

March 3, 2020

## Alambic Insights



Albert Richards, PhD., CFA  
CEO and Founder  
Alambic Investment Management, L.P.

Albert Richards launched Alambic Investment Management, L.P. in 2006, with over 20-years of equity research experience and a lifetime technical acumen. Bert and Brian Thompson, Bert's longtime friend and colleague from the PhD program at MIT, started the firm to bring thoughtful human insights to the design, development and operation of systematic investment strategies. Now with an 8-year track record, the team launched their first equity market neutral strategy in 2011.

Before starting Alambic Investment Management, Bert perfected the art of tearing apart financial statements to find value and opportunity. As a sell-side analyst and head of research within two large global investment banks, Bert became adept at identifying and quantifying the key drivers of equity valuation and company quality as well as the behavioral pitfalls that create market opportunities.

Full bio: [www.alambicim.com](http://www.alambicim.com)

### ***How Low Can It Go? Asian Flu of 1957-58 Foretells "Recession" in 2020***

Following a week in which markets delivered their fastest-ever correction (*i.e.*, a 10% decline from a recent peak), the question looming large is just how far equities will drop before they stabilize. The extent of the market and economic impact depends on how individuals change their behavior in response to a new global pandemic (yes, we think we're ready to use the "p" word). With apologies for the bias reflected in the historic naming conventions, we find the Asian Flu of 1957-58, the 1958 Eisenhower Recession and the 1957 Bear Market to be interesting comparisons to today – ***so much so we are now predicting mild U.S. and European recessions in our base case.***

Many early analyst estimates assumed the impact of COVID-19 would evolve like other recent, well-contained outbreaks such as SARS, MERS and Ebola. In our [analysis distributed in mid-February](#), we adopted a more-pessimistic base case forecast in which we predicted a mild global pandemic lasting up to 2 years with significant behavioral and economic implications. This remains our base case, although we dropping the "mild" moniker given that the pace of global spread is somewhat faster than we initially envisioned and – with Asian Flu as a template – we are increasing the estimated economic consequences.

We believe past pandemics such as the Spanish Flu of 1918, Asian Flu of 1957, Hong Kong Flu of 1968 and Swine Flu of 2009 are much more apt comparisons than SARS, MERS and Ebola. As COVID-19 continues to evolve, we are finding the Asian Flu pandemic to be a particularly interesting comparison – one which may provide clues to both the economic and stock market impact of a global pandemic. The results aren't particularly encouraging, as Asian Flu may have played a role in the 20.7% drop of the S&P 500 following its initial debut in the US and been responsible for the recession of 1958.

## Should “Recession” be the Expected Outcome? Asian Flu Suggests “Yes”

We haven’t found any sources that link the Asian Flu of 1957-58 with the 1958 Recession and the associated Bear Market directly, but there is strong evidence of a connection. Using the Asian Flu pandemic as a template, we find it difficult not to predict COVID-19 *potentially* costing 100-300,000 lives in the United States (hopefully meaningfully less with proper containment efforts), and causing significant shifts in consumer behavior (as were seen in 1957-58), including a potentially-sharp decline in personal consumption. It’s a close call, but our base case now calls for a mild U.S. recession in Q3 and Q4 (possibly earlier in Europe).

### Adjusting our Bull, Base and Bear Case Forecasts (from mid-February)

**Bull Case (30%, was 35%):** Our original Bull Case, calling for reasonably-quick containment (like SARS and MERS), is now overly optimistic. The new Bull Case assumes that China’s draconian efforts continue to demonstrate their effectiveness, thereby allowing them to restart production and get their economy – at least the manufacturing part thereof – moving. Other countries manage to control, or significantly slow, the non-China case increases (currently 20%-per-day) and slow the spread of the disease. China’s GDP growth dips to 2.0%-2.5% in Q1 and then recovers robustly over the remainder of the year. Global growth is negatively impacted by 0.5%-0.75% -- slightly more than SARS. Q1 2020 U.S. growth is 1.5%-1.7% as virus effects are delayed until later in the year. Most of the U.S. economic impact is seen in Q2, with growth around 1%, but cases are kept under control and H2 growth recovers back to the 2%+ range. A recession is avoided (although Europe gets close). We believe that the equity markets are pricing in this scenario (treasury markets appear more bearish, but corporate spreads could widen,) even with the recent declines.

**Base Case (50%):** A global pandemic similar to, but better controlled than, the 1957-58 Asian Flu, lasting 1 or 2 seasons and curtailed with vaccine development. China continues its success in controlling the outbreak, but this turns into a game of whack-a-mole as imported cases continue to pop up and they start shutting out foreign visitors (already happening). While manufacturing activity recovers, the country is faced with the dilemma of allowing the services side of the economy to reopen at the risk of reaccelerating the outbreak. Other countries find COVID-19 difficult, if not impossible, to eradicate, as many patients suffer only mild-to-moderate symptoms and few other societies will tolerate extreme measures like the lockdowns in China. Cases in Europe continue to climb, and U.S. cases experience a similar rise after a slow start. Spread throughout developing countries accelerates (our initial prediction was for Africa to be first, not the Middle East), and the developing world becomes an ongoing source of outbreaks in the developed world. Chinese growth dips to 1.0%-1.5% YOY in Q1 and struggles to push above 3%-4% for the rest of the year. Anxiety outside China increases, slowing global economies by a 0.75%-1.25% annual rate, and both Europe and the U.S. enter mild recessions as consumer spending drops significantly and unemployment rises modestly. Equity markets struggle, likely entering a bear market, credit spreads widen, interest rates stay low and the Fed rate cuts fail accelerate growth. We do not believe markets, particularly equities, have priced in this risk.

**Bear Case (20%, was 15%):** A moderate pandemic that accelerates over the next 3-6 months as containment fails to sustainably slow the global spread despite China’s initial successes. The human toll is 4x-8x a normal flu season, and anxiety turns to mild panic with the resulting shifts in consumer behavior causing Chinese growth to drop to around 2%-3% for the year (challenging its financial system). The United States and Europe enter recessions caused mainly by a sharp decline in personal consumption as consumers adopt a bunker mentality (as in 1957-58). Unemployment rises sharply. Equity markets enter a bear market, credit spreads widen and financial stress increases for levered firms. After initially dropping, inflation threatens to pick up as governments resort to even larger deficit spending, with the U.S. deficit approaching a \$1.5 trillion run rate by year end as the result of falling revenues and additional stimulus spending.

## The Asian Flu Pandemic of 1957-1958

The first major pandemic of the 20th century was the Spanish Flu of 1918. Spanish Flu was a particularly nasty virus (which until the 1930's was believed to be caused by a bacterium, rather than a virus) with a high mortality rate (around 10%), and it was particularly deadly for healthy individuals as it essentially over-amped their immune systems.

After several uneventful decades, the next major global outbreak was the Asian Flu pandemic of 1957-58. According to the CDC website:

*In February 1957, a new influenza A (H2N2) virus emerged in East Asia, triggering a pandemic ("Asian Flu"). This H2N2 virus was comprised of three different genes from an H2N2 virus that originated from an avian influenza A virus, including the H2 hemagglutinin and the N2 neuraminidase genes. It was first reported in Singapore in February 1957, Hong Kong in April 1957, and in coastal cities in the United States in summer 1957. The estimated number of deaths was 1.1 million worldwide and 116,000 in the United States.*

It is interesting to note the timing of the influenza outbreak in the U.S. – it started in the summer of 1957. Although seasonal influenzas have greater difficulties propagating in the summer months, this isn't necessarily true for other viruses (even though it seems logical), and the Asian Flu's virulence, as well as the fact that the public lacked immunity to this new pathogen, helped it continue to propagate during the summer months.

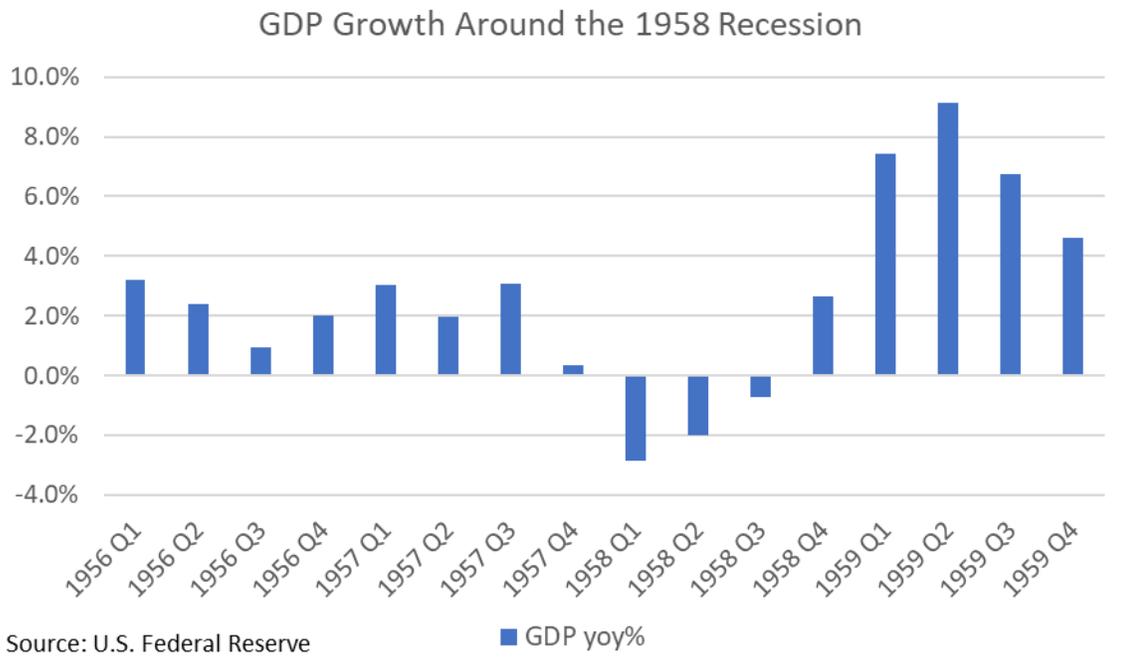
As the population has roughly doubled since 1957, a similar outbreak today would cause around 230,000 deaths in the United States alone – a number well in excess of the 20,000-60,000 deaths that occur in a "normal" flu season (depending on the severity of that year's strain). In our opinion, anything over 100,000 deaths would be enough to cause meaningful behavioral changes in the general populace – changes that could meaningfully reduce economic activity.

With this as a benchmark, how many deaths might we expect from COVID-19 if it becomes truly widespread? We see two main differences between COVID-19 and the Asian Flu of 1957. First, with a mortality that we estimate to be in the 0.75% to 1.0% range – less than the currently-reported 1%-2% figures coming out of China because of uncounted mild cases – COVID-19 still seems more deadly than the Asian Flu (published estimates have a broad range, with a loose center-point of around 0.25%). Counterbalancing this, of course, is improved care and a better-educated public when it comes to prevention. While it is a pure guess, we would think that a full pandemic has the potential to cause 100,000 – 300,000 deaths across the United States. While we certainly hope this doesn't happen, its mere potential is enough to change behavior in economically-important ways (curtailing travel being just one example), all of which could lead to a meaningful slowdown in consumer spending and hence overall GDP.

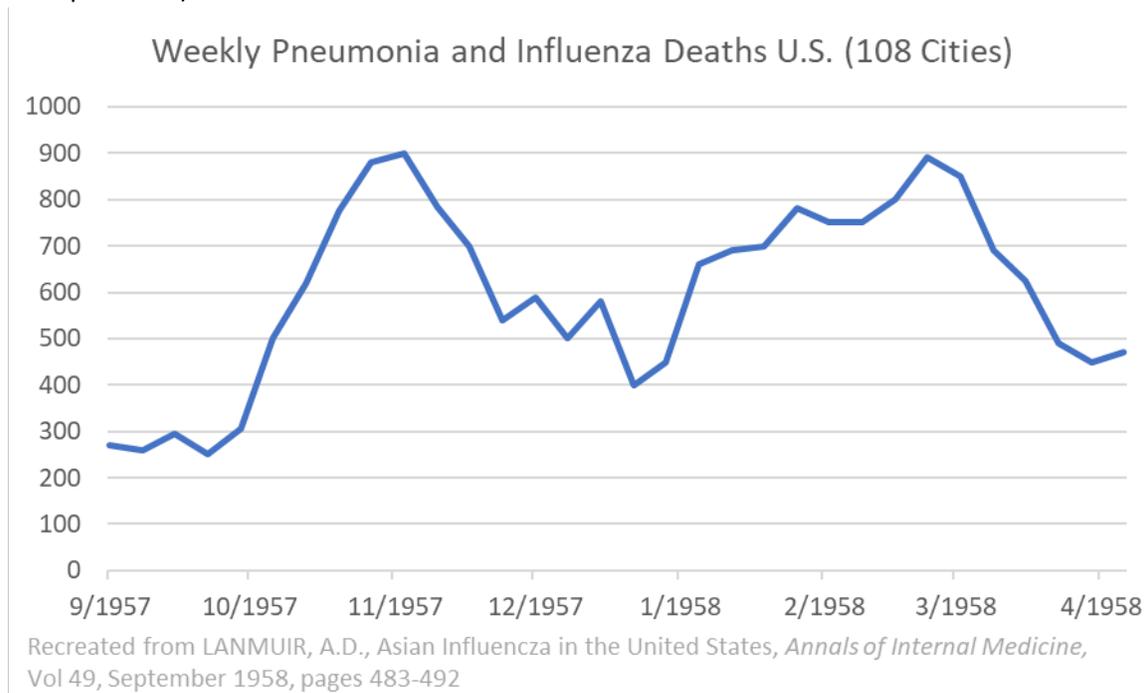
## The 1958 Recession (aka, The Eisenhower Recession)

When examining the Asian Flu, we were surprised to find a coincident U.S. (and global) recession. In general, the 1958 Recession (also called the Eisenhower Recession) doesn't get much press, for while it was relatively-sharp in magnitude (the worst since the 1930's) it was also fairly-short in duration. We also found very little written on the causes of the recession. While there are some references to earlier rate increases, the cause-and-effect connection seems quite tenuous. This said, ***giving the timing and the behavioral implications, we strongly suspect that a major culprit was the Asian Flu.***

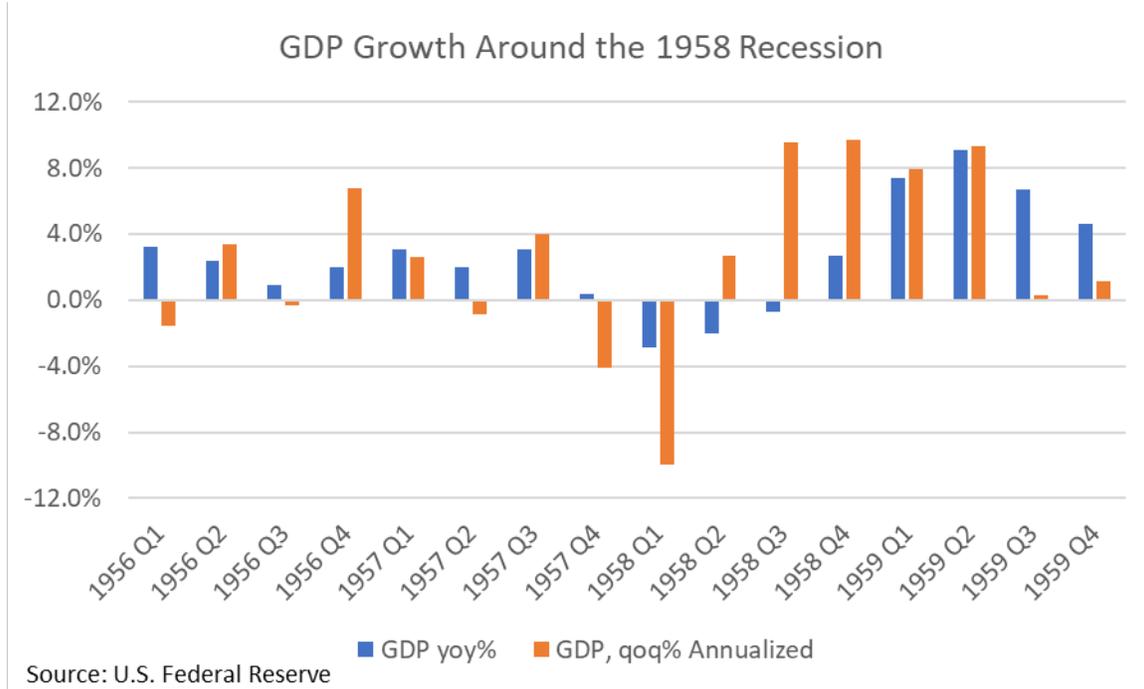
Shown below are the 1956-1959 quarterly GDP growth rates, expressed on year-over-year basis. For the most part, the economy in the mid-1950's was chugging along at an annualized rate on the order of 2-3%. There was then a sudden slowdown in the second half of 1957 and into early 1958, followed by a strong recovery.



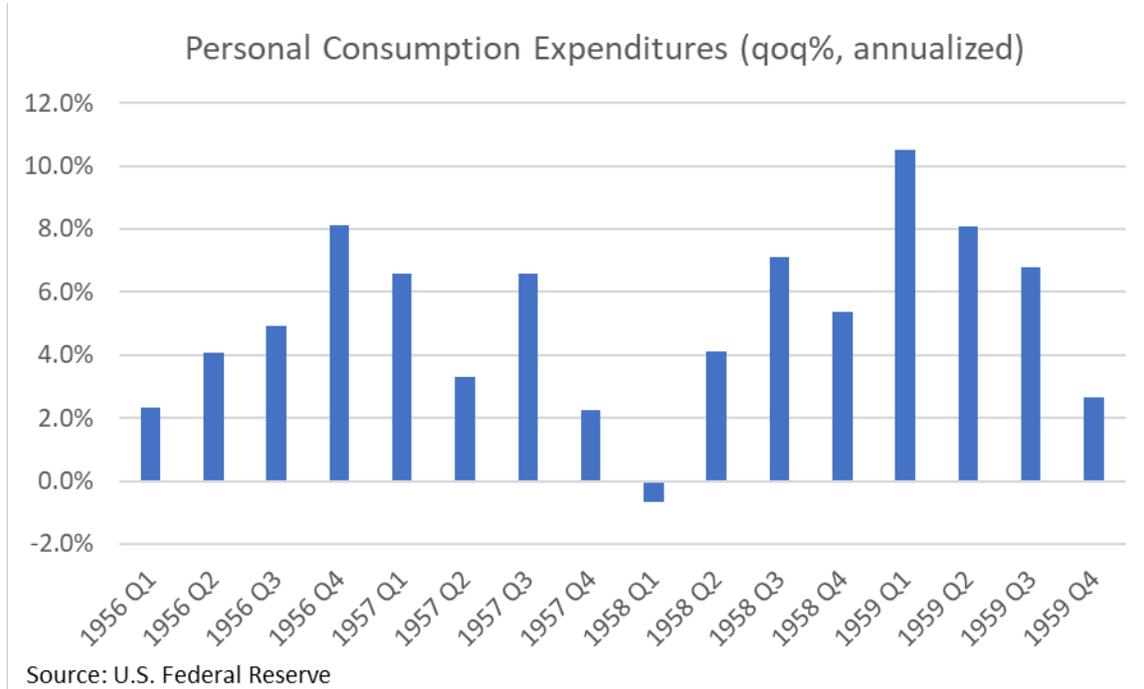
The mortality data for the Asian Flu took a very similar path, first appearing in the U.S. in the late summer of 1957 and continuing through the spring of 1958 with two distinct peaks (a “normal” season would be 300-400 deaths per week).



Note that the earlier chart of year-over-year GDP growth excluded the more traditional quarter-over-quarter annualized figures which we've included in the following chart. The volatility of the annualized qoq data demonstrates why we like the previous chart for illustrative purposes. Note the severity of the quarterly declines, as well as the robustness of the subsequent recovery.



A particularly peculiar characteristic of the 1958 Recession was the strong decline in consumer spending. Automobile sales, for example, were down sharply, from an earlier peak of 8.0 million units in 1955 to just 4.3 million units in 1958. This was particularly apparent in Personal Consumption Expenditures, or PCE, for which we show quarter-over-quarter growth rates (annualized) for the 1956-59 period below.



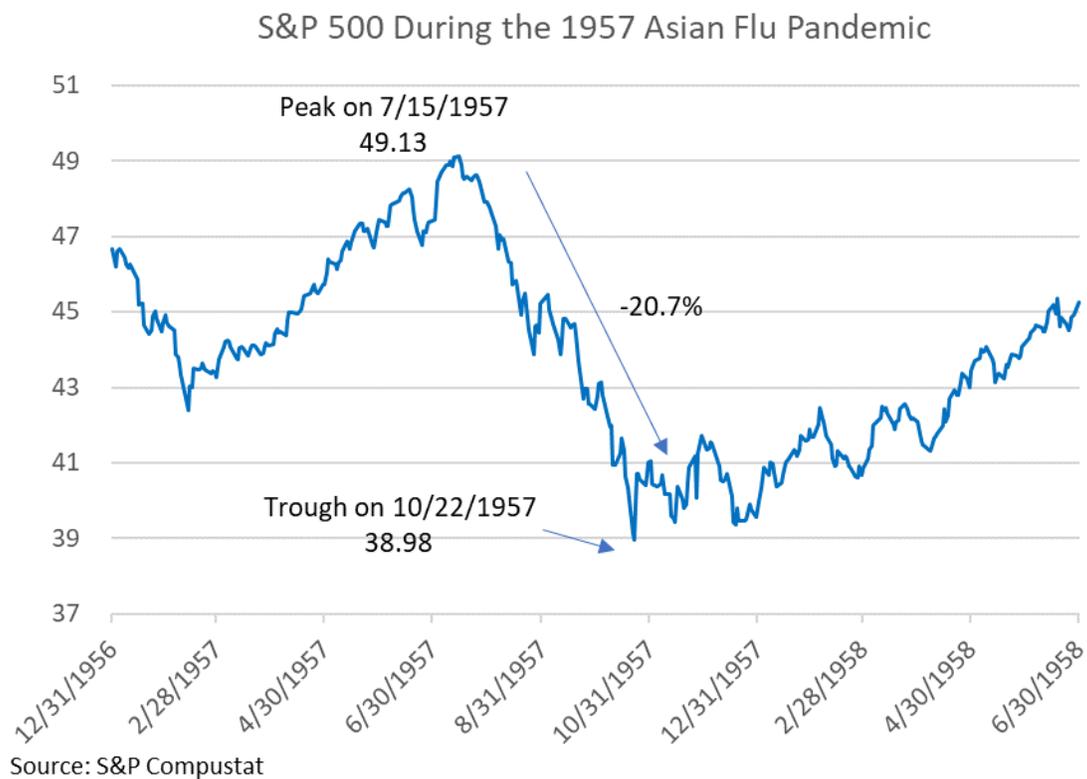
While the quarterly drop in PCE may seem mild, **it is one of only four declining quarters from 1955 until today**, with another being in the recession of 1960 and the final two being Q1 and Q2 of 2009 (with these latter two admittedly being much worse). So why did consumers suddenly stop their consumption expenditures in late 1957 and early 1958? In our opinion, the answer is simple – everybody had the flu!

A strong and very sharp decline in consumption expenditures is perfectly aligned with the present situation around the world, first in China and more recently in both South Korea, Japan (particularly Hokkaido), and Italy (amongst others). Images abound of deserted streets and empty or completely shuttered shops. While the actual numbers won't come out for weeks or months, the thought that these regions won't see a severe decline in sales is almost unthinkable. And all this could well be coming to the United States – perhaps soon (if only we finally start testing on a broader scale, but that's another subject).

Given that it appears (anecdotally) that one of the big drivers of the 1957-58 decline in PCE could have been the flu, and that the sudden and sharp decline in consumer expenditures seems to be the driving force behind the recession, it makes us wonder just how we will avoid a recession with the current (likely) pandemic. Even if mitigation measures are implemented and even if they significantly slow the spread of the virus (as China has done), the act of doing so will have a large and negative effect on consumption. Thus, while we previously only had outright U.S. and European recessions in our bear case, we now believe that "recession", albeit perhaps a mild one, is now the most-likely outcome.

### The 1958 Bear Market

What's a recession without an associated bear market? This, too, occurred over the 1957-58 time period, albeit only barely. Shown below is the S&P 500's performance over this time period.



The stock market's peak in mid-1957 was almost perfectly coincident with the arrival of the Asian Flu in the U.S. (note that this doesn't guarantee cause-and-effect, but it's a very strong coincidence). From its peak in Mid-July of 1957 to its bottom in late October, the S&P 500 dropped 20.7%.

This gives us a benchmark for the declines that might be in store for us should the COVID-19 virus continue as expected. Indeed, we think the 20.7% decline may underestimate the possibilities, as the market is much more expensive today than it was back in the 1950's. At the market peak in July of 1957, the Case-Shiller Cyclically-Adjusted P/E (CAPE ratio) stood at 16.9. While this was high for the time (the average in the 1950's was 14.8), it was nowhere near the current (pre-correction) level of 31.5 today. Even adjusting this relative to the average of the past decade (25.6, inflated due to the losses in 2009), today's market is far from cheap.

### The Effect on Unemployment

Unemployment increased in 1957-58, rising from 4.1% in August of 1957 (when the virus arrived) to 7.4% just 8 months later (near the outbreak peak). A repeat pattern is possible if consumer spending takes the hit we expect, particularly given that job openings and help wanted data were already weak in January (pre-virus).



### Can the Fed Fix It?

Finally, we believe that a viral pandemic is a type of economic shock that lower interest rates can't fix, hence the recent Fed action, while not hurting, is also unlikely to help much. While lower rates might give a small additional boost to housing, this is only around 3%-4% of GDP. Meanwhile, we do not believe there's any interest rate cut (or tax cut) that will pull frightened consumers back into restaurants or out browsing the shops, let alone boarding a cruise ship. These activities, and the associated spending, will just have to wait until the episode is past. While some sort of stimulus spending could eventually move the economy, the current administration has shown no interest in this approach yet, and the experience from 2008-09 suggests it couldn't be put in place fast enough anyway. ***If the one-week-to-the-next change in foot traffic on the Italian streets is anything to go by, this won't be a slow-motion train wreck, it could instead be a full-tilt***

***run into a consumer spending brick wall.*** This, too, shall pass, just as it did over a few quarters in 1957-58, but at present we don't see any viable options to outright *avoid* it. Sometimes, you just gotta cycle.

**Disclosure:**

Alambic Investment Management, L.P., is an SEC registered investment advisor. The information in this article is intended for discussion and informational purposes only and does not constitute financial, legal, tax or any other advice. All information contained herein is provided "as is." Alambic expressly disclaims making any express or implied warranties with respect to the fitness of the information contained herein for any particular use, its merchantability, or its application or purpose.

Nothing in this document should be construed as an offer to purchase or sell, or a solicitation to purchase or sell, any security or instrument. Any offer will be made by only by means of a formal private placement memorandum and a related subscription agreement to be furnished to prospective investors. Prior to making any investment or hiring any investment manager, you should consult with a professional financial advisor, legal and tax advisor to assist in due diligence as may be appropriate and determining the appropriateness of the risk associated with a particular investment.

Please note that with regard to the historical market performance discussion contained herein, that past performance is no indication of how the markets will perform in the future.