ALGER

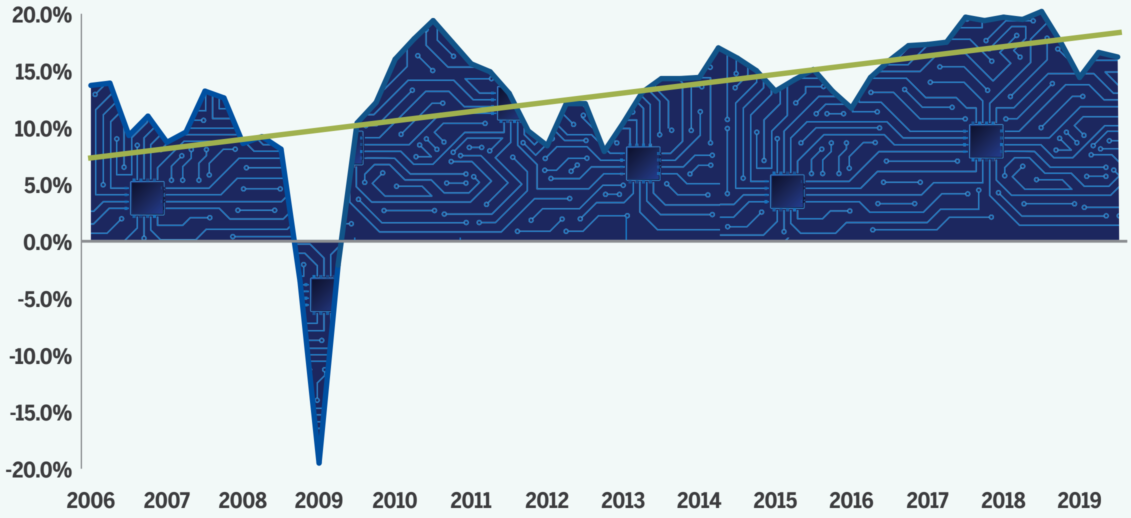
Alger On the Money

A View on the U.S. Market

Semiconductor Economies of Scale

The global semiconductor industry, which represents over $450 billion of annual sales, operates very differently from most other areas of technology. We believe the semiconductor industry enjoys a concept we call “continuous economies of scale.” This means that the larger companies become, the more their protective barriers to entry strengthen and the more their margins rise.

Average Semiconductor Company Operating Margins



Source: FactSet, Global Semiconductor Index containing 37 semiconductor companies.

- Average semiconductor company operating margins have increased from 13.7% in 1Q06 to 16.2% in 3Q19.
- In semiconductors the slowing of Moore’s Law[1] causes advances in speed or capability to require more engineering capital. This capital hurdle prevents venture capital-backed startups from creating cost-competitive products to compete against larger incumbents.
- The investment required to produce cutting-edge silicon, a primary ingredient in semiconductors, is additive. Years of capital expenditures—on equipment, buildings and chip architecture—need to be aggregated to determine the total cost of replicating a product. We think the barriers to entry created by this capital intensity can last multiple decades.
- We believe the leaders in subsectors of semiconductors—especially in capital intensive areas like foundry—offer the potential for strong, long-term returns for tech investors. Additionally, we believe continuous economies of scale will continue to consolidate the semiconductor industry by removing subscale companies, increasing barriers to entry and improving pricing power, which should together reduce the industry’s cyclicality and improve long-term margins.

Inspired by Change, Driven by Growth.

[1] Moore's Law is the principle dictating that the speed and capability of computers may double every two years as a result of increases in the number of transistors a microchip can contain.

The views expressed are the views of Fred Alger Management, LLC ("FAM") as of February 2020. These views are subject to change at any time and they do not guarantee the future performance of the markets, any security or any funds managed by FAM. These views are not meant to provide investment advice and should not be considered a recommendation to purchase or sell securities.

Important Disclosures: This document is directed at investment professionals and qualified investors (as defined by MiFID/FCA regulations). It is for information purposes only and has been prepared and is made available for the benefit of investors. This document does not constitute an offer or solicitation to any person in any jurisdiction in which it is not authorised or permitted, or to anyone who would be an unlawful recipient, and is only intended for use by original recipients and addressees. The original recipient is solely responsible for any actions in further distributing this document and should be satisfied in doing so that there is no breach of local legislation or regulation. This document is not for distribution in the United States.

Any opinions expressed herein are those at the date this material is issued. Data, models and other statistics are sourced from our own records, unless otherwise stated herein. We caution that the value of investments in discretionary accounts, and the income derived, may fluctuate and it is possible that an investor may incur losses, including a loss of the principal invested. Investors should ensure that they fully understand the risks associated with investing and should consider their own investment objectives and risk tolerance levels. **Past performance is not indicative of future performance.** Investors whose reference currency differs from that in which the underlying assets are invested may be subject to exchange rate movements that alter the value of their investments.

Certain products may be subject to restrictions with regard to certain persons or in certain countries under national regulations applicable to such persons or countries. NOTABLY, THIS MATERIAL IS EXCLUSIVELY INTENDED FOR PERSONS WHO ARE NOT U.S. PERSONS, AS SUCH TERM IS DEFINED IN REGULATIONS OF THE U.S. SECURITIES ACT OF 1933, AS AMENDED (THE SECURITIES ACT) AND WHO ARE NOT PHYSICALLY PRESENT IN THE UNITED STATES.

Risk Disclosures: Investing in the stock market involves gains and losses and may not be suitable for all investors. Growth stocks tend to be more volatile than other stocks as their prices tend to be higher in relation to their companies' earnings and may be more sensitive to market, political, and economic developments. Technology companies may be significantly affected by competition, innovation, regulation, and product obsolescence, and may be more volatile than the securities of other companies.

Important Information for All Investors: Alger Management, Ltd. (company house number 8634056, domiciled at 78 Brook Street, London W1K 5EF, UK) is autho-rised and regulated by the Financial Conduct Authority, for the distribution of regulated financial products and services. FAM and/or Weatherbie Capital, LLC, U.S. registered investment advisors, serve as sub-portfolio manager to financial products distributed by Alger Management, Ltd.

Alger Group Holdings, LLC (parent company of FAM), is not an authorized person for the purposes of the Financial Services and Markets Act 2000 of the United Kingdom ("FSMA") and this material has not been approved by an authorized person for the purposes of Section 21(2)(b) of the FSMA.

Important Information for UK Investors: The distribution of this material in the United Kingdom is restricted by law. Accordingly, this matertial is provided only for and is directed only at persons in the United Kingdom reasonably believed to be of a kind to whom such promotions may be communicated by an unauthorized person pursuant to an exemption under the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the "FPO"). Such persons include: (a) persons having professional experience in matters relating to investments and (b) high net worth bodies corporate, partnerships, unincorporated associations, trusts, etc. falling within Article 49 of the FPO. Most of the rules made under the FSMA for the protection of retail clients do not apply, and compensation under the United Kingdom Financial Services Compensation Scheme will not be available.

Important information for Investors in Israel: This material is provided in Israel only to investors of the type listed in the first schedule of the Securities Law, 1968 (the "Securities Law") and the Regulation of Investment Advice, Investment Marketing and Investment Portfolio Management Law, 1995. The Fund units will not be sold to investors who are not of the type listed in the first schedule of the Securities Law.