SWAN GLOBAL INVESTMENTS

Issue 30 - Q3, 2018

The Good, the Bad, and the Ugly

Quarterly Update of the Swan Defined Risk Strategy

CONTENTS

THE GOOD, BAD, UGLY
The S&P 500 DRS returned 3.81% and 3.90% for Premier and Institutional respectively in Q3 versus 7.71% for the S&P 500.

PAGE 3 MARKET COMMENTARY & DRS PERFORMANCE

PAGE 4 TECHNOLOGY WILDCARD & THE ECONOMY

PAGE 7 NEW SECTOR CHANGE UPDATE

REMINDER
THE 10TH BOX
Thinking Outside the (9-Style) Box

We are hosting a series of regional due diligence events and inviting advisors from across the nation to discuss solutions to the unique and pressing investment challenges facing investors today and beyond.

A look at the world of managed finance from Durango, CO and elsewhere...
From the Desk of Randy Swan

The Good

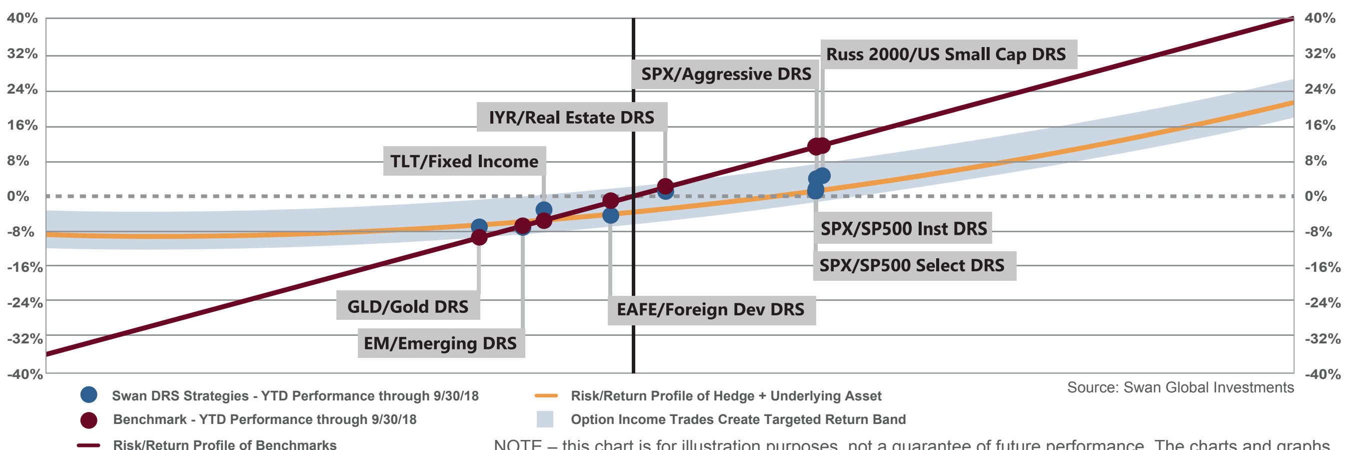
The U.S. equity markets have returned double digit performance through the first three quarters of 2018. I am impressed that the U.S. markets have held up so well given the fact that most other global equity markets and asset classes are down for the year, but we will discuss the non-U.S. markets in the "Bad" section.

The performance of the Defined Risk Strategy (DRS) was decent based upon expectations given the performance of each underlying asset. I could potentially re-use the second quarter write up to describe the third quarter. Like last quarter, our YTD performance across the board is at the lower end of expectations due to two reasons. First, the performance of equal-weighted sectors versus the cap weighted S&P, and the resulting tilt towards value relative to growth in our core equity holdings, was detrimental to our S&P 500 DRS. Second, the lower level of option premium income this year is due to the rapid rise in January's markets and violent sell-off in February which caused several players in the options and volatility space grave harm. We should also add that despite almost unprecedented low levels of volatility at the end of 2017 (the time of our most recent re-hedge) volatility in many long-term put options is about the same or even lower at the start of Q4. This combined with the rising interest rates, which has some minor negative effect on the value of our put options, has us at the lower end of expectations. The 2018 year has almost been a perfect storm of poor conditions and thus will be discussed more in the "Bad" section.

Please review the targeted return band below and the DRS product summary at the end of this newsletter for specifics.

Given our investment philosophy of always invested and always hedged, we are excited about the continued prospects of stock market growth but also remain prepared for a bear market. To be clear, the DRS thrives off of upside and downside volatility over an entire investment cycle (i.e., bull and bear), and we have not experienced a bear market since 2009. In other words, investors have almost forgotten what a bear market tastes like.

Another good: the U.S. economy seems to be firing on all cylinders given the 4% growth in GDP this year. Unemployment is low and consumer confidence is high. Arguably, most everything looks okay on the surface. We have had nearly 10 years of growth (albeit slow



NOTE – this chart is for illustration purposes, not a guarantee of future performance. The charts and graphs contained herein should not serve as the sole determining factor for making investment decisions.

SWAN CONTENT

THOUGHT LEADERSHIP

Know What You Own: Understanding the Options Category

Managing Expectations: Drawdown Scenarios & DRS Performance

New Risk Metrics for a New World

SWAN INSIGHTS

Fiduciary Insanity?

Duration Matters

The 40 Don't Protect

The State of Fixed Income

ARTICLE COVERAGE

Investor's Business Daily: How to Use ETFs to Stay Invested without Fearing the Bear

WEBINARS

Quarterly Round-Up
with PM, Randy Swan
Monday, Oct. 22 - 3pm EST
Click to Register

growth) without any substantial problems. According to Liz Ann Sonders at Charles Schwab in an article titled "An End Has a Start: Keep an Eye on Recession Indicators," there are no obvious warning signs of an impending bear market because most of the key indicators they track are not yet flashing warnings.

It is likely that this decent growth in 2018 has been spurred by the recent tax cuts. I find the continued debate interesting about whether tax increases are necessary to balance the budget or if they are punitive for "wealthy" taxpayers. This goes back to the Laffer Curve President Reagan frequently discussed, which posits that there is a tax rate that maximizes revenue to the government between 0 and 100. In other words, no one would work at a 100% tax rate, and the government does not take in any revenue at 0%. Maximizing revenue while not killing the proverbial "golden goose" makes a lot of sense, but I would add that treating your best customers fairly is not only an admirable goal but a necessity. I would add that I just like to see individuals deciding how to spend or invest their money rather than the Federal government. The Federal government's track record with our money at this point is quite suspect.

The bottom line question is whether it is better to collect less tax revenue and allow the producers in the economy to keep more of their money or raise more revenue and punish innovation. Let's see if the reduction in regulations and taxes continue and whether strong GDP growth continues as well.

The Bad

Building on the theme that U.S. equity markets have had a solid 2018 and that most everything else around the globe is suffering, I offer the following chart:

Country	ETF	% Below All-Time High Close	Country	ETF	% Below All-Time High Close
Nigeria	NGE	-69%	India	PIN	-19%
Turkey	TUR	-68%	South Korea	EWY	-19%
Greece	GREK	-67%	Peru	EPU	-18%
Egypt	EGPT	-59%	Belgium	EWK	-16%
Russia	RSX	-55%	Gernmany	EWG	-15%
Colombia	GXG	-51%	Singapore	EWS	-14%
Brazil	EWZ	-49%	Hong Kong	EWH	-14%
Italy	EWI	-45%	Netherlands	EWN	-12%
Vietnam	VNM	-39%	Ireland	EIRL	-11%
Chile	ECH	-37%	Thailand	THD	-9%
Indonesia	EIDO	-36%	United Kingdom	EWU	-9%
South Africa	EZA	-34%	Australia	EWA	-9%
Argentina	ARGT	-32%	Taiwan	EWT	-9%
UAE	UAE	-31%	Sweden	EWD	-8%
Phillippines	EPHE	-31%	Japan	EWJ	-8%
Poland	PLND	-31%	Switzerland	EWL	-7%
Mexico	EWW	-29%	France	EWQ	-7%
Qatar	QAT	-29%	Norway	NORW	-6%
China	FXI	-28%	New Zealand	ENZL	-6%
Spain	EWP	-27%	Saudi Arabia	KSA	-6%
Portugal	PGAL	-26%	Canada	EWC	-5%
Austria	EWO	-24%	Israel	EIS	-5%
Malaysia	EWM	-21%	US	SPY	-1%

Source: Pension Partners, @CharlieBilello, as of September 30th, 2018

In the last GB&U, we discussed the topping process that we think might be occurring. We stated, "With respect to global equity performance, most of foreign equity is down on the year, whereas U.S. equities are up slightly. Although it is too early to tell, it looks like the long-awaited topping process has started. I say process because market tops are a process, not an event."

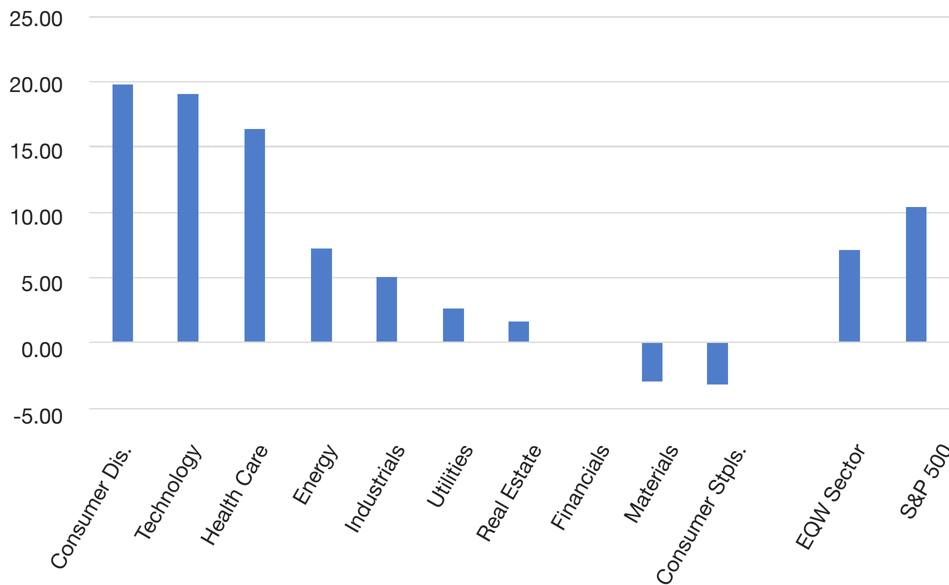
As seen above, while gains for the U.S. markets have increased that has not been the case for world equity markets. This has caused a sizable divergence. In addition, a divergence is also occurring in the U.S. between the average stock and the FAANG stocks. In other words, fewer and fewer stocks are contributing to the rising equity markets as evidenced by the NYSE Composite which topped out in January, whereas most other indices topped in the July – September period. All divergences don't necessarily create market tops, but all tops contain divergences like these.

Speaking of market tops, a recent MarketWatch article succinctly outlined some potential triggers for the next financial crisis from a few economists and experts. Surprise, surprise, the common answer was DEBT. The four individuals referred to in the article, each of which predicted the cause of the previous financial crisis, all believe that the excessive amounts of global debt will be the catalyst for a future crisis, whether it be consumer, corporate, or sovereign debt (Source: MarketWatch, Howard Gold).

To be clear, our position has been the smartest guys in the room around the globe have created multiple bubbles by their actions to prevent a day of reckoning. Thus, each crisis will likely be bigger than the last which should ultimately end with what author John Mauldin describes as the "Great Reset" whereby the global debt will be forgiven or restructured similar to the year of Jubilee discussed in the Bible. We will discuss debt further in the "ugly" section.

Finally, as it relates to the DRS, the underperformance of the option income trades has to be in the bad. Not because of the absolute losses, since the average equity asset has returned around -0.11% in 2018, but that it hasn't helped pay for any of the hedging cost in 2018. This on top of the underperformance of the equal-weight sector approach has only made it worse for the S&P 500 flagship strategy. Our relative performance is not good but bad this year, so far. It is important to note that the bad relative performance can often be a precursor to relative outperformance when the next bear market starts.

As we have often said, the biggest factor in determining your return is the price you paid for the investment. Overpaying for assets is not typically rewarded, which, as we have pointed out previously, should be a concern currently from the extraordinarily high valuations of the U.S. markets relative to valuations over the past 100 years.



Source: Morningstar and Zephyr StyleAdvisor; through the end of the third quarter.

I can't stress this enough but the best time to invest in the DRS is at the end of bull markets. Since no one knows in advance when they start, you must rely on patience and discipline. The bottom line is that human nature does not change, which is why we stress taking a long-term view as to avoid making emotional mistakes through short-term dislocations.

The Ugly

We introduced the debt situation as a potential catalyst for a market sell-off in the "bad" section, but it doesn't end there. All of the following debt-related issues are "ugly":

1. Rising interest rates and their negative impact on bond holders
2. The impediment of tighter monetary policy on the real economy
3. The low returns inflicted on bond holders over the last decade
4. The monetary, fiscal, and political tools available to stave off the next recession are seriously impaired

Of those issues, the most immediate is the rising interest rates which have led to losses in bond holdings. Conservative investors are not receiving the stability and income that bonds once provided to their portfolios. The table below shows the year-to-date performance for various bond ETFs.

Vanguard Total Bond Market ETF	BND	-1.67
iShares Core US Aggregate Bond ETF	AGG	-1.64
iShares 1-3 Year Treasury Bond ETF	SHY	0.14
iShares 7-10 Year Treasury Bond ETF	IEF	-2.82
iShares 20+ Year Treasury Bond ETF	TLT	-5.98
iShares TIPS Bond ETF	TIP	-0.92

Source: Morningstar Direct, through the end of the third quarter.

The interest rate cycle that helped investors since the early 1980s is now a headwind that is not likely to help for the foreseeable future. A couple of years ago one could invest in bonds and receive a return of 2-3%, now one needs to be concerned about potential losses.

Regarding the slow-down effects higher rates have on the economy, Jamie Dimon believes the 10-Year Treasury yield should be at 4% today and on its way to 5% and higher. In an interview back in the summer of last year, he stated, "It's a higher probability than most people think." It was noted in a CNBC article that covered his comments that the 10-Year Treasury influences rates for mortgages, auto loans, and other types of loans. This fact and the amount of absolute consumer debt (i.e., mortgage, credit card, student loans) could have a dampening effect on growth going forward.

Yves Smith, in a recent article titled, "How the Crisis Caused a Pension Train Wreck," spoke to how the low absolute levels of returns forced upon bond holders has greatly impacted the funding status of pension plans. It stated, "Even though the widespread underfunding at public pension plans is in many cases due to government officials choosing to underfund them (New Jersey in the early 1990s is the poster child), in many cases, the bigger perp is the losses they took during the crisis, followed by QE lowering long-term interest rates so much that it deprived investors of low-risk income producing investments. Pension fund and other long-term investors had only poor choices after the crisis: take a lot of risk and not be adequately rewarded for it" (Source: Naked Capitalism, Yves Smith). The article goes on to point out that individual investors are in the same predicament and that their investments in non-U.S. equity markets have only returned 4% since the financial crisis.

Finally, I have consciously decided to avoid talking about current political dysfunction even though it is getting worse. Nothing else can be said other than politicians or central bankers are not doing anything to solve the real problems that exist today, namely too much debt and not enough savings to fund one's retirement. In fact, as we just stated they have stolen from savers to bail out the banks and others "Too Big to Fail" in the form of low interest rates.

A group of current and former policymakers and academics in the financial industry dubbed the "Group of 30", some of which led the world into the last financial crisis, have concluded that the Fed is going to be in worse off shape to fight the next major crisis than they were in 2008. Timothy Geithner stated that, "some of the tools to fight the hopefully rare but extreme crisis in the future have been weakened." He continued to say, "new reforms are actually part of the problem in that Congress has limited the ability of the Federal Reserve and FDIC to provide emergency support to the financial system" (Source: Bloomberg, Rich Miller). Well, it sure hasn't seemed like they have been very limited in the last decade.

We have found most investors have two simple goals for themselves, namely, 1) I don't want to lose my money and 2) I don't want to outlive my money. For both of these goals, investors should be concerned that the risk from excessive debt will be debilitating to future growth and could prevent many from reaching their financial goals.

Technology as the Wild Card

Is there no way out? Is the future all "doom and gloom?" It is true that we often discuss what we see as serious headwinds to our long-term growth prospects, namely debt, demographics, and denial. Similar to John Mauldin's outlook, we foresee continued piling on of debt until the system can no longer handle any more, ending in a painful reset. The easy choices are long since passed and we are now beginning to reap what we sowed. This has been evidenced by the slower than normal growth in our economy since the financial crisis. No one knows the tipping point of the debt crisis but it will happen at some point in the future.

However, there is a silver lining—technology. It is possible that improvements from technology could offset some but not all of the negative effects of excessive debt that continues to grow. What do we mean by improvements? The reduction of costs to produce goods and services through automation, artificial intelligence (AI), etc., is going to have a positive effect on productivity. In addition, scientific breakthroughs in medical technology and biochemical areas are going to have a positive impact in our society. When and by how much remains to be seen. To be clear, I don't subscribe to the fact that it can completely offset what is coming but rather has the potential to mitigate some of the effects.

A recent study by McKinsey and Company titled, "A Future that Works: Automation, Employment, and Productivity" claims that the majority of occupations (60%) can expect about 30% of their tasks to be automated while only 5% can be completely automated. Furthermore, the study claims the following functions may be replaced by robots:

74% Food and hospitality

61% Transportation and warehousing

54% Manufacturing

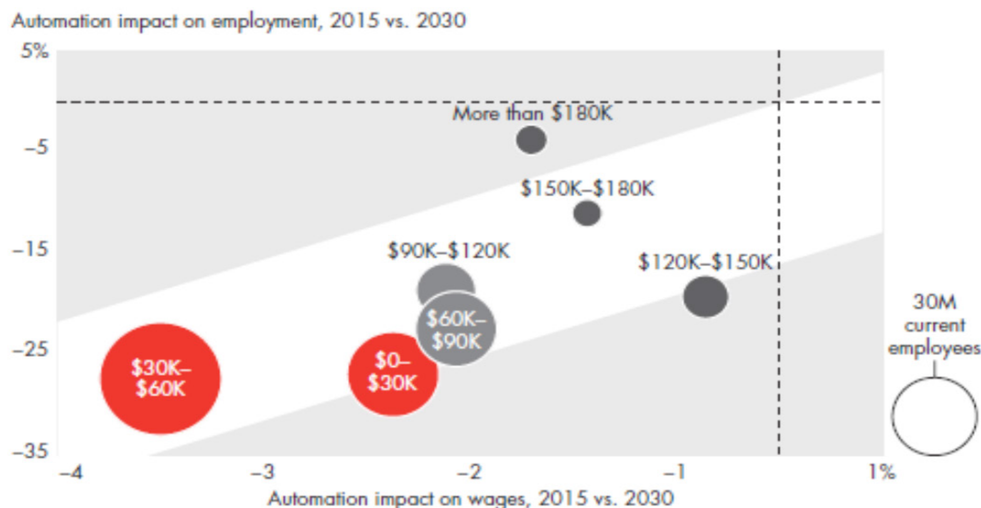
53% Retail

The upside is expected productivity growth on a global basis by 0.8% to 1.4% annually. The question then remains how much of these productivity gains will be offset by the likely big impact on employment and the costs of excessive borrowing over the last 30 years on a global level.

These questions about technology's impact on society over the coming decades has been top-of-mind for forward-looking writers and thinkers who care more about the future than next quarter's earnings report. While no one knows what the future will look like, some of the "big picture" questions being debated are:

- Are the gains from technology being concentrated in the hands of a few monopolistic/oligarchic organizations?
- Will all the gains from productivity flow solely to the income statements of these few companies?
- Where does that leave the mass of workers who will be rendered redundant by technology?
- Will the "losers" from technological arms race demand more and more from the state?
- Will the state be in a position to meet those demands?

Some writers are claiming the coming technological revolution will be as impactful as the Industrial Revolution. The massive conversion of farmers to workers as the world's economies shifted from agrarian to industrial caused massive amounts of societal upheaval. More recently, the globalization since the end of the Cold War that has seen billions of individuals transition from closed, command economies to market-oriented economies has led to the populist backlash currently sweeping the globe. Some think the coming Technological Revolution will be every bit as disruptive.



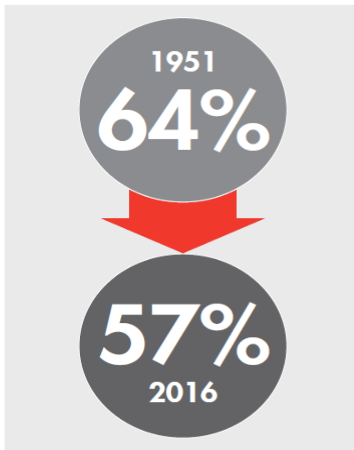
These predictions also cause a lot of anxiety and stress and are at least some of the reasons for the call for guaranteed income for everyone and a new form of economic system called "Oligarchical Socialism." According to Joel Kotkin in a recent article titled "America is Moving Toward an Oligarchical Socialism": "Oligarchical socialism allows for the current, ever growing concentration of wealth in a few hands—notably tech and financial moguls—while seeking ways to ameliorate the reality of growing poverty, slowing social mobility and indebtedness. This will be achieved not by breaking up or targeting the oligarchs, which they would fight to the bitter end, but through the massive increase in state taxpayer support."

The author states that based upon the recent trends and projections of continued dominance of the oligarchs:

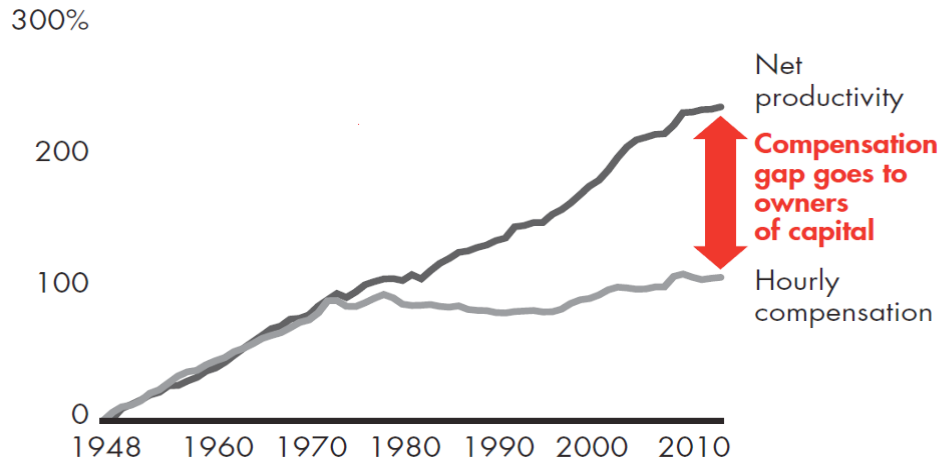
> "Theoretically, the Democrats moving to the left should terrify the oligarchs. Yet increased income guarantees, nationalized health care, housing subsidies, rent control and free education could also help firms maintain a gig-oriented economy since these employers do not provide the basic benefits often offered by more traditional "evil" corporations in energy, manufacturing, and basic business services.
>
> Such subsidies would help millions of gig workers, as well as the vastly underpaid production workers at Amazon's warehouses, erratically paid workers at the Tesla car factory or the contract labor who clean the tech firms' buildings and provide security. As historian Jeff Winters has pointed out, the oligarchy, representing basically the top 0.01 percent of the population, are primarily interested not in lower taxes but in protecting their market shares and capital; they have been at least as brilliant in avoiding taxes as developing innovative products. He points out the very rich have maintained their share of assets even in welfare states such as Sweden and Finland.

Labor's share of GDP is already declining; increased automation may accelerate this trend

US labor share of output



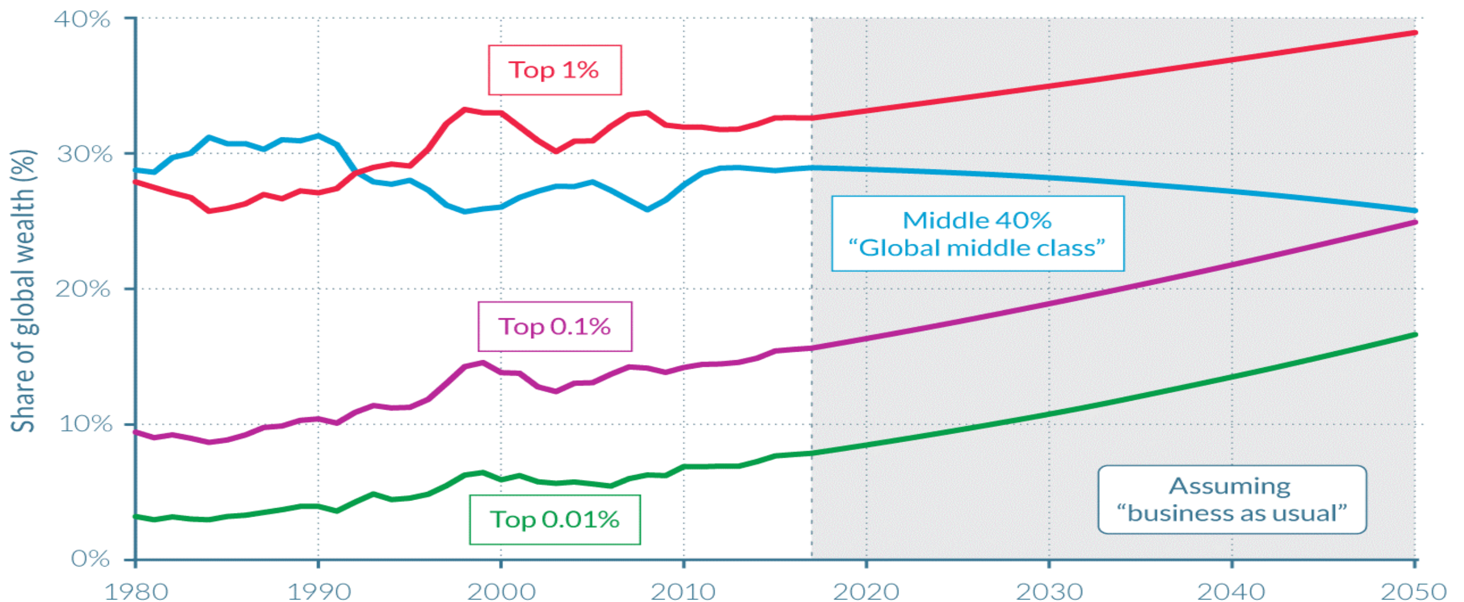
US growth in productivity vs. growth in compensation, indexed to 1948



Notes: US labor share of output is five-year moving average; labor share is for nonfarm sector; data is for average hourly compensation of production/nonsupervisory workers in private sector and net productivity of total economy; net productivity is growth of output of goods and services minus depreciation per hour worked
Sources: US Bureau of Labor Statistics; Economic Policy Institute; Bain Macro Trends Group analysis, 2017

> The losers here will be our once-protean middle class. Unlike the owners of corporations in the past, oligarchs have no interest in their workers becoming homeowners or moving up the class ladder. Their agenda instead is forever-denser, super-expensive rental housing for their primarily young, and often short-term, employees.
>
> There's surely a compelling logic for oligarchic socialism. The tech moguls get to remain wealthy beyond the most extreme dreams of avarice, while their allies in progressive circles and the media, which they increasingly own, continue to hector everyone else about giving up their own aspirations. All the middle and upwardly mobile working class gets is the right to pay ever more taxes, while they watch many of their children devolve into serfs, dependent on alms and subsidies for their survival." (Source: Orange County Register, Joel Kotkin)

What could this end up looking like? It is too early to tell but numerous studies have highlighted the potential of increasing productivity and greater concentration of capital. One study has projected that the top 0.1% will have about as much wealth as the entire middle class by 2050 (; as these factors begin to widen the spread further amongst the oligarchy and the "labor" population.



Source: WID.world (2017). See wir2018.wid.world/methodology.html for data series and notes.

In 2016, in a world represented by China, Europe and the US, the global wealth share of the Top 1% was 33%. Under "Business as usual", the Top 1% global wealth share would reach 39% by 2050, while the Top 0.1% wealth owners would own nearly as much wealth (26%) as the middle class (27%). The evolution of global wealth groups from 1987 to 2017 is represented by China, Europe and the US. Values are net of inflation.

Potential Problems from this Trend

How is the debt going to be paid off / restructured? Who is going to suffer the most?

How can 30-40% of the population pay for 100% of the population? Where does demand come from? Will the 30-40% have a profit motive or is it based upon altruism or survival (i.e., avoid the proverbial pitchforks)?

What are the psychological effects of having 60-70% unproductive? What will be the impact on the stock markets and amongst Technology companies and other effected corporations?

Those seem to be questions for another time. However, the transformation that will occur in the next few decades will most assuredly have a profound impact on the economy around the globe. Labor markets, national economics, and most industries will be dramatically changed, due to the turmoil and change brought about by automation and new, currently unknown or broadly applied technologies. However, many researchers have noted as well that this transition will also by accompanied by a period of growth and innovation (at least in some areas). As it has been throughout history, the temporary imbalances caused by this seismic shift will eventually be resolved, and new opportunities and risks will arise for both the labor force and the markets.

I will quote Oliver Wendell Holmes, "prophesy as much as you want but always hedge."

In Other News - New Sector Change Update

On September 21st the sectors involved in the new Communication Services sector completed their rebalance. Stocks from the Consumer Discretionary and Technology sectors were rebalanced and re-classified within Communication Services; these included major stocks like Facebook, Google, Netflix, Walt Disney, as well as the prior Telecom sector stocks such as Verizon and AT&T. Swan used this time period to integrate this change into the portfolios that take an equal sector approach and rebalance the other sectors (usually already done on a quarterly basis).

What will this mean going forward?

The new sector does not change the core equity's holdings that much, with some slight changes to reduce in small amounts a few overweight and underweight sectors. The approach remains value-tilted and light on the bigger mega cap names than the cap-weighted S&P 500. Although growth has outperformed value handily this year and over the last few years, we believe value's tendency to outperform growth during bear markets could be valuable during the next crisis.

Swan DRS Product Performance Summary
As of: September-30-2018

	DRS Products				Benchmark		
	Core Equity	Hedge	Income	Total Portfolio (Net)	Benchmark	Return	Over/Under Performance
YTD 2018							
S&P 500 DRS Select Composite (1)	6.43%	-3.59%	-0.51%	1.75%	S&P 500	10.56%	-8.81%
S&P 500 DRS Institutional Composite (2)	6.44%	-3.69%	-0.22%	1.78%	S&P 500	10.56%	-8.78%
DRS Emerging Markets Composite (3)	-8.16%	1.48%	-0.13%	-7.62%	MSCI EM Index (Gross)	-7.39%	-0.23%
DRS Foreign Developed Markets Composite (4)	-2.08%	-1.20%	-0.33%	-4.28%	MSCI EAFE Index (Gross)	-0.98%	-3.34%
DRS U.S. Small Cap Composite (5)	9.73%	-4.67%	1.26%	5.18%	Russell 2000 Index (Gross)	11.51%	-6.38%
DRS Gold (6)	-7.25%	1.12%	-0.28%	-7.17%	SPDR Gold Shares (GLD)	-8.81%	1.64%
DRS Real Estate (6)	1.60%	-1.06%	1.13%	0.90%	iShares US Real Estate (IYR)	1.56%	-0.66%
DRS Fixed Income (6)	-5.45%	2.55%	1.17%	-2.63%	iShares 20+ Yr Treasury Bond (TLT)	-5.92%	3.29%
DRS Aggressive (6)	6.30%	-1.92%	0.57%	4.07%	S&P 500	10.56%	-6.49%

Source: Swan Global Investments and Morningstar

Performance is net-of-fees; total portfolio return includes all expenses. The core equity, hedge, and income components do not sum to the Total Portfolio (Net) return due to fees and differences resulting from geometrically smoothing component returns.

1. The Defined Risk Strategy Select Composite demonstrates the performance of non-qualified assets managed by Swan Global Investments, LLC since inception. It includes discretionary individual accounts whose account holders seek the upside potential of owning stock, and the desire to eliminate most of the risk associated with owning stock. The Composite relies on LEAPS and other options to manage this risk. Individual accounts own S&P 500 exchange traded funds and LEAPS associated with the exchange traded funds as well as multiple other option spreads that represent other indices that are widely traded. The Defined Risk Strategy was designed to protect investors from substantial market declines, provide income in flat or choppy markets, and to benefit from market appreciation. ETFs and options are the primary components of the strategy.
2. DRS Institutional Composite includes high net-worth, non-qualified accounts that utilize cash-settled, index-based options held at custodians that allow participation in Clearing Member Trade Agreement (CMTA) trades. The Composite relies on LEAPS and other options to manage risk. This composite owns S&P 500 exchange traded funds (ETF) and LEAPS associated with the ETFs as well as multiple other option spreads that represent other indices that are widely traded. The DRS was designed to protect investors from substantial market declines, provide income in flat or choppy markets, and to benefit from market appreciation. ETFs and options are the primary components of the strategy.
3. Emerging Markets DRS Composite demonstrates the performance of mutual fund accounts invested in the DRS Emerging Markets strategy. DRS emerging markets accounts seek the upside potential of owning stock and the desire to eliminate most of the risk associated with owning stock. The Composite relies on LEAPS and other options to manage this risk. The Funds invest in exchange traded fund(s) (ETF) that own emerging markets equities and LEAPS associated with the ETFs as well as multiple other option spreads that represent other indices that are widely traded. The DRS was designed to protect investors from substantial market declines, provide income in flat or choppy markets, and to benefit from market appreciation. ETFs and options are the primary components of the strategy.
4. Foreign Developed Markets DRS Composite demonstrates the performance of research and development account(s) and mutual fund accounts invested in the DRS Foreign Developed Markets strategy. DRS Foreign Developed Markets accounts seek the upside potential of owning stock and the desire to eliminate most of the risk associated with owning stock. The Composite relies on LEAPS and other options to manage this risk. The Funds invest in exchange traded funds (ETF) that own foreign developed markets equities and LEAPS associated with the ETF as well as multiple other option spreads that represent other indices that are widely traded. The DRS was designed to protect investors from substantial market declines, provide income in flat or choppy markets, and to benefit from market appreciation. ETFs and options are the primary components of the strategy.
5. U.S. Small Cap DRS Composite demonstrates the performance of research and development account(s) and mutual fund accounts invested in the DRS U.S. Small Cap strategy. DRS U.S. Small Cap accounts seek the upside potential of owning stock and the desire to eliminate most of the risk associated with owning stock. The Composite relies on LEAPS and other options to manage this risk. The Funds invest in exchange traded funds (ETF) that own U.S. small cap equities and LEAPS associated with the ETF as well as multiple other option spreads that represent other indices that are widely traded. The DRS was designed to protect investors from substantial market declines, provide income in flat or choppy markets, and to benefit from market appreciation. ETFs and options are the primary components of the strategy.
6. Research and Development account. No fees are being charged in the R&D accounts but performance reflects a 1% management fee being charged monthly in arrears for illustrative purposes.

Annualized Returns as of September 30, 2018

Composite	One Year	Three Year	Five Year	Ten Year	Since Inception
DRS Select Composite	6.38%	7.89%	6.07%	7.03%	8.41%
S&P 500	17.91%	17.31%	13.95%	11.97%	7.77%
DRS Institutional Composite	5.80%	6.82%	5.65%	6.98%	8.39%
S&P 500	17.91%	17.31%	13.95%	11.97%	7.77%
DRS Emerging Markets Composite	-4.21%	5.41%	N/A	N/A	1.41%
MSCI EM (Emerging Markets)	-0.44%	12.77%	N/A	N/A	5.40%
DRS Foreign Developed Markets Composite	-2.44%	2.91%	N/A	N/A	1.39%
MSCI EAFE	3.25%	9.77%	N/A	N/A	7.62%
DRS U.S. Small Cap Composite	7.14%	8.56%	N/A	N/A	6.00%
Russell 2000	15.24%	17.12%	N/A	N/A	11.85%

Source: Morningstar Direct

Disclosures:

Performance results are presented in U.S. dollars, net of management fees, and include reinvestment of dividends and capital gains. Fees may vary based on account size, custodial relationship and other factors. No current or prospective client should assume future performance of any specific investment strategy will be profitable or equal to past performance. All investment strategies have the potential for profit or loss. Changes in investment strategies, contributions or withdrawals may cause client portfolio performance results to differ from the composite. Different types of investments involve different degrees of risk; we make no assurance that a specific investment will be suitable or profitable for a client's portfolio.

Historical performance results for market indices and categories do not reflect the deduction of transaction fees, custodial charges, or management fees, the incurrence of which would have the effect of diminishing historical performance. All Swan products utilize the Defined Risk Strategy ("DRS"), but may vary by asset class, regulatory offering type, etc. Accordingly, all Swan DRS product offerings will have different performance results, and comparing results among the Swan products and composites may be of limited use. Economic factors, market conditions, and investment strategies will affect the performance of any portfolio and there are no assurances that it will match or outperform any particular benchmark. Swan Global Investments, LLC ("Swan") is an independent Investment Advisor headquartered in Durango, Colorado registered with the U.S. Securities and Exchange Commission under the Investment Advisers Act or 1940. Being an SEC-registered advisor implies no special qualification or training. Swan Global Investments, LLC is affiliated with Swan Capital Management, LLC, Swan Global Management, LLC, Swan Wealth Advisors, LLC, and Swan Wealth Management, LLC.

There are eight DRS Composites offered: 1) The DRS Select Composite which includes non-qualified accounts; 2) The DRS IRA Composite which includes qualified accounts; 3) The DRS Composite which combines the DRS Select and DRS IRA Composites; 4) The DRS Institutional Composite which includes high net-worth, non-qualified accounts that utilize cash-settled, index-based options held at custodians that allow participation in Clearing Member Trade Agreement (CMTA) trades; 5) The Defined Risk Fund Composite which includes mutual fund accounts invested in the S&P 500; 6) The DRS Emerging Markets Composite which includes mutual fund accounts invested in emerging markets; 7) The DRS Foreign Developed Composite which includes all research and development account(s), and mutual fund accounts invested in foreign developed markets; 8) The DRS U.S. Small Cap Composite which includes all research and development account(s), and mutual fund accounts invested in U.S. small cap issues.

Additional information regarding Swan's policies and procedures for calculating and reporting performance returns is available upon request. Swan claims compliance with the Global Investment Performance Standards (GIPS) and has prepared and presented this report in compliance with GIPS standard. Swan investment performance has been independently verified from its inception on July 1, 1997 through December 31, 2017. A copy of the verification report is available upon request by calling 970.382.8901 or emailing operations@swanglobalinvestments.com. Verification assesses whether (1) the firm has complied with all the composite construction requirements of the GIPS standards on a firm-wide basis and (2) the firm's policies and procedures are designed to calculate performance in compliance with GIPS standards. Verification does not ensure the accuracy of any specific composite presentation.

The Defined Risk Strategy Select Composite demonstrates the performance of all non-qualified assets managed by Swan Global Investments, LLC since inception. It includes discretionary individual accounts whose account holders seek the upside potential of owing stock, and the desire to eliminate most of the risk associated with owning stock. The composite relies on LEAPS and other options to manage this risk. Individual accounts own S&P 500 exchange-traded funds, LEAPS associated with the ETFs, as well as option strategies based on other widely traded indices. The Defined Risk Strategy Select Composite includes all nonqualified discretionary accounts which are solely invested in the Defined Risk Strategy. The Defined Risk Strategy was designed to protect investors from substantial market declines, provide income in flat or choppy markets, and to benefit from market appreciation. Stock and options are the primary components of the strategy.

The performance benchmark used for the Defined Risk Strategy is the S&P 500 Index comprised of 500 large-capitalization stocks, and which does not charge fees.

The performance benchmark for the DRS Institutional Composite is the S&P 500.

The performance benchmark for the DRS Emerging Markets Composite is the MSCI (Morgan Stanley Capital International) Emerging Markets Index, which is designed to measure equity market performance in global emerging markets.

The performance benchmark for the DRS Foreign Developed Markets Composite is the MSCI (Morgan Stanley Capital International) EAFE index, which comprises the MSCI country indexes capturing large and mid-cap equities across developed markets, excluding the U.S. and Canada.

The performance benchmark for the DRS U.S. Small Cap Composite is the Russell 2000 Index, which is designed to measure the equity market performance of U.S. small-cap to mid-cap companies.

One cannot invest directly in an index.

425-SGI-101918