



SECULAR
OUTLOOK
MAY 2019

Dealing With Disruption

Major secular drivers could disrupt the global economy and financial markets over the next three to five years. We share our views on risks and opportunities ahead.

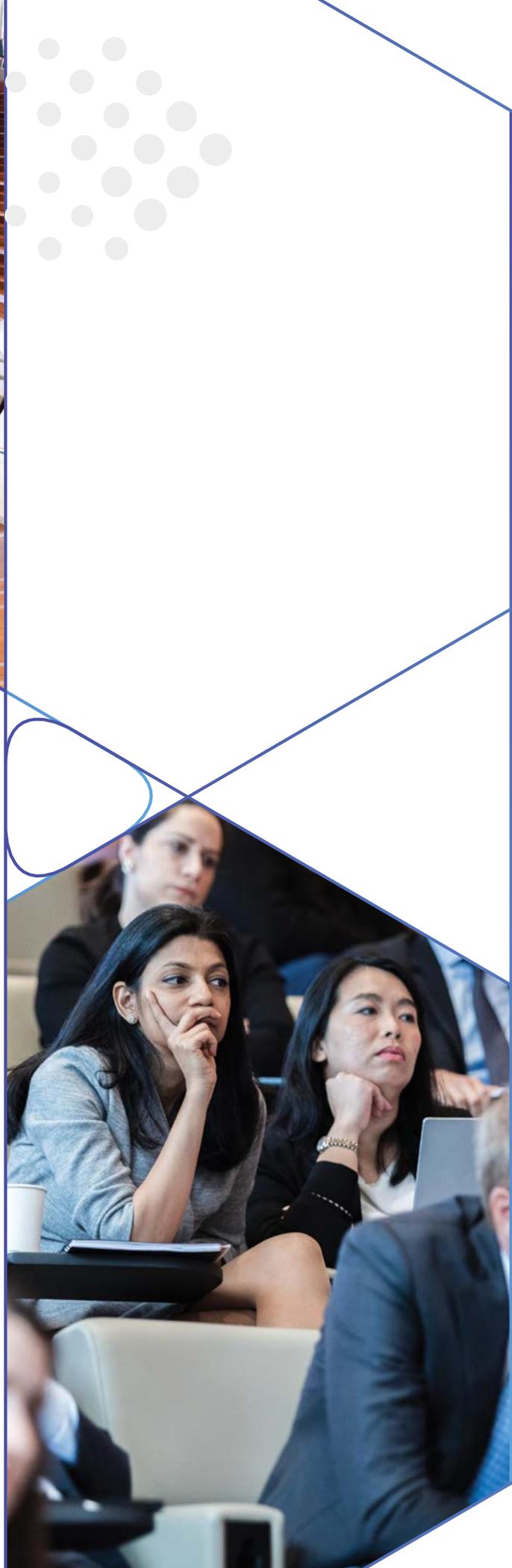


About Our Forums

PIMCO's investment process is anchored by our Secular and Cyclical Economic Forums. Four times a year, our investment professionals from around the world gather in Newport Beach to discuss and debate the state of the global markets and economy and identify the trends that we believe will have important investment implications. We believe a disciplined focus on long-term fundamentals provides an important macroeconomic backdrop against which we can identify opportunities and risks and implement long-term investment strategies.

At the Secular Forum, held annually, we focus on the outlook for the next three to five years, allowing us to position portfolios to potentially benefit from structural changes and trends in the global economy. Every Secular Forum, we invite distinguished guest speakers – Nobel laureate economists, policymakers, investors, and historians – who bring valuable, multi-dimensional perspectives to our discussions. We also welcome the active participation of the PIMCO Global Advisory Board, a team of world-renowned experts on economic and political issues.

At the Cyclical Forum, held three times a year, we focus on the outlook for the next six to 12 months, analyzing business cycle dynamics across major developed and emerging market economies with an eye toward identifying potential changes in monetary and fiscal policies, market risk premiums, and relative valuations that drive portfolio positioning.



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In early May we gathered our global team of investment professionals in Newport Beach for PIMCO's 38th annual Secular Forum. With input from invited speakers (see sidebar, page 4) as well as our Global Advisory Board and other consultants, we zoomed in on several key secular drivers that have the potential to significantly disrupt the global economy, financial markets, and investors' portfolios over the next three to five years, and discussed how investors can deal with disruption. Here's what we concluded.



WHAT'S PRICED IN?

Any consideration of the outlook for macro and markets has to start from what asset markets are currently pricing in regarding future growth, inflation, and policy. And so, going into PIMCO's annual Secular Forum, we observed that our long-standing New Normal (2009) / New Neutral (2014) thesis of lackluster growth, low inflation, and New Neutral interest rates appears to be fully priced in: Short rates and inflation are expected to stay low, yield curves are flat, credit spreads are tight, equities are fully valued, and volatility is at rock-bottom levels.

Thus, despite occasional "Rude Awakenings" caused by trade conflicts, China's slowdown, and European politics, investors seem to have comfortably arrived in a New Neutral world where nothing can possibly go wrong for long, as central banks stand ready to jump in if

needed. The latest case in point was the Federal Reserve's triple dovish pivot on rates, the balance sheet, and its inflation strategy in January, which led to a rebound in risk assets after the sell-off late last year.

OUR BASELINE INCLUDES A SHALLOW RECESSION

Looking ahead, our own baseline outlook for the global economy over the secular three- to five-year horizon, which we discussed and reconfirmed at the forum, sounds relatively benign – at least at first sight (for details, see the accompanying sidebar, page 12). In short, we foresee a continuation of lackluster economic growth on average, with moderately stronger productivity advances roughly offsetting slowing labor force growth. We expect low inflation to persist and central banks to keep interest rates at or below New Neutral levels.



2019 SECULAR FORUM GUEST SPEAKERS

MALA GAONKAR,

discussing productivity and technology

Co-portfolio manager at investment firm Lone Pine Capital; trustee of the Clinton Health Access Initiative (CHAI); founding trustee of Ariadne Labs, The Queen Elizabeth Prize for Technology, and Surgo Foundation, which provides data analysis tools for a smarter public health ecosystem; member of the advisory board of The Economist and trustee of RAND and the Tate

LISE KINGO,

discussing sustainability risks and opportunities

CEO and Executive Director of the United Nations Global Compact; former Chief of Staff, Executive Vice President and member of the Executive Management team at Novo Nordisk A/S

ULRIKE MALMENDIER,

discussing belief formation

Edward J. and Mollie Arnold Professor of Finance at the Haas School of Business and Professor of Economics at the Department of Economics at the University of California, Berkeley; Research Associate at NBER; Faculty Research Fellow at IZA; CESifo Fellow and CEPR research affiliate

ADAM TOOZE,

discussing populist trends

Kathryn and Shelby Cullom Davis Professor of History and Director of the European Institute, Columbia University; author of "Crashed: How A Decade of Financial Crises Changed the World" (2018), "The Deluge" (2014), and "Wages of Destruction" (2008)

JANET YELLEN,

discussing the future of monetary policy

Distinguished Fellow in Residence at the Hutchins Center on Fiscal and Monetary Policy at the Brookings Institution; former Chair of the Board of Governors of the Federal Reserve System

Importantly, our baseline continues to include a global recession at some stage during the secular horizon. In the absence of major private sector economic imbalances and hawkish central banks, it would likely be a shallow recession. But with limited room for conventional monetary policy and limited effectiveness of quantitative easing, when judged by economic outcomes the recovery would likely be sluggish. Fiscal policy might well become more aggressive to overcome a recession as, in the words of one forum participant, central banks are "pretty much scraping the bottom of an empty barrel" with their remaining tools and fiscal deficit hawks, like monetary policy hawks, are hard to find these days.

BEWARE OF FAT TAILS AND RADICAL UNCERTAINTY

However, this relatively benign baseline is only one of several realistic alternative scenarios that investors need to consider over the secular time frame. In our view, the probability distribution of economic outcomes in the next three to five years has fatter tails than usual. Moreover, when it comes to factors such as geopolitics and populism, it is even impossible to attach any probabilities to possible outcomes, giving rise to "radical uncertainty." Thus, as we already emphasized in last year's *Secular Outlook*, investors who just extrapolate the relatively benign macro and market environment of the last five to 10 years into the future will be in for some "Rude Awakenings."

THE REASON: SERIAL DISRUPTORS

During our three-day-long discussions, we identified five secular trends that have the potential to disrupt the global economy, financial markets, and investors' portfolios in the next three to five years, and one "supersecular" factor that we think is important for our clients, our industry, and our firm over an even longer-term horizon.

#1: CHINA

China has the potential to disrupt the global economy and markets in at least three different ways.

First, while our baseline view is for a controlled gradual slowdown of China's economic growth over the secular horizon, the path may turn out to be bumpier than expected, especially if the trade war with the U.S. escalates further. In the case of a sharper slowdown, the massive buildup of internal debt over the past decade would be more difficult to digest and could aggravate a downturn. In such an adverse scenario, the Chinese authorities might resort to aggressive currency depreciation, which would send a deflationary shockwave through the global economy.

Second, even in a relatively benign Chinese growth scenario, China's targeted efforts to move up the ladder to higher-value-added manufacturing with the help of leading edge technologies will likely disrupt established producers in Europe, Japan, the U.S., and Southeast Asia.

Third, China's growing economic power and its ambition to establish a global sphere of influence (e.g., via the Belt and Road Initiative) could disrupt the established geopolitical order dominated by the U.S. and, irrespective of the outcome of the current trade conflict, is likely to lead to continuing economic and political tensions between the U.S. and China in the coming years. We discussed the looming "Thucydides trap" in last year's *Secular Outlook*, and the deterioration in the U.S.–China relationship since then supports the notion that heightened geopolitical tensions and the resulting bouts of market volatility are a secular force that investors will have to reckon with.

#2: POPULISM

While our discussions didn't result in a clear consensus on whether populism has already peaked or will gain even more influence around the world in coming years, we agreed that populist movements, parties, and candidates will likely continue to disrupt national and international politics and policymaking over the next three to five years.

To be sure, the populist challenge from both sides of the political spectrum for the established parties and governments could result in either positive or negative economic and financial market outcomes. Economic growth and asset prices would be supported if populist governments or traditional governments under pressure from a populist opposition tackle overly zealous regulations, reduce the tax burden, and/or address excessive inequality.

Other aspects and variants of populism tend to be more detrimental to growth and asset prices, especially when they are aimed at slowing or reversing globalization by increasing impediments to immigration, cross-border trade in goods and services, and capital flows. Populist movements on both sides of the political spectrum are typically more inward-looking and prone to erect barriers, be it because they have nationalist or nativist leanings or because they oppose global competitive pressures that limit national governments' ability to pursue unorthodox policies. In many cases, populism thus rhymes with protectionism, which is a clear and present danger for a global economic system built on complex international supply chains and myriad financial linkages.

PIMCO GLOBAL ADVISORY BOARD

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Former Federal Reserve Chairman and Distinguished Fellow at the Brookings Institution

JOSHUA BOLTEN

President and CEO of the Business Roundtable and former White House Chief of Staff

GORDON BROWN

Former U.K. Prime Minister and former Chancellor of the Exchequer

NG KOK SONG

Former Group Chief Investment Officer of the Government of Singapore Investment Corporation (GIC)

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President and CEO of New America, Bert G. Kerstetter '66 University Professor Emerita of Politics and International Affairs at Princeton University, and former Director of Policy Planning for the U.S. State Department

JEAN-CLAUDE TRICHET

Former President of the European Central Bank and present Chairman of the European group of the Trilateral Commission

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President, Sperling Economic Strategies; previously Director of the National Economic Council and Assistant to the President for Economic Policy under both President Clinton and President Obama

RICHARD THALER

Charles R. Walgreen Distinguished Service Professor of Behavioral Science and Economics at the University of Chicago Booth School of Business; member of the Governing Board of the Center for Decision Research; senior advisor to PIMCO on retirement and behavioral economics

Another implication of the rise of populism and the fact that it comes in many different forms is that economic policies and outcomes are likely to become more divergent across countries. Over the last two decades, the so-called Washington consensus of fiscal rectitude promoted by the International Monetary Fund – open markets, inflation targeting, and flexible exchange rates – led to a certain convergence of economic policies in many advanced and emerging countries. Over the secular horizon, we expect more varied and in some cases more extreme policy approaches, which could increase the importance of the country factor for asset price determination and also produce larger exchange rate variability.

#3: DEMOGRAPHICS

Slower population growth and increasing longevity in the major economies are important contributors to lackluster economic growth, low inflation, and the global saving glut that depresses equilibrium, or neutral, interest rates. This is likely to continue to force the major central banks to keep policy rates low or even negative and to engage in asset purchases during or even outside recessions whenever the lower bound for interest rates becomes binding. This environment also creates multiple challenges for individuals planning for their retirement – see sidebar on secular strategies, page 15.

The longer these trends last – and to the extent that they are demographically induced, they will last – the more disruptive they become, in several ways. First, low interest rates and flat yield curves for longer pose challenges for the financial sector, which is an important transmission channel for monetary policy.

Second, low rates for longer have contributed to rising corporate leverage and pushed many investors into riskier assets in search for yield, which increases the vulnerability of private sector balance sheets in the event of major asset market corrections (more on this later).

And third, with central banks having limited tools in a low-rate environment and government borrowing costs low, both the calls for and the temptation to engage in more active and expansionary fiscal policy are increasing. This is a two-edged sword: On the one hand, expansionary fiscal policy is welcome if demand and/or inflation are undesirably low and also when there is a heightened demand for perceived safe assets. On the other hand, fiscal discipline might be lost, which could make public sector balance sheets vulnerable to future interest rate, growth, or confidence shocks.

We concluded that of the major advanced economies, the eurozone looks most likely to be disrupted by “Japanification” – defined as a demographically challenged macro environment of low growth, near-zero inflation, and very low interest rates. As our Japanese colleagues rightly pointed out at the forum, Japan has been coping well with this scenario, preserving and even increasing its high living standards through decent per capita real GDP growth, social cohesion, little inequality, and its consensus culture. By contrast, while most eurozone economies have relatively generous welfare systems, the single currency area lacks a common fiscal policy and is politically fractured. In short, Japanification may have worked for Japan but could turn out to be very disruptive for a eurozone lacking social, fiscal, and political cohesion.

#4: TECHNOLOGY

With new technologies becoming better, cheaper, and thus more accessible to a wider range of companies, their benefits for productivity growth are becoming increasingly visible: Over the past year, U.S. non-farm business sector output per hour worked – i.e., labor productivity – picked up from its dismal pace in the previous five years, and investment in research and development (R&D), software, and tech hardware accelerated. While it is early days, these may be the first signs that technology has been trickling down from the few large productivity leaders in each industry to the many laggards.

The other, ominous side of the coin of technology is that it disrupts existing business models in the corporate sector and, while it produces winners, it will create many losers as well. As one of our speakers mentioned at the forum, even the large superstar firms are at risk of being disrupted, not only by regulators but by newcomers that challenge their status. In this context, we also discussed the potential for emerging market economies and companies to “leapfrog” competitors in the advanced economies with the help of new technologies.

Moreover, potential jumps in productivity growth, which are not our base case but a distinct possibility, could lead to temporary or longer-lasting technological unemployment, which in turn could feed back into political discontent and further support for populist parties and candidates. The road to technology-enabled “infinite abundance,” which one forum participant romanced about, may thus turn out to be long, winding, and full of potholes.

#5: FINANCIAL MARKET VULNERABILITY

In the past 50 years there have been seven U.S. recessions, as defined by the semi-official arbiter, the National Bureau of Economic Research. The five prior to 2000 were driven by overheating and Fed tightening, including the impact of oil price shocks. The two recessions in 2001 and 2008 were primarily driven by the unwinding of financial market imbalances. We must be very attentive to the risk, as one of our senior investment professionals described it, that instead of reacting to the news, it is financial markets that make the news.

Looking over the next three to five years, the Fed’s pivot and the likelihood that it will end its tightening cycle at close to the New Neutral rate, rather than tightening policy to an outright restrictive stance that would elevate recession risk, has the potential to lead to greater excess in valuations, particularly in credit and similar to the period in the mid-2000s before the onset of the global financial crisis. We are not there yet, but it makes sense to watch very closely for excesses and the potential for corrections, in terms of macro drivers but crucially as part of a disciplined investment process.

Today, while there are pockets of excess, for the most part we continue to see financial market valuations as still reasonable. But more than 10 years since the onset of the 2008 global financial crisis, we continue to operate in an environment characterized by extraordinary policy stances and financial repression that will tend to force investors and asset allocators to reach for yield. There are very valid concerns about market structure, particularly in credit markets given liquidity concerns, which raise the risk that any significant change in sentiment and large scale attempt at risk transfer will be very difficult to accommodate without significant market disruption.

DEALING WITH CLIMATE-RELATED DISRUPTIONS

Another focus at our forum was on the longer-term, supersecular disruptive impact of environmental risks such as climate change on human lives, economic activity, and financial markets.

Weather-related shocks look set to become more frequent with global warming and have the potential to wreak havoc with economic activity and inflation, and thus could make it more difficult for investors and central banks to separate the noise from the signal. Climate-related shocks may become not only more frequent but also more persistent and severe, increasing the probability of fat tail catastrophic events.

Moreover, investors will have to factor in additional government responses to climate and other environmental risks in the form of regulation, carbon taxes, and public investment. These will create many winners and losers in the corporate sector, which in turn will require active management of credit and default risks. For a closer look at how we at PIMCO integrate environmental, social, and governance (ESG) analysis into our investment process, see the accompanying sidebar, page 15.

Investment implications

The Secular Forum is a central part of our investment process, where we seek to incorporate a long-term view on macro and market drivers into our strategy and portfolio construction decision-making and establish guardrails for our risk positions. We look at a range of scenarios and bring in outside advisors to guard against groupthink and test our macro and investment frameworks. As we look out over the next three to five years, markets appear to be pricing a similar outlook to our established New Normal / New Neutral baseline. But we anticipate a difficult investment environment, subject to radical uncertainty and a range of disruptors – populism, geopolitics, ongoing deflationary demographic trends, and technology and sustainability issues that create winners and losers – in addition to other sources of macro and market divergence from the baseline.



DURATION

New Neutral central bank policy rates are anchoring global fixed income markets within fairly established ranges, with the Fed rate cycle likely to finish very close to the mid-point of our long-established 2% to 3% nominal New Neutral rate range and other major central banks anchored by their low neutral rates and unlikely to embark on significant tightening if the Fed cycle is finished.

For global yields, we see fairly balanced risks around the baseline, with the likelihood of a U.S. recession over the next three to five years offset against the upside risks of higher inflation in an environment where the Fed might positively welcome upside inflation surprises – and the possibility that higher productivity growth could push us to something better than the New Normal growth environment of the past decade, resulting in higher real rates. We continue to think that the U.S. offers the most attractive duration for hedging against declines in risk assets, given the Fed has achieved a modest tightening cycle that helped increase the distance to zero in the yield on intermediate and longer-term bonds, in contrast to the eurozone and Japan.

CREDIT MARKETS AND ASSET-BACKED SECURITIES

Credit market valuations look tight and there are some signs of excess in some credit sectors. As we mention above, the potential for growing financial market excess and painful correction is one of the key disruptive risks that we may have to deal with over the secular horizon. But, even if the more stable baseline continues, we remain concerned about market structure in credit and the growth of corporate issuance and investor allocation to credit, in contrast to the decline in market liquidity for corporate bonds. The lower liquidity profile means that we think there should be more compensation for credit risk. Even if recession is avoided, there is the potential for a shift

in the default cycle, perhaps during a period of prolonged below-trend growth. In the event of a significant shift in the demand for credit, as highlighted above, we are concerned about the market's capacity to facilitate large-scale risk transfer without big price movements. We want to be prepared for such an environment with caution on credit and a focus on quality and liquidity in our portfolios. Caution on credit now means that we expect to be well prepared to take advantage of select opportunities as they arise and to be liquidity providers – not liquidity demanders – with the ability to add credit risk in the event of corporate credit market dislocation.

In the 2006–2007 period, we thought it made sense to be extremely defensive and run negative carry portfolios, owing to much more stretched valuations and the danger posed by leverage in the private financial system and the potential for the U.S. housing market to correct. In contrast today, we think it makes sense to maintain an income-generating focus in our portfolios, but without excessive reliance on corporate credit. We see U.S. agency mortgage-backed securities as a relatively stable and defensive source of income in our portfolios. We continue to see U.S. non-agency mortgages and a broader set of U.S. and global asset-backed securities as offering seniority in the capital structure, better technicals compared with crowded credit markets, and better downside risk profile in the event of weaker macro or credit market outcomes.

CURRENCIES

We do not see major misalignments in developed country foreign exchange valuations. We continue to see some cheapness of emerging market (EM) currencies on a valuation basis, and see selective EM FX exposure as a liquid way to take EM exposure as a potential source of income and diversification. The path of the Chinese yuan has been a key source of risk for global markets over the past three to five years and is likely to remain so over the next three to five years, especially if slower Chinese growth or an escalating trade war lead to pressure for currency depreciation.

While we don't see significant secular trends in currencies, there will continue to be cyclical opportunities to exploit, given the risk of serial disruption and the potential for significant policy divergence over time. In the event of a recession, many global central banks have some remaining room for conventional and unconventional policy, but it is limited and there are questions over the efficacy of policy interventions compared with the period in the last decade when central banks were the only game in town. One question is the extent of activist fiscal policy and another is the scope for monetary and fiscal coordination – with implications for currencies and more broadly across markets.

EUROZONE

We have emphasized caution in recent years on eurozone sovereign and credit risk, given the underlying fragilities of the eurozone, the risks of populism, the lack of effective monetary policy tools in the event of a broad recession, and myriad coordination issues on fiscal policy. In the next three to five years, all these concerns remain, with a particular concern on Italy and the potential for worsening problems in that country to spill over to its peripheral neighbors.

We have seen increased concerns on the German growth outlook – a country that has been the brightest spot in the eurozone, driven by export markets – given China's slower growth and efforts to compete in the field of higher-value manufactured goods. More broadly, the eurozone is a more open economy than the U.S. and has relied more on global trade growth to propel its economy given fairly stagnant domestic demand growth. In the event that U.S. and global protectionist pressures rise, we would see the eurozone as likely one of the biggest losers among the developed countries. Core country duration should be relatively well anchored in a weaker growth environment, but this macroeconomic concern reinforces the case for caution on eurozone sovereign credit and corporate credit markets.

EMERGING MARKETS

Emerging markets, similar to the eurozone, face uncertainty in the face of the shift in China's growth model and the threat of protectionism. But we see an offsetting set of positive factors in EM fundamentals and a Fed tightening cycle that is at or close to its end. Barring a major reversal in financial or trade globalization, EM countries should continue to benefit from increased diversification on the part of global investors and ongoing flows into the EM asset class.

EQUITIES

An extended period of disinflationary growth that prompts policymakers to keep an eye toward easing is likely to be positive for equity markets, albeit with lower absolute returns and more volatility. Disruption from policy, geopolitics, economic forces, and the speed of innovation will periodically weigh on market risk premia, creating bouts of volatility, but also opportunity. In equity markets, disruption – or creative destruction – has a long history of increasing competition, resulting in an environment of winners and losers.

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We believe the U.S. and high quality, defensive growth companies are best positioned to navigate the disruptive period we expect, but the path is narrowing as asset price valuations increase, resulting in a slimmer margin of safety. The low nominal growth environment we forecast favors companies with high and persistent levels of profitability with pricing power and balance sheet flexibility when growth is the scarce asset. Identifying turning points for profit growth, managing shifts in the policy reaction function, and staying focused on geopolitical shifts will be key to dealing with equity market disruption.

COMMODITIES

We have a fairly neutral view on commodities, with our baseline expectation for commodity returns in line with inflation. That said, we think that commodities will continue to play an important role in our asset allocation portfolios. Over the past few years, intra-commodity dispersion has returned to its historical norm as the micro drivers of each commodity market have become the biggest driver of relative performance. Active management of commodities, which is often associated with positive carry, may lead to overall positive returns even in markets in which commodities overall are fairly flat.

ACTIVE MANAGEMENT

As we have emphasized above, the past decade has been an unusual period in which financial assets have significantly outperformed the real economy, and no one should assume that this is a sustainable pattern that will continue over the next decade. There is no guarantee that the strong market returns over the past decade will continue and, indeed, starting valuations make this unlikely. Volatility across assets is at historically low levels. This may continue in the baseline but we see a range of risks in terms of higher macroeconomic volatility and political disruptions that lead to higher volatility – and potentially a more sustained rise in volatility than the repeated but short-lived spikes we have seen in the past few years.

As active managers we think it makes sense to emphasize caution and flexibility in our portfolio construction, to not place excessive weight on the continuation of the New Normal / New Neutral baseline. While we think it will be a difficult environment, this atmosphere of disruption is one that we believe will provide good opportunities for active investment managers.

We will seek to identify significant disruptions to the market baseline and also to identify significant overreactions to events that are likely to occur at a time when risk spreads leave little cushion and noise may have disproportionate short-term impacts. We will look globally for the best top-down and bottom-up opportunities. While emphasizing caution on generic corporate credit beta, we will look to our team of credit portfolio managers and analysts for their high conviction security selection and relative value ideas. Environmental, social, and governance (ESG) factors will be a core part of our active investment process, both to meet client objectives and to strengthen our overall investment process.

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As our secular theme indicates, we will emphasize flexibility to respond to events, keeping some powder dry and emphasizing liquidity over chasing the very highest yields. We will pursue our clients' investment objectives via diversified risk-taking and attentive risk management, all while dealing with disruption.



PIMCO's secular economic baseline: 10-point summary

- 1. Over the next three to five years, we expect lackluster economic growth on average and persistently low inflation in the advanced economies.** Labor market slack has been largely eroded in what will soon become the longest-ever economic expansion, supporting a further moderate acceleration of wage gains. However, the gradual diffusion of new technologies is likely to promote slightly faster productivity advances, which along with low inflation expectations should help to keep consumer price inflation in check and should broadly offset the damping impact of a slowing and aging labor force on potential output growth.
- 2. Our secular baseline continues to include a relatively shallow recession with a sluggish recovery** in the advanced economies within the next three to five years. Deep recessions are usually caused by a combination of major economic and/or financial imbalances and aggressive monetary tightening. Although not impossible, neither looks very likely in the next several years, especially after the Fed's recent dovish pivot. However, with monetary and fiscal policy space limited especially in Europe and Japan, the next recession, while shallow, may last longer than usual.
- 3. Potential causes of the next recession** in the advanced economies include an escalating trade war, a geopolitical shock, a significant increase in policy and political uncertainty, a spontaneous sharp correction in asset prices, or a sudden downturn in China. Importantly, with trend output growth in the advanced countries relatively low, it wouldn't take much to push the economy into recession. Moreover, even a sharp economic slowdown that doesn't lead to a full-blown recession may feel like one in financial markets when risk asset valuations are rich.

- 4. With inflation likely to remain below target almost everywhere, we expect the major central banks to keep policy rates at or below New Neutral levels** for most of the next three to five years and – where there is room – to cut them preemptively when downside growth or inflation risks materialize.
- 5. A return to the zero lower bound for interest rates and renewed asset purchases look likely in the next recession,** although their effectiveness will be limited due to already low or even negative term premia. Additional central bank tools to fight the next recession could include lower-for-longer strategies, such as average inflation targeting or temporary price level targeting, currently being discussed by the Federal Reserve, and yield curve control, which is already practiced by the Bank of Japan. However, as with asset purchases, we expect such policies to face diminishing returns.
- 6. Like monetary policy, fiscal policy is likely to be biased to prop up economic growth** in the advanced economies over the secular horizon. Even absent a recession, populist pressures and low borrowing costs will incentivize many governments to raise spending and/or reduce taxes on consumption and lower income earners. Moreover, in the event of a downturn, limited monetary policy space and effectiveness will increase the pressure to use fiscal policy as a countercyclical tool, with the U.S. likely having more room for further fiscal expansion and less political sensitivity than Europe and Japan.
- 7. We also expect more steps toward more – implicit or explicit – monetary-fiscal cooperation** in various forms over the secular horizon. Against this backdrop, budget deficits and public debt-to-GDP ratios are more likely to increase than decline in most advanced economies, but central banks will (continue to) help finance expansionary fiscal policy by keeping policy rates low and depressing bond term premia through asset purchases. Closer monetary-fiscal cooperation implies a partial loss of central bank independence and could pave the way for higher inflation toward the end of our secular horizon or on the supersecular horizon.
- 8. Geopolitics and trade policy are likely to remain a source of volatility** for economies and markets over the secular horizon. In the U.S., a more aggressive stance on trade with China has gained momentum on both sides of the aisle. Europe's and in particular Germany's large trade surplus with the U.S. also make it a target for further tariff action. More generally, populist pressures in many countries are likely to promote protectionism and de-globalization.
- 9. China's economic growth is poised to slow** over the secular horizon given its adverse demographics, a likely continued focus on containing the buildup of further leverage and sustained trade frictions. As the Chinese economy rebalances away from exports and investment to consumption and opens up to capital inflows, the current account will likely move from surplus into deficit. At the same time, China's move up the value chain in manufacturing will make it more of a competitor for high-value-added producers in Japan, Europe, the U.S., and Southeast Asia.
- 10. Our economic outlook for emerging markets is relatively benign, although potential shocks to global trade and domestic populism pose risks for the secular outlook.** The negative shocks over the past five years (taper tantrum, dollar rally, commodity price plunge) have masked a trend improvement in external imbalances and balance sheets as well as domestic credit gaps. Also, EM currencies are competitive in most cases and monetary policy frameworks have become more credible. However, along with de-globalization, idiosyncratic political risks will continue to be a source of economic and market volatility and contribute to increasing differentiation within the EM universe.

Strategies for Secular Disruption

We discuss strategies for navigating disruption.

RESPONSIBLE INCOME

We have outlined five potential disruptors over the secular horizon: China, populism, demographics, technology, and market vulnerability. All contribute to market risk, some contribute to recession risk. Our base case is for a recession to strike over the next three to five years, though it may be a shallow one.

In addition, interest rates are likely to remain lower for longer, and valuations are stretched across most asset classes. Volatility could also spike – despite periodic headline-grabbing bouts, volatility overall has been at historically low levels.

In such an environment, managing portfolios in a diversified and responsible manner is critical to meet the objectives of income and capital appreciation. We believe investors should not take too much risk or stretch for yield. Rather, we think they should seek diversified sources of yield across both higher-yielding and higher-quality securities, invest in securities that offer structural seniority and asset coverage, and maintain portfolio flexibility in an effort to both hedge downside risks and capture upside surprises.

While a more diversified and defensive posture may mean giving up some portfolio yield potential in the short term, it can help embed resiliency in portfolios during periods of market stress and result in a more reliable approach to earning income.



RETIREMENT SOLUTIONS

Populations in many countries are aging, with profound implications for economic growth and inflation, as well as retirement funding. In the U.S., for example, more than 75 million baby boomers will enter retirement over the next 10 to 15 years, or roughly 10,000 people every day (source: U.S. Census Bureau).

These demographics have made retirement a top priority in the investment management industry, and a key planning and investing challenge for chief investment officers, individuals, and advisors across the globe.

PIMCO is a large provider of retirement investment solutions with more than half of our assets under management dedicated to retirement, including over \$175 billion of liability-driven investing solutions across the pension landscape, various fixed income products within over 100,000 defined contribution plans, and in innumerable personal retirement accounts of our private wealth clients.

Historically, much of the discussion about investing for retirement has focused on getting “to” retirement – the accumulation phase. Now, it’s important to explore better solutions for getting “through” retirement – the decumulation phase. At PIMCO, we are harnessing behavioral insights from our [partnership with the University of Chicago Booth School of Business Center for Decision Research](#) as well as through our consultant Richard Thaler, and we’ve engaged our full suite of retirement resources and experts to develop strategies that aim to help retirees achieve consistent income through retirement while preserving purchasing power, mitigating market downside, and addressing longevity risks.

SUSTAINABLE INVESTING

Today, the global economy faces massive economic, social, and environmental risks – and opportunities. Increasingly, economic and investment performance are inextricably linked with sustainability issues, particularly climate change.

While sustainability is ultimately the goal of responsible investing, investors still confront many challenges, such as changing regulations and incomplete data. Despite those challenges, the financial industry is making inroads toward more sustainable markets.

PIMCO’s approach rests on two pillars. First, we integrate material ESG (environmental, social, governance) analysis into our investment process. We do this because ESG investing isn’t just about making the world a better place; it’s about better investment decisions.

Second, for investors seeking greater ESG orientation in their portfolios, we have created a platform of ESG-focused strategies that seek to deliver financial returns while driving sustainable change. We believe ESG investing no longer needs to be an either/or paradox – either financial return or sustainable impact. Investors can pursue both.

Looking ahead, our view is that ESG-based analysis should be a natural part of bond investing, along with the assessment of credit, duration, and other risk factors. We are committed to putting this into practice across our portfolios both from a top-down perspective, where we see ESG analysis as consistent with our annual Secular Forum process, and from a bottom-up perspective, where ESG is integrated into our fundamental research across fixed income sectors.

Past performance is not a guarantee or a reliable indicator of future results.

All investments contain risk and may lose value. Investing in the **bond market** is subject to risks, including market, interest rate, issuer, credit, inflation risk, and liquidity risk. The value of most bonds and bond strategies are impacted by changes in interest rates. Bonds and bond strategies with longer durations tend to be more sensitive and volatile than those with shorter durations; bond prices generally fall as interest rates rise, and low interest rate environments increase this risk. Reductions in bond counterparty capacity may contribute to decreased market liquidity and increased price volatility. Bond investments may be worth more or less than the original cost when redeemed. **Commodities** contain heightened risk, including market, political, regulatory and natural conditions, and may not be suitable for all investors. **Equities** may decline in value due to both real and perceived general market, economic and industry conditions. Investing in **foreign-denominated and/or -domiciled securities** may involve heightened risk due to currency fluctuations, and economic and political risks, which may be enhanced in emerging markets. **Mortgage- and asset-backed securities** may be sensitive to changes in interest rates, subject to early repayment risk, and while generally supported by a government, government-agency or private guarantor, there is no assurance that the guarantor will meet its obligations. **Socially responsible investing** is qualitative and subjective by nature and there is no guarantee that the criteria utilized, or judgement exercised by PIMCO will reflect the beliefs or values of any one particular investor. Information regarding responsible practices is obtained through voluntary or third-party reporting, which may not be accurate or complete, and PIMCO is dependent on such information to evaluate a company's commitment to, or implementation of, responsible practices. Socially responsible norms differ by region. There is no assurance that the socially responsible investing strategy and techniques employed will be successful. **Sovereign securities** are generally backed by the issuing government. Obligations of U.S. government agencies and authorities are supported by varying degrees, but are generally not backed by the full faith of the U.S. government. Portfolios that invest in such securities are not guaranteed and will fluctuate in value. **Diversification** does not ensure against loss.

Statements concerning financial market trends or portfolio strategies are based on current market conditions, which will fluctuate. There is no guarantee that these investment strategies will work under all market conditions or are suitable for all investors and each investor should evaluate their ability to invest for the long term, especially during periods of downturn in the market. Outlook and strategies are subject to change without notice. Investors should consult with their investment professional prior to making an investment decision.

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