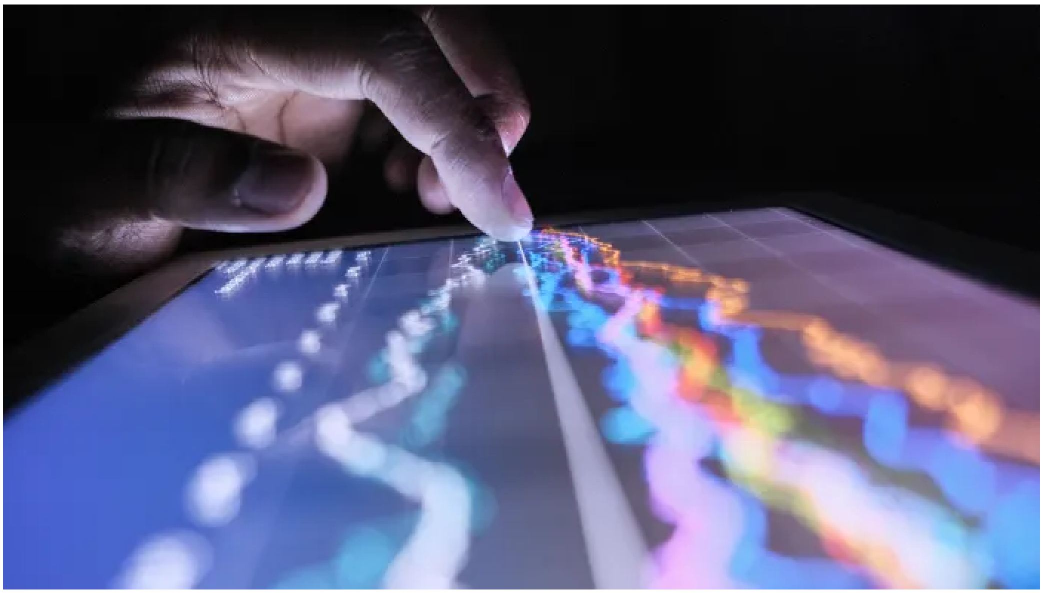
Special Report **Business Education: Financial Training**

**Masters in Finance**

# Graduates with tech and finance skills in high demand

The workforce will have to adapt as companies use artificial intelligence for more tasks



Opportunity knocks: tech is creating new career paths for finance graduates © Getty

Seb Murray JUNE 17, 2019

By 2030, some 400,000 full-time jobs in capital markets — including asset management, investment banking and brokerage — will be lost as technology and artificial intelligence (AI) supplant humans, predicts Opimas, a research consultancy.

"There will be blood on Wall Street if the workforce fails to adapt," says Axel Pierron, co-founder and managing director of Opimas. If a role involves doing calculations, such as equity trading, he adds, a machine will be able to do it faster and more accurately.

But there are opportunities for masters in finance (MiF) graduates. The blend of technological and financial knowledge is a sweet spot, as is a growing Asian economy and new opportunities in areas such as risk management.

Mr Pierron predicts 66,000 new technology and data science jobs will be created by 2030 in roles such as computer programming. Opimas found that between January and May this year, about 35 per cent of jobs posted by 19 European and US banks and asset managers were for tech and data roles.

Mr Pierron says technology is freeing financiers of routine tasks and improving their competitiveness. Hedge funds and asset managers are mining new information sources to beat the markets. For example, changes in the number of jobs listed on a company's website can hint at financial performance before results are officially released.

Demand for those with financial and technological acumen is outstripping supply, says Andrew Jenkins, a principal in the IT transformation practice of Odgers Berndtson, an executive search company. “Banks, asset managers and insurance companies increasingly want to employ people who can analyse customer data and communicate the insights, so as to design new products and cross-sell services.”

Perhaps the highest demand comes from quantitative investors that use AI to trawl markets and colossal data sets to identify potential trades, says Heidi Pickett, assistant dean of the MiF programme at MIT Sloan School of Management in Massachusetts, US.

“Computer programming skills are becoming a must-have,” she says. “Don’t bother putting Excel or PowerPoint on your résumé. Financial institutions are looking for R, Python or another programming language.”

Yet soft skills are increasingly essential for the financial workforce, says Gary Baker, managing director for Europe, the Middle East and Africa at the CFA Institute, an international association for investment professionals. In a report by the institute, industry leaders ranked “T-shaped skills” — which include subject expertise, the ability to understand diverse perspectives and being comfortable with technology — as the most important aptitudes for the future, above even technical abilities.

“Some think this is wishy-washy softer stuff, but that’s very difficult for any machine to pick up,” Mr Baker says. Humans will always be retained in financial institutions, he adds, because people still need to interact with clients and make investment decisions.

Asia’s growing economy is another opportunity for finance students. It has produced many rich private investors who need financial advice, boosting job opportunities with wealth and asset managers, says Joseph Cheng, director of the MSc programme in finance at Chinese University of Hong Kong Business School. “As money flows from mainland China to Hong Kong, our students are increasingly hired into asset allocation, equities research and securities analysis roles, helping to create sustainable and optimal portfolios for the wealthy,” he says.

In Europe, meanwhile, the regulation that followed the financial crisis has made students with technical and legal knowledge a prized asset, says Olivier Bossard, executive director of the MSc finance programme at HEC Paris business school. “There is a growing demand for our students who can calculate and communicate risks,” he says, including at banks and consulting firms.

Risk management was once seen as “less glamorous” than client-facing roles, says Prof Bossard, but this has changed as it has become more powerful thanks to the increase in regulation.

Another change has been an increase in buyside companies — which include hedge funds and private equity firms — hiring students with little or no work experience to produce equities research, says Prof Bossard.

One driver of this has been Mifid II. The EU regulatory reform included a rule that forces investment banks to sell research to their clients separately, rather than including it in a brokerage service. Banks' clients do not want to pay for the research, so they are doing more in-house, says Prof Bossard. He adds that where once students interested in equities research would look for jobs at investment banks, they are now adding asset managers to their searches.

But finance is a fast-changing industry, and knowledge and skills acquired today might not guarantee a job in future, says Alex Stremme, assistant dean of MSc finance programmes at the UK's Warwick Business School.

Financial training can develop resilience to cope with that change, he adds. So while the future is uncertain, business schools can at least help students come to terms with the ambiguity.