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Global economic summary & outlook

October 2016

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International

As developments unfold regarding elections and referenda around the world, commodities, currencies, and financial markets remain generally range bound, seemingly awaiting a clearer political picture. Despite its rhetoric, the U.S. Federal Reserve (Fed) also appears on hold, at least momentarily, for the same reason. Although the U.S. presidential election epitomizes the potential for political change, we note that many other countries will also hold leadership elections in the near future. If recent local election results around the world provide any indication, a shift in political and investor sentiment could be coming.

Economically, data has been mixed, with a few exceptions. China's economy recently performed above expectations, most likely as a result of large government stimulus injections. Japan's economy continues to track at a weak pace. Economic trends in Europe remain mixed, and British Prime Minister Theresa May announced that Article 50 will be triggered by March 2017, initiating a two-year process to separate the U.K. government from the European Union (EU).

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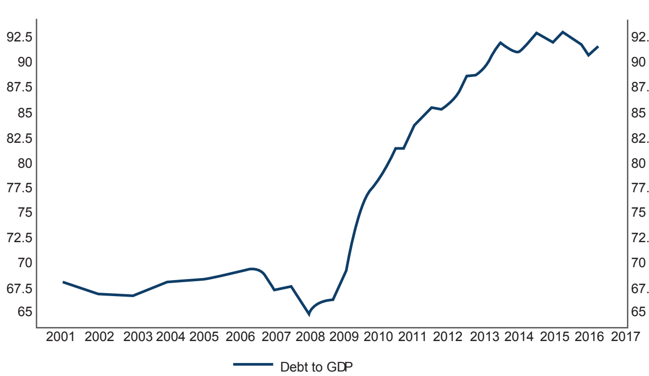
While changing political tides appear most topical at this point, we also recognize a growing expectation among investors that governments may begin applying fiscal stimulus, as near-zero interest rate policies appear to have attained their maximum incremental economic effect. Notably, a significant amount of non-U.S. debt continues to offer negative yields. Finally, we observe that debt levels across Europe are beginning to fall after years of austerity (see chart below), bolstering the case for European fiscal stimulus. However, fiscal stimulus requires a settling of pending elections and referenda, so any trends toward increased government spending will likely play out later, rather than sooner. Depending on the outcome of various political movements and elections, a backdrop of monetary policy initiatives could act as the catalyst to affect a secular change in the worldwide interest rate environment.

A backdrop of monetary policy initiatives could act as the catalyst to affect a secular change in the worldwide interest rate environment

European government debt-to-GDP ratio

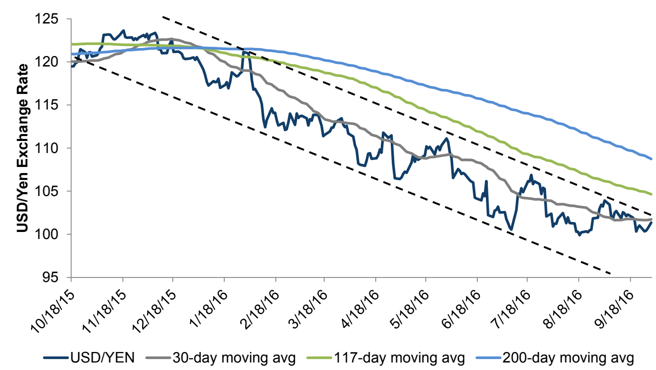


As of: 12/31/2015. Source: Eurostat

We expect global fixed income markets to remain stable ahead of the U.S. presidential election. Despite warnings from members of the Fed, global inflation appears tepid, at best, and lacks a consistent worldwide trend. For example, deflation haunts the Japanese economy while disinflation troubles economic planners in China.

Finally, we note a possible inflection point in the U.S. dollar. Following weakness against many of the world's major currencies throughout most of 2016, recent technical limit breaches (e.g., U.S. dollar / yen) indicate that a period of U.S. dollar strength is possible (see chart below).

U.S. dollar / yen



As of: 9/30/2016. Source: Bloomberg

Europe — summary

- U.K. Prime Minister Theresa May announced that Brexit will commence by March 2017. She also announced that she would block another referendum on Scottish independence. U.K. economic data continues to surprise to the positive. U.K. exports received support from a further decline in Sterling, which fell to a 31-year low on news that an Article 50 trigger date had been selected.
- Concerns regarding the safety of the European banking system heightened, as Deutsche Bank shares dropped sharply. However, the concern is not confined to Deutsche Bank, and analysts estimate that Italy's banking system faces significant potential losses stemming from $50 billion of non-performing loans. The Italian government pressured Germany to allow Italy to bailout certain troubled banks. Separately, the European Central Bank (ECB) disclosed that Spanish and Italian banking system deposit outflows continued to increase in August, reaching €313.6 billion and €326.9 billion, respectively.
- Italy identified December 4, 2016 as the date of the upcoming referendum on the Constitution of the Italian Republic. Investors view the vote as a critical indicator regarding the direction of European politics and critics say its passage will increase the Italian government's power by streamlining its parliamentary structure. Indeed, Italian Prime Minister Matteo Renzi threatened to resign if the proposed constitutional reforms don't pass. If voters reject the constitutional reforms, pundits will likely construe the move as anti-EU and potentially destabilizing to Italian politics in the aftermath. On the same day, Austrians will re-vote the annulled general elections of April 24, 2016 and May 22, 2016.
- Hungary held a referendum on October 2, 2016, to determine whether the country should accept the EU's migrant resettlement plans. The election was declared null and void because less than 50% of the electorate voted. However, 98% of those who voted favored the proposal to prohibit entry to further refugees.

- The Netherlands (March 2017), France (May 2017) and Germany (September 2017) face new leadership elections next year. Recent local elections in these countries indicate that incumbent parties and leaders may not return to power. In addition, following two indecisive general elections, Spain remains without a majority party in power and could face a third election.
- Greece's Finance Minister warned of dire consequences if a debt deal isn't put into place by year-end. The International Monetary Fund (IMF) and the EU remain at odds over the requirements for the extension of further funds to Greece. On an alarming note, the IMF recently stated that Greece still requires deep reforms and more debt relief after seven years of austerity and significant economic deterioration. Although declining, Greek unemployment still stands at 23.2%, the highest level in the EU. Greece remains the most likely candidate to leave the European Monetary Union.

Europe — outlook

- ECB open market bond buying activity remains a key support factor for the European economy, and the mechanism by which authorities maintain low European interest rates. Recent ECB comments cast doubt on the sustainability of the program, causing some market volatility. We anticipate that the European economy will remain sluggish for the foreseeable future, with limited signs of a pickup in growth, given the prevailing political uncertainties, the number of key scheduled elections, and the potential drag on economic growth of Brexit in 2017.

We anticipate that the European economy will remain sluggish for the foreseeable future

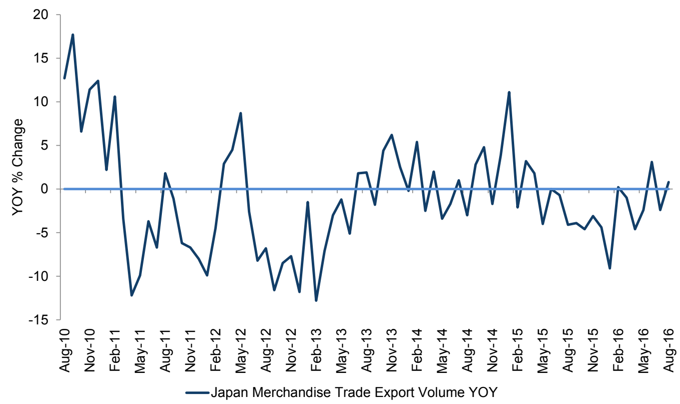
- Although some parts of Europe exhibit signs of economic recovery, a sustained upturn is not likely without a change of policy. Mixed economic growth ensures the continued involvement of the ECB, and should keep European yields low for the foreseeable future.

Rest of the world (ex-Europe and U.S.) — summary

- Third quarter 2016 economic data from China continues to report above expectations; notable trends include strong retail sales and new highs in housing prices. This higher-than-expected Chinese economic performance comes as the 2016 government-sponsored lending infusion begins to take hold. Some investors are nervous that much of the stimulus effect appears to be reflected in a property price bubble. The Chinese yuan also continues to weaken against the U.S. dollar, having the effect of reducing the country's export prices globally. A lower yuan and its negative effect on Chinese export prices counters the expectation of a global inflation threat and is supportive of bond prices.
- Brazil continues to emerge from a period of high inflation and low growth. Brazilian economic growth for 2016 is now forecast at -3.5%, an improvement on forecasts at the beginning of the year. Signs of a political shift emerged following the August 31, 2016 impeachment of Brazilian President Dilma Rousseff. Brazil will hold presidential elections in October 2018.
- The Australian and New Zealand dollars appear to have recently peaked against the U.S. dollar. The moves partly reflect recent policy statements indicating that rate hikes are not imminent in either economy (in contrast to the U.S.). Both countries moved to curb property purchases by foreigners that have driven prices to extreme levels.

- Japanese exports continue to struggle in the face of a strong yen. Although they face significant challenges, the Japanese government and the Bank of Japan are committed to raising inflation to 2% per annum. Export growth (see chart below) has remained largely negative since June 2015, reflecting sluggish global growth.

Japanese exports, year-over-year percentage change



As of: 8/31/2016. Source: Bloomberg

Rest of the world (ex-Europe and U.S.) — outlook

- Outside of the U.S. and Europe, the focus remains on China. Chinese economic growth will likely surprise to the upside for the foreseeable future, given the extent of the government stimulus applied in 2016. For now, the weakening yuan will also support exports and dampen global inflation pressures.

Domestic

Market participants continue to fixate on the timing of the next Fed rate increase. Current odds, as implied from futures markets, place the probability of a target fed funds rate hike by the December 2016 meeting at 59.3%. The implied probability remains essentially unchanged from the beginning of September, despite weakening trends in economic data throughout the month, as reflected by the decline during the month in the Citi Economic Surprise Index to -5.1 from 13.5. Despite generally weaker trends in economic data, it appears the Fed is intent on increasing the target fed funds rate by the end of the year. Time will tell, but it currently isn't clear to us that recent economic data justify a rate hike. Nevertheless, our base case expectation is that the Fed will raise rates at its December meeting. However, futures market implied probabilities hardly register better than a coin toss, and the ultimate decision may depend highly upon global events and economic data released up to the date of the Federal Open Market Committee's (FOMC) scheduled December 13-14, 2016 meeting.

United States — summary

- Following its September 20-21, 2016 meeting, the FOMC left its target fed funds rate unchanged at 0.25% to 0.50%. The September 20-21, 2016 FOMC minutes include several noteworthy items: 1) an upgraded economic outlook stating that "risks to the economic outlook appear roughly balanced" versus previous language stating that "risks to the economic outlook have diminished"; 2) the addition of the statement, "The committee judges that the case for an increase in the federal funds rate has strengthened…"; and 3) the fact that the number of dissenting voters increased to three from one, as Loretta Mester and Eric Rosengren joined Esther George to express a desire to immediately increase the target fed funds rate.

- The update to the Fed's Summary of Economic Projections (SEP) incorporated minor changes, but appeared generally consistent with a "lower for longer" theme (see chart below).

Summary of Economic Projections - Central Tendency

Projections		2016	2017	2018	2019	Long run
Change in real GDP	September	1.7 to 1.9	1.9 to 2.2	1.8 to 2.1	1.7 to 2.0	1.7 to 2.0
	June	1.9 to 2.0	1.9 to 2.2	1.8 to 2.1	N/A	1.8 to 2.0
Unemployment rate	September	4.7 to 4.9	4.5 to 4.7	4.4 to 4.7	4.4 to 4.8	4.7 to 5.0
	June	4.6 to 4.8	4.5 to 4.7	4.4 to 4.8	N/A	4.7 to 5.0
Personal Consumption Expenditure (PCE) inflation	September	1.2 to 1.4	1.7 to 1.9	1.8 to 2.0	1.9 to 2.0	2.0
	June	1.3 to 1.7	1.7 to 2.0	1.9 to 2.0	N/A	2.0
Core PCE inflation	September	1.6 to 1.8	1.7 to 1.9	1.9 to 2.0	2	N/A
	June	1.6 to 1.8	1.7 to 2.0	1.9 to 2.0	N/A	N/A

Source: Federal Reserve

- The "dot plot" included in the SEP, which displays the individual target fed funds rate expectations of each of the FOMC's members, indicated that 14 of the 17 members expect to raise the target fed funds rate by year end.
- Both the Federal Reserve Banks of Atlanta and New York estimate Gross Domestic Product (GDP) growth based on economic data as it is released. In the case of the Atlanta Fed, its estimate for third quarter growth declined from 3.5% at the beginning of September to 2.4% by the end of the month. New York's third quarter GDP growth estimate declined from 2.8% at the beginning of September to 2.2% by the end of the month.
- Economic growth in the third quarter of 2016 should reflect improvement from the 1.1% annualized growth rate estimated for the first half of 2016. Nevertheless, we expect the overall rate of GDP growth will appear rather anemic. Indeed, the Fed itself hardly expects stellar growth, as it currently maintains a long-run GDP growth forecast of only 1.7% to 2.0%.

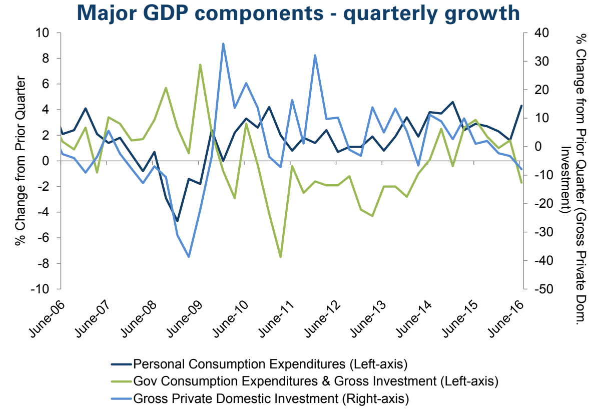
United States — outlook

- The Fed's track record of forecasting GDP growth has not been good. So, despite the FOMC's apparent expectation that the economy will support a rate hike by its December 13-14, 2016 meeting, we remain somewhat skeptical. Although our base case expects that the FOMC will raise rates after its December meeting, we recognize the unique nature of the moment and warn that there is a fair chance that the prevailing pause may continue into 2017.

Despite the FOMC's apparent expectation that the economy will support a rate hike by its December 13-14, 2016 meeting, we remain somewhat skeptical

- Personal Consumption Expenditures, which grew 4.3% on a seasonally adjusted annual rate in the second quarter of 2016, comprised the only major underlying component of GDP that exhibited growth in the period. Private Investment and Government Consumption Expenditures fell on an annualized basis by -7.9% and -1.7%, respectively.

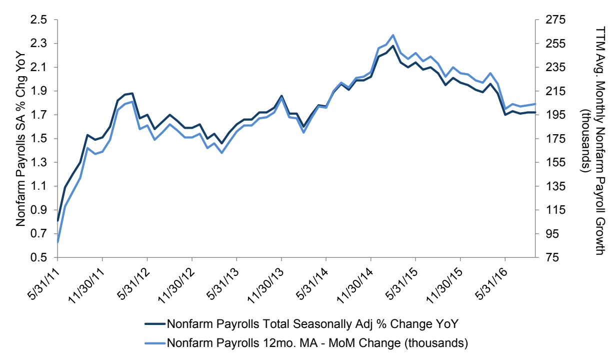
Major GDP components - quarterly growth



As of: 6/30/2016 Source: Bloomberg

- Future GDP growth remains highly reliant on Personal Consumption Expenditures. The other major components of GDP, Government Consumption Expenditures and Gross Private Domestic Investment, haven't contributed positively or consistently to GDP in recent periods. As a result, the economy remains dependent on strong consumer spending.
- As measured by total nonfarm payroll employment, the U.S. economy continues to add jobs. However, nonfarm payroll employment growth has been steadily decelerating since February 2015. The trend of decelerating job growth could signal a slowing economy.

Non-farm payroll growth



As of: 9/30/2016. Source: Bloomberg

- We continue to believe that quarterly U.S. GDP growth will remain positive through the second quarter of 2017 and we expect that annualized growth through that period will range between 1.75% and 2.25%.

Disclaimers