As we enter this night month of confinement due to the COVID-19 pandemic, I think it is a good moment to reflect and evaluate everything that has been happening and how our lives have changed. For one, I, being the optimist that I am, have been trying to identify the “silver lining” within all these events. I have to confess it has not been easy, but have to admit that, probably, all this has forced us to do things differently. And has also forced us to leap bound and adopt new technologies and ways of doing business that probably, in our comfort zone, we had not even considered. So, for whatever it’s worth, let’s look at the positive aspect and embrace all the good things that this unfortunate event has brought us.

Please keep safe and enjoy this issue of our Zenith Investor.

Miguel L. Vargas-Jiménez
Executive Director & CEO

Birling Capital’s goal is to provide you with expert opinions and commentaries from all over the world to our readers with a detailed view of the economy, markets, and geopolitics. We also offer you our outlook for Puerto Rico’s economic progress and the United States to allow you to plan with a 3 to 5-year window.
We invite you to examine this month’s insights to help you stay ahead of the curve.

Thank You for your continued support.

Francisco Rodríguez-Castro
President & CEO
Birling Capital Advisors, LLC.

"Hope is in the DNA of all who learn from their losses. When times are tough, they choose hope, knowing that it will motivate them to learn and turn them from victims into victors."
As we publish The Zenith Investor for November 2020, we will elect a new Governor and a new President.

The coronavirus outbreak has thrown hospital systems throughout Puerto Rico and the World into a systemic risk crisis that includes both medical and financial. While robust institutions may be able to brush off the impact of the Pandemic’s adverse effects, most hospitals in Puerto Rico will not be able to recover.

• As of October 30, Puerto Rico has accumulated 65,743 positive cases, with 820 deaths. When we analyzed the same numbers on September 17, Puerto Rico had 38,284 cases, with 570 deaths. These numbers represent a growth rate of 63.60% in total cases and 38.27% in mortality over the last month.

The worsening pandemic surge has leaders concerned; during the last 30 days, the rise COVID-19 count is as follows:

- France 119%
- United Kingdom 110.9%
- Italy 77.25%
- Puerto Rico 63.60%
- Spain 53.29%
- U.S. 23.76%

As of today, there are 45,373,712 global cases confirmed, with 1,185,200 deaths confirmed.

In the U.S., there are 9,015,262 confirmed cases with 230,000 deaths.

The COVID-19 Pandemic has undoubtedly become the global interloper in world growth expectations and economic outcomes. After its designation as a pandemic on March 11, 2020, the virus has prompted lockdowns, quarantines, and social isolation measures throughout the World in a struggle to contain the contagion curve. This has resulted in several unprecedented events occurring during the second quarter of 2020:

- Over 40 million Americans have filed for unemployment benefits, an all-time historical record.

52% of Puerto Rico’s Private Sector labor force was unemployed, while the Governments employees continued getting paid without work.

The Exogenous Shock downward revisions in growth across the World, including the recent International Monetary Fund forecast of a major global contraction.

$5 trillion in stimulus packages in the U.S., the largest in its history.

The U.S. G.D.P. rose 33.10%, from -31.40% last quarter, the worst in recent memory. This is higher than the long term average of 3.16%.

As of all these challenges happen we note the impact of our regions G.D.P. Growth 2019-2021:

<table>
<thead>
<tr>
<th>Region</th>
<th>Real GDP Growth 2019</th>
<th>Real GDP Growth 2020</th>
<th>Real GDP Growth 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>North America</td>
<td>1.9%</td>
<td>-4.9%</td>
<td>3.3%</td>
</tr>
<tr>
<td>Canada</td>
<td>1.7%</td>
<td>-7.1%</td>
<td>5.2%</td>
</tr>
<tr>
<td>Mexico</td>
<td>-0.3%</td>
<td>-1.0%</td>
<td>3.5%</td>
</tr>
<tr>
<td>United States</td>
<td>2.2%</td>
<td>-4.3%</td>
<td>3.1%</td>
</tr>
<tr>
<td>Puerto Rico</td>
<td>2.0%</td>
<td>-7.5%</td>
<td>1.5%</td>
</tr>
<tr>
<td>South America</td>
<td>-0.2%</td>
<td>-8.1%</td>
<td>3.6%</td>
</tr>
<tr>
<td>Central America</td>
<td>3.2%</td>
<td>-3.9%</td>
<td>3.6%</td>
</tr>
<tr>
<td>Caribbean</td>
<td>0.5%</td>
<td>-1.9%</td>
<td>4.0%</td>
</tr>
</tbody>
</table>

Stock Market Performance 3Q20:

Despite the COVID-19 Pandemic retaining its stronghold on the global economy, stock markets around the World posted significant gains during the third quarter. The technology heavy Nasdaq was the highest performing index driven again by the gains of large technology companies. Globally, emerging markets provided returns in excess of developed markets. The charts in this slide indicate, however, that the market was more bullish in the first two months of the quarter and slowed, giving up some of those gains, in September. With the looming election and no end yet in sight for the Pandemic, most expect market volatility to continue through the end of the year.

Stock Markets Performance

U.S. Sector Performance:

The energy was the sole sector to finish Q3 2020 in the red, down a whopping 19.5%. With continued slack in demand for energy, the companies have struggled to maintain profitability, depending on these commodities. All other sectors proved positively correlated over the period. Consumer stocks performed exceptionally well, with consumer discretionary companies seeing a lift on increased retail sales (covered in a later slide) and the best performing sector in the “defensive” group (sectors typically more resilient in down markets but less benefitted by bull markets) was consumer staples. Raw materials’ gains could indicate increased economic development as demand picks up early in the supply chains.
Puerto Rico hospitals have increased to $545,361,682 for the 214 days ending on October 15.

All these issues have left Puerto Rico with diminished resources and capacity. Even implementing far-reaching structural reforms, the 2020 Fiscal Plan projects that the Government will not meet its contractual obligations, and during 2021 we see a dramatic increase of austerity measures with a price tag of $800 million if not more.

Forecast 1: Puerto Rico’s Economy and Birling Capital Puerto Rico Stock Index will continue to suffer due to COVID-19 Surge:

The slow recovery process in the aftermath of Hurricane Maria, the Earthquake of a 6.4 magnitude, placed Puerto Rico at a position to reach the worst economic contraction possible, then the COVID-19 Pandemic arrived in March, leaving with it an even bigger economic collapse.

Job Loss: In terms of job loss, we note that 52% of the private sector labor force sought unemployment benefits, the total number of new claims filed since March are extremely high compared to any period in recent memory. By the month of August 2020, more than 388,630 claims had been filed, of which 372,097 or 96% were submitted since the lockdown began on March 18.

The total net loss so far for the private sector is north of 81,000 jobs.

To better illustrate our point, we show the accompanying graph:

We continue to see high levels of Government wasteful spending and corruption.

A chronically underfunded public health system. Since the lockdown began on March 15, the estimated losses to the Puerto Rico hospitals have increased to

We share our Puerto Rico projections for 2020-2023 in the graph below:

The Birling Capital Puerto Rico Stock Index has been dramatically impacted due to the Pandemic: the 5 institutions that belong to the Birling Puerto Rico Stock Index are all public companies with headquarters in Puerto Rico. We are ranking them according to their performance during the period from January 1 to October 30, 2020:

- **Triple S (G.T.S.):** closed on October 30, with $ 18.48, achieving a return of -0.05% which is above the Dow Jones and the Birling Capital PRSI
- **Evertec Inc. (EVTC):** closed on October 30, at $33.27, and a return of -2.26% that is above the Dow Jones and the Birling Capital PRSI
- **Popular, Inc. (BPOP):** closed on October 30 at $42.28, achieved a -28.03% return below the Dow Jones as the Birling Capital PRSI
- **First Bancorp. (F.B.P.):** closed on October 30, at $6.50, achieving a yield of -38.62%
- **O.F.G. Bancorp. (O.F.G.):** closed on October 30, at $14.35, achieved a return of -39.22%, being below the Dow Jones as the Birling Capital PRSI.

Forecast 2: V-Shaped Recovery?

Many of us have heard debates about whether the U.S. is experiencing a "V-shaped" recovery from the current recession. So, we decided to prepare a chart that would dispel this issue or prove it. Looking at this chart, it is easy to see the quick recovery in the stock market. Housing and personal income have yet to show any weakness since the official start of the recession. Jobs and G.D.P., however, are still well off the highs from early in 2020.

All the data we have examined indicates that the American consumer is back in full force. After the sharp decline in retail sales, several months of increasing spending has the headline sales number back to all-time highs. Americans are still saving more than they have historically but the relationship between personal spending and personal savings has trended back towards the historical normal.

Additionally, the job market data continues to improve after the sharp decline from March 2020, there is still some significant ground to make up to return to pre-recession levels. Let’s review the progress:

- **U.S. Real G.D.P. for Q3:** rose 33.10%, compared to -31.40% last quarter and 2.60% last year. This is higher than the long-term average of 3.16%.
- **U.S. Unemployment Rate:** fell to 7.90%, compared to 8.40% last month and 3.50% last year.
- **U.S. Initial applications for Unemployment:** were reported at 751,000, an decrease of 5.06% from 791,000 last week.
- **U.S. New Single-Family Houses Sold:** fell to 959,000 down from 994,000 last month and up from 726,000 one year ago. This is a change of -3.52% from the previous month.
- **U.S. Durable Goods New Orders MoM:** rose to 1.85%,
compared to 0.40% last month and 1.42% last year.

- **U.S. Automobile Manufacturing Shipments** increased to 7.856 billion, up from 7.40 billion last month and down from 9.357 billion one year ago. This is a change of 6.16% from last month and -16.04% from one year ago.

- **U.S. Bank Prime Loan Rate** is at 3.25%, compared to 3.25% the previous market day and 5.00% last year. This is lower than the long-term average of 6.90%.

- **U.S. Hires:** Total Nonfarm rose to 5.919 million, up from 5.903 million last month and up from 5.839 million one year ago. This is a change of 0.27% from last month and 1.37% from one year ago.

- **U.S. Labor Participation Rate:** fell slightly to 61.40% last month and 63.20% last year. This is lower than the long-term average of 62.87%.

- **U.S. ISM Manufacturing PMI:** rose to 55.40, down from 56.00 last month and up from 47.80 one year ago. This is a change of -1.07% from last month and 15.90% from one year ago.

- **U.S. Retail and Food Services Sales MoM:** rose to 1.91%, compared to 0.57% last month and -0.60% last year. This is higher than the long-term average of 0.37%.

- **U.S. Consumer Price Index:** rose to 260.28, up from 259.92 last month and up from 256.76 one year ago. This is a change of 0.14% from last month and 1.37% from one year ago.

- **U.S. Personal Saving Rate:** fell slightly to 14.65 trillion, up from $13.10 trillion last quarter and down from $14.65 trillion one year ago. This is an increase of 9.91% from last quarter and -1.71% from one year ago.

**Forecast 3: Which Company will win the race for the COVID-19 stocks:** The C.E.O.’s of AstraZeneca (AZN), BioNTech (BNTX), GlaxoSmithKline (G.S.K.), Johnson & Johnson (J.N.J.), Merck (MRK), Moderna (MRNA), Novavax (NVAX); Pfizer (P.F.E.), and Sanofi (SNY), signed a commitment to upholding the integrity of the scientific process. All the companies are working towards the approval of the first COVID-19 vaccine. In addition, several biotech firms are also in the race for the COVID-19 vaccine; below we analyze three of them and their efforts.

- **Gilead Sciences Inc (GILD):**

  Gilead develops and markets therapies to treat life-threatening infectious diseases, with the core of its portfolio focused on H.I.V. and hepatitis B and C.

  Gilead was the first of the companies to draw the mainstream attention with its drug "Remdesivir" which was originally approved for Ebola patients and has been approved by the F.D.A. to improve the recovery period of COVID-19. The drug trade name is Veklury (remdesivir) Its stock price is at $57.47.

- **Moderna Inc. (MRNA):**

  Moderna creates metamorphic transformative therapeutics that are formed using messenger R.N.A. and mRNA. Moderna uses gene and cellular information to develop vaccines. The firm develope all kinds of therapeutics and vaccines for infectious diseases, immunooncology, rare diseases, autoimmune and cardiovascular diseases. It published its Phase I study of mRNA-1273, its vaccine candidate against COVID-19, the analysis evaluated a two-dose vaccination schedule of mRNA-1273 given 28 days apart in 40 healthy adult participants across two dose levels (25 and 100 µg) in two age cohorts (ages 56-70 and ages 71+), and reports results through Day 57 (1 month after the second dose). This analysis found that both the 25 µg and 100 µg dose levels were generally well-tolerated in both
age cohorts. Its stock closed at $67.51.

- **Regeneron Pharma (REGN):** produces treatments for ocular, cardiovascular, cancer, and inflammation diseases. Regeneron makes the drug Eylea approved for wet age-related macular degeneration and other eye diseases. Currently, Regeneron is working on two COVID-19 treatments. The drug Kevzara is made with Sanofi S.A. to treat arthritis patients. Their work involves repurposing Kevzara to halt the human immune system from overreacting to its introduction. The other is antibodies to both treat and prevent virus infection. Regeneron has a minimal window to bring the antibody treatment to the market because once the vaccine is out, it will make the antibody treatment irrelevant. Its stock closed at $540.00

**Theme 1: Asset Class Performance with Trailing Periods:** As most of you know, all business cycles are entirely dissimilar; most markets' historical evaluation points to a specific pattern of cyclical oscillations in the economy. The cycles of economic activity impose a critical determination as to which asset classes perform better than others. For example, in a pandemic, we all know by now that the tourism sector will perform worse than the technology sector. These changes will determine the performance over time.

Additionally, movements in critical economic benchmarks usually provide useful guidance to recognize the business cycles phases of:

- Early
- Mid
- Late
- Recession

We strive to help you identify these patterns early enough to allow you to shift your portfolio asset allocation to avoid asset underperformance.

To learn what success looks like and know how to recognize it, we always point out that an initial cycle is signalized by an intense economic recovery in most situations.

This table represents key asset classes and their respective trailing performance as of the end of Q3–2020. The clear trend has been that U.S. large cap and growth stocks have dominated over the long running bull market and the 3 months ending 9/30/2020 were no different in that regard. The variety of the ranking for each asset class, over different timeframes, creating this "quilt" effect is an endorsement for diversification. This image will allow you visualize longer term trends which you can see by moving from the left to the right across the chart.
Theme 2: The COVID Surge Crashes Market Around the World: The U.S. and Global stock markets ended the month with steep losses, as the COVID-19 surge is making headlines again and is causing the investor sentiment to turn negative. The other issue in the investor’s minds is the lack of agreement towards a Stimulus bill and the upcoming U.S. general election. Since the March market collapse from the COVID-19 exogenous shock, this is the largest weekly and monthly downturn so far.

In the Eurozone, we have seen the new Coronavirus lockdowns across the majority of Europe.

We highlight the COVID-19 Case increase comparison of 9/30/20 vs. 10/30/20; below the increases per country:

- France 119.8%
- The United Kingdom 112.5%
- Italy 95.8%
- Germany 70.14%
- Spain 50.82%

The earnings calendar featured the following companies and quarterly results:

- Apple (AAPL) closed at $109.05, falling $5.04 or 4.41%.
- Amazon.com (AMZN), closed at $3,044.70 falling $104.03 or 3.30%.
- Alphabet (GOOG), closed at $1,623.74 rising $154.14 or 10.49%.
- Facebook (FB), closed at $263.89 rose $1.99 or 0.75%.
- Exxon Mobil (X.O.M.) closed at $32.70, fell $1.63 or 4.74%.
- Chevron (CVX), closed at $69.58 fell $2.42 or 3.36%.
- Microsoft (MSFT) closed at $202.82 fell $7.51 or 3.57%.
- Pfizer (P.F.E.), closed at $35.48, fell $1.22 or 3.32%.

Results for October 30, 2020:

- The Dow Jones Industrial Average closed at 26,501.60, down 1,280.10 points, or 4.61% and a YTD return of -7.14%.
- The Standard & Poor's 500 closed at 3,269.96, down 93.04 points, or 2.77% and a YTD return of 1.21%.
- The Nasdaq Composite Index closed at 10,911.59, down 255.92 points, or 2.29%, and a YTD return of 21.61%.
- The Birling Puerto Rico Stock Index closed at 1.632.41, up 134.68 points, or 8.99%, and a YTD return of -19.90%.
- The U.S. Treasury 10-year note closed at 0.88%, a change of 27.54%, and a YTD return of -0.95%.
- The U.S. Treasury 2-year note closed at 0.14%, a change of 7.69%, and a YTD return of -1.20%.

Interest Rates: rates remain historically low, and the Fed indicates that rates will stay low for the foreseeable future. Our expectation in the short end of the curve is to stay close to zero and keep an eye on the longer end to see how willing investors are to lock in low rates for more extended periods.

In a perfect storm, Optimism is scarce.

As we finish this report, we are just a couple of days away before Puerto Rico and U.S. general election. There is a dangerous combination of issues all destined to place pressure and creates uncertainty in the markets.

1. **PuertoRico Elections**: Concerns surrounding the final election outcome in Puerto Rico will have divergent components and behavioral issues; this is quite normal in an election the will be too close to call.

2. **The U.S. Presidential Elections**: the election is generating a stir among all citizens. Most polls place Joe Biden as the frontrunner; if we learned anything from the 2016 Presidential elections, polls could be entirely wrong.

3. **The COVID-19 surge** is a perfect storm on its own, as the seasonal changes with colder temperatures bring us the flu season.

As the markets digest all these issues at play, we are in for an intense period of Volatility. This is pattern common 30 days before any general election and subsiding 30 days after the elections.

We recommend that investors do not permit that any political opinion becomes the catalyst for investment decisions. As Steve Jobs used to say, “You can't connect the dots looking forward; you can only connect the dots looking backward. So you have to trust that the dots will somehow connect in your future.”

Sometimes when we invest, no action is the preferred action, and these Volatility-infused elections seem to be one of those times.
The current Pandemic has forced business owners to re-think the way they operate; it is no longer business as usual. Continuing with our writings on how to improve your business during the Pandemic, in this writing, we will discuss the well-known business model - Theory of Constraints (T.O.C.). A constraint is defined in the Merriam-Webster dictionary as "the state of being checked, restricted, or compelled to avoid or perform some action." In business terms, a constraint has been defined as anything that interferes with a business's profitability.

What IS THE THEORY OF CONSTRAINTS(T.O.C.)?
The Theory of Constraints (T.O.C.) was conceived and distributed globally in 1984 by Dr. Eliyahu Goldratt in his book, "The Goal" and similar to other theories, it has been under constant development to the point that it has become one of the most commonly used methods for business worldwide.

The T.O.C.'s primary goal is to identify the constraint. This most crucial limiting factor prevents a business from achieving a goal and then going through the process of improving that constraint until it is no longer the limiting factor. In manufacturing, the constraint is often referred to as a bottleneck.

Using a scientific approach, T.O.C. theorizes that every significant business process consists of several intertwined functions, and one of them could be the "weakest link in the chain" and disrupt the whole process. In situations where there is an urgent need to improve, T.O.C. offers a highly focused methodology for creating rapid improvement.

The following are the tools used by the T.O.C.:

1. The Five Focusing Steps - identify and eliminate constraints.
2. The Thinking Processes - analyze and resolve problems.
3. Throughput Accounting - measure performance and guide management decisions.

A well-implemented T.O.C. analysis will have the following benefits:

- Increased profit
- Fast improvement
- Improved capacity
- Reduced lead times
- Reduced inventory

BASICS OF TOC

FOCUS

Dr. Goldratt identified the focus as the as the essence of T.O.C. T.O.C.'s essential part is to focus on improving the constraint affecting the business now until it no longer limits the operation. Once this is process is completed, then you can focus on the following limitation, if any. Do not spend any time on methods that do not restrict the operation, even if you understand that they can be improved since their optimization will not provide significant benefits.

The Five Focusing Steps

The T.O.C. method is a cyclical process known as the Five Focusing Steps - Shown in the following diagram.

Various experts that have studied and implemented T.O.C. suggest that the process will be complete by two additional steps to the front of the above table.
These steps are: (1) Define the goal of the process, and (2) determine how to measure the goal.

The Thinking Processes

The Thinking Processes is a problem-solving methodology designed as "cause and effect" tools, whose goal is to identify root causes and to remove them without creating new ones.

The Thinking Processes are used to answer the following three questions, which are essential to T.O.C.:

1. What needs to be changed?
2. What should it be changed to?
3. What actions will cause the change?

Throughput Accounting

Throughput Accounting is an alternative accounting methodology that eliminates distortions that promote behaviors contrary to increasing profit in the long term.

In traditional accounting, most of the emphasis on increasing profit is directed to reducing expenses while T.O.C. puts its efforts into increasing Throughput (i.e., sales). T.O.C. suggests that management decisions are guided by their effect on achieving the following improvements (in order of priority):

- Will Throughput be increased? – Throughput is defined as the rate at which sales are generated less truly variable costs, such as raw materials.
- Will Investment be reduced? – Investment is defined as cash tied up in physical items such as inventories.
- Will Operating Expenses be reduced? – Operating expenses are defined as money spent to create Throughput, other than genuinely variable costs such as payroll.

The most robust emphasis is on increasing Throughput. Again, T.O.C. focuses less on cutting expenses (Investment and Operating Expenses) and focus more on building sales (Throughput).

Difficulties in the TOC

TOC's main difficulty poses to a business wishing to implement it is that T.O.C. requires a complete turnaround of traditional management. The key to a successful implementation is education throughout the entire organization to understand the nature of the change and why it is necessary. Because of the significant amount of change needed to succeed, T.O.C. is easier implemented by smaller organizations. Although, large organizations, like the United States Military, have adopted T.O.C.

We have simplified the T.O.C. for purposes of this writing, but The Theory of Constraints is an advanced operation management philosophy. Its usefulness has been well established, and it has been used in conjunction with other methods like Total Quality Management.

At Birling Capital, we are prepared to guide you through identifying your specific constraints, breaking them, and making your business more profitable.
The Final Word: The Critical Key is Timing

Do you know what the difference between a Home Run and Foul Ball is?

Both require the same effort, but Home Run wins games and makes reputations, while the Foul Ball is worthless and insignificant.

- It's is not Power;
- It is not Distance;
- It is not Force;

The only difference is **Timing**; that slight advance or delay can have all the significance in the outcome.

As Babe Ruth used to say, "**Never let the fear of striking out get in your way.**"

- The sale does not end until the customer is satisfied and happy with the service or product working. "Home Run vs. Foul Ball"
- You are the client's point of reference; therefore, you must know everything about how the service progresses. "Home Run vs. Foul Ball"
- We all live on referrals; without them, there are no future sales. "Home Run vs. Foul Ball"
- Keeping this in mind, one manages to make clients for life.

We are usually intuitive in our giftedness areas, so it is critically important to know when to lead and where to go. No game ever stays the same; we must continually be in the process of change.

In conclusion, share one of my favorite quotes from John Maxwell, who states, "**Success is...knowing your purpose in life, growing to reach your maximum potential, and sowing seeds that benefit others.**"

**Always remember! Yesterday's Game-winning Home Run will not win tomorrow's Game!**

We hope that you have enjoyed this issue of The Zenith Investor ©, and we very much welcome your comments, thoughts, and ideas; you may reach us at frc@birlingcapital.com or 787-247-2500.

Francisco Rodríguez-Castro
President & C.E.O.

About Birling Capital

Birling Capital is a corporate advisory & consulting firm that offers broad corporate finance & advisory services. We focus on identifying and resolving organizational finance-related issues. We use a holistic approach to both assets and liabilities sides with integrated Business, family needs, and objectives. Over the past two decades, our firm's principals advised on more than hundreds of transactions in the corporate, healthcare, education, insurance, banking sectors.

**You have problems… We provide long term solutions.**

**Doing the right thing at the right time.**

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