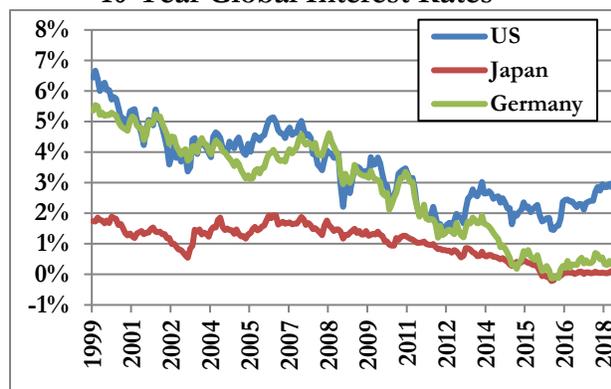


Seamans Capital Management – Q3 2018 Quarterly Report

GLOBAL BONDS AND CURRENCIES

The Federal Reserve continued to raise interest rates, while European and Asian central banks remained hesitant to do so. The U.S. economy, jobs, stock market, and dollar have all remained strong after five interest rate increases, providing evidence that further quantitative tightening can be made without negatively impacting the U.S. economy. Interest rates in other developed markets remain near their historical lows.

10-Year Global Interest Rates



Source: Bloomberg

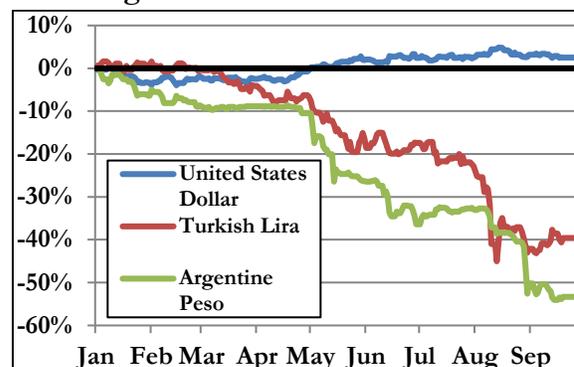
The Bank of Japan is waiting for inflation to rise, while the European Central Bank appears concerned about weak economic growth in Europe and Britain’s exit from the EU in March 2019.

Investors lost confidence in emerging markets in the third quarter of 2018. The inability of President Mauricio Macri of Argentina to deal with his country’s foreign debt after a major drought led to a 25% decline in the country’s wheat harvest, which is an important export. Argentina’s central bank chief resigned on September 25, 2018, after the country’s

currency had already lost more than 50% of its value.

Turkish President Recep Erdoğan’s unconventional monetary policies also led to a loss of investor confidence. While central bankers generally raise interest rates when inflation picks up and trade deficits widen — in this case, from \$33.1 billion in 2016 up to \$51.6 billion in 2018 — Erdogan pushed to maintain low interest rates. Low interest rates failed to attract foreign money, however, and led investors to question the Turkish central bank’s independence.

Strong Dollar Versus EM Currencies



Source: Bloomberg

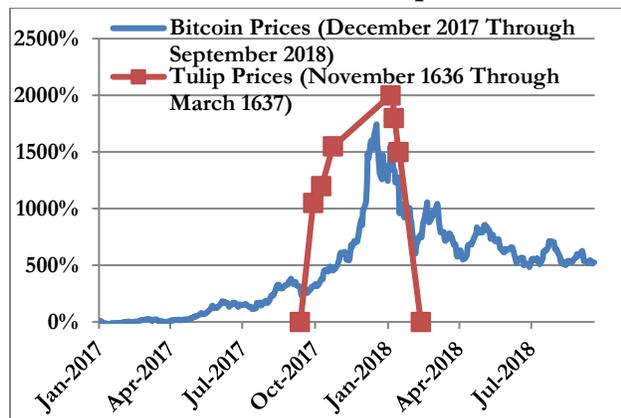
In September, Erdogan fired the management staff of Turkey’s sovereign wealth fund and named himself chairman. The Turkish lira has declined 40% so far in 2018, making its USD- and euro-denominated debt (representing 10% and 8% of the country’s debt, respectively) more difficult to pay off.

A growing concern for emerging markets is that they issued debt in stronger currencies.

The price action of cryptocurrencies over the past year is reminiscent of the “tulip mania”

that took place in the 1600s. From November 1636 until March 1637, Dutch tulip bulb prices spiked 20-fold before returning to normal. The spike in bitcoin prices in 2017 was driven by Chinese demand to circumvent currency controls, which led to a mania that is gradually subsiding.

Bitcoin, The Modern Tulip Mania

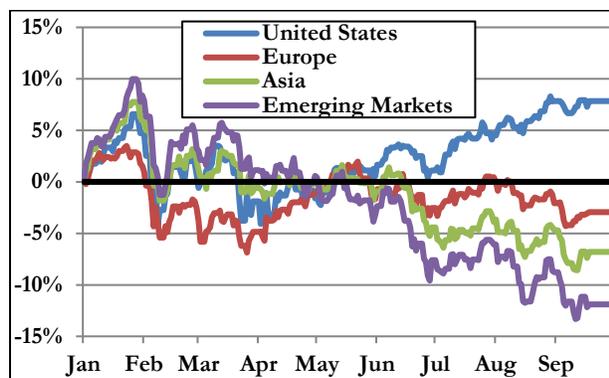


Source: Bloomberg

GLOBAL STOCKS

The strength of the U.S. dollar and the growth of company earnings coupled with lower taxes have led to the outperformance of the U.S. stock market, as shown in the chart below.

U.S. Bull Market Powers Ahead



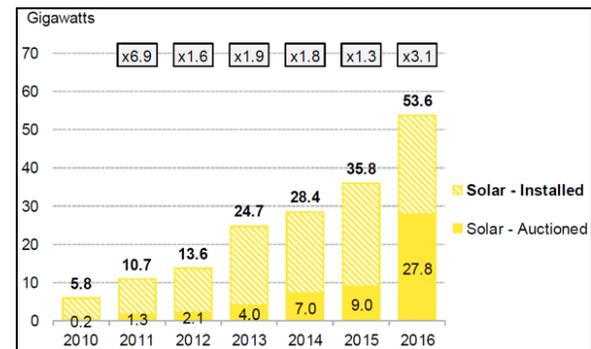
Source: Bloomberg

RENEWABLE POWER

Many countries have shifted to auction-based procurement for renewable energy capacity. The success of auctions is linked to the price declines delivered by the solar and wind sectors. This has resulted in substantial reductions in the cost of electricity.

Recent auctions for wind and solar capacity in Saudi Arabia bear this out: the 300 MW Sakaka PV solar project was awarded early in 2018 at \$23.4/MWh, and the 400 MW Dumat al-Jandal onshore wind project received bids in July in the range of \$21.3–\$33.9/MWh. Comparable prices for conventional energy are in the range of \$50–\$60/MWh.

Annual Auctioned PV Capacity Overlaid on Annual Installations



Source: Bloomberg New Energy Finance

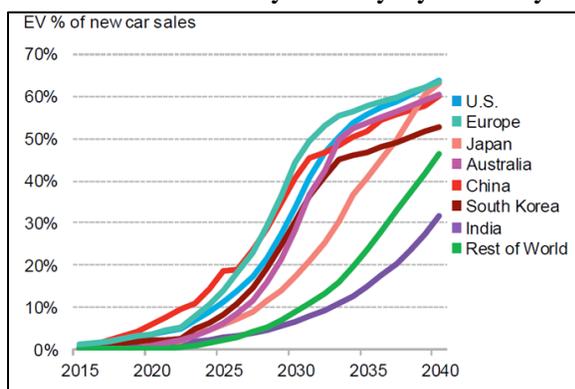
Google announced that it entered into a 10-year deal to buy renewable energy from three wind farms being built in Finland. The wind farms will power a Google data center. Google announced the Finnish deal is the first time the company has bought power from European projects without receiving any government subsidies. France's Neoen, Germany's CPC, and WPD will build the farms, which will have a combined capacity of 190 MW.

CLEAN TRANSPORTATION

By 2040, it is projected that 55% of all new car sales and 33% of fleet sales globally will be electric vehicles (EVs). It is expected that parity between the initial costs for passenger EVs and internal combustion engine (ICE) vehicles will be achieved in the mid-2020s.

The projected portfolio of EVs as a percentage of total new passenger vehicle sales varies greatly by country over the period to 2040, as shown below. It is expected that EVs will constitute almost 40% of sales in China in 2030, but just 7% of sales in India. By 2040, over 60% of new sales in Europe and the U.S. will be EVs, with the share of sales in India increasing to 32%. A more globally differentiated auto market presents significant challenges for automakers in choosing the right markets and targeting different technologies.

EV Sales Will Vary Greatly by Country



Source: Bloomberg New Energy Finance

World oil demand is expected to peak in 2022. Oil demand will begin to erode slowly, at a rate of -0.5% to -1.5% per year until 2030. After 2030, the decline in oil demand is expected to accelerate with the rapid increase in EV adoption.

Saudi Arabia’s sovereign wealth fund signed an agreement to invest more than \$1 billion in aspiring electric-car maker Lucid Motors Inc., months after building a stake in Elon Musk-led Tesla Inc. The deal clinches crucial funding needed by Lucid to start producing its first model, the Air sedan, in 2020. The Silicon Valley-based startup is years behind schedule in building a plant in Arizona and starting production of the car, which is expected to have a base price of \$60,000.

By 2040, 55% of all new car sales and 33% of fleet sales globally will be electric vehicles.

Logistics and food delivery companies are competing to be the first to offer driverless pizza deliveries to their customers. Domino’s Pizza Inc. doubled down on its partnership with Ford Motor Co. for driverless pizza deliveries in Miami and Michigan. In competition, Pizza Hut joined forces with Toyota Motor Corp. in a similar robot-car pact. The partnerships were welcomed by car companies as evidence the development of driverless vehicles are transforming people’s mobility patterns, including deliveries made in cities around the world.

General Motors announced plans to become the first major automaker to enter the peer-to-peer car rental space, competing with Turo and Getaround. The business, much like Airbnb users do with their homes and apartments, will operate under the company’s Maven brand, which is a more traditional car rental business.

Lyft has come up with another anti-car ownership effort in the form of a partnership with car rental company, Avis. As part of a multi-year deal, Avis will add thousands of cars

to Lyft’s Express Drive program, which currently offers Lyft drivers a way to rent cars on a weekly basis from Hertz and Flexdrive. Lyft and Uber both anticipate IPOs in 2019.

continue rising from approximately \$350 per car today to about \$1,000 per car by 2020.

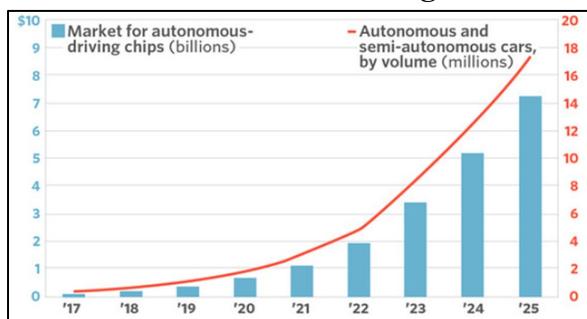
Semiconductor content in vehicles will continue rising from approximately \$350 per car today to about \$1,000 per car by 2020.

TECHNOLOGY

Semiconductor chip demand is no longer mainly driven by PCs, as the technology becomes the basis of almost every industry including cloud infrastructure, security, mobile, next-generation memory, connected cars, and the Internet of Things.

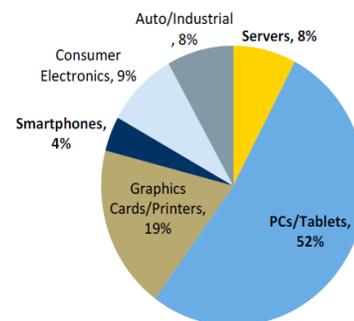
While chips have found an increasing number of applications, the most notable increase has been in smartphones, which now account for 37% of total bits consumed, up from 4% in 2008. This has been driven by increasing smartphone penetration as well as higher semiconductor content per smartphone. In addition, the server demand contribution has increased since 2008. The tailwinds should continue to drive growth for datacenters and hybrid IT applications.

Vehicle Automation Driving Semis

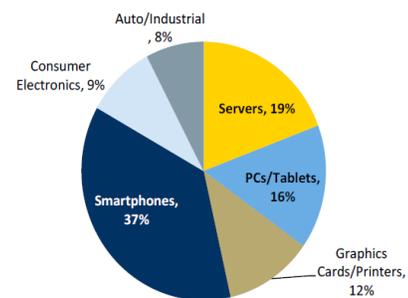


Source: J.P. Morgan

Memory Chip End Markets in 2008



Memory Chip End Markets in 2017



Source: Gartner & RBC

For example, chips are already increasingly used in automobiles. With more advanced driver assistance systems rolling out in standard car models, rising volumes are driving chip costs down, allowing for an increasing number of sensors and processors to be included. J.P. Morgan estimates that the total available market for semiconductors used in semi-autonomous and fully autonomous cars will reach about \$7.3 billion by 2025; supporting a compounded annual growth rate of approximately 62.5% starting in 2017. The cost of semiconductor content in vehicles will

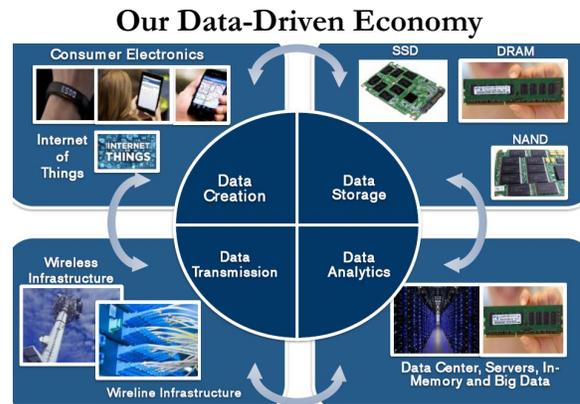
SOFTWARE AS A SERVICE

The global software as a service (SaaS) market is strongly driven by easy access, convenience, and fast and efficient operation, among other factors. SaaS is also growing rapidly because of the wide adoption of on-demand software in various industries. Furthermore, this model eliminates the licensing of any software as companies provide remote access to their clients over the internet.

The top software companies continue to strengthen their product offerings to deliver more integrated services. These provide more consistent revenues and improved margins by leveraging the established infrastructure, ultimately delivering a lower total cost of usage for their customers. All the top players in the industry also provide higher productivity because of their cloud connectivity and a higher degree of security. The large SaaS businesses are all growing at 20% to 30% per year. Each vendor is investing substantially in product development, customer service, sales, and marketing to ensure these strategic growth engines continue to support rising demand.

SEMICONDUCTORS

The system of creation, storage, transmission and analytics is central to the evolution toward a truly “data-driven economy,” enabled by faster and more compact semiconductors. The importance of data analytics is expected to support robust growth.



Source: Company data, Credit Suisse Research

Despite significant outperformance over the past several years, semiconductors have yet to see any meaningful re-rating of their valuations. Semiconductor stocks are trading at a 20% to 25% discount compared with other technology stocks, despite faster revenues/EPS growth, higher absolute profitability, stronger balance sheets, and superior cash returns.

PRIVATE EQUITY UPDATE

The SCM private equity portfolio has experienced strong gains. Braidy Industries appreciated 80% since our investment in the first quarter of this year, and EMOH appreciated 200% since our investment, at the beginning of 2018.

We expect Braidy Industries to continue its strong growth trajectory as the company continues to sign customer agreements in the coming quarters. We anticipate EMOH will perform well in 2019 as it transitions from an R&D-based company into full-scale production.

We are currently raising a Series B round for EMOH, of which 50% is now committed. We are also engaged in raising a small portion of the \$500 million Series B round for Braidy Industries.

We are seeing a number of strong private equity opportunities that lack the seasoned management teams we seek. We anticipate growing our operating partner model to provide these companies with the skill sets necessary for their successful development.

THE EMOH COMPANY

During the third quarter, EMOH made two substantial technological breakthroughs.

First, the company successfully processed commercial wastewater to the level sufficient for crop irrigation. This is valuable to customers because they can reduce both their water consumption and the fees for discharging into sewer systems.

Second, EMOH proved its technology for fish farms with an installation in California that allows customers to replace expensive liquid oxygen systems with a more efficient EMOH installation. This is a vertical that has significant potential to drive sales higher than forecasted.

As the company transitions from R&D to full-scale production, it is building an in-house sales department, a function that was originally outsourced. During the third quarter, EMOH hired one salesperson for the Southeast U.S. and another for the West Coast. EMOH plans to reach five salespeople by year-end and ten to fifteen salespeople by 2020.

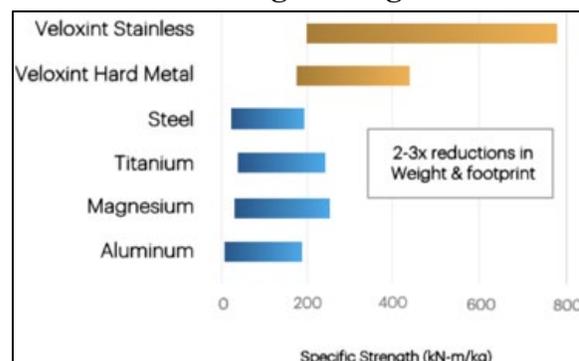
BRAIDY INDUSTRIES

Braidy Industries is a manufacturer of aluminum and advanced super strength ultra-lightweight metals for multiple industries including the global transportation and defense. The company has two subsidiaries, Veloxint and Braidy Atlas.

Veloxint, an MIT-incubated lightweighting solutions company, produces metals two to five times stronger than conventional materials. The prelaunch sales effort is producing notable results, as Stanley Black & Decker plans to use Veloxint metals in all of its sockets and then expand the scope to include wrenches and other hand tools. Stanley Black & Decker currently spends \$500 million on outsourced hand tools.

Veloxint stainless steel and hard metals are significantly stronger than conventional metals such as titanium and steel. The graph below shows the extent of Veloxint’s strength differential.

Veloxint Strength/Weight Ratio

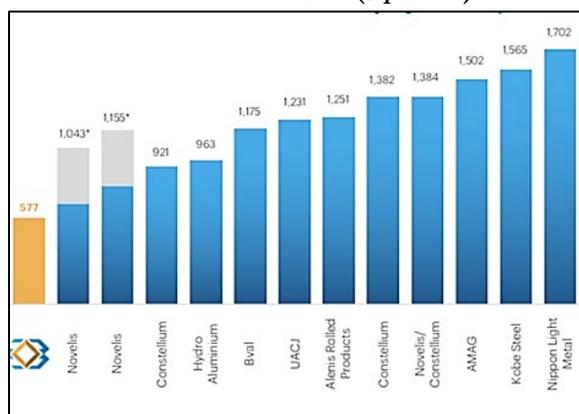


Source: Braidy Industries

Braidy Atlas is building the first greenfield aluminum mill in North America in 35 years, and it comes to market with the lowest cost

structure in the aluminum industry; specifically, the company has a 30% to 50% cost advantage over competitors. Braidy Atlas has deals in place with five of the top auto manufacturers, and has received Memorandums of Understanding (MOUs) for 200% of capacity for the next seven years.

Braidy Atlas (Aluminum Mill)
Full Conversion Cost (\$ per ton)



Source: Braidy Industries

The chart above shows Braidy Atlas’s cost advantage (in orange) over its competitors.

Braidy Industries has a strong board of directors in place, chaired by Craig Bouchard. Craig has founded several multi-billion-dollar public companies, including the top performing NASDAQ stock of 2008. The board also includes John Preston, the former director of technology development at MIT.

Revenue for Braidy Industries is projected to range between \$1.7 billion and \$1.9 billion in 2023, with EBITDA ranging from \$700 million to \$980 million.

CONCLUSION

We expect the uncertainty around the U.S. midterm elections to create a buying opportunity for the cash reserves we have set aside in the accounts. Rising interest rates suggest that bonds will underperform both domestically and internationally. Uncertainties in Europe and Asia are likely to continue to support further inflows into the U.S. economy. For these reasons, we believe U.S. stocks will be the asset of choice going forward. We remain focused on opportunities created by essential technologies and essential services in both our public and private investment portfolios, in the belief that they will provide strong returns and stability in a challenging financial environment.

We are pleased with our private equity investment opportunities. By identifying disruptive technologies that are proven, proprietary and patented, as well as timely, simple and scalable across multiple sectors, strong rapid adoption is supported. A plan for an IPO or a sale to a strategic partner is our preferred path to monetization. Despite continuing geopolitical tensions and highly volatile markets, we continue to be encouraged by the opportunities enabled by technology to redesign products and services that allow for both strong financial returns while contributing to social stability and protection of the environment.

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