ITALY'S PRODUCTIVITY CHALLENGES: CAN AI PROVIDE A SOLUTION?

Paola Verduci

Italy: reasons for not adopting AI, by firms' size

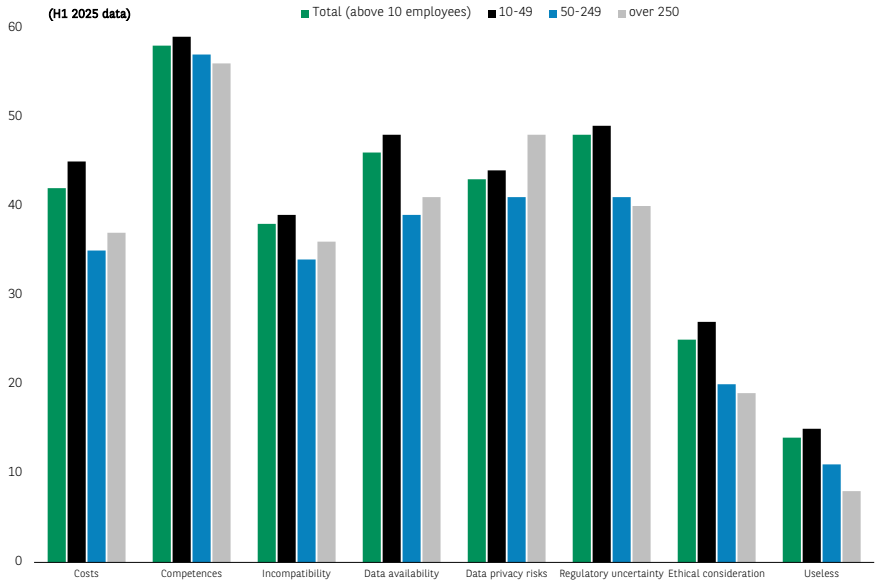


CHART 1

SOURCE: BANCA D'ITALIA, 2026

In the years following the pandemic, labour productivity in Italy has stalled. Artificial intelligence is identified as a potential catalyst for reversing this trend, with projections indicating possible annual productivity growth increases of up to 1.1 p.p. in a scenario of rapid adoption. However, the actual adoption of AI in Italy is still low, despite a faster growth rate compared with its main Euro area counterparts. As of 2025, only 16.4% of Italian companies with more than 10 employees were using AI. In the financial and insurance sectors, adoption rates are above average (39%, peaking at 70% in insurance). However, the application remains largely superficial, primarily focused on support activities such as fraud detection, process automation and customer relations, while its use in trading and post-trading activities remains largely experimental.

Adopting AI could improve labour productivity. In the years after the pandemic, the dynamics of labour productivity in Italy have been disappointing. When measured as output per hour worked, there was a decline of 4.7% between 2020 and 2025, compared to a -1% decrease in France, a +0.9% increase in Germany and a +2.5% increase in Spain. Although there has been some improvement in recent years – with a more limited contraction of -1.9% during the 2023-2025 period – Italy's productivity dynamics remain weaker compared to the stagnation or gains observed in other major European economies (Germany +0.1%; Spain +1.9%; France +1.5%).

The spread of artificial intelligence is highlighted as a factor that could reverse this trend. Estimates by Filippucci et al. (2025)[1] suggest that over the next decade, AI adoption could deliver annual labour productivity growth gains ranging from 0.2 to 0.8 p.p., particularly benefiting countries experiencing significant demographic declines, such as Japan and Italy. In the United States, where the bulk of global investment in AI is currently concentrated[2], the annual increase in labour productivity growth could reach 1.3 p.p.

If the adoption of AI were to proceed rapidly, the potential benefits for Italy could be significantly greater, adding as much as 1.1 p.p. to productivity growth. A recent analysis[3] identifies the sectoral contributions to GDP growth under a scenario of rapid adoption, differentiating between direct effects (the productivity gains generated within each sector), and indirect effects (which arise through input-output linkages along the production chain). Manufacturing stands out as the single largest contributor, adding approximately 2 p.p. to GDP growth over the decade, followed by Wholesale and Retail trade (around 1 p.p.) and Professional services (around 0.8 p.p.), while the Financial and Insurance sector would account for a further 0.6 p.p.

1 Filippucci, F. et al. (2025), "*Macroeconomic productivity gains from Artificial Intelligence in G7 economies*", OECD Artificial Intelligence Papers, No. 41, OECD Publishing, Paris.
2 The disparity in investment amounts is remarkable; between 2013 and 2025, the United States invested around USD 753 bn in AI, compared to USD 17.2 bn in Germany and USD 15.6 bn in France, the only two Euro-area countries among the top ten global investors; see *AI Index Report*, 2026.
3 3 Fabio Bertolotti, Andrea Linarello, Patrick Zoi; *Shock propagation and economic policies in the Italian production network*; Banca d'Italia; June 2026.

Relatively wide AI adoption by the Italian financial sector

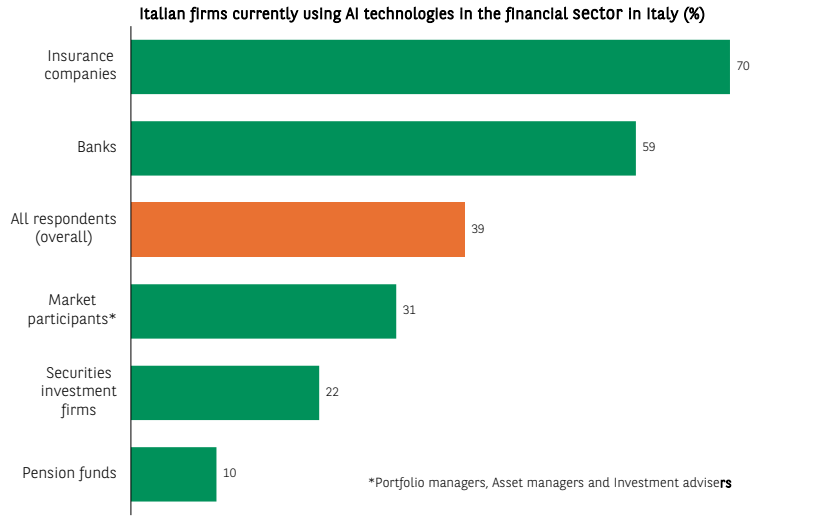


CHART 2

SOURCE: BNL ECONOMIC RESEARCH ON OECD

The magnitude of each sector's contribution ultimately depends on three factors: its share of total value added, its direct exposure to AI, and its importance within the production network.

AI adoption varies greatly from one sector to another. The intensity of AI adoption is influenced by various factors, including sectoral composition, the size of companies and the availability of the skills needed to use it. Eurostat data shows the considerable heterogeneity in AI adoption among countries: despite an increase of over 100% from 2024, by 2025 only 16.4% of Italian companies with over 10 employees were using AI, a figure comparable to France's (18.2%) but significantly lower than Germany's (around 26%) and Spain's (20.2%). Adoption rates increase steadily with company size: in the first half of 2026, 32% of Italian companies with over 20 employees were using AI, a percentage that climbed to 63% among those with over 500 employees but fell to 28% among smaller companies with 20-49 employees. A similar disparity is observed across sectors, with take-up comparatively limited in Manufacturing (27%) and considerably more widespread in Services (36%). The "Other services" segment, which includes professional, scientific and technical activities, records the highest average adoption rate, facilitated by a more uniform distribution of the technology across different company-size categories.

Italian companies cite a lack of skills as one of the main reasons for not adopting AI, particularly among small companies (10-49 employees). Additionally, high costs, data availability and regulatory uncertainty also hinder adoption (see *Chart 1*).

Access aside, the ability to use the technology is equally important: the IMF's Skill Readiness Index, which measures how prepared human capital is to work with AI, places Italy towards the lower end of a ranking led by Ireland, Finland, Denmark and Switzerland. France and Spain rank slightly better than Italy, while Germany occupies a marginally higher position.

In Italy, a recent survey[4] indicates that companies in the Financial and Insurance sector adopt AI more widely than the average productive system (39%), peaking at 70% in the insurance segment (see *Chart 2*). However, similar to their OECD counterparts, Italian financial institutions primarily use the technology for activities that lie outside the core functions of financial markets, such as fraud detection and prevention. This somewhat superficial application reflects a cautious approach, mirroring trends observed in other OECD countries, where companies typically focus AI efforts on customer relations, process automation, cybersecurity and fraud prevention, while applications in trading and post-trading remain largely experimental.[5]

Despite this, the benefits reported thus far are significant: among Italian financial companies using AI, three-quarters report improvements in operational efficiency, almost two-thirds cite productivity gains, and roughly half report greater effectiveness in decision-making. However, gains in genuinely market-relevant areas are still under-represented, illustrating a pattern of broad adoption that lacks depth in core market functions.

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4 OECD/Banca d'Italia; *Artificial Intelligence in Italian Financial Markets*; June 2026. The 450 responses represent 49% of the entities supervised in Italy (including foreign companies operating in Italy under the supervision of Banca d'Italia). The question on AI adoption was mandatory. All figures are unweighted counts of responding entities by segment, although coverage varies (e.g. 60% for banks; 48% for pension funds and 22% for securities investment firms).
5 In the United States, almost all financial functions (U.S. Department of the Treasury, 2024); in the United Kingdom, companies focus on optimising internal processes, enhancing cybersecurity and detecting fraud (BoE/FCA, 2024); Swedish and Finnish companies prioritise summarisation, translation and automation (Finansinspektionen, 2024 and FIN-FSA, 2025); Japanese companies give priority to customer relations and targeting (Bank of Japan, 2024); Dutch banks concentrate on creditworthiness and fraud prevention (De Nederlandsche Bank/AFM, 2024); French respondents report internal applications with no specific uses in financial activities (AMF, 2026).

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