Risk Factors Comparison 2024-02-22 to 2023-02-22 Form: 10-K

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The risks described below are not the only risks that we face. Additional risks and uncertainties not currently known to us or that we currently deem to be immaterial also may materially adversely affect our business, financial condition and / or operating results. Risks Associated with Teradyne' s Markets Our business is impacted by global and industry- specific economic cycles, which are difficult to predict, and actions we have taken or may take to offset these cycles may not be sufficient. Capital equipment providers in the electronics, semiconductor industries and robotics, such as Teradyne, have, in the past, been negatively impacted by both sudden slowdowns in the global economies and recurring cyclicality within those industries. These cycles have resulted in periods of over- supply; a trend we believe will continue to occur. Our business and results of operations depend, in significant part, upon capital expenditures of manufacturers of semiconductors electronics and other industrial products, which in turn depend upon the current and anticipated market demand for those products. Disruption or deterioration in economic conditions may reduce customer purchases of our products, thereby reducing our revenues and earnings. In addition, such adverse changes in economic conditions, and resulting slowdowns in the market for our products, may, among other things, result in increased price competition for our products, increased risk of excess and obsolete inventories, increased risk in the collectability of our accounts receivable from our customers, potential reserves for ~~doubtful accounts~~ **credit losses** and write- offs of accounts receivable, increased risk of restructuring charges, and higher operating costs as a percentage of revenues, which, in each case and together, adversely affect our operating results. We are unable to predict the likely duration, frequency and severity of disruptions in financial markets, credit availability, and adverse economic conditions throughout the world, and we cannot ensure that the level of revenues or new orders for a fiscal quarter will be sustained in subsequent quarters. We have taken actions to address the effects of general economic variability and recurring industry cyclicality, including implementing cost control and reduction measures. We cannot predict whether these measures will be sufficient to offset global or market- specific disruptions that might affect our businesses and we may need to take additional or different measures in the future. We are subject to intense competition. We face significant competition throughout the world in each of our reportable segments. Some of our competitors have substantial financial and other resources to pursue engineering, manufacturing, marketing and distribution of their products **. In addition, we are subject to trade regulations imposed by the United States government, which may not impact some of our competitors** . We also face competition from emerging Asian companies and internal development at several of our customers. Some of our competitors have introduced or announced new products with certain performance characteristics that may be considered equal or superior to those we currently offer. We expect our competitors to continue to improve the performance of their current products and to introduce new products or new technologies that provide improved cost of ownership and performance characteristics. New product introductions by competitors could cause a decline in revenues or loss of market acceptance of our products. The market for our products is concentrated, and our business depends, in part, on obtaining orders from a few significant customers. The market for our products is concentrated with a limited number of significant customers accounting for a substantial portion of the purchases of test equipment. In each of the years, **2023,** 2022 ~~,~~ **and** 2021 ~~and 2020~~ , our five largest direct customers in aggregate accounted for **32 %,** 26 % ~~,~~ **and** 33 % ~~and 36 %~~ of consolidated revenues, respectively ~~. We estimate consolidated revenues driven by Qualcomm, a customer of our Semiconductor Test, System Test, and Wireless Test segments, combining direct and indirect sales to Qualcomm, accounted for approximately 11 % of our consolidated revenues in 2022 and less than 10 % in 2021 and 2020~~ . We estimate consolidated revenues driven by one OEM customer, of our Semiconductor Test and Wireless Test segments, combining direct sales to that customer with sales to the customer' s OSATs (which include Taiwan Semiconductor Manufacturing Company Ltd.), accounted for **19** ~~less than 10~~ % of our consolidated revenues in ~~2022, and 19 % and 25 % of our consolidated revenues in~~ 2021 ~~and 2020, respectively~~ . ~~14~~ **Customer consolidation could affect our operating results. There has been a trend toward customer consolidation in the semiconductor industry through business combinations, including mergers, asset acquisitions and strategic partnerships. If this trend continues, it could make us more dependent on fewer customers who may be able to exert increased pressure on our prices and other contract terms and could increase the portion of our total sales concentration for any single customer. Customer consolidation activity could also reduce the demand for our products and services if such customers streamline research and development or operations, reduce purchases or delay purchasing decisions. These outcomes could negatively impact our operating results and financial condition.** If we fail to develop new technologies to adapt to our customers' needs ~~and~~ **or** if our customers fail to accept our new products, our revenues will be adversely affected. We believe that our technological position depends primarily on the technical competence and creative ability of our engineers. In a rapidly evolving market, such as ours, the development or acquisition of new technologies, commercialization of those technologies into products and market acceptance and customer demand for those products are critical to our success. Successful product development or acquisition, introduction and acceptance depend upon a number of factors, including: • new product selection; • ability to meet customer requirements including with respect to safety and cyber security; • development of competitive products by competitors; • timely and efficient completion of product design; • timely and efficient implementation of manufacturing and manufacturing processes; • timely remediation of product performance issues, if any, identified during testing; • assembly processes and product performance at customer locations; • differentiation of our products from our competitors ~~'~~ **'** products; • management of customer expectations concerning product capabilities and product life cycles; • transition of customers to new product platforms; • compliance with product safety regulations; • ability to protect products from cyber attacks when used by our customers; • ability to attract and retain technical talent; and • innovation that does not infringe on the intellectual property rights of third parties. Risks Associated with Operating a Global Business We are subject to risks of operating internationally. A significant portion of our ~~total~~ **consolidated** revenues is derived from customers outside the United States. Our international sales and operations are subject to significant risks and difficulties, including: • unexpected changes in legal and regulatory requirements affecting international markets; • cost increases due to inflation **;** • changes in tariffs and exchange rates; • social, political and economic instability, acts of terrorism and international conflicts; • disruption caused by health pandemics ~~, such as the coronavirus~~ ; • difficulties in protecting intellectual property; • difficulties in accounts receivable collection; • cultural differences in the conduct of business; • difficulties in staffing and managing international operations; • compliance with anti- corruption laws; • compliance with data privacy regulations; ~~15~~ • compliance with customs and trade regulations; and • compliance with international tax laws and regulations. In addition, an increasing portion of our products and the products we purchase from our suppliers are sourced or manufactured in foreign locations, including China, Malaysia and Denmark, and a large portion of the devices our products test are fabricated and tested by foundries and subcontractors in Taiwan, China, Korea and other parts of Asia. As a result, we are subject to a number of economic and other risks, particularly during times of political, health or financial instability in these regions. Disruption of manufacturing or supply sources in these international locations could materially adversely impact our ability to fill customer orders and potentially result in lost business **. We are subject to risks associated with doing business in China. In addition to the risks associated with the tariffs and trade regulations detailed below, we are subject to the following risks associated with doing business in China: • adverse changes in Chinese political, economic or social conditions or Chinese laws, regulations or policies, including the imposition of unexpected or confiscatory taxation, restrictions on currency conversion, imports and sources of supply, devaluations of currency, the nationalization or other expropriation of private enterprises, or the reversal of economic reform policies that encourage private economic activity, foreign investments and greater economic decentralization; • differing economic practices compared to most developed countries, including with respect to the amount of government involvement, control of foreign exchange and allocation of resources; • uncertainties presented by the Chinese legal system, which is not fully integrated and continues to rapidly evolve, impeding our ability to interpret certain Chinese laws and regulations, predict and evaluate the outcome of administrative and court proceedings and the level of legal protection to enforce contracts we have entered into in China; and Chinese controls on the convertibility of Renminbi into foreign currencies and, in certain cases, the remittance of currency out of China, restricting our ability to remit sufficient foreign currency to pay dividends or make other payments to us, or otherwise satisfy foreign currency- denominated obligations. The foregoing risks and the ongoing geopolitical tensions and economic uncertainty between the United States and China and the unknown impact of current and future Chinese rules and regulations, may cause increased costs, as well as restrictions on our ability to sell, or a decreased demand from customers to purchase, our products, which could harm our business, financial condition and operating results. The Israel- Hamas conflict may have a material impact on our Business The Israel- Hamas conflict could have a negative impact on our future revenue and supply chain, either of which could adversely affect our business and financial results. Our customers in Israel may experience delays in product releases due to impacts to their labor force and impacts on their suppliers because of the conflict, which could materially impact demand for our products. Similarly, our suppliers in Israel may experience delays in providing us with parts due to the conflict. In addition, the global economic uncertainty following the start of the conflict could impact demand for our products** . Risks Related to Teradyne' s Finances We may not fully realize the benefits of our acquisitions or strategic alliances. In June 2015, we acquired Universal Robots, in 2018, we acquired Energid and MiR and, in 2019, we acquired Lemsys and AutoGuide **. In November 2023, we announced entering into strategic partnership agreement with Technoprobe which included Teradyne acquiring 10 % of the equity in Technoprobe** . We may not be able to realize the benefits of acquiring or successfully growing these businesses. We may continue to acquire additional businesses, form strategic alliances, or create joint ventures with third parties that we believe will complement or augment our existing businesses. We may not be able to realize the expected synergies and cost savings from the integration with our existing operations of other businesses or technologies that we may acquire. In addition, the integration process for our acquisitions may be complex, costly and time consuming and include unanticipated issues, expenses, and liabilities. We may have difficulty in developing, manufacturing, and marketing the products of a newly acquired company in a manner that enhances the performance of our combined businesses or product lines and allows us to realize value from expected synergies. Following an acquisition, we may not achieve the revenue or net income levels that justify the acquisition. Acquisitions may also result in one- time charges (such as acquisition- related expenses, write- offs or restructuring charges) or in the future, impairment of goodwill or acquired intangible assets, or adjustments to contingent consideration liabilities that adversely affect our operating results. Additionally, we may fund acquisitions of new businesses, strategic alliances, or joint ventures by utilizing our cash, incurring debt, issuing shares of our common stock, or by other means **. Additionally, we may face restrictions pursuant to the terms of an acquisition or strategic alliance agreement, such as the three year restriction on the transfer or disposition of the Technoprobe shares upon closing of the agreement, subject to certain early termination events** . We may incur higher tax rates than we expect and may have exposure to additional international tax liabilities and costs. We are subject to paying income taxes in the United States and other countries where we operate. Our effective tax rate is dependent on where our earnings are generated and the tax regulations and the interpretation and judgment of administrative tax or revenue authorities in the United States and other countries. We have pursued a global tax strategy that could be adversely affected by the mix of earnings and tax rates in the countries where we operate, changes to tax laws, tax regulations or an adverse tax ruling by administrative authorities. We are also subject to tax audits in the countries where we operate. Any material change in our tax liability resulting from changes in tax laws, tax regulations, administrative rulings or audits from an administrative tax or revenue authority could negatively affect our financial results. As a multinational corporation, we are subject to income taxes as well as non- income- based taxes, in both the United States and various foreign jurisdictions. In certain foreign jurisdictions, we qualify for tax incentives and tax holidays based on our ability to meet, on a continuing basis, various tests relating to our employment levels, research and development expenditures and other qualification requirements in a particular foreign jurisdiction. While we intend to operate in such a manner to maintain and maximize our tax incentives and tax holidays, no assurance can be given that we have so qualified or that we will so qualify for any particular year or jurisdiction. If we fail to qualify or fail to remain qualified for certain foreign tax incentives and tax holidays, we may be subject to further taxation or an increase in our effective tax rate which would adversely impact our financial results. In November 2020, we entered into an agreement with the Singapore Economic Development ~~16~~ Board which extended our Singapore tax holiday under substantially similar terms to the agreement which expired on December 31, 2020. The new tax holiday is scheduled to expire on December 31, 2025. The tax savings attributable to the Singapore tax holiday for the years ended December 31, **2023,** 2022 ~~,~~ **and** 2021 ~~and 2020~~ were **$ 1. 4 million or $ 0. 01 per diluted share,** $ 16. 0 million or $ 0. 09 per diluted share, **and** $ 33. 3 million or $ 0. 18 ~~per diluted share, and $ 29. 9 million or $ 0. 16~~ per diluted share, respectively. These tax savings may not be achievable in subsequent years due to changes in Singapore' s tax laws, issuance of new global minimum tax laws, or the expiration of the tax holiday. In addition, we may incur additional costs, including headcount expenses, in order to maintain or obtain a foreign tax incentive or tax holiday in a particular foreign jurisdiction. We have significant guarantees, indemnification, and customer confidentiality obligations. From time to time, we make guarantees to customers regarding the delivery, price and performance of our products and guarantee certain indebtedness, performance obligations or lease commitments of our subsidiary and affiliate companies. We also have agreed to provide indemnification to our officers, directors, employees and agents, to the extent permitted by law, arising from certain events or occurrences, while the officer, director, employee or agent, is or was serving at our request in such capacity. Additionally, we have confidentiality obligations to certain customers and if breached would require the payment of significant penalties. If we become liable under any of these obligations, it could materially and adversely affect our business, financial condition or operating results. For additional information see Note M: " Commitments and Contingencies ~~—~~ **-** Guarantees and Indemnification Obligations " in Notes to Consolidated Financial Statements. We may discontinue or reduce our quarterly cash dividend or share repurchase program. In January 2014, our Board of Directors initiated a quarterly cash dividend. Since 2014, the Board of Directors has increased our quarterly cash dividend from $ 0. 06 per share to $ 0. ~~11~~ **12** per share. Holders of our common stock are only entitled to receive dividends when and if they are declared by our Board of Directors. In January 2021, our Board of Directors approved a $ 2. 0 billion share repurchase program. In 2022 and 2021, we repurchased $ 752. 1 million, and $ 600. 0 million, respectively of common stock. In January 2023, our Board of Directors cancelled the 2021 repurchase program and approved a new $ 2. 0 billion share repurchase program **. In 2023, we repurchased $ 400. 5 million of common stock. We intend to repurchase up to $ 90. 0 million in 2024** . Under the share repurchase program, we may repurchase outstanding shares of our common stock from time to time in the open market and through privately negotiated transactions. Unless terminated earlier by resolution of our Board of Directors, the repurchase program will expire when we have repurchased all shares authorized for repurchase under the share repurchase program. Future cash dividends and share repurchases are subject to the discretion of our Board of Directors and will depend, among other things, upon our earnings, capital requirements and financial condition. While we have declared a quarterly cash dividend on our common stock and authorized a share repurchase program, we are not required to do either and may reduce or eliminate our cash dividend or share repurchase program in the future. The reduction or elimination of our cash dividend or our share repurchase program could adversely affect the market price of our common stock. We have incurred indebtedness and may incur additional indebtedness. ~~On December 12, 2016, we completed a private offering of $ 460. 0 million aggregate principal amount of 1. 25 % convertible senior unsecured notes (the " Notes ") due December 15, 2023 and received net proceeds, after issuance costs, of approximately $ 450. 8 million, $ 33. 0 million of which was used to pay the net cost, after being partially offset by proceeds from the sale of the warrants, of the convertible note hedge transactions and $ 50. 1 million of which was used to repurchase 2. 0 million shares of our common stock. Holders of the Notes may require us to repurchase the Notes upon the occurrence of certain fundamental changes involving us or the holders may elect to convert into shares of our common stock. As of February 22, 2023, one hundred and twenty-four holders had converted $ 424. 9 million worth of notes. 17~~ On May 1, 2020, we entered into a three- year, senior secured revolving credit facility of up to $ 400. 0 million. On December 10, 2021, the credit agreement was amended to extend the maturity date of the credit facility to December 10, 2026. On October 5, 2022, the credit agreement was amended to increase the amount of the credit facility to $ 750. 0 million from $ 400. 0 million. The amended credit agreement provides that, subject to customary conditions, we may seek to obtain from existing or new lenders the available incremental amount under the credit facility, not to exceed the greater of $ 200. 0 million or 15 % of consolidated EBIDTA. We could borrow funds under this credit facility at any time for general corporate purposes and working capital. As of February 22, ~~2023~~ **2024** , we have not borrowed any funds under this credit facility. **Our outstanding** ~~The issuance of the Notes~~ and any additional indebtedness, among other things, could: • make it difficult to make payments on this indebtedness and our other obligations; • make it difficult to obtain any necessary future financing for working capital, capital expenditures, debt service requirements or other purposes; • require the dedication of a substantial portion of any cash flows from operations to service for indebtedness, thereby reducing the amount of cash flows available for other purposes, including capital expenditures ~~;~~ **,** and • limit our flexibility in planning for ~~,~~ or reacting to ~~,~~ changes in our business and the industries in which we ~~compete~~ **complete** . Restrictive covenants in the agreement governing our senior secured revolving credit facility may restrict our ability to pursue business strategies. The agreement governing our senior secured revolving credit facility limits our ability, among other things, to incur additional secured indebtedness; sell, transfer, license or dispose of assets; consolidate or merge; enter into transactions with our affiliates; and incur liens. In addition, our senior secured revolving credit facility contains financial and other restrictive covenants that limit our ability to engage in activities that may be in our long- term best interest, such as, subject to permitted exceptions, making capital expenditures in excess of certain thresholds, making investments, loans and other advances, and prepaying any additional indebtedness while our indebtedness under our senior secured revolving credit facility is outstanding. Our failure to comply with financial and other restrictive covenants could result in an event of default, which if not cured or waived, could result in the lenders requiring immediate payment of all outstanding borrowings or foreclosing on collateral pledged to them to secure the indebtedness. **[3]** Our ~~convertible note hedge and~~ warrant transactions could impact the value of our stock **. On December 12, 2016, we completed a private offering of $ 460. 0 million aggregate principal amount of 1. 25 % convertible senior unsecured notes (the " Notes ") that matured on December 15, 2023** . Concurrent with the offering of the Notes, we entered into convertible note hedge transactions ~~(the " Note Hedge Transactions ")~~ with the initial purchasers or their affiliates (the " Option Counterparties ") ~~. The Note Hedge Transactions cover, subject to customary anti- dilution adjustments, the number of shares of our common stock that underlie the Notes, with a strike price equal to the conversion price of the Notes of $ 31. 46. The Note Hedge Transactions cover, subject to customary anti- dilution adjustments, approximately 1. 6 million shares of our common stock. On November 4, 2021, we made an irrevocable election under the indenture to require the principal portion of the remaining Notes to be settled in cash~~ . Separately and concurrent with the pricing of the Notes, we entered into warrant transactions with the Option Counterparties (the " Warrant Transactions ") in which we sold net- share- settled (or, at our election subject to certain conditions, cash- settled) warrants to the Option Counterparties. The Warrant Transactions **, which expire between March 18, 2024 and July 10, 2024,** cover, subject to customary anti- dilution adjustments, approximately 14. ~~6~~ **7** million shares of our common stock. The strike price of the warrants is $ 39. ~~48~~ **40** per share. The Warrant Transactions could **result in increased** ~~have a dilutive effect to our~~ common stock **outstanding** to the extent that the market price per share of our common stock, as measured under the terms of the Warrant Transactions, exceeds the applicable strike price of the warrants ~~. 18 The Note Hedge Transactions are expected to reduce the potential dilution to our common stock upon any conversion of the Notes. However, the Warrant Transactions could separately have a dilutive effect to the extent that the market value per share of our common stock exceeds the applicable strike price of the warrants. The net cost of the Note Hedge Transactions, after being partially offset by the proceeds from the sale of the warrants, was approximately $ 33. 0 million. In connection with establishing their initial hedge of these convertible note hedge and warrant transactions, the Option Counterparties have entered into various derivative transactions with respect to our common stock and / or purchase shares of our common stock or other securities, including the Notes, concurrent with, or shortly after, the pricing of the Notes. In addition, the Option Counterparties may modify their hedge positions by entering into or unwinding various derivative transactions with respect to our common stock or by selling our common stock or other securities, including the Notes, in secondary market transactions (and may do so during any observation period related to the conversion of the Notes). These activities could adversely impact the value of our common stock and the Notes~~ . We may not be able to pay our debt and other obligations. If our cash flows are inadequate to meet our obligations, we could face substantial liquidity problems. If we are unable to generate sufficient cash flows or otherwise obtain funds necessary to make required payments on ~~the Notes~~ **our senior secured revolving credit facility** or certain of our other obligations, we would be in default under the terms thereof, which would permit the holders of those obligations to accelerate their maturity and also could cause defaults under future indebtedness we may incur. Any such default could have a material adverse effect on our business, prospects, financial position and operating results. ~~In addition, we cannot be certain that we would be able to repay amounts due on the Notes if those obligations were to be accelerated following the occurrence of any other event of default as defined in the instruments creating those obligations, or if the holders of the Notes require us to repurchase the Notes upon the occurrence of a fundamental change involving us. Moreover, we cannot be certain that we will have sufficient funds or will be able to arrange for financing to pay the principal amount due on the Notes at maturity.~~ Foreign currency exchange rates and fluctuations in those rates may affect the Company' s ability to realize projected growth rates in its sales and earnings. Our financial statements are denominated in U. S. dollars. While the majority of our revenues are in U. S. dollars, approximately 70 ~~percent~~ **%** of our Robotics revenue ~~is~~ **in 2023 was** denominated in foreign currencies. Correspondingly, our results of operations and our ability to realize projected growth rates in sales and earnings in Robotics could be adversely affected if the U. S. dollar strengthens significantly against foreign currencies **. Adverse developments affecting the financial services industry, including events or risks involving liquidity, defaults or non- performance by financial institutions, could have a material adverse effect on our business, financial condition or results of operations. On March 10, 2023, Silicon Valley Bank (SVB), who is a lender in our revolving credit facility and where we maintain certain accounts and cash deposits, was placed into receivership with the Federal Deposit Insurance Corporation (FDIC), which resulted in all funds held at SVB being temporarily inaccessible by SVB' s customers. As of March 13, 2023, access to our cash and cash equivalents at SVB was fully restored. Although our cash balances at SVB are insignificant and we do not expect further developments at SVB to have a material impact on our cash and cash equivalents, we do hold cash balances in several large financial institutions significantly in excess of FDIC and global insurance limits. If other banks and financial institutions with whom we have banking relationships enter receivership or become insolvent in the future, we may be unable to access, and we may lose, some or all of our existing cash, cash equivalents and investments to the extent those funds are not insured or otherwise protected by the FDIC. Our stock price has been subject to fluctuations, and will likely continue to be subject to fluctuations, which may be volatile and due to factors beyond our control. The market price of our common stock is subject to wide fluctuations in response to various factors, some of which are beyond our control. In addition to the factors discussed in this" Risk Factors" section and elsewhere in this report, factors that could cause fluctuations in the market price of our common stock include the following: • ratings changes by any securities analysts who follow our company; • announcements by us or our competitors of significant technical innovations, acquisitions, strategic partnerships, joint ventures, or capital commitments; • changes in operating performance and stock market valuations of other technology companies generally, or those in our industry in particular; • changes in accounting standards, policies, guidelines, interpretations, or principles; • actual or anticipated developments in our business or our competitors' businesses or the competitive**

landscape generally; • developments or disputes concerning our intellectual property or our products and platform capabilities, or third- party proprietary rights; • cybersecurity attacks or incidents; • announced or completed acquisitions of businesses or technologies by us or our competitors; • changes in our board of directors or management; • announced or completed equity or debt transactions involving our securities; • sales of shares of our common stock by us, our officers, directors, or other stockholders; and • other events or factors, including those resulting from global and macroeconomic conditions, including heightened inflation, rising interest rates, bank failures, and a potential recession, and speculation regarding the same, as well as public health crises, geopolitical tension, incidents of terrorism, or responses to these events. In addition, the market for technology stocks and the stock markets in general have experienced extreme price and volume fluctuations. Stock prices of many technology companies have fluctuated in a manner unrelated or disproportionate to the operating performance of those companies. In the past, stockholders have instituted securities class action litigation following periods of market volatility. If we were to become involved in securities litigation, it could subject us to substantial costs, divert resources and the attention of management from our business, and adversely affect our business, results of operations, financial condition, and cash flows. A decline in the value of our common stock, including as a result of one or more factors set forth above, may result in substantial losses for our stockholders . Risks Related to Operations Our operating results are likely to fluctuate significantly. Our operating results are affected by a wide variety of factors that could materially adversely affect revenues or profitability. The following factors could impact future operations: • a worldwide economic slowdown or disruption in the global financial or industrial markets; • cost increases from inflation on materials, employee wages, third party labor, and contract manufacturing; • competitive pressures on selling prices; • our ability to introduce, and the market acceptance of, new products; • changes in product revenues mix resulting from changes in customer demand; ~~19~~ • the level of orders received which can be shipped in a quarter because of the tendency of customers to wait until late in a quarter to commit to purchase due to capital expenditure approvals and constraints occurring at the end of a quarter, or the hope of obtaining more favorable pricing from a competitor seeking the business; • engineering and development investments relating to new product introductions, and the expansion of manufacturing, outsourcing and engineering operations in Asia; • provisions for excess and obsolete inventory relating to the lack of demand for and the discontinuance of products; • impairment charges for certain long- lived and intangible assets, and goodwill; • an increase in the leasing of our products to customers; • disruption caused by health pandemics, such as the coronavirus; • the success of sales channel expansion in Robotics; • our ability to expand our global distribution channel for our collaborative and mobile robots; • parallel or multi- site testing which could lead to a decrease in the ultimate size of the market for our semiconductor and electronic test products; and • the ability of our suppliers and subcontractors to meet product quality or delivery requirements needed to satisfy customer orders for our products, especially if consolidated revenues increase. As a result of the foregoing and other factors, we have experienced and may continue to experience material fluctuations in future operating results on a quarterly or annual basis which could materially and adversely affect our business, financial condition, operating results or stock price. If our suppliers do not meet product or delivery requirements, we could have reduced revenues and earnings. If any of our suppliers were to cancel contracts or commitments or fail to meet the quality or delivery requirements needed to satisfy customer orders for our products, we could lose time- sensitive customer orders, have significantly decreased revenues and earnings and be subject to contractual penalties, which would have a material adverse effect on our business, results of operations and financial condition. In addition, we rely on contract manufacturers for certain of our products, and our ability to meet customer orders for those products depends upon the timeliness and quality of the work performed by these subcontractors, over whom we do not exercise any control. To a certain extent, we are dependent upon the ability of our suppliers and contract manufacturers to help meet increased product or delivery requirements. It may be difficult for certain suppliers to meet delivery requirements in a period of rapid growth, therefore impacting our ability to meet our customers' demands. Our suppliers are subject to trade regulations, including tariffs and export restrictions imposed by the United States Government and by the governments of other countries. These regulations could impact our suppliers' ability to provide us with components for our products or could increase the price of those components. We rely on the financial strength of our suppliers. ~~There~~ -- **The** ~~can be no assurance that the~~ loss of suppliers either as a result of financial viability, bankruptcy or otherwise **could** ~~will not~~ have a material adverse effect on our business, results of operations or **financial condition.The global supply** shortage of electrical components and inflationary cost increases has impacted our ability to meet customer demand and could adversely affect our business and financial results.The global supply shortage of electrical components,including semiconductor chips,continued to impact our supply chain in ~~2022~~ **2023** .As a result,we have experienced,and **may** ~~expect to continue to~~ experience **in the future** ,increases in our lead times and costs for certain components for certain products and delays in the delivery of some orders placed by our customers.In addition,in ~~2022~~ **2023** ,inflationary pressures contributed to increased costs for product components and wage inflation,which had minimal impact on our cost of products,gross margin and profit for the year.Our supply chain team,and our suppliers,continue to manage numerous supply,production and logistics obstacles.In an effort to mitigate these risks,in some cases,we have incurred higher costs due to investment in supply chain resiliency and to secure available inventory or have extended or placed non- cancellable purchase commitments with semiconductor suppliers,which introduces inventory risk if our forecasts and assumptions prove inaccurate.We have also sourced components from additional suppliers and multi- sourced and pre- ordered components and finished goods inventory in some cases in an effort to reduce the impact of the adverse supply chain conditions we have experienced.However,if we are unable to secure manufacturing capacities from our current or new suppliers and contract manufacturers,on acceptable terms or at all,or successfully manage our purchase commitments and inventory for components,our ability to deliver our products to our customers in the desired quantities,at competitive prices or in a timely manner may be negatively impacted for ~~2023~~ **2024** .Also,our suppliers and contract manufacturers have increased their prices,which increased our cost of products ~~.We have been and may continue to be,affected by wage inflation~~ .We also have been,and may continue to attempt to,offset the effect of these inflationary pressures by increasing the prices of our products.However,we may not be fully able to pass additional costs on to our customers,which could have a **negative impact on our results of operations and** financial condition. Our operations may be adversely impacted if our outsourced contract manufacturers or service providers fail to perform. We depend on Flex Ltd. (" Flex ") to manufacture and test our FLEX and J750 family of products from its ~~facilities~~ **facility** in ~~China and, starting in 2022, also~~ Malaysia; Plexus Corp. (" Plexus ") to manufacture and test our ~~20~~ Magnum products from its facilities in Malaysia and ~~, starting in 2023,~~ also Thailand and ETS family of products from its facility in Malaysia; SAM Meerkat to manufacture and test our storage test family of products from its facilities in Malaysia and Thailand and on other contract manufacturers to manufacture other products. If for any reason these contract manufacturers cannot provide us with these products in a timely fashion, or at all, we may not be able to sell these products to our customers until we enter a similar arrangement with an alternative contract manufacturer. ~~The Flex facility located in China may be impacted by the ongoing trade dispute between the United States and China, by regulations implemented by the United States or China, or disruption caused by health pandemics, such as the coronavirus.~~ If we experience a problem with our supply of products from Flex, Plexus, SAM Meerkat, or our other contract manufacturers, it may take us significant time to either manufacture the product or find an alternate contract manufacturer, which could result in substantial expense and disruption to our business. We have also outsourced certain general and administrative functions to reputable service providers, many of which are in foreign countries, sometimes impacting communication with them because of language and time differences. Their presence in foreign countries also increases the risk they could be exposed to political **and cybersecurity** risk. Additionally, there may be difficulties encountered in coordinating the outsourced operations with existing functions and operations. If we fail in successfully coordinating and managing the outsourced service providers, it may cause an adverse effect on our operations which could have a material adverse effect on our business, results of operations or financial condition. Our business may suffer if we are unable to attract and retain key employees. Competition for employees with skills we require is intense in the high technology industry. We expect intense competition for employees to continue in ~~2023~~ **2024** . Our success will depend on our ability to attract and retain key technical employees. The loss of one or more key or other employees, a decrease in our ability to attract additional qualified employees, or the delay in hiring key personnel could each have a material adverse effect on our business, results of operations or financial condition. Our operations, and the operations of our customers and suppliers, are subject to risks of natural catastrophic events, severe weather, widespread health epidemics, acts of war, terrorist attacks and the threat of domestic and international terrorist attacks, any one of which could result in cancellation of orders, delays in deliveries or other business activities, or loss of customers and could negatively affect our business and results of operations. Our business is international in nature, with our sales, service and administrative personnel and our customers and suppliers located in numerous countries throughout the world. Our operations, and those of our customers and suppliers, are subject to disruption for a variety of reasons, including work stoppages, acts of war, terrorism, health epidemics, fires, earthquakes, hurricanes, typhoons, volcanic eruptions, energy shortages, telecommunication failures, tsunamis, flooding or other natural disasters. Such disruption could materially increase our costs and expenses as well as cause delays in, among other things, shipments of products to our customers, our ability to perform services requested by our customers, or the installation and acceptance of our products at customer sites. Any of these conditions could have a material adverse effect on our business, financial condition or results of operations. Global climate change can result in natural disasters occurring more frequently, with greater intensity and with less predictability. For example, in December 2021, our operations in Cebu, Philippines experienced a devastating typhoon. Our employees in Cebu succeeded in restoring most of our operations within days despite the severity of the damage in the region. ~~We have offered support services to many of our employees impacted by the typhoon and have incurred additional costs to maintain our operations following the disaster.~~ The long- term effects of climate change on the global economy and the semiconductor industry in particular are unclear but could be severe . 21 The global supply shortage of...... businesses for which we had customer demand . Risks Related to Intellectual Property (" IP ") and Cybersecurity Third parties may claim we are infringing their intellectual property and we could suffer significant litigation costs, licensing expenses or be prevented from selling our products. We have been sued for patent infringement and receive notifications from time to time that we may be in violation of patents held by others. An assertion of patent infringement against us, if successful, could have a material adverse effect on our ability to sell our products or it could force us to seek a license to the intellectual property rights of others or alter such products so that they no longer infringe the intellectual property rights of others. A license could be very expensive to obtain or may not be available at all. Similarly, changing our products or processes to avoid infringing the rights of others may be costly or impractical. Additionally, patent litigation could require a significant use of management resources and involve a lengthy and expensive defense, even if we eventually prevail. If we do not prevail, we might be forced to pay significant damages, obtain licenses, modify our products, or stop making our products; each of which could have a material adverse effect on our financial condition, operating results or cash flows. If we are unable to protect our IP, we may lose a valuable asset or may incur costly litigation to protect our rights. We protect the technology that is incorporated in our products in several ways, including through patent, copyright, trademark and trade secret protection and by contractual agreement. However, even with these protections, our IP may still be challenged, invalidated or subject to other infringement actions. While we believe that our IP has value in the aggregate, **we do** ~~no~~ **not believe that any** single element of our IP is in itself essential. If a significant portion of our IP is invalidated or ineffective, our business could be materially adversely affected. A breach of our operational or security systems could negatively affect our business and results of operations. We rely on various information technology networks and systems to process, transmit and store electronic information, including proprietary and confidential data, and to carry out and support a variety of business ~~22~~ activities, including manufacturing, research and development, supply chain management, sales and accounting. We have experienced several attempted cyber- attacks of our network. None of the attempted attacks have caused a disruption to our operations or had a material adverse effect on our business or financial results. As a result of the attempts, we have taken further preventive security measures to protect our systems. Despite these preventative security measures we have implemented, we may continue to be vulnerable to attempts by third parties to gain unauthorized access to our networks or sabotage our systems. These attempts, which might be related to criminal hackers, industrial espionage or state- sponsored intrusions, include trying to covertly introduce malware to our computers, networks and systems and impersonating authorized users. In addition, third party suppliers and service providers that we rely on to manage our networks and systems and process and store our proprietary and confidential data, including the data of our customers and suppliers, may also be subject to similar attacks. Employees and contractors may also attempt to gain unauthorized access to our systems and steal proprietary and confidential data. Such attempts could result in the misappropriation, theft, misuse, disclosure or loss or destruction of the intellectual property, or the proprietary, confidential or personal information, of Teradyne or our employees, customers, suppliers or other third parties, as well as damage to or disruptions in our information technology networks and systems. These threats are constantly evolving **and expanding, such as through the increased use of artificial intelligence in our products and expanding remote work opportunities for our employees** , thereby increasing the difficulty of defending against them or implementing adequate preventative measures. While we seek to detect and investigate all security incidents and to prevent their recurrence, attempts to gain unauthorized access to our information technology networks and systems may be successful, and in some cases, we might be unaware of an incident or its magnitude and effects. A failure in or a breach of our operational or security systems or infrastructure, or those of our suppliers and other service providers, including as a result of cyber- attacks, could have a material adverse effect on our business or financial results, disrupt our business, result in the disclosure or misuse of proprietary or confidential information, damage our reputation, cause losses and increase our costs. We expect to continue to devote significant resources to the security of our information technology networks and systems. A breach of the security of our products could negatively affect our business and results of operations. We may be subject to security breaches of certain of our products caused by viruses, illegal break- ins or hacking, sabotage, or acts of vandalism by third parties or our employees or contractors. A breach of our product security systems could have a material adverse effect on our business or financial results, disrupt our business, result in the disclosure or misuse of proprietary or confidential information, damage our reputation, cause losses, and increase our costs. We expect to continue to devote significant resources to the security of our products. ~~Risks Related to the COVID- 19 Pandemic The novel coronavirus (COVID- 19) pandemic has impacted our business and could materially adversely affect our results of operations, financial condition, liquidity, or cash flows. During the global COVID- 19 pandemic, government authorities implemented numerous measures in an effort to contain the spread of the virus, such as travel bans and restrictions, limitations on gatherings or social distancing requirements, quarantines, shelter- in- place orders, vaccination and testing mandates, and business limitations and shutdowns. These measures impacted our day- to- day operations and disrupted our business, workforce and operations, as well as the operations of our customers, contract manufacturers and suppliers. The COVID- 19 pandemic also significantly increased economic and demand uncertainty in our markets. The COVID- 19 pandemic, and the numerous measures implemented in response, adversely impacted our results of operations, including increasing costs company- wide, but we cannot accurately estimate the full extent of the impact to our 2022, 2021 and 2020 financial results or to our future financial results. We will continue to monitor the COVID- 19 pandemic. However, we are unable to accurately predict the future of COVID- 19, which will depend on future developments that are highly uncertain and cannot be predicted with accuracy, including, but not limited to, any new surges or new strains or variants of the virus in areas where we do business, the availability and use of vaccinations and any further actions we may take as required by government authorities or that we determine are in the best interest of our employees, customers, contract manufacturers and suppliers. 23~~ Risks Related to Legal and Regulatory Compliance The implementation of tariffs on our products may have a material impact on our business. Our business operations and supply chain are global and may be disrupted by the implementation of tariffs. In 2018, the United States Trade Representative imposed a 25 % tariff on many lists of products, including certain Teradyne products that are made in China and imported into the United States. We have implemented operational changes that mitigate the impact of the 25 % tariff on the import of our impacted products into the United States. As a result, the existing tariff has not had a material adverse effect on our business, financial condition or results of operations. The implementation of additional tariffs by the United States could have a material adverse effect on our business, financial condition or results of operations. In addition to the actions taken by the United States, China has implemented retaliatory tariffs on products made in the United States and imported into China, including certain Teradyne products. We have implemented, if appropriate, operational changes that would mitigate the impact of the retaliatory tariffs. However, notwithstanding our efforts, the retaliatory tariffs or other trade restrictions implemented by China could disrupt our business operations, sales and supply chain and, therefore, have a material adverse effect on our business, financial condition or results of operations. Trade regulations and restrictions impact our ability to manufacture certain products and to sell products to and support certain customers, which may materially adversely affect our sales and results of operations. We are subject to U. S. laws and regulations that limit and restrict the export of some of our products and services and may restrict our transactions with certain customers, business partners and other persons. In certain circumstances, export control and economic sanctions regulations prohibit the export of certain products, services and technologies, and in other circumstances are required to obtain an export license before exporting the controlled item. We must also comply with export restrictions and laws imposed by other countries affecting trade and investments. We maintain an export compliance program but there are risks that the compliance controls could be circumvented, exposing us to legal liabilities. Compliance with these laws has not significantly limited our sales but could significantly limit them in the future. Changes in, and responses to, U. S. trade policy could reduce the competitiveness of our products and cause our sales to drop, which could have a material adverse effect on our business, financial condition or results of operations. The U. S. government from time to time has issued export restrictions that prohibit U. S. companies from exporting U. S. manufactured products, foreign manufactured products with more than 25 % controlled U. S. content, as well as U. S. origin technology. For example, the U. S. Department of Commerce has restricted the access of U. S. origin technologies to certain Chinese semiconductor companies ~~including YMTC and CXMT~~ by adding those companies to the Entity List under U. S. Export Administration Regulations (" EAR "). The addition of certain of these companies to the entity list has had and will continue to have an adverse impact on our business with these customers. We will take appropriate actions, including filing for licenses with the U. S. Department of Commerce to attempt to minimize the impact of the restrictions on ~~these companies~~ **our business** . On May 16, 2019, Huawei and 68 of its affiliates, including HiSilicon, were added to the U. S. Department of Commerce Entity List under the EAR. This action by the U. S. Department of Commerce imposed new export licensing requirements on exports, re- exports, and in- country transfers of all U. S. regulated products, software and technology to the designated Huawei entities. On August 17, 2020, the U. S. Department of Commerce published final regulations expanding the scope of the U. S. EAR to include additional products that would become subject to export restrictions relating to Huawei entities including HiSilicon. These new regulations restrict the sale to Huawei and the designated Huawei entities of certain non- U. S. made items, such as semiconductor devices, manufactured for or sold to Huawei entities including HiSilicon under specific, detailed conditions set forth in the new regulations. These new regulations have impacted our sales to Huawei, HiSilicon and their suppliers. We are taking appropriate actions, including filing license applications and obtaining licenses ~~24~~ from the U. S. Department of Commerce. However, we do not expect these actions will mitigate the impact of the regulations on our sales to Huawei, HiSilicon and other suppliers. As a result, the regulations will continue to have an adverse impact on our business and financial results. It is uncertain the extent these new regulations and any additional regulations that may be implemented by the U. S. Department of Commerce or other government agency may have on our business with other customers or potential customers. Also, our controls related to Entity List compliance could be circumvented, exposing us to legal liabilities. On April 28, 2020, the U. S. Department of Commerce published new export control regulations for certain U. S. products and technology sold to military end users or for military end- use in China, Russia and Venezuela. The definition of military end user is broad. The regulations went into effect on June 29, 2020. In December 2020, the U. S. Department of Commerce issued a list of companies in China and other countries that it considered to be military end users. Compliance with the new export controls has impacted our ability to sell products to certain customers in China. In addition, while we maintain an export compliance program, our compliance controls could be circumvented, exposing us to legal liabilities. We will continue to assess the impact of ~~the~~ **these** ~~new~~ export controls on our business and operations and take appropriate actions, including filing for licenses with the U. S. Department of Commerce, to minimize any disruption. However, we cannot be certain that the actions we take will mitigate all the risks associated with the export controls that may impact our business. On October 7, 2022, the U. S. Department of Commerce published ~~new~~ regulations restricting the export to China of advanced semiconductors, supercomputer technology, equipment for the manufacturing of advanced semiconductors and components and technology for the manufacturing in China of certain semiconductor manufacturing equipment. The ~~new~~ restrictions ~~are lengthy and complex. We continue to assess the impact~~ **impacted** ~~of these regulations on our business. We have determined that restrictions on the sale of semiconductor testers in China to test certain advanced semiconductors will impact~~ our sales to certain companies in China **and our** ~~. Several multinational companies~~ manufacturing ~~these advanced semiconductors~~ **and development operations** in China ~~have obtained one- year licenses allowing suppliers such as Teradyne to continue to provide testers to the facilities operated by these companies~~ . We **mitigated** ~~expect that other companies manufacturing advanced semiconductors in China will not receive licenses, thereby restricting our ability to provide testers to the facilities operated by these companies that do not receive a license. We also are filing license requests to sell to and support certain customers in China for certain end uses that, if granted, may reduce~~ the impact of these restrictions on our business **by obtaining licenses from the U** . ~~At this time~~ **S. Department of Commerce. On October 17** , ~~we do not know~~ **2023, the U. S. Department of Commerce released new rules updating the export controls issued on October 7, 2022. The new rules, which took effect on November 17, 2023, significantly limit** the impact **of** ~~these~~ -- **the October 7, 2022** ~~end user and end use~~ restrictions ~~will have~~ on our business ~~in China or on future revenues~~ . **However** ~~In addition to the specific restrictions impacting our business~~ , the regulations may **continue to** have an adverse impact on certain actual or potential customers and on the global semiconductor industry. To the extent the regulations impact actual and potential customers or disrupt the global semiconductor industry, our business and revenues will be adversely impacted. ~~We also have determined that the restrictions on the export of certain US origin components and technology for use in the development and production in China of certain semiconductor manufacturing equipment impact our manufacturing and development operations in China. We have received a temporary authorization from the U. S. Department of Commerce allowing us to continue our manufacturing and development operations in China until the U. S. Department of Commerce issues a license to replace this temporary authorization. We cannot assess the likelihood or timing of receiving this license. In addition to requesting a license, we are implementing procedures for minimizing the impact of these new regulations on our operations in China, but there is no assurance that these procedures will succeed.~~ In response to the regulations issued by the U. S. Department of Commerce, the Chinese government has passed new laws, including blocking legislation, which may impact our business activities in China. The Company is assessing the potential impact of these new Chinese laws and monitoring relevant laws and regulations issued by the Chinese government. The impact of these new Chinese laws on our business activities in China remains uncertain at this time. We may be subject to product recalls and warranty and product liability claims. We invest significant resources in the design, manufacturing and testing of our products. However, from time to time, we discover design or manufacturing defects in our products after they have been shipped and, as a ~~25~~ result, we have incurred development and remediation costs and settled warranty and product liability claims. In addition, when our products contain defects or have reliability, quality or safety issues, we have conducted a product recall which resulted in significant repair or replacement costs and substantial delays in product shipments and may damage our reputation which could make it more difficult to sell our products. We could continue to have warranty and product liability claims or product recalls in the future. Any of these results could have a material adverse effect on our business, results of operations or financial condition. We may incur significant costs of complying with present and future environmental regulations and may incur significant liabilities if we fail to comply with such environmental regulations. We are subject to both domestic and international environmental regulations and statutory strict liability relating to the use, storage, discharge, site cleanup and disposal of hazardous chemicals used in our manufacturing processes. In addition, future regulations in response to global climate change may affect us, our suppliers, and our customers. Such regulations could cause us to incur additional direct costs for compliance, as well as increased indirect costs resulting from our customers, suppliers, or both incurring additional compliance costs that are passed on to us. Future climate change regulations could result in decreased demand for our products. If we fail to comply with present and future regulations, or are required to perform site remediation, we could be subject to future liabilities or cost, including penalties or the suspension of production. Present and future regulations may also: • restrict our ability to expand facilities; • restrict our ability to ship certain products; • require us to modify our operations logistics; • require us to acquire costly equipment; or • require us to incur other significant costs and expenses. Pursuant to present regulations and agreements, we are conducting groundwater and subsurface assessment and monitoring and are implementing remediation and corrective action plans for facilities located in Massachusetts and New Hampshire which are no longer conducting manufacturing operations. As of December 31, ~~2022~~ **2023** , we have not incurred material costs as a result of the monitoring and remediation steps taken at the Massachusetts and New Hampshire sites. The directive on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (the " RoHS Directive ") and the directive on Waste Electrical and Electronic Equipment (the " WEEE Directive ") altered the form and manner in which electronic equipment is imported, sold and handled in the European Union. Other jurisdictions, such as China, have followed the European Union' s lead in enacting legislation with respect to hazardous substances and waste removal. Ensuring compliance with the RoHS Directive, the WEEE Directive and similar legislation in other jurisdictions, and integrating compliance activities with our suppliers and customers could result in additional costs and disruption to operations and logistics and thus, could have a negative impact on our business, operations or financial condition. We currently are, and in the future may be, subject to litigation or regulatory proceedings that could have an adverse effect on our business. From time to time, we may be subject to litigation or other administrative, regulatory or governmental proceedings, including tax audits and resulting claims that could require significant management time and resources and cause us to incur expenses and, in the event of an adverse decision, pay damages or incur costs in an amount that could have a material adverse effect on our financial position or results of operations. We may face risks associated with shareholder activism. We may become subject to campaigns by shareholders advocating corporate actions such as financial restructuring, increased borrowing, special dividends, stock repurchases or divestitures. Such activities could ~~26~~ **interfere with our ability to execute our business plans, be costly and time- consuming, disrupt our operations, divert the attention of management, or result in our initiating borrowing or increasing our share repurchase plan or dividend, any of which could have an adverse effect on our business or stock price. Provisions of our charter and by- laws and Massachusetts law may make a takeover of Teradyne more difficult. There are provisions in our basic corporate documents and under Massachusetts law that could discourage, delay or prevent a change in control, even if a change in control may be regarded as beneficial to some or all of our stockholders.**