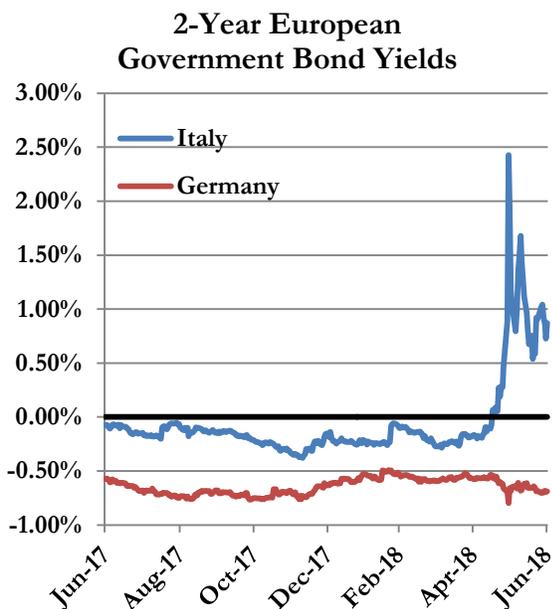


## Seamans Capital Management – Q2 2018 Quarterly Report

### GLOBAL BONDS AND CURRENCIES

The Fed continued to raise interest rates in June as inflation picked up while unemployment remained low. Meanwhile, other central banks remained cautious about monetary tightening. The Bank of Japan kept its policy of monetary easing unchanged, saying they have no time frame for when inflation will start to increase. The European Central Bank (ECB) also kept interest rates unchanged at 0%. On balance, the U.S. economy continues to be one of the strongest among developed countries as a result of favorable tax policies.



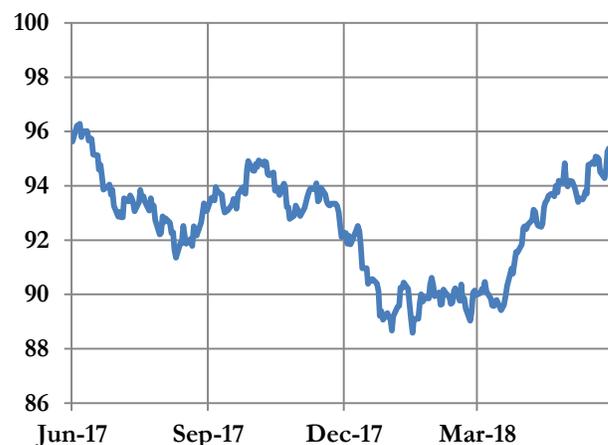
Source: Bloomberg

At the end of May, Italy approved the government proposed by the populist Five Star and League parties. Together, the two parties form a populist coalition that has

historically blamed the Eurozone for depriving Italy of its sovereignty. Italian bond yields soared following the announcement, as shown in the chart to the left, indicating a higher level of risk for Italian bonds, particularly compared with German bonds, whose yields declined.

*Fed policy has made U.S. assets more attractive for international investors abroad.*

### U.S. Dollar Index

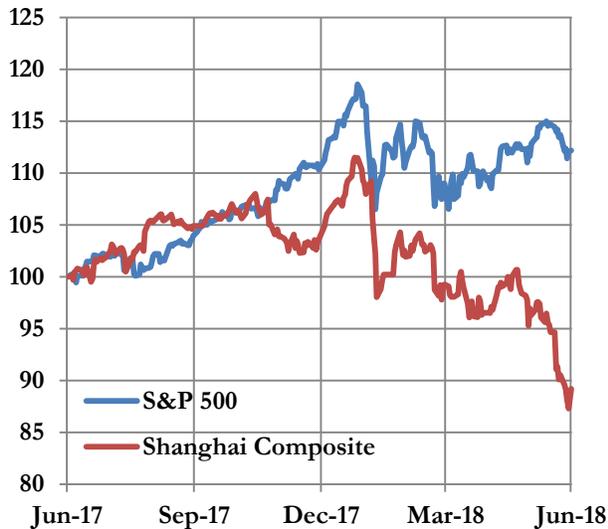


Source: Bloomberg

The U.S. dollar appreciated by 5.2% during the second quarter, buoyed by a stronger economy and interest rates. The Fed's policy of increasing interest rates has made U.S. assets more attractive for international investors abroad. The U.S. government also threatened to implement tariffs on countries participating in unfair trade practices. The U.S. dollar is acting both like a safe haven and a carry trade, with the higher interest rates.

**GLOBAL STOCKS**

**Shanghai Composite vs. S&P 500**

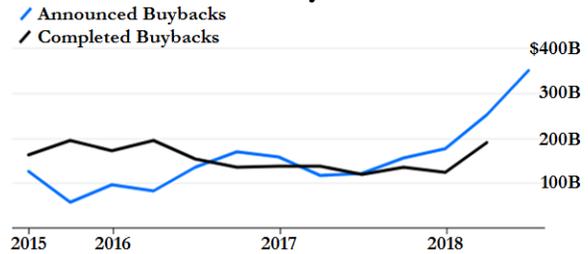


Source: Bloomberg

*The U.S. stock market has outperformed China by more than 20% in 2018 in USD terms.*

The U.S. raised multiple trade issues with China in the second quarter. The president raised concerns about unfair Chinese trade practices, including the dumping of steel into the global markets, heavy restrictions on foreign investments into China, and the requirement for technology transfers from companies setting up production in China. While the threat of trade tariffs created some volatility in U.S. stock markets, it had a much more dramatic effect on the Chinese stock market. The Shanghai Composite fell more than 23% from its January high, as shown in the chart above.

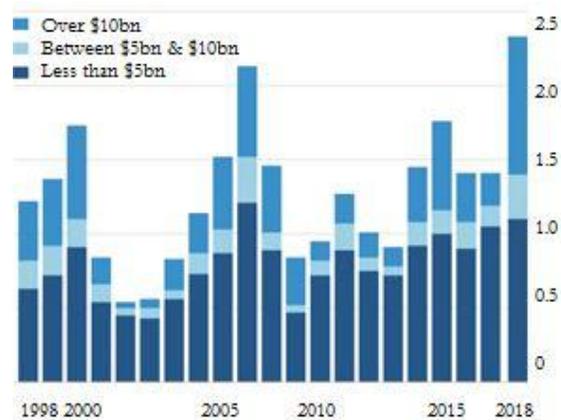
**Stock Buybacks**



Source: Bloomberg

Companies are raising share buyback activity in the U.S., as shown in the chart above. U.S. companies are repatriating funds after paying the mandatory taxes on funds held outside the U.S. S&P 500 companies bought back \$433 billion in shares in the second quarter and are on pace to buy back a record \$840 billion in 2018, which is equivalent to 4% of the U.S. stock market's capitalization.

**M&A Deal Values in First Half of the Year**

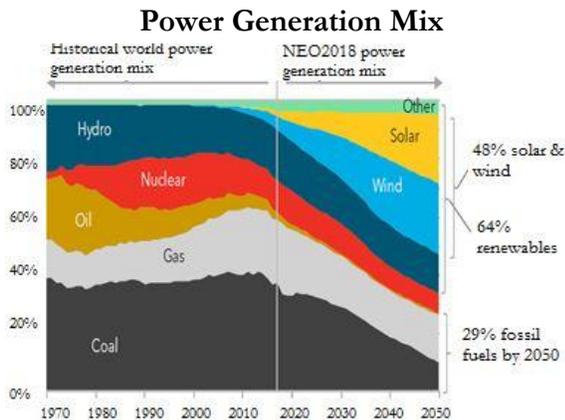


Source: Financial Times, Reuters

Mergers and acquisitions reached record pace in the first half of the year, totaling nearly \$2.3 trillion. There were 79 transactions of more than \$5 billion this year, surpassing the previous record set in 2007. These mergers and acquisitions equate to more than 3% of

the \$76 trillion global stock market capitalization.

## RENEWABLE POWER



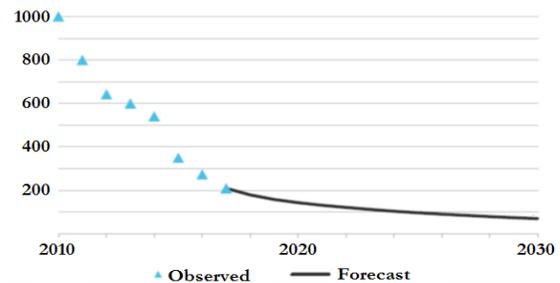
Source: Bloomberg New Energy Finance

According to a study by Bloomberg New Energy Finance, fossil fuels have been responsible for two-thirds of the global production of electricity during the past decade. This trend is set to flip, as by 2050, fossil fuels are expected to be responsible for less than one-third of the global production of electricity, and renewables are expected to generate almost two-thirds. The continuing decline in wind- and solar-generating costs, together with lower battery prices, is making hybrid wind/solar/battery-generating facilities the lowest-cost producer and addressing the intermittent production issues of solar and/or wind plants.

Battery prices have been declining geometrically, as shown in the chart to the right. Lithium-ion batteries, which cost \$1,000 per kWh in 2010, have declined to less than \$200 per kWh currently and are expected to cost less than \$100 per kWh by 2025.

*Renewables are expected to be two-thirds of global power by 2050, which will call for an additional investment of \$9.3 trillion.*

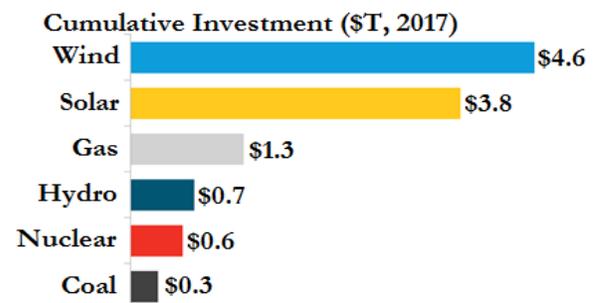
### Lithium-Ion Battery Price (\$/kWh)



Source: Bloomberg

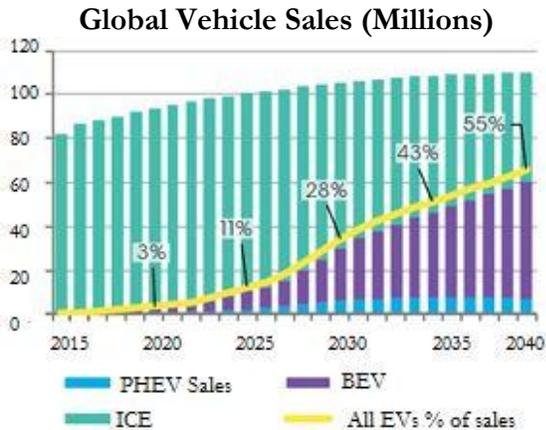
A total of \$11.5 trillion is estimated to be invested in new power-generation capacity between 2018 and 2050, an average of \$350 billion per year. Over 80%, or \$9.3 trillion, is expected to be spent on renewables. Wind will account for \$4.6 trillion and solar for another \$3.8 trillion investment globally during this period. Including hydro, renewables will attract about four times more investment than conventional energy capacity out to 2050. In addition, Bloomberg New Energy Finance estimates that batteries will require \$548 billion in investments as well.

### Global Investment in Renewable Energy



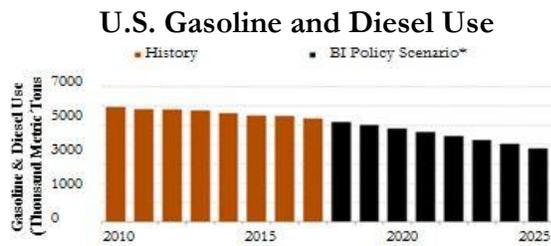
Source: Bloomberg New Energy Finance

## CLEAN TRANSPORTATION



Source: Bloomberg New Energy Finance

Electric vehicle (EV) adoption is expected to pick up rapidly over the coming decades. EV sales currently account for 1.8% of passenger vehicle sales, and that market is expected to double by 2020 and double again by 2025. It is expected to reach 55% of vehicle sales by 2040. Battery prices declined by 79% from 2010 to the end of 2017. This declining price trend is making EVs economically competitive. Governments have also been pushing the EV adoption, with China, Japan, parts of Europe, and some U.S. states all offering incentives, subsidies, and tax exemptions. Automakers have announced 289 EV models that will be on the market by 2022, highlighting the rapid shift that automakers have made into this new market.



Source: Bloomberg Intelligence

One natural side effect of increased EV usage is a lower demand for gasoline and diesel fuel. The graph above shows this declining trend. U.S. gas and diesel demand declined from 6 million metric tons per year in 2010 down to below 5.5 million in 2018.

*Electric vehicles are expected to reach 55% of vehicle sales by 2040.*

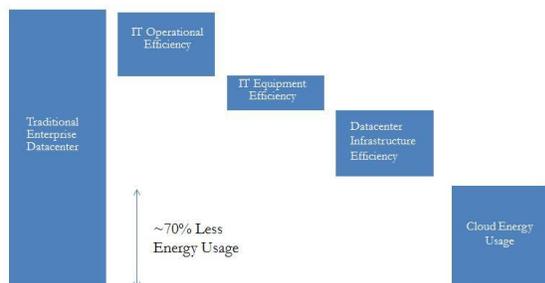
## TECHNOLOGY

Memory chip demand is being driven by a number of factors. The biggest factor is the increased use of the cloud. The cloud allows companies to use more big data analytics requiring data collection, storage, and transfer of extremely large amounts of data. These large data sets are becoming a core asset in the economy, as industries and products are developed to manage this information. While demand for memory chips may be cyclical, this cycle is much more drawn out as applications increase across multiple industries. While memory chip prices have declined significantly on an annual basis, they have been relatively stable over the past year because of the mix of consolidation and growing demand from the market for datacenters.

Cloud computing allows for an easy transition from on-premises computing to sizable data centers, which offer an opportunity to improve a business's efficiency and reduce its IT requirements. Centralized computing provides a substantial boost to efficiency and reduction in carbon emissions. According to Microsoft, cloud computing can result in a 70% decrease in energy usage. Cloud services

are reported to be growing at an annual rate of more than 28%.

### Cloud Computing Energy Savings



Source: Microsoft Cloud Carbon Study

## SOFTWARE AS A SERVICE

Software as a Service (SaaS) is an extension of the trend to cloud computing. As businesses migrate their data storage to the cloud, many are also moving their software to the cloud. The SaaS model is beneficial to both the customer and the service provider.

For the customer, SaaS offers a small up-front fee versus the traditional high setup cost of traditional software. As the customer needs grow in size, the customer can scale up easily as well. Maintenance is now outsourced to the service provider, and the software can be accessed anywhere over the internet. Furthermore, SaaS applications are typically more integrated with each other, which mean that a customer can use one piece of software in coordination with another more easily.

There are also major benefits to being a SaaS provider. The recurring subscription model, with automatic software updates, is a stable revenue model. Furthermore, when a user starts using one SaaS provider, they typically will not switch over to another, giving the

provider a “sticky” source of revenue. The company also has opportunities to grow the business, by upselling services to the customer, and by offering an expanded suite of software that will match the customers’ changing needs. Scalability is also easier for a SaaS provider to implement, allowing the SaaS provider to maintain the same level of service even as customer volume increases.

This mutually beneficial relationship lends strong support to the future growth story of SaaS applications.

*Cloud computing can result in a 70% decrease in energy usage and is reported to be growing at an annual rate of more than 28%*

## PRIVATE EQUITY

We have been investing in the private equity of companies in the essential services and essential technology sectors since December 2017. We use a very disciplined approach to our private equity investments looking for disruptive technologies that are proven, proprietary and timely that are simple and scalable with applications across multiple sectors and geographies. Management teams are expected to have proven records of creating shareholder value and be financially aligned with investors. We look for these companies to be cash flow positive within 18 to 24 months and have an exit plan through an IPO or acquisition by a strategic partner.

A private disruptive water remediation technology company in which we invested provides services to the agriculture, water cleanup and desalinization industries. The company is expected to be cash flow positive

in the fourth quarter of 2018 and to see this cash flow, before taxes, grow from less than \$1 million to more than \$50 million within 5 years.

A private light weighting metal company in which we invested will provide aluminum as well as super strength (2x to 5x) metals for 3D metal printing, cutting, and drilling, and automotive and aircraft applications. It is led by a team that has already created two billion dollar metals companies. The company is expected to be cash flow positive in 2020. An IPO is anticipated within three years.

## CONCLUSION

While geopolitical risks increased during the second quarter, the U.S. financial markets appear to represent a safe haven for international investors. Mergers and acquisition activity along with company stock buybacks are supporting the U.S. dollar, stock, and bond markets.

Renewable energy adoption is almost a foregone conclusion. Technology is driving lower costs and opening new applications at

an unprecedented rate. Declining battery prices are expected to make hybrid wind/solar/battery plants the lowest-cost energy-producing systems within three to five years.

Technology is driving major changes across almost every industry, leading to lower costs and rising profits. The move toward cloud computing is increasing energy efficiency and reducing carbon output. It is also driving increased demand for memory chips and software as a service.

In this time of radical transformation, financial and social stability are important factors. We believe that by focusing on leading companies that provide essential services and essential technologies, portfolios will be more resilient. It is important to own those companies that are embracing the technological advances to offer better and lower cost services and products, because over time, every company must reinvent itself to stay relevant. We understand that free cash flow and its growth will ultimately determine shareholder value.

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