

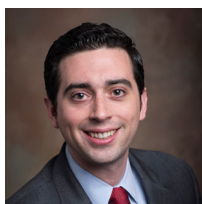


Capitalizing on New Technologies in Europe

What took 10 years to develop, at a total cost of EUR 10 billion, and will take three 747s to deliver to customers? Meet the new extreme ultraviolet lithography (EUV) machine, developed by ASML, that is about to usher in the next wave of innovation in the semiconductor industry, says Dom Rizzo, a T. Rowe Price investment professional who covers European technology companies from London.

ASML, a semiconductor capital equipment company in the Netherlands, “is probably the most important company for continued innovation in semiconductors,” Dom says. “Their new machine will enable the next generation of chips, propelling new technologies like artificial intelligence, 5G telecommunications, and the ‘internet of things.’ Unleashing the power of EUV technology is an essential breakthrough for the semiconductor manufacturing industry.”

While many investors were skeptical that ASML would ever bring the EUV technology to market or that it could be profitable, T. Rowe Price’s confidence that the company would succeed was bolstered by a coordinated global research effort that included in-depth discussion with suppliers, customers, senior executives, and the entire ASML ecosystem, even including the companies that provide the design software to ASML’s customers.



Talking with
Dom Rizzo

Investment Professional, Technology in Europe,
T. Rowe Price

Going Beyond the Numbers Reveals the Full Story

At T. Rowe Price, our investment approach is to go beyond the numbers when evaluating what companies may offer the best future potential. By getting out into the field, we gain insights and a deeper understanding of where a company or industry stands and where it could go in the future.

The rigor of T. Rowe Price’s research was evidenced by its analysis of ASML. During his four-year stint researching small-cap technology stocks in the United States, Dom covered many of the suppliers to ASML. He’s coordinated with colleagues who have extensive knowledge of ASML’s major customers: Samsung, Intel, and TSMC (Taiwan Semiconductor Manufacturing Company). Dom and other T. Rowe Price investment professionals made numerous trips to visit technology companies in California and Taiwan and completed a factory tour of ASML’s production facilities, sharing insights to get a more complete picture of ASML.

“These face-to-face meetings are crucial to our research process because each company is very different, and technology is constantly changing.”

“The insights we gained from this hands-on research were, first, that the technology is essential to the next generation of semiconductors and will be adopted for mass production in 2020, even at an average price of EUR 130 million per machine. And, second, that it could be extraordinarily profitable.”

Getting Ahead of a Fast-Changing and Diverse Sector

To keep abreast of new technology developments across Europe, Dom spends about 30% of his time on the road. “These face-to-face meetings are crucial to our research process,” he says, “because each company is very different,

and technology is constantly changing. So, you need a deep understanding of the customers, suppliers, and competitors to gain insights into what new technologies are being adopted and which ones are not—who will benefit from continuous change and who might be hurt by it.

“Europe does not have a reputation for being the technology center of the universe,” Dom adds, “but it’s a diverse sector, with some global lynchpin companies. We try to invest in those that are really innovating even though they don’t have the name recognition of a Google or Amazon.”

INVEST WITH CONFIDENCESM

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