

MACRO STRATEGY

A Multispeed Recovery: 2021 Global Risks

After a chaotic and difficult 2020, we look forward to finally turning the page to a new year. We see 2021 as a year of multispeed recovery. Although the COVID-19 coronavirus continues to rage in many parts of the world as we end 2020, there is reason for optimism. Armed with multiple vaccines and a massive production and distribution effort, several parts of the world could see strong recoveries in 2021. China has already begun its recovery, and emerging market economies could begin recoveries toward the end of the year.

For each region, we present our base case forecast for key economic indicators and highlight key regional risks to keep an eye on.



United States

U.S. Forecast	2021
Policy Rate	0.00-0.25
GDP Growth (%y/y)	3.6
Inflation	2.0
10-year Treasury	1.75
Unemployment Rate	5

Source: MIM

In our baseline forecast, we expect a year of recovery.

We expect a bleak Q1, with a risk to the downside for growth, including the potential for negative economic activity in a high-lockdown scenario.

Vaccine rollouts should take place throughout Q1 and Q2, with a rapid fall off in cases as vaccinated people join already-recovered individuals, and the spring weather reduces transmission rates.

We expect a bumpy recovery. Vaccine rollouts will likely be subject to various production and distribution issues. Also, although many consumers are willing and eager to spend, and companies are already gearing up investments, firms may struggle to predict new demand patterns. Finally, labor market mechanisms are likely to struggle to reallocate workers efficiently.

Risk #1: An Ugly Start to 2021

The risk of the third wave extending into Q1 is high. Fatigue has set in in the battle against COVID. Many states are soldiering on through record-breaking spikes in the disease and even hospitalizations but have not responded with urgency of the spring wave.¹ The holiday season presents a great challenge, with people eager to see loved ones and policy makers loath to be seen as ruining the holidays. A risk is for a weak or even negative Q1, with widespread disease and consumers hunkered down as they wait for vaccinations and the spring. Additionally, under a Biden administration the battle to control the spread of the disease will likely pick up. While it might help fight the disease and save lives, federal encouragement of lockdowns could also cause further economic weakness.

Risk #2: Vaccine Troubles

Many things could go wrong with the distribution of the new vaccines.

The November publication of vaccine effectiveness studies counts as material good news. Aside from their own efficacy, a highly effective vaccine could create a virtuous cycle where more people than expected are willing to take the vaccine.² The first vaccines have already been administered. The production of the vaccine appears to be well underway, with at least 40 million doses available by the end of the 2020, and potentially enough production to vaccinate all who want it in the U.S. by the midpoint of 2021.³

However, many problems could arise, to disrupt our base case. Distribution problems are a clear risk. The cold chain required of the early vaccines are fragile Administering second doses may not be straightforward. Reaching rural, minority, and poor communities may be difficult. Any safety-related mistake could jeopardize the take-up rate of all vaccines.

Risk #3: Recovery Pains and Stymied Growth

There are several threats to the recovery process itself, even if all goes well from a vaccine perspective. Principally, there are risks involving supply/demand mismatch, and the partly related problem of job market disruption.

We expect as a base case a bumpy recovery, and a great deal of uncertainty through the process. The consumer has made wild swings in demand across product groups, leaving producers in an impossible situation of predicting demand. There is a risk that these mismatches prove fatal to some companies, or lead to a drag on investment, impeding recovery.

Additionally, we expect longer term displacement for at least some share of the high-contact service workers such as in retail, and in the restaurant industry. Economic recovery will depend at least in part on many of these workers being re-integrated into the economy and spending accordingly. A particularly low share of reintegration is a risk to recovery.

Risk #4: Overheated Recovery and Inflation

There is also an upside risk to the recovery, in that the economy becomes overheated. The \$900 billion stimulus package that just reached agreement could

hit the economy at exactly the wrong time, just as vaccines become available and spending picks up. The stimulus checks, if saved until the spring when economic activity is expected to pick up, could be particularly problematic. Combined with rapid improvements in pandemic conditions, there is a risk of broadly more demand than supply, which could lead to general price inflation.

Less likely would be Fed involvement. Monetary policy is unlikely to be swayed by anything seen as transitory, and is likely to stay at the zero lower bound in terms of the policy rate. The Fed might, however, weigh in on some level—if only through forward guidance or modest adjustment to their other tools—if inflation were to remain persistently high. We do not expect spiraling inflation, but prices will certainly bear watching.

Risk #5: Infrastructure Disappointment

Another potential policy risk is in infrastructure investment. There is widespread expectation that an infrastructure deal can be achieved. In reality, there is a risk that an infrastructure bill founders on partisanship. The most economically effective—and expensive—use of infrastructure dollars are generally in population dense cities. Northeastern cities are tightly interlinked and would benefit from regionally coordinated—that is to say, Federal—solutions. As these are heavily Democratic, Republicans have little incentive to support such bills. There is also the question of financing. If recovery is well underway, the idea of more deficit spending is expected to be particularly unpalatable to Republicans. By contrast, the publicprivate partnerships favored by Republicans tends to be seen by Democrats as insufficient.

Risk #6: U.S. Alone on China

The biggest non-COVID, non-recovery theme is likely to be U.S.-China relations.

As many commentators have noted, a Biden administration is expected to maintain the rift with Beijing, including on tariffs. Tactically, President-Elect Biden is expected to put a priority on getting allies to join the U.S. in multilateral pressure tactics against China. Allies are likely to signal a certain level of support. But a risk is that the U.S. may have to bear the brunt of the fight alone. Europe, and Germany in particular, is reliant on Chinese purchases of industrial

goods. Germany appears reluctant to enact a ban on Huawei components in its networks.⁴ Asian nations may also be difficult to convince. The recent signing of the Regional Comprehensive Economic Partnership, although largely symbolic at this point, indicates that most Asian countries acknowledge China—and perhaps not the U.S.—to be of paramount importance to their economic survival.

U.S. markets and businesses may be disappointed by the failure of other countries to more fully support the U.S.-China conflict. There may also be less progress, in terms of resolving areas of conflict and lowering tariffs, than businesses might expect or want.

Risk #7: Populism and Socialism—and Trump

Themes brought up by the President Trump and the far left of the Democratic party are not likely to go away any time soon in American politics. The fundamental economic concern of both groups appears to be the consolidation of economic power by a small group of haves against a larger group of have-nots, although the two groups propose somewhat different solutions. The pandemic has only exacerbated these problems.

There is a distinct risk that these existing tensions find an outlet again—if not with President Trump in 2024, then in some other disruptive form.

Only somewhat separately, President Trump, once out of office, will likely retain many of his 89 million twitter followers including a very loyal core of supporters. We expect him to remain influential in American politics.

A Multispeed Recovery in Asia

2021 Forecasts	Japan	China	Korea
Policy Rate	-0.10	4.00	0.5
GDP Growth (%y/y)	2.4	8.0	3.1
Inflation	0.2	2.3	1.2
10 year government yield	0.10	3.30	1.80

Source: MIM

Our baseline forecast for Asia sees a particularly large regional divergence in 2021. China is consolidating its recovery, others are expected to begin recovery in the first half of the year, and some emerging market economies may not start recovery until late in the year.

Daily new infections in North Asia have remained under control, notwithstanding a surge in new cases in recent weeks, particularly in Southeast Asia, Japan and Hong Kong.

Mobility has generally improved across the region in recent months given its relative success in containing COVID-19, although the recent uptick in cases in some countries should slow mobility into year end.

China has led the region out of the COVID-19 recession. Economic activity is now back to near pre-COVID levels in China, with further catch up in consumption and services likely to further support the recovery in 2021.

The rest of Asia is undergoing a multi-speed recovery. We expect most countries to attain pre-COVID levels of activity by mid-2021 assuming growth recovery in key export markets and relative success in containing new COVID outbreaks in coming quarters.

Asia is expected to see mixed timing for vaccination roll out. It appears that China is well positioned for vaccine production and rollout targets of 600 million and 1 billion doses by year end 2020 and 2021 respectively. For the rest of the region, vaccine supply may fall short of demand in 2021, particularly in the more populous countries.

Risk # 1: Delayed Containment of COVID-19

There are downside risks to our forecast given that much of Asia is headed into the winter season when risks of new outbreaks are more likely. Indeed, the recent surge in new cases in Japan, Hong Kong and parts of Southeast Asia risk renewed lockdowns to various degrees. These in turn will likely lead to more growth headwinds and the need for more fiscal policy support. China has succeeded in containing the virus thus far and we are confident that it is well equipped and prepared to deal with COVID-19, particularly as it should benefit from an early and quick rollout of vaccinations. Several other countries have fared well at containing the virus (Taiwan, Singapore, Thailand) despite reopening their economies to various degrees. Meanwhile, daily confirmed cases surged in November in parts of South and Southeast Asia including Malaysia, Indonesia, Sri Lanka and Pakistan. There have also been renewed outbreaks in Japan and Hong Kong (3rd and 4th waves respectively) after a period of stability. South Korea's cases are modestly rising again, following recent relaxation of social distancing measures. New

cases are broadly based across the country as sporadic cluster contagions were detected in various locales such as elderly housing, restaurants, schools, subway stations and shopping malls.

Risk #2: Possible Further Lockdown in Japan

Japan's spike in new cases is still far lower than that of the U.S. and Europe. The government is reluctant to announce new measures that would further undermine growth, particularly a renewed State of Emergency (SOE). However, concerns over the virus appear to be growing, and a SOE could be considered if the outbreak reached Stage 4, which is the highest level in a four-stage system the government uses to assess the outbreak. At present, the government considers several prefectures to be at Stage 3. Based on analysis by Goldman Sachs, six prefectures are close to the midpoint between Stages 3 and 4, including Tokyo and Osaka which are near Stage 4. However, the nationwide average stress score is still below Stage 3. A renewed national SOE presents downside risk to our forecast, although we believe this is a low probability risk given the government's reluctance to jeopardize the growth recovery.

Risk #3: Delays to Vaccination Rollout ex-China

China does not provide official updates on vaccine progress and thus it is difficult to obtain accurate information on latest developments. Of the four vaccines that have received approval for selective use, three are already being produced or will be produced for a targeted 600 million doses by year end and another 1 billion doses by the end of 2021. We believe the main constraint for China is not production capacity but vaccine efficacy. So far results suggest lower efficacy for the leading Chinese candidates versus the Pfizer and Moderna vaccines. However, this may be sufficient given how aggressively China is likely to push the roll out.

Elsewhere in Asia, our forecast faces a downside risk if the economic effects of the vaccine rollout are less robust than expected. With mobility having already recovered in some East Asian economies (China, SK, Taiwan), the positive economic impact of a vaccine rollout may be smaller. For other countries in the region, vaccine supply may fall short of demand next year based on our current tallies of pre orders, thereby hindering economic recovery. The shortfall may be

particularly acute in the more populous countries of India, Indonesia, Philippines and Bangladesh. Coldchain logistics requirements, a two-dose regimen will further complicate wholesale rollout of vaccinations in those economies.

Risk #4: Heightened U.S.-China Tensions

U.S.-China trade and technology tensions have undermined regional sentiment over the last couple of years. Despite ongoing anti-China legislation and Executive Orders over the lame duck period, the U.S.-China relationship should enjoy a degree of reset during the initial stages of a Biden administration. We expect the more unpredictable elements of bilateral relations under the Trump administration to dissipate as the Biden administration takes a more formal, diplomatic and multilateral approach in dealing with China. However, tensions will not go away completely as trust between the two countries is at a historical low. Almost every area of existing relations is under strain, including Hong Kong, Taiwan, the South China Sea, and the treatment of Uighurs. Notably, many of these areas involve human rights grievances that the Biden administration and Democratic Party will prioritize in their dealings with China. Meanwhile the tech war will likely rage on as the U.S.-China structural decoupling in technology plays out. The risk is that some of these issues could come back to fore and undermine the broader relationship, forestalling an expected reset in the U.S.-China relationship. On the latter, a risk for China is new possible measures by the U.S. security establishment to sanction key Chinese players in the tech space producing dual-use technologies, setting back China's efforts to move up the value chain in certain segments.

Risk #5: North Korea Provocations

It is possible that Kim Jong-un will engage in some type of provocation in the coming months to attract global attention and put the Biden administration on the defensive. The latter is likely to involve a test of short-range weapons or displays of new and/or longer-range weapons. The Eighth Workers' Party Congress, which will likely occur in January, is the next major domestic event that will offer Kim a high-profile opportunity to show off North Korea's military prowess in some form. Pyongyang has historically timed its provocations around important events such as U.S. elections. Although such a provocation would create

headlines, the market would likely take it in stride in part because they have become normalized. A Biden administration will likely to take a more multilateral approach in dealing with North Korea, probably by offering to restart working-level discussions. In the case of a provocation, the U.S. will react forcibly but without President Trump's "fire and fury" threats, reducing the likelihood for volatility.

Europe: Struggle Toward Recovery

2021 Forecast	Euro Area	U.K.
Policy Rate	0.00	0.10
GDP Growth (%y/y)	5.0	5.5
Inflation	1.0	1.4
10 year government yield	0.00*	0.50

*Bund yield Source: MIM

Our baseline forecast for Europe calls for a substantial rebound from the economic damage suffered under its COVID-related restrictions, but we expect the tug-of-war between disease management and economic activity to continue at least through much of H1 2021.

COVID-19 restrictions remain a worry for economic recovery in 2021 until vaccinations provide herd immunity.

The disproportionately negative economic impact on Italy and Spain has raised underlying risks in those countries, albeit with near term concerns mitigated by the ECB's large QE program and the creation of new joint EU financial support measures.

A relatively stable political landscape is expected to continue in 2021; the end of the Merkel era is not expected to lead to a major change in Germany's stance towards the EU.

A post-Brexit trade deal remained elusive at the time of writing. A no deal outcome would be negative in particular for UK growth prospects in 2021 and a more marginal headwind for the EU, although would be unlikely to reverse the broader economic rotation as the impact of the pandemic wanes next year.

Risk #1: Further Waves of the Pandemic

A major spike in new positive coronavirus case rates hit Europe in fall 2020, roughly six months after the start of the first wave. Although all European governments initially foreswore any return to national lockdowns, these were nonetheless introduced in many major economies as hospital spare capacity started to dwindle. While the second-wave restrictions are milder on average than in Spring 2020, limits on social and economic activity are likely to linger in to H1 2021 as the region attempts to restrict the spread of coronavirus. The risk to our forecast, therefore, is of further delays to the economic recovery which could increase the permanent damage inflicted by the pandemic, such as higher structural unemployment.

Risk #2: Economic Divergence Raises Risks in Italy and Spain

The pandemic has widened the disparity between euro area countries in terms of per-capita income levels and fiscal metrics. For example, Spain has suffered the largest hit to output in the euro area, with 2020 GDP expected to contract by around 12% versus a contraction of around 6% in Germany.5 And while Germany's labor market adjusted via a reduction in hours worked, Spain saw a much higher rate of jobshedding. While this performance gap may close over the medium term, this cannot be taken for granted. For example, Italy never caught up its lost growth after the 2011-2012 debt crisis, while Spain largely did. EU leaders have committed to support the worsthit countries with increased fiscal transfers, but this will probably only be a partial remedy. We see an increase in country risk, particularly in Italy and Spain, both from worsening public finances and continued public support for populist political parties. That said, we continue to view the risk of a broader political or economic rupture within the euro area as unlikely and we are reassured by the European solidarity shown in response to the crisis so far.

Risk #3: Strong European Response, but with Implementation Risks

European leaders have agreed to provide EU member states with access to €750bn of additional grants and loans, with Spain and Italy the biggest beneficiaries. The bulk of this will come via the Recovery and Resilience Facility (RRF). Notwithstanding the risks of a delayed recovery from further waves, we expect the GDP recovery path to resume in earnest by 2H21 and be given an additional boost by RRF disbursements over the medium term. However, there are implementation risks which mean the size of the

European-funded green infrastructure package could disappoint. For example, most countries have indicated a reluctance to make use of the policy-conditional loans and are focusing on the RRF grants, potentially limiting the utility of the RRF. Countries may also struggle to utilize the EU resources on offer for lack of viable green projects or due to logistical bottlenecks.

Risk #4: Political Risks

2020 has been a year or relative political stability in Europe and we expect that to be the case in 2021, but political shocks cannot be ruled out. In Italy, we do not expect early elections prior to the natural end of the parliamentary term in 2023, although it remains a key risk. The composition of the government could change if the largest party (Five Star) were to splinter, but we expect that center-right Forza Italia would step in to support the government in that scenario. In Spain, the government recently secured the support of the Catalan and Basque parties for passage of the 2021 budget which greatly reduces the risk of an early election in the next 12 months, albeit at the cost of concessions to nationalist parties that may increase political polarization in Madrid over the longer-term. Catalan separatism may return as a headline issue as the region is likely to hold early elections in 1Q21, but we do not expect a return to full-blown constitutional crisis. In France, the COVID-19 crisis saw President Macron shift focus away from domestic reform to European integration and this looks set to continue as he seeks to cement his legacy in the run up to the April 2022 elections. In Germany, federal elections are due by October 2021 and Merkel is set to step down after over 15 years as Chancellor. The party conference to elect the next CDU leader has been set for January 16. While none of the candidates have a radically different approach to Europe, the choice will be significant for the direction of economic policy of the CDU (and therefore most likely of the next government). Armin Laschet and Norbert Röttgen are centrist candidates while Friedrich Merz can be characterized as more of a law-and-order, free-market conservative.

Risk #5: U.K./Brexit Risks

Negotiations over a trade deal continued at the time of writing, with the end-2020 deadline for agreement on a new trading relationship to be in place from January 2021 fast approaching. Conclusion of a thin trade deal (zero quotas, zero tariffs) still looked within reach but

could not be guaranteed. In the event of a deal, the UK economy would still face headwinds from the new trading arrangements next year as it adjust to higher non-tariff barriers with the EU—the UK's largest export market - having faced virtually none as a member of the EU and during the standstill transition period. In the event of a no deal outcome, headwinds to growth will be greater in 2021 as the UK adjusts to higher tariff and non-tariff barriers (on WTO schedules). In this event, GDP growth could be around 2ppts lower than currently expected in 2021 with weakness concentrated in H1. However, even in this eventuality a hard Brexit is unlikely to be a big enough force to reverse the growth rotation from the pandemic shock, which we see as a much larger driver of the 2021 economic outlook assuming the successful roll out of a mass vaccine program from around Q2. Nevertheless, a no deal Brexit outcome would likely trigger additional policy action, with fiscal policy settings remaining looser for longer and the BoE initially likely to react with a policy rate cut and talking up the potential for rates to go negative, in addition to more QE.

Latin America

2021 Forecast	Mexico	Brazil
Policy Rate	3.75	3.00
GDP Growth (%y/y)	3.4	3.1
Inflation	3.5	3.75
10 year government yield	6.00	7.50

Source: MIM

Our baseline forecast for Latin America calls for moderate growth and improvements to fiscal deficits, but recovery may be delayed with the Southern Hemisphere fall combining with an expected delayed vaccine schedule for the region.

The region has begun to experience a second wave, posing risks of new mobility restrictions.

Vaccination schedules in most of Latin America are likely to lag behind the developed world, to the second half of 2021.

Fiscal spending has been very high in 2020, and while the concern is sufficient to hamper additional spending in 2021, fiscal reforms will be needed to stabilize public debt.

A heavy political calendar presents uncertainty and potential downside risks.

Risk #1: Second Wave Worse than First Wave

The first wave of contagion in Latin America has been worse than the first waves in Europe and in the U.S., but not as high as their second waves. Having experienced worse first waves and benefiting from its summertime, Latin America may get milder second waves, but that is highly uncertain given how contagious the virus is. Furthermore, a vaccine may take longer to be distributed in the region, meaning the virus could still pose significant public health challenges into next year. Any wide scale vaccination program is unlikely to be implemented until mid-2021 as access to the vaccine may take longer than in developed economies. Progress on the Astra Zeneca/Oxford vaccine seems to be the most promising for the region given production capacity and required temperature levels. Our baseline assumes that vaccinations may begin as early as Q1 in Latin American countries to cover high risk groups, but widespread vaccinations only happen in the second half of the year depending on production capacity and logistical challenges.

Risk #2: Fiscal Deficits Fail to Improve

Fiscal deficits have widened in 2020 due to the impact of weaker economic activity on fiscal revenues, and also governments' response to the pandemic with both revenue and spending measures. As activity recovers, we expect fiscal deficits to fall next year, but remain relatively high. In Chile, where the government is implementing a fiscal support package of 13% of GDP, we expect the fiscal deficit to reach 9.6% of GDP in 2020 and improve to 5.4% in 2021 as the economy recovers. In Brazil, where public accounts were already weak before the pandemic, the government put in place a fiscal package of nearly 8% of GDP, as a result we expect the fiscal deficit to rise to 17% of GDP in 2020 and narrow to 8% of GDP in 2021 if emergency spending does not extend into next year, which is still a risk. In Mexico, the government managed to contain the fiscal deterioration in 2020 with one-off measures (e.g. tax collection and stabilization funds) that will probably not be repeated in 2021. We expect the fiscal deficit is expected to reach 5.4% of GDP in 2020 and improve slightly to 4.8% of GDP in 2021. Fiscal reforms will be needed to stabilize debt metrics, avoid rating downgrades, and recover lost buffers over the next few years.

Risk #3: Heavy Political Calendar and Risks of Social Unrest

We expect political risks to be relevant in 2021 in an uncertain public health and economic environment. Chile, Peru, and Ecuador will hold general elections. Chile will also be redrafting its constitution, while Colombia and Brazil will need to address fiscal challenges. Populism and social unrest could present further risks to our economic outlook for the region.

Endnotes

- 1 Thomas Hale, Tilbe Atav, Laura Hallas, Beatriz Kira, Toby Phillips, Anna Petherick, Annalena Pott. Variation in US states' responses to COVID-19. Blavatnik School of Government. Updated as of December 21, 2020 using data through December 8, 2020.
- 2 As an example, the measles vaccine is about 97 percent effective, with a 91 percent takeup rate. By contrast, the flu vaccine is only 40-50 percent effective and has a takeup rate of about 50 percent. Source: CDC Faststats at CDC.gov
- 3 NPR.org, "Vaccinations To Prevent COVID-19 Could Begin Next Month, Fauci says," November 17, 2020. Pfizer and BioNTech, "Pfizer and BioNTech Announce Vaccine Candidate Against COVID-19 Achieved Success in First Interim Analysis from Phase 3 Study," Pfizer and BioNTech Press Release, November 9, 2020. Moderna: Reuters, "Moderna sees 20 million doses of COVID019 vaccine candidate by year end," September 18, 2020. AstraZeneca: "AZD1222 vaccine met primary efficacy endpoint in preventing COVID-19," AstraZeneca Press Release, November 23, 2020.
- 4 Patrick Donahue, "Merkel resists full ban on Huawei, making Germany an outlier," Bloomberg News, September 22, 2020.

Authors

Global Economy

Tani Fukui

Europe/CIS/Canada

David Heslam Douglas Renwick Asia

David Richter

Latin America

Felipe Perigo

MetLife Investment Management (MIM),¹ MetLife, Inc.'s (MetLife's) institutional investment management business, serves institutional investors by combining a client-centric approach with deep and long-established asset class expertise. Focused on managing Public Fixed Income, Private Capital and Real Estate assets, we aim to deliver strong, risk-adjusted returns by building tailored portfolio solutions. We listen first, strategize second, and collaborate constantly as we strive to meet clients' long-term investment objectives. Leveraging the broader resources and 150-year history of the MetLife enterprise helps provide us with deep expertise in navigating ever changing markets. We are institutional, but far from typical.

For more information, visit: investments.metlife.com

Disclosure

For Institutional Investor, Qualified Investor and Professional Investor use only. Not for use with Retail public.

This document has been prepared by MetLife Investment Management ("MIM")¹ solely for informational purposes and does not constitute a recommendation regarding any investments or the provision of any investment advice, or constitute or form part of any advertisement of, offer for sale or subscription of, solicitation or invitation of any offer or recommendation to purchase or subscribe for any securities or investment advisory services. The views expressed herein are solely those of MIM and do not necessarily reflect, nor are they necessarily consistent with, the views held by, or the forecasts utilized by, the entities within the MetLife enterprise that provide insurance products, annuities and employee benefit programs. The information and opinions presented or contained in this document are provided as the date it was written. It should be understood that subsequent developments may materially affect the information contained in this document, which none of MIM, its affiliates, advisors or representatives are under an obligation to update, revise or affirm. It is not MIM's intention to provide, and you may not rely on this document as providing, a recommendation with respect to any particular investment strategy or investment. The information provided herein is neither tax nor legal advice. Investors should speak to their tax professional for specific information regarding their tax situation. Investment involves risk including possible loss of principal. Affiliates of MIM may perform services for, solicit business from, hold long or short positions in, or otherwise be interested in the investments (including derivatives) of any company mentioned herein. This document may contain forward-looking statements, as well as predictions, projections and forecasts of the economy or economic trends of the markets, which are not necessarily indicative of the future. Any or all forward-looking statements, as well as those included in any other material discussed at the presentation, may turn out to be wrong.

¹ MetLife Investment Management ("MIM") is MetLife, Inc.'s institutional management business and the marketing name for the following affiliates that provide investment management services to MetLife's general account, separate accounts and/or unaffiliated/third party investors: Metropolitan Life Insurance Company, MetLife Investment Management, LLC, MetLife Investment Management Limited, MetLife Investments Asia Limited, MetLife Latin America Assesorias e Inversiones Limitada, MetLife Asset Management Corp. (Japan), and MIM I LLC.

 $\label{localization} L1220009977 [exp1222] [All States], L1220009983 [exp1222] [All States], L1220009994 [exp1222] [All States], L1220009996 [exp1222] [All States], L12200099996 [exp1222] [All States], L1220009999 [exp1222] [All States], L122000999 [exp1222] [All States], L12200099 [exp1222] [All States], L1220009 [exp1222] [All States], L1220009 [exp$

