The AI puzzle: The race for your pocket and your job

KALINA KOLEVA

MATTHEW ZAMMIT

AUGUSTO COMISSO

Artificial intelligence has evolved from a theoretical concept into a powerful agent of real-world change.

Its applications are diverse and extensive, including but not limited to traffic management, control and migration policies as well as promoting the effective use of scarce water resources in agriculture. In medicine, AI enables doctors to diagnose cancer more quickly and accurately. As AI continues to evolve, its impact on nearly every aspect of our lives and the economy is expected to grow. This raises important questions about its potential impact on employment, inflation and wages.

The Maltese labour market has undergone substantial changes since 2010. The influx of foreign workers across the entire Maltese economy is remarkable. Whereas foreign workers accounted for around 5% of the total domestic employment in 2010 (out of which 2% were third country nationals (TCN) and 3% were European Union (EU) and European Free Trade Association (EFTA) nationals), in 2024, this figure went up to approximately 33% (of which 10% were EU and EFTA nationals and 23% were TCNs).

Given the demographic characteristics of the Maltese indigenous population, the stream of foreign workers is needed to sustain economic growth and the subsequently created vacancies. However, it could be a source of strain on the local infrastructure and ultimately, on the quality of living.

AI has the potential to reshape the Maltese labour market, possibly alleviating some of the pressure on the local infrastructure. Indeed, AI can cause job replacements in several sectors, ultimately decelerating population growth. The increasing use of AI can thus ease traffic congestion, pressure on the health care and electricity generation and sewage services, demand for accommodation, use of public transport, etc. Moreover, AI could increase the productivity of those already employed by simplifying their jobs, executing basic tasks, minimising errors but also performing more complex cognitive functions. AI systems have become powerful tools able to process large amounts of information, in some cases delivering a superior performance to the human one.

Malta is well positioned to benefit from an increased use of AI. Indeed, the country has been investing in digital transition and technologies "to strengthen digital preparedness and the use of AI", apportioning a substantial €196 million (0.9% of 2024 GDP) from EU funds for digital transformation. The government has also launched several initiatives, the latest being announced in April and dedicating €4 million to the introduction of Microsoft Copilot – an AI productivity tool – for public officials. The top six sectors with the highest percentage of full-time foreign employees in their workforce in Malta as at December 2024 were accommodation and food service activities (71.0%), arts, entertainment and recreation (62.5%), construction (56.6%), professional, scientific and technical activities; administrative and support service activities (50.7%), wholesale and retail trade; and repair of motor vehicles and motorcycles; transporting and storage; information and communication (38.7%) and manufacturing, quarrying and utilities 36.0%). While the accommodation or construction sectors seemingly possess less immediate potential, others like professional, scientific and technical activities; arts, entertainment and recreation; and information and communication could benefit from AI in terms of job displacements.

According to an IMF analysis, around 60% of the labour market of Malta is highly exposed to AI, pointing towards a possibility to reduce an overlap between AI applications and the skills required for these jobs thereby diminishing the need to further expand the pool of the employed and, reducing it where possible/needed. In addition, a recent IMF analysis concluded that the high share of business administration professionals, sales workers and clerical support roles with low complementarity in Malta could lead to labour market replacements somewhat easing population density.

AI's disproportionate potential across different labour market sectors at the current juncture should, however, not be taken as given. Much as it would have been impossible 30 years ago to forecast the sweeping way the internet has altered virtually every aspect of our lives, so too we must anticipate that at least a portion of the fallout of AI in the years and decades to come as a Rumsfeldian unknown unknown.

This uncertainty is not restricted to the employment market. Another as yet imperfectly understood aspect of AI is its connection to inflation; a relationship that, given the nature of our mandate, is of considerable importance to central banks. By dint of potentially affecting consumer prices, it also has substantial implications for every citizen's pocket and spending power.

Put simply, inflation is affected by both demand and supply side factors. With regards to the latter, AI is widely expected to promote productivity, thus increasing the volume of goods and services available and therefore, in theory, lowering prices. The degree and rapidity at which this will occur is more contentious. In one paper, the IMF predicts that medium-term productivity gains for Europe will only amount to a cumulative 1% over five years. Others have adopted considerably higher expectations, arguing that AI will have not only direct but also knock-on effects on productivity growth.

However, AI has also its own challenges. For example, AI requires very high energy consumption, possibly leading to short-term inflation in the energy market, unless technological developments reduce such energy intensity needs. Expectations of economic actors regarding the effects of AI on inflation could also play a role.

Conclusion

It can be reasonably expected that in the prevailing tight labour market conditions, continued investment in and adoption of AI will act as a brake on demand in several employment sectors. In turn, this would likely elicit a population growth slowdown, with knock-on effects with regards to population density, impact on infrastructure and environment, and quality of life. The impact on inflation is harder to gauge, although on balance AI should represent a positive shock to supply.

Kalina Koleva is a manager, International Relations Office. Matthew Zammit is a Senior Expert, International Relations Office. Augusto Comisso is Senior Officer, International Relations Office at the Central Bank of Malta