

A close-up photograph of a white industrial robotic arm with multiple joints and flexible conduits, positioned over a work area with a red textured surface. The background is blurred, showing other industrial equipment.

Oaklins

Robotics report

An update on the M&A market

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Introduction

RECOVERY CONTINUES THANKS TO ACCELERATED INCLUSION OF ROBOTS IN NEW AREAS

The global robotics M&A market continues its quick recovery from the bumps and bruises experienced during 2020, the first year of the COVID-19 pandemic. Even though deal activity has not yet returned to pre-pandemic levels, the robotics industry could well profit from various COVID-related developments that are set to remain.

It has long been predicted that robots will be one of the biggest disruptors of our time. However, while industrial robots used for automation purposes in factories are already well-established, the incorporation of service robots into other sectors of professional and personal life has progressed at a slower

pace. At the moment, they are mainly being used in healthcare and in the logistics industry — and those areas are also where the pandemic sparked rising demand for further automation.

Sanitation was transformed into a mainstream topic as a result of COVID-19. Not only can robots be installed for disinfecting or cleaning purposes, they can also provide assistance in hospitals and nursing homes, for instance by taking over surgeries or interacting with patients. By carrying out such functions, they reduce human-to-human contact and thus minimize the risk of infection. What's more, as robots themselves don't get sick, they can be considered as a guaranteed workforce.

Global lockdowns and the consequent increase in online shopping meant

that warehouses were in dire need of more efficient solutions. Automation was the answer, which led to increased penetration and remits of robots in the logistics industry. And as robots are introduced into new areas, the requirements that they have to fulfill change. Unlike in the past, robots nowadays often don't work in areas that are clearly separated from people, but collaborate and interact with them directly — hence they're known as "cobots." In order to work successfully in this way, they have to be able to see or sense their environment and react to changes. This ability to learn from and adapt to their environment is elementary for enabling cobots to provide more services in the future and move into other sectors. This fact has already been observable in robotics M&A activity over the last few years.

The robotics M&A market:

Energy efficiency as a new criteria

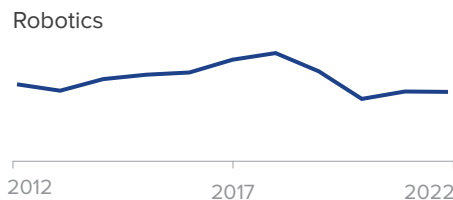
Through the first nine months of 2022, 213 transactions were completed in the field of robotics.

This represents an increase of 85% compared to the same period during the pandemic-hit year of 2020, and a rise of 37% on 2021. In fact, 213 transactions is almost equal to the total number of transactions completed during the whole of 2021.

Of all the transactions closed during the first nine months of 2022, 53% happened in the sub-sector of machine vision and sensing equipment. Even though this is the majority of deals, this figure represents the lowest share for the sub-sector from the last 15 years. Indeed, in 2021 its share of transactions was already slightly below its long-term average, indicating that the recovery from the dip during the first year of the pandemic is taking place slower than in the sub-sector of robotic process and computerized control.

One possible explanation for this shift is the rise of yet another new characteristic that robots increasingly need to possess. While improving efficiency in terms of throughput time and higher production output was the main driver behind automation in the past, companies now increasingly demand energy-efficient robots. In fact, if it means lower energy consumption, these businesses might even be willing to accept slightly worse output. This improved energy efficiency can be achieved through more capable software that optimizes the interactions between the different components of a robot as well as between different robots and machines.

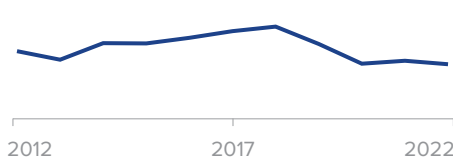
Trend transaction activity 2012–2022



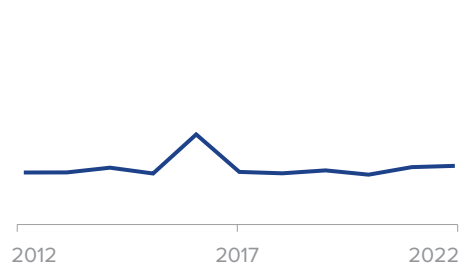
Robotic process and computerized control



Machine vision and sensing equipment

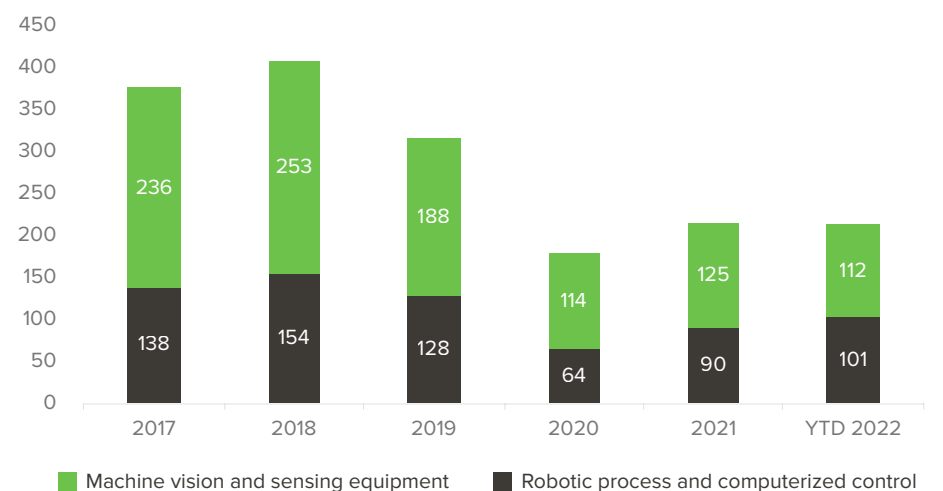


Trend volume 2012–2022



Sources: Mergermarket, Oaklins analysis

Transactions per sub-sector



Source: Mergermarket

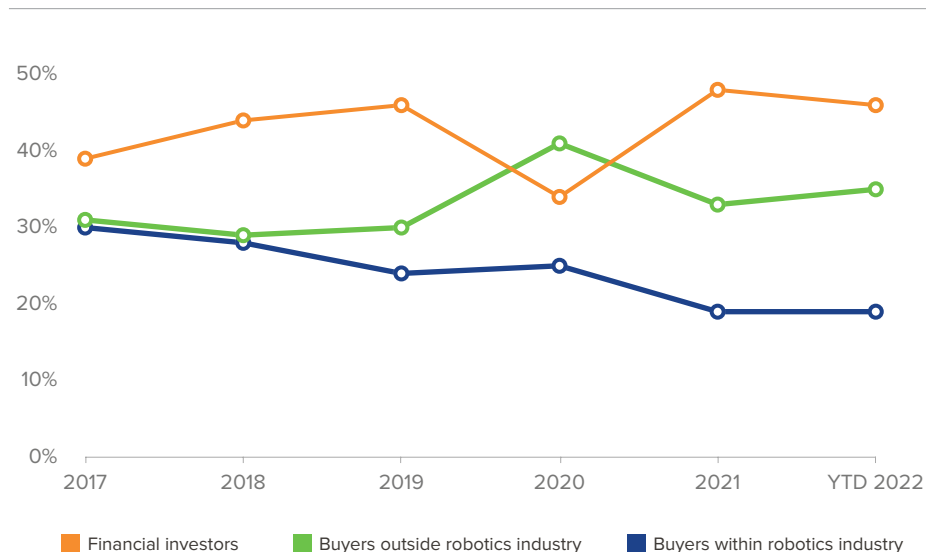
The drastic increases in electricity prices and the fear of supply shortages this year have only helped accelerate this development, since financial gains from energy-efficient robots might now compensate for the reduced output.

BUYER STRUCTURE

Of all the transactions completed in 2022, only one in five buyers came from within the robotics industry. This continues the trend of the last few years, which has seen the share of within-industry transactions in consistent decline.

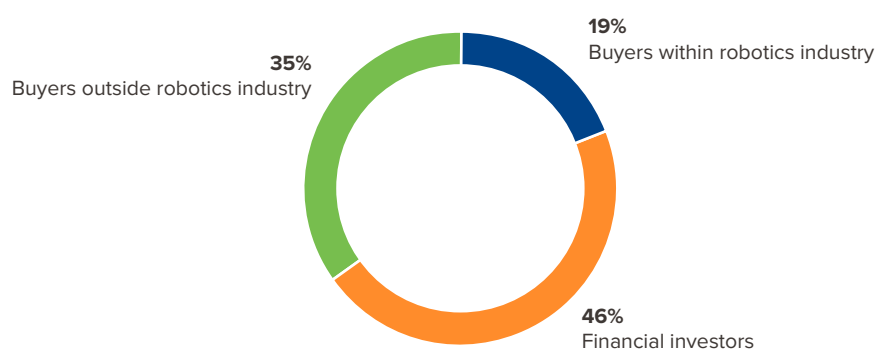
The vast majority of buyers come from outside the robotics industry, with financial investors responsible for almost half of all transactions. The return of financial investors, which make up an important buyer group, is a positive sign for the robotics M&A market, especially since it was deals closed with financial investors that saw the biggest dip in 2020, when these potential acquirors were concentrating their capital on their existing portfolios.

Buyer structure in the robotics industry: the past five years



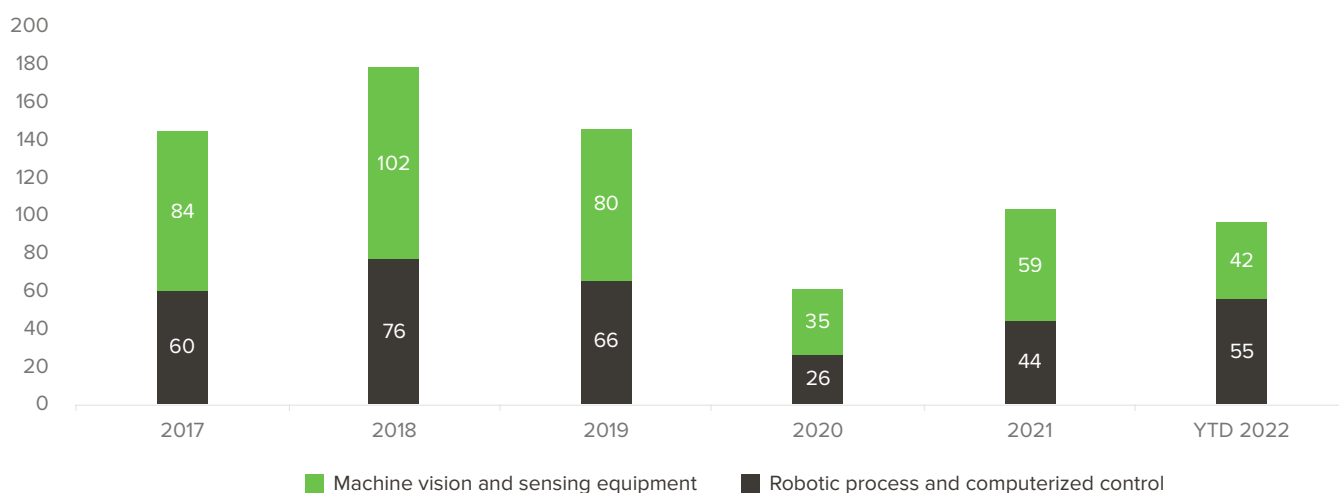
Source: Mergermarket

Buyer structure in the robotics industry in the first three quarters of 2022



Source: Mergermarket

Financial investors: transactions per sub-sector



Source: Mergermarket

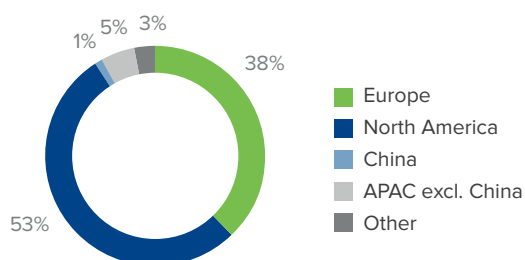
Global M&A

Although most M&A activity during the late 2010s happened in Europe, the focus has shifted to North America since 2021. So far this year, the target company has been located in North America in over half of all transactions. Buyers also come most often from North America, even though there is

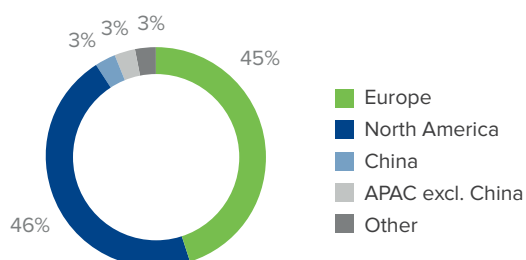
still a notable number from Europe. Deals involving Asian targets or buyers are comparatively rare. While in North America and Europe most deals happen within the region, the majority of Asian targets are being bought by acquirors from one of the other two regions. European buyers in particular are very

active in overseas markets, both in North America and Asia, while North American buyers tend to concentrate on their own region. At a country level, about 46% of the completed transactions within the robotics industry were cross-border.

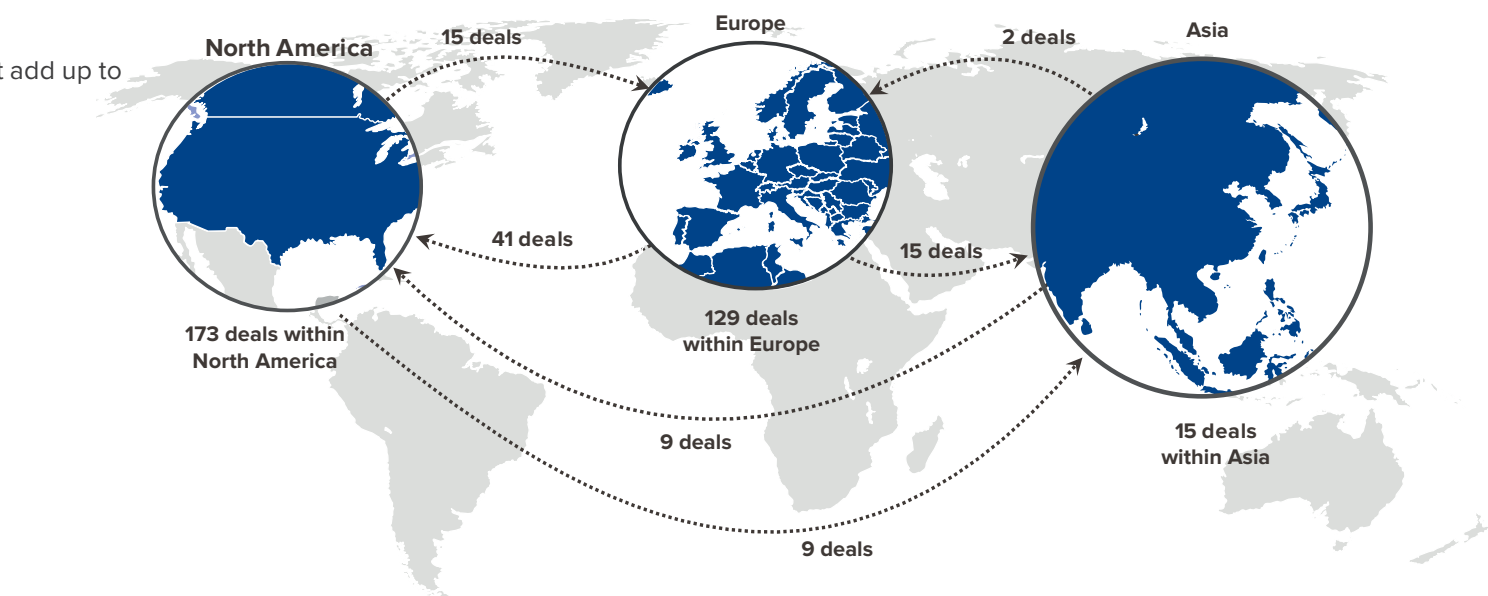
Target region 2022



Buyer region 2022



Global M&A flow since 2021



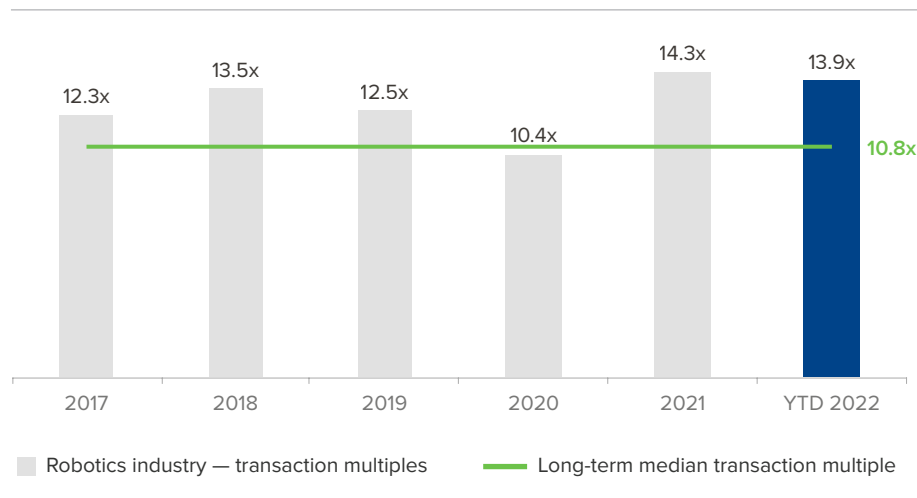
Sources: Mergermarket, Oaklins analysis

VALUATIONS REMAIN HIGH

Despite not quite reaching the record highs of 2021, valuations in the robotics industry remain well above the long-term average. Investors value the new perception of the benefits that robots can provide to companies, such as reducing energy consumption or increasing business resilience. Although there exists an increasingly challenging economic and geopolitical environment, the robotics industry continues to prosper thanks to:

- **unbroken high demand** — With automation continuing to be a major topic in industrial sectors, and service robots expected to be adopted in more and more areas, sales of robots are bound to continue reaching new highs.
- **the rise of cobots** — With cobots able to see or sense their environment, they can work and exist shoulder-to-shoulder with humans, opening the door to bringing them more into everyday life and a whole new sphere of applications. Not surprisingly, deals in the sub-sector of machine vision and sensing equipment have reached higher valuation levels over the last 15 years.
- **technological progress** — With companies worldwide investing heavily in the development of new technologies, the sky's the limit in the robotics industry. What is state of the art today might be obsolete within a few years, leading to the need for continuous investment by companies. Furthermore, technological progress allows for a broader adoption of robots and cobots.

Transaction multiples in the robotics industry

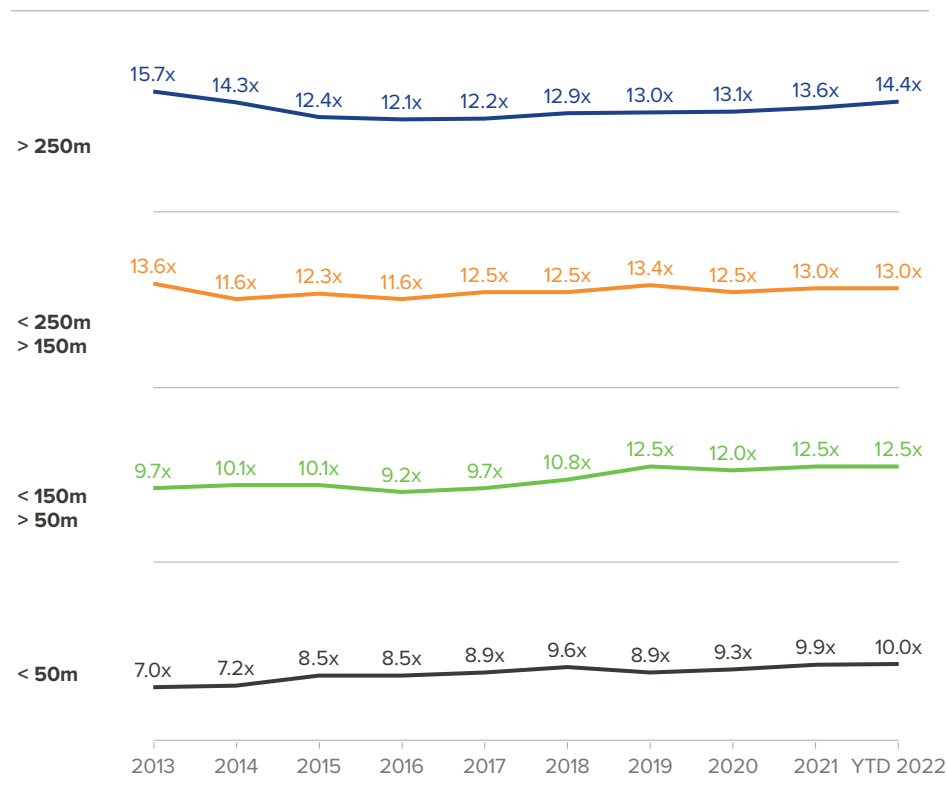


Source: Mergermarket

The generally positive outlook for the entire industry has led to higher prices being paid for all types of robotics companies. Five-year rolling transaction multiples from the last 10 years show that valuation levels have been rising

across all transaction sizes. The prices paid for smaller companies in particular have risen, reducing the discount usually paid for those companies due to the higher level of risk because of their typically lower diversification.

EBITDA multiples over the past 10 years by transaction size



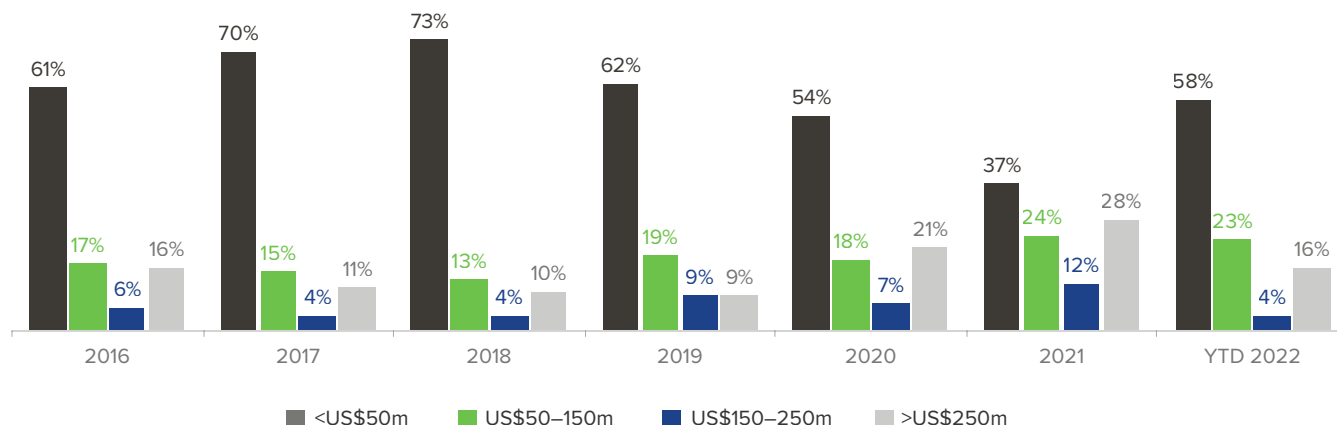
Source: Mergermarket

Despite the sustained high level of valuation multiples, average deal size has drastically declined over the first three quarters of 2022. With an average value of US\$226 million, deals

were 40% smaller than in the previous year. A possible explanation for this is that investors were hesitant to close bigger deals since there are still many insecurities in the global markets due to

the pandemic and the war in Ukraine. Total deal volume was US\$18.8 billion, down 19% from the same period in 2021.

Deal size per year



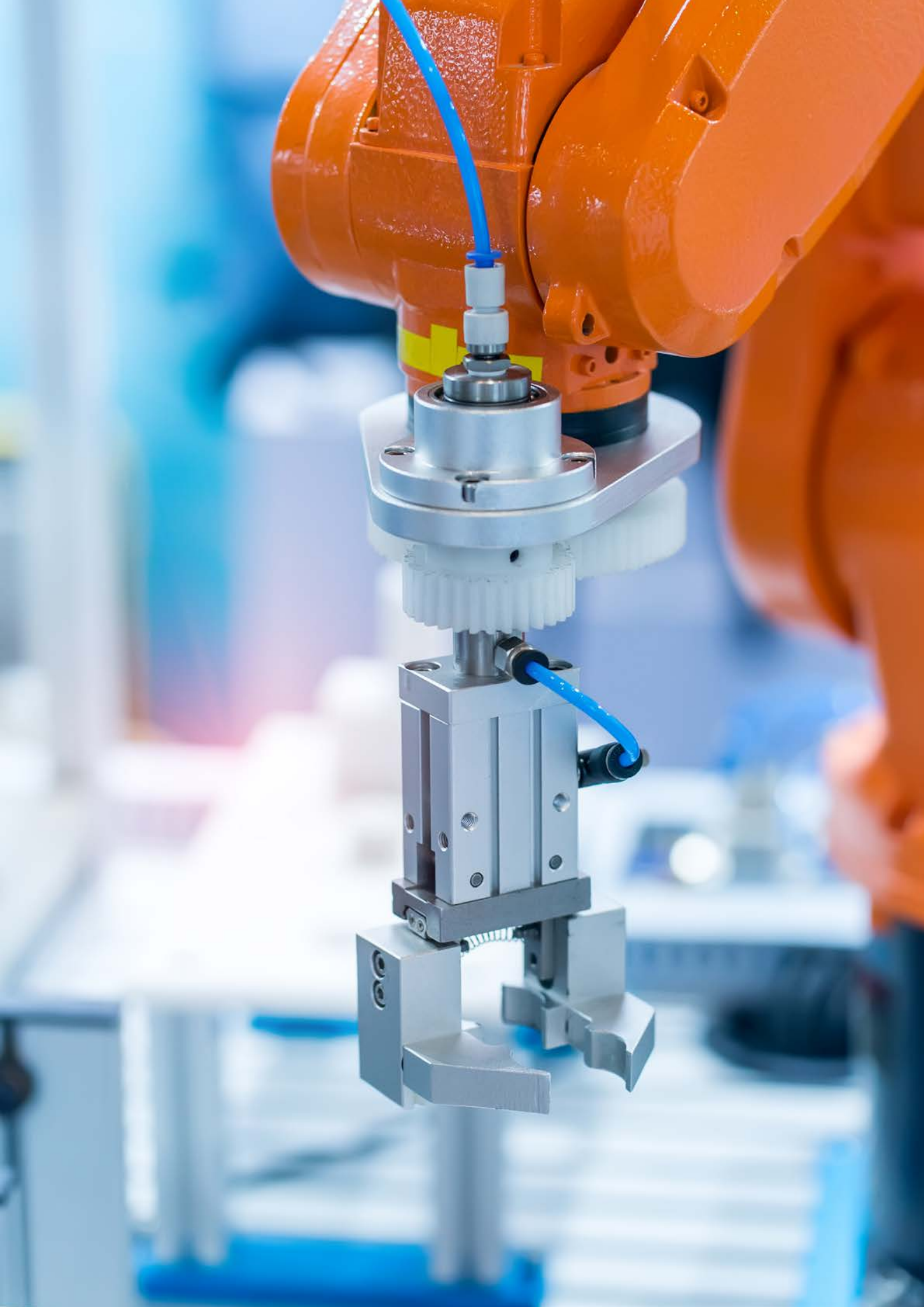
Source: Mergermarket

Looking ahead

If anything, robotics has gained even more momentum during the difficult years of COVID-19 as companies were forced to replace human workforce with robots in order to keep their business afloat. Consequently, robot sales can be expected to continue thriving and pushing company valuations to new heights in the process. Artificial intelligence and machine learning will make interactions between and the coexistence of humans and robots easier in the future, boosting demand even further. Companies helping to achieve technological breakthroughs in those fields will prosper and be able to demand high valuations in the market.

However, there are some headwinds facing the robotics M&A market, mostly stemming from the global economic and geopolitical situation. Although the COVID-19 pandemic still cannot be declared over even after three years, it has been replaced as the number one topic of concern by the war in Ukraine and its implications for global value chains and energy supplies that were both already under strain. Insecurities are high among investors and they are further accentuated by the unclear forecasts regarding inflation and interest rates. These are all factors that, in general, are not beneficial to M&A activity or company valuations as investors tend to keep away from big investments in such an environment.

All signs point to robots entering more and more sectors, building a solid foundation for M&A activity and company valuations in the long run.



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