

## 2. International Economic Developments

Global economic activity decelerated slightly in the second quarter of the year. In this period, advanced economies presented a more positive growth performance, whereas the growth rate of emerging economies lost pace. Among advanced economies, the main drivers of growth were the US, Japan and the UK. In the euro area, though, the slowdown in economic activity became more discernible. On the emerging economies side, Latin America decelerated growth. In the period ahead, downside risks to the global growth outlook seem to be more pronounced due to geopolitical developments and intensified discourse of protectionism in global trade.

Commodity prices were mainly shaped in line with trade and foreign policy of the US in the third quarter of the year. While crude oil prices increased, other industrial metal prices decreased owing to the trade tensions between the US and China in the third quarter. In line with rising oil prices, both headline and core inflation rates in advanced and emerging economies trended up. Increased protectionist tendencies in global foreign trade stand out as a downside risk factor for commodity prices in the following period due to both their dampening effect on import demand and potential adverse effect on global growth. Meanwhile, the geopolitical developments in Iran and Venezuela continue to be a major upside risk to crude oil prices.

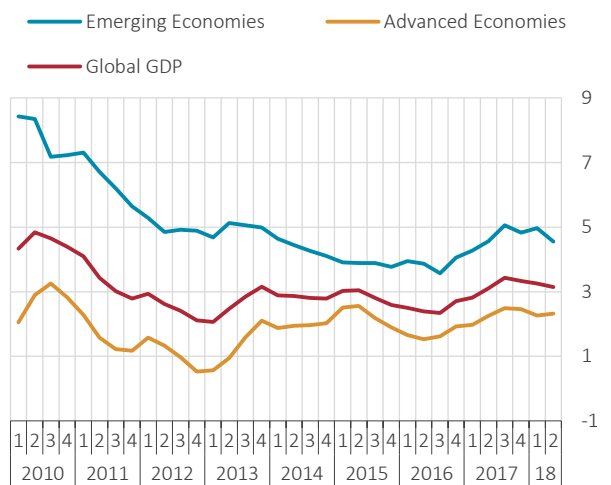
The global financial conditions further tightened compared to the previous Inflation Report period. The normalization of the Fed's monetary policy has had a more apparent effect on long-term interest rates, and 10-year bond yields have increased by approximately 10 basis points since the previous reporting period. Strengthened protectionist tendencies along with increased yields in advanced economies led to portfolio outflows from emerging economies, thereby causing depreciation in local currencies. Therefore, some of the emerging economy central banks increased their policy rates to protect the value of their currencies and contain inflationary effects. Against this background, the monetary policy stance on the emerging economies side has also tightened noticeably. The tightening in the monetary policies of both advanced and emerging economy central banks is likely to prevail in the upcoming period, too. However, the current tight financial conditions in advanced economies, the lingering geopolitical uncertainties and the likely negative effects of increased protectionism in global trade remain a downside risk to portfolio flows towards emerging economies.

Uncertainties regarding the course of global economic policies, contractionary policies on global foreign trade and geopolitical risks restrain the growth potential of the global economy. Therefore, to reduce vulnerabilities, it is important that macroeconomic policies be implemented not only effectively and in a coordinated manner but also be supported by structural reforms and appropriate trade policies.

### 2.1 Global Growth

The ongoing positive growth trend in global economic activity decelerated slightly and the growth rate of the global economy remained below the previous quarter value in the second quarter of the year (Chart 2.1.1). While advanced economies presented a more positive growth performance, emerging economies' growth rates slowed down in this period. The US, Japan and the UK were the main drivers of growth on the advanced economy side, while the slowdown in the euro area growth rate became more discernible. On the emerging economy side, the growth rate generally lost momentum in the second quarter of the year (Chart 2.1.2). As for Latin America, growth rates of Brazil and Mexico decelerated, with Argentina registering a contraction in its economic activity.

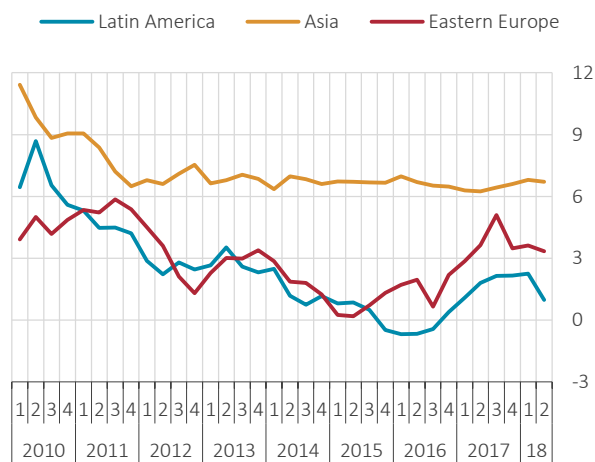
Chart 2.1.1: Global Growth Rates\* (Y-o-Y % Change)



Source: Bloomberg, CBRT.

\* Weighted by each country's share in global GDP.

Chart 2.1.2: Regional Growth Rates for Emerging Economies\* (Y-o-Y % Change)



Source: Bloomberg, CBRT.

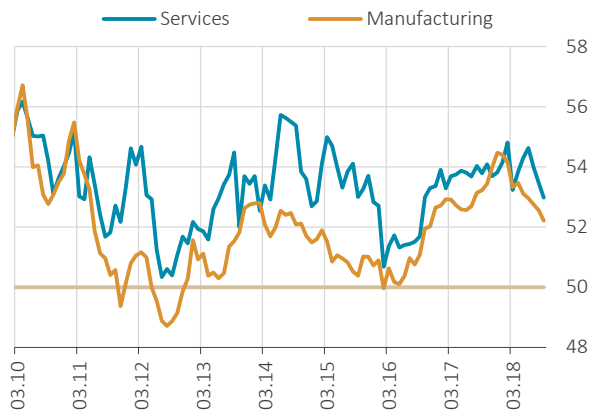
\* Weighted by each country's share in regional GDP.

PMI data related to global economic activity receded in both manufacturing industry and services sectors in the third quarter of the year (Chart 2.1.3). The decline in global PMI indicators was induced by both advanced and emerging economies, which signals that the global economic activity presented a more negative performance than the preceding quarter.

The US manufacturing industry PMI indicator dropped in the third quarter of the year compared to the second quarter (Chart 2.1.4). Despite this drop, the US economy grew by 3.5 percent quarter-on-quarter in annualized terms in the third quarter. Favorable developments in labor market and faster growth of industrial production were instrumental in this outlook. Moreover, manufacturing industry PMI data increased noticeably in October compared to the third quarter (Chart 2.1.4). This is an indication that the US economy maintained its growth performance also in the last quarter of the year.

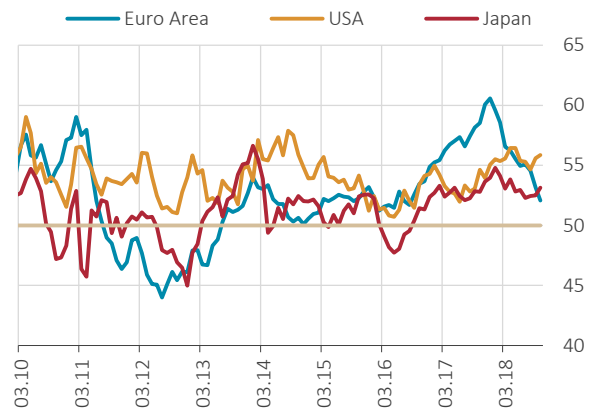
The manufacturing industry PMI for the euro area posted a significant quarter-on-quarter decline in the third quarter (Chart 2.1.4). PMI data continued to decline in October. Although the decrease in unemployment rates continued in July and August, both Italy and Brexit-driven political uncertainties, and the US-imposed customs tariffs on exports of steel and aluminum imply that economic growth continued to lose pace in the third quarter and create an expectation that the rate of growth might decline a bit more. This expectation is also underpinned by extremely low levels of annual growth recorded by industrial production in July and August. Furthermore, GDP data for the second quarter reveal that contribution of exports declined considerably compared to the preceding periods. Therefore, uncertainties over trade disputes with the US are anticipated to take a toll on economic growth in the rest of the year, too. Similarly, the fact that Japan's manufacturing industry PMI declined in the third quarter and its industrial production recorded a low level of annual growth in July and August signals that the growth rate may decrease below the preceding quarter figure in the third quarter.

Chart 2.1.3: Global PMI



Source: IHS Markit.

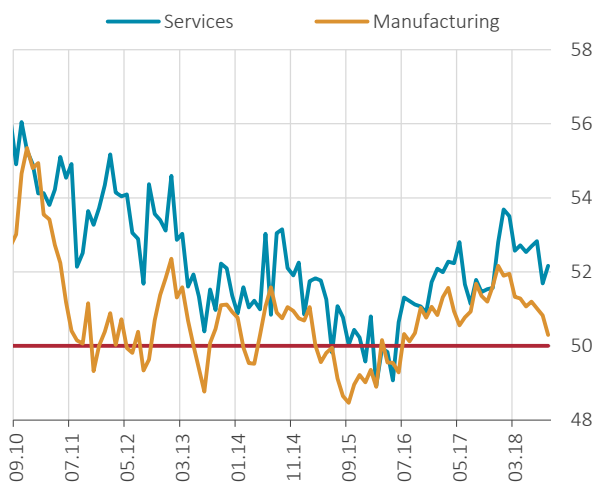
Chart 2.1.4: Manufacturing Industry PMI in Advanced Economies



Source: IHS Markit.

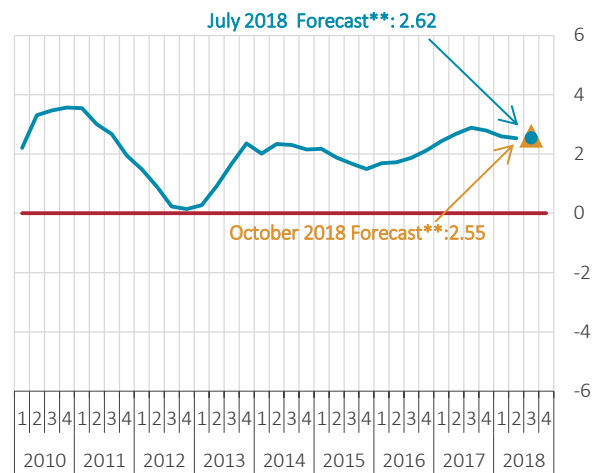
In the third quarter of the year, PMI indicators for emerging economies continued to decrease in the manufacturing industry and the services sector (Chart 2.1.5). PMI indicators deteriorated across emerging economies, primary in those going through financial turmoil in this period. Additional customs duties imposed by the US on imports, particularly from China, led to an increase in expectations that the policies restricting global trade will strengthen. Capital outflows from emerging economies, particularly from those with weak macroeconomic outlook, continued in this period. Moreover, the ongoing rise in commodity prices stands out as another factor that negatively affects the growth prospects for emerging economies that are not commodity exporters. All these reasons are estimated to have had a role in the persistence of the slowdown in economic activities of emerging economies in the third quarter.

Chart 2.1.5: Emerging Markets PMI



Source: IHS Markit.

Chart 2.1.6: Export-Weighted Global Production Index\* (Y-o-Y % Change)



Source: Bloomberg, CBRT.

\* Weighted by each country's share in Turkey's exports.

\*\* Average growth forecast for 2018.

In sum, it is possible to assert that the global growth outlook for the third quarter of year turned slightly more negative as against the previous Inflation Report period and that the growth rate remained at a lower level compared to the previous quarter, due primarily to emerging economies. A similar growth performance is projected also for the last quarter of the year. In fact, growth forecasts for 2018 published in the October Consensus Forecasts have been revised downwards, albeit slightly, for the euro area and emerging economies in Latin America and Eastern Europe compared to the previous reporting period (Table 2.1.1). The IMF's World Economic Outlook Report published in October also revised the growth

forecasts for 2018 downwards for the euro area and emerging economies. Despite these downward revisions, the 2018 year-end growth rate of the export-weighted global growth index, weighted by each country's share in Turkey's total exports and revised based on the forecasts of October Consensus Forecasts, did not diverge significantly from the previous reporting period (Chart 2.1.6). Against this background, it is possible to assert that Turkey's external demand has remained favorable.

**Table 2.1.1: Growth Forecasts for 2018 and 2019 (Annual Average % Change)**

	July		October	
	2018	2019	2018	2019
Global	3.3	3.2	3.2	3.1
<b>Advanced Economies</b>				
USA	2.9	2.6	2.9	2.6
Euro Area	2.2	1.8	2.0	1.8
Germany	2.0	1.7	1.9	1.7
France	1.8	1.8	1.6	1.6
Italy	1.2	1.1	1.1	1.1
Spain	2.8	2.3	2.7	2.2
Japan	1.1	1.1	1.1	1.2
UK	1.3	1.5	1.3	1.5
<b>Emerging Economies</b>				
Asia Pacific	5.9	5.7	5.9	5.6
China	6.6	6.4	6.6	6.3
India	7.4	7.5	7.4	7.5
Latin America	2.0	2.5	1.4	2.1
Brazil	1.7	2.6	1.3	2.4
Eastern Europe	3.2	2.8	3.1	2.2
Russia	1.8	1.8	1.8	1.6

Source: Consensus Forecasts.

## 2.2 Commodity Prices and Global Inflation

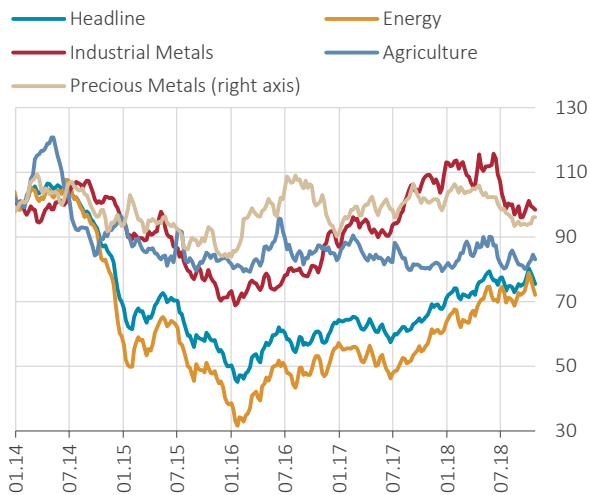
The uptrend in the headline commodity index continued in the third quarter of 2018 and increased by 23.5 percent on a year-on-year basis. In this period, all subcategories recorded an uptick while the increase in energy prices index continued to be the main determinant of the rise in the general price index. Accordingly, in the third quarter, energy prices increased by 40.7 percent year-on-year, while industrial metal prices and agricultural prices rose by 4.4 percent and 0.4 percent, respectively, with a decline in precious metal prices by 3.7 percent (Chart 2.2.1).

Commodity prices were mainly shaped in line with trade and foreign policy of the US in the third quarter. This situation pushed crude oil prices up, yet pulled industrial metal prices down compared to the previous quarter. While the increase in the US shale oil production continued to be the key factor in increasing the crude oil supply, the uptrend in oil prices remained strong due to the decline in production in view of the political developments in Venezuela, the sanctions to be imposed on Iran and frequent cutbacks on production in Libya. Losses of supply experienced in that period could somewhat be offset by production increases in Saudi Arabia and Iraq.

Due to the foreign trade dispute between the US and China, while the assumption of a significant reduction in industrial metal demand had an immediate effect on prices, price pressures driven by

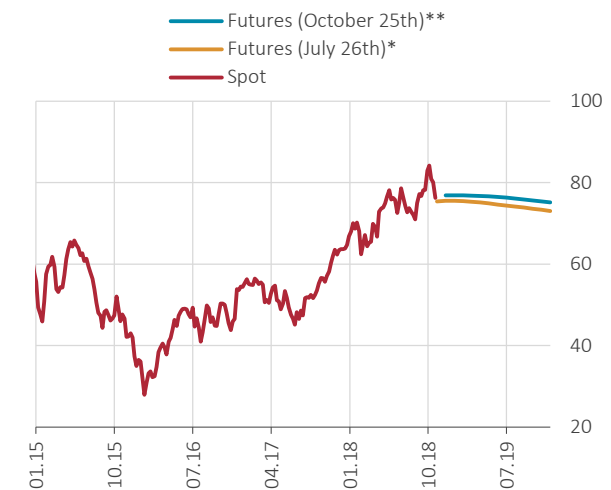
significant declines on the supply side were not significant. However, the slowdown in production along with rapid depletion of stocks particularly in aluminum and copper markets signal that supply-side price pressures might be felt more noticeably in the upcoming period. Meanwhile, the Fed's decisive implementation of rate hikes led to a stronger US dollar and increased US bond yields in the third quarter yet reversed the expected upward movements in gold prices in a period of heightened uncertainty all over the globe.

**Chart 2.2.1: S&P Goldman Sachs Commodity Index**  
(January 2014=100)



Source: Bloomberg.

**Chart 2.2.2: Brent Crude Oil Prices (USD/bbl)**



Source: Bloomberg.

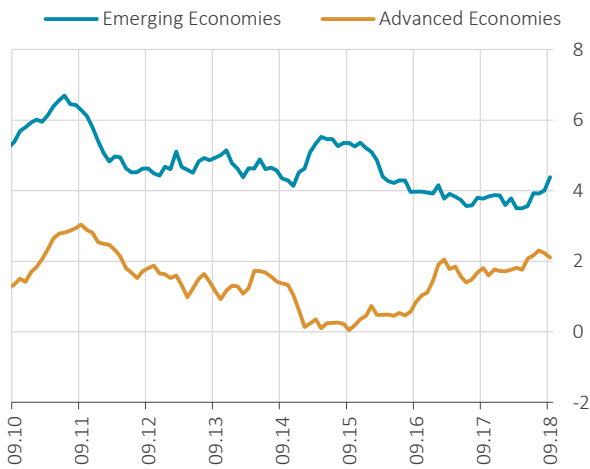
\*Denotes the arithmetic average of the prices quoted at futures contracts during 1-26 July 2018.

\*\* Denotes the arithmetic average of the prices quoted at futures contracts during 1-25 October 2018.

Increased protectionism in global foreign trade stands out as headwind for commodity prices due to its likely adverse effect on global growth besides its dampening effect on import demand. What is more, it is judged that adverse developments in the currencies of emerging economies would induce a reduction in the crude oil demand, thereby leading crude oil prices to decline. Once the infrastructure problems in the US shale oil production that emerged in the previous reporting period are settled to a large extent, the US production is estimated to be an additional factor driving the prices down. However, failure to rebalance the production losses led by geopolitical developments in Iran and Venezuela continues to be tailwind for crude oil prices. Accordingly, as signaled by the Brent crude oil futures contracts, crude oil prices are expected to be trading around USD 77 at end-2018 (Chart 2.2.2).

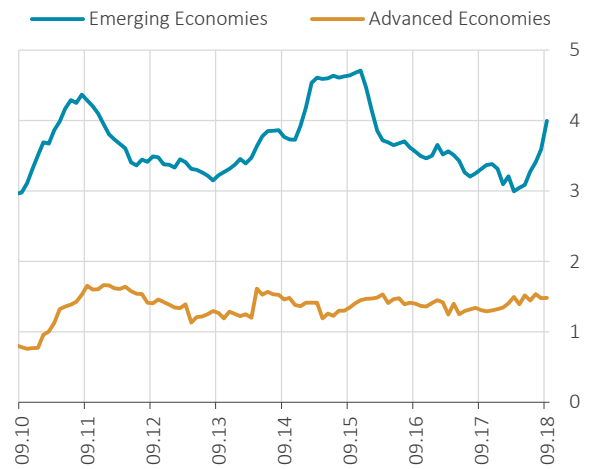
The headline and core inflation rates in advanced and emerging economies have both increased since the previous reporting period in response to rising crude oil prices and depreciation of local currencies in some emerging economies (Chart 2.2.3 and Chart 2.2.4). Inflation expectations for 2018 have been revised upwards for some emerging economies in the inter-reporting period (Table 2.2.1).

**Chart 2.2.3: CPI Inflation in Advanced and Emerging Economies (Y-o-Y % Change)**



Source: Bloomberg, CBRT.

**Chart 2.2.4: Core Inflation in Advanced and Emerging Economies (Y-o-Y % Change)**



Source: Bloomberg, Datastream, CBRT.

On the emerging economies front, local currencies of Argentina and Turkey saw a more dramatic depreciation vis-à-vis the US dollar compared to other countries due to high external indebtedness and country-specific conditions. In the subsequent period, inflation rates of both countries increased, followed by important measures adopted towards disinflation. Conditions of the three-year stand-by agreement signed between Argentina and the IMF in June to lower inflation were amended in September. This agreement aims to contain inflation in Argentina through the control of money supply instead of inflation targeting. Primary risks to the sustainability of this agreement are judged to be extreme depreciation of the Argentinian peso and general election results.

On the advanced economies front, low productivity rates along with the rate of underemployment in the labor market hovering above the levels before the global crisis were considered instrumental in the lack of a high-rated increase in wages despite an unemployment rate receding to historic lows in the US. Moreover, survey- and market-based inflation expectations hover around the 2-percent inflation target. However, crude oil prices that have recently increased have pushed the headline inflation slightly above the core inflation indicators. Inflation forecasts for the euro area based on oil futures prices indicate that consumer inflation is expected to hover around 2 percent in 2018 and 2019. In Japan, both the headline and core inflation rates are below 2 percent, with inflation expectations remaining flat. Meanwhile, in the United Kingdom, the reaction of the pound sterling to Brexit-related news and increased oil prices pushed the consumer inflation rate above the target of 2 percent.

**Table 2.2.1: Inflation Forecasts for end-2018 and end-2019 (Annual Average % Change)**

	July		October	
	2018	2019	2018	2019
<b>Advanced Economies</b>				
USA	2.5	2.2	2.5	2.3
Euro Area	1.7	1.6	1.7	1.7
Germany	1.9	1.9	1.9	1.9
France	1.8	1.6	2.0	1.6
Italy	1.2	1.4	1.3	1.4
Spain	1.8	1.7	1.8	1.6
Greece*	0.8	1.1	0.8	1.1
UK	2.5	2.1	2.5	2.2
Japan	1.0	1.1	0.9	1.1
<b>Emerging Economies</b>				
Asia Pacific (excl. Japan)	2.5	2.5	2.4	2.6
China	2.2	2.3	2.1	2.3
India**	4.9	4.8	4.7	4.9
Latin America (excl. Venezuela)	7.3	6.0	9.5	6.9
Brazil*	4.1	4.2	4.3	4.2
Eastern Europe	5.5	5.3	6.2	7.0
Russia*	3.6	4.1	3.7	4.5

Source: Consensus Forecasts.

\* Annual percentage change.

\*\* Based on fiscal year.

Risks to global inflation are on the upside in the period ahead. The recent depreciation in local currencies of emerging economies were driven by the Fed's normalizing its monetary policy in line with expectations as well as expansionary fiscal policies in the US. If this persists, inflation in related countries may gain momentum. Furthermore, a continued increase in crude oil prices due to geopolitical developments in the Middle East is another tailwind for global inflation. Additionally, protectionist steps in foreign trade, taken in a tit for tat fashion by the US and China, might also accelerate inflation in these countries depending on their trade openness as well as the magnitude and enforcement period of the steps.

## 2.3 Global Monetary Policy

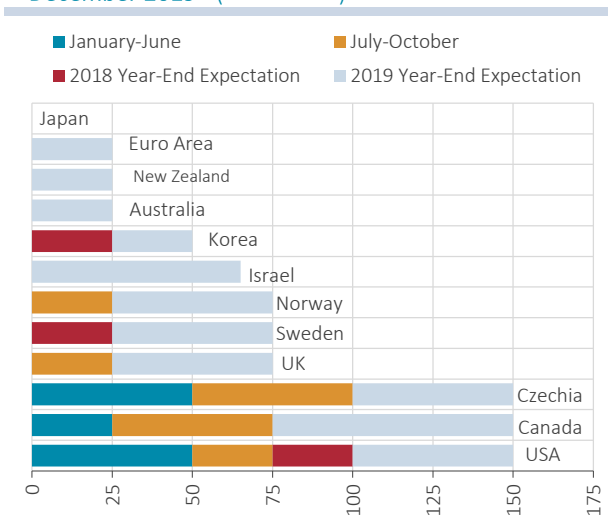
The gradual normalization in monetary policies of advanced economies continued during the July-October period. In line with expectations, the Fed delivered the third rate hike of this year and continued to unwind its balance sheet. Its fourth rate hike, expected in December, has been largely priced in by markets. Effects of the monetary policy normalization have been more apparent in long-term interest rates. Besides, the Fed kept its median policy rate expectations unchanged at its September meeting. This situation suggests that the normalization continues as planned.

The ECB maintained its monetary policy stance, keeping its forward guidance statements intact. Meanwhile, the Bank of England hiked its policy rate in its August meeting. This move causes fluctuation in economic data as uncertainties over Brexit linger. Bloomberg Survey median expectations point to two more rate hikes in 2019 by the Bank.

Central Banks of Norway, Czechia and Canada also maintained their monetary tightening in the July-October period. In 2019, more and more central banks are likely to implement tightening (Chart 2.3.1).

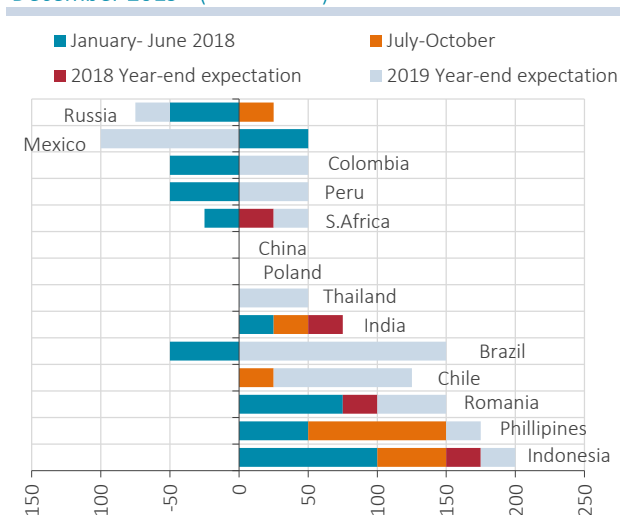
Emerging economies that had presented a more heterogeneous monetary policy outlook up until recently, have started to tighten their policies noticeably in the recent period. Both strengthening protectionist tendencies in global trade and increases in advanced economy yields led to portfolio outflows from emerging economies and suppressed exchange rates. Central banks of Russia, India, the Philippines, Chile and Indonesia increased their policy rates during the July-October period to protect the value of their currencies and to contain inflationary effects. The tightening trend is expected to continue during the rest of the year and in 2019 (Chart 2.3.2).

**Chart 2.3.1: Policy Rate Changes and Year-End Policy Rate Expectations in Advanced Economies January 2017 – December 2019\* (Basis Point)**



Source: Bloomberg.  
\* As of 26 October 2018.

**Chart 2.3.2: Policy Rate Changes and Year-End Policy Rate Expectations in Emerging Economies January 2017 – December 2019\* (Basis Point)**



Source: Bloomberg.  
\* As of 26 October 2018.

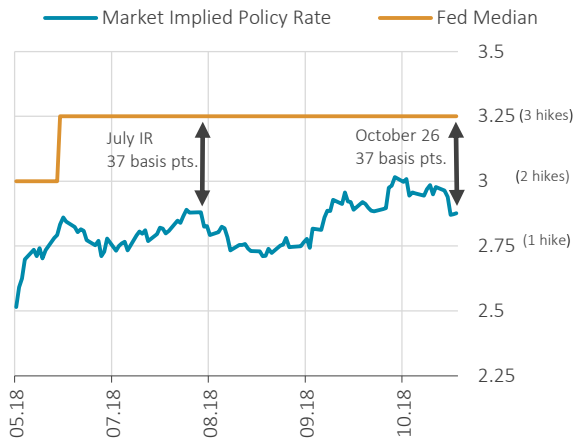
The effects of the normalization processes in advanced economy monetary policies on emerging economies have been more apparent since the second half of the year. Particularly evident were the increases in US bond yields. Although a portion of these increases was retrieved by the end of October, the US 10-year bond yields as of 26 October were 10 basis points higher than those of the previous reporting period. Inflation converging to targets and the positive course of labor markets support advanced economy central banks in their normalization endeavors. However, the current tightening seems to proceed more slowly, gradually and cautiously compared to previous tightening episodes.

Possible tightening scenarios signaled by central banks and survey data have not fully been reflected on prices. Despite three rate hikes that the Fed has projected for 2019, the number of rate hikes priced in by the market is at the same level as the previous reporting period and is below two (Chart 2.3.3). Rate hike expectations for 2019 peaked by mid-October and then slightly eased after the uncertainty caused by approaching US elections was priced in. Probabilities of 2019 rate hikes for the ECB also followed a similar path, yet saw a sharper decline in the second half of October. With this decline, the interest rate level that was priced in receded below that of the previous reporting period (Chart 2.3.4). As for the euro area, despite persistence of cost-push pressures on inflation due to wages and energy prices, growth has recently slowed down, challenging a rate hike decision. The increased uncertainty related to Italy also played a role in the fading of expectations for a rate hike.

Despite the recently heightened uncertainty, the US growth trend is likely to continue and so is the Fed's normalization process as planned. Accordingly, the Fed's rate hikes are believed to potentially have more impact on yields.

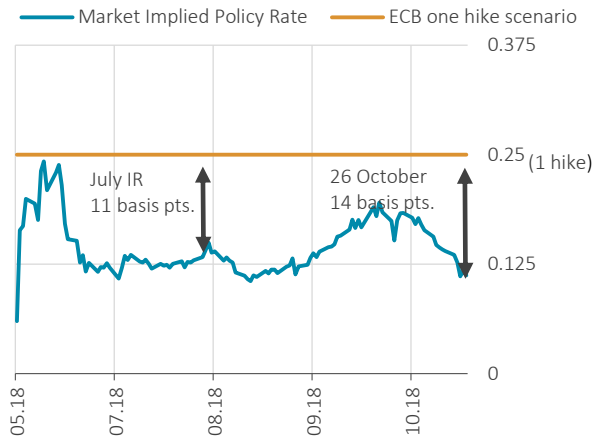


**Chart 2.3.3: Options-Implied Fed Policy Rate for End-2019 (% Upper Band)**



Source: Bloomberg.

**Chart 2.3.4: Options-Implied ECB Policy Rate for End-2019 (%)**

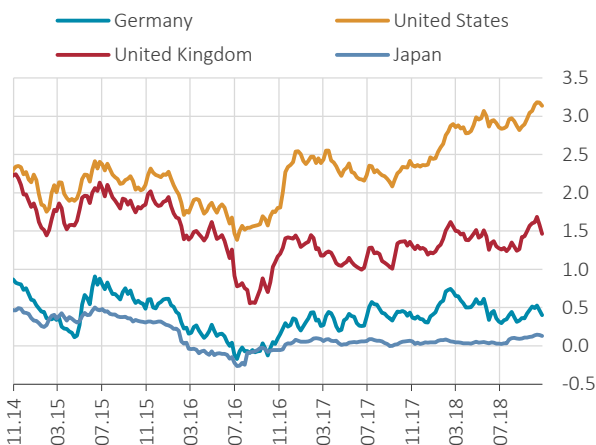


Source: Bloomberg.

## 2.4 Global Risk Indicators and Portfolio Flows

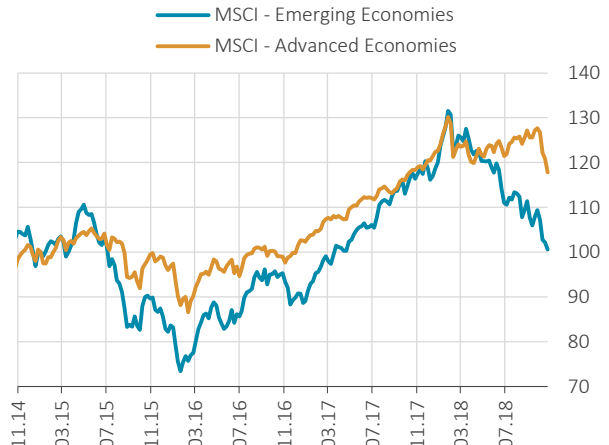
Expectations for a sustained tightening by the Fed and the ECB also remained strong in the third quarter of 2018, in line with which advanced economy bond rates picked up (Chart 2.4.1). While the increase of protectionist tendencies in trade caused downward revisions in global growth expectations, emerging economy equities continued to depreciate in response to the expectation that the decline in trade volumes would push corporate profitability down, particularly in export-oriented companies. Advanced economy equities that had been on the rise till the end of September declined moderately in parallel to the increased bond yields (Chart 2.4.2).

**Chart 2.4.1: 10-Year Bond Yields (%)**



Source: Bloomberg.

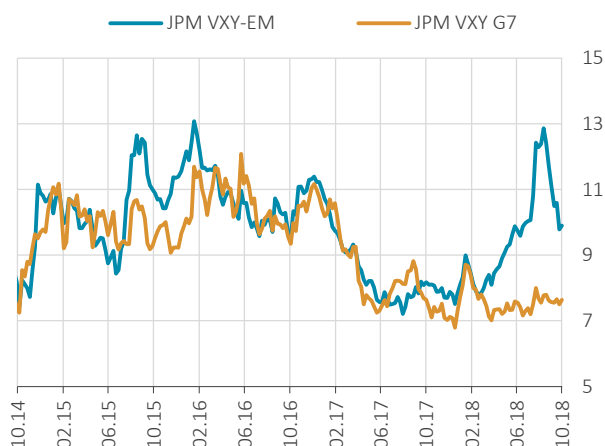
**Chart 2.4.2: MSCI Indices (January 2015=100)**



Source: Bloomberg.

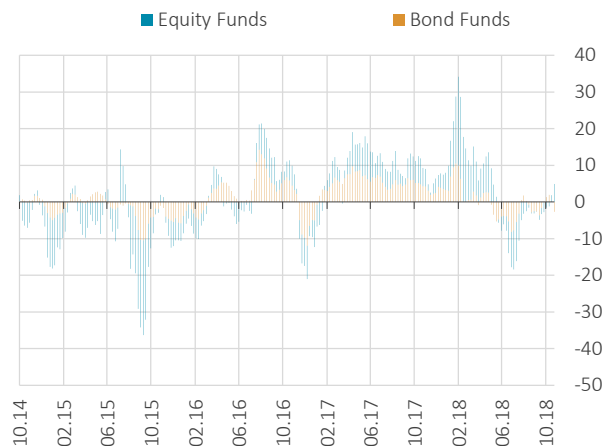
Expansion of the scope of protectionist measures in trade in addition to the ongoing tightening and increased bond yields in advanced economies, lack of a definitive agreement between the UK and the EU for the post-Brexit period, concerns over a heightened public debt stock in Italy and sanctions to be imposed on Iran are primary factors lying behind the low level of risk appetite for emerging economies (Chart 2.4.3).

Chart 2.4.3: JP Morgan Exchange Rate Volatility Indices (Weekly)



Source: Bloomberg.

Chart 2.4.4: Portfolio Flows to Emerging Economies (Billion USD, 4-Week Cumulative)



Source: EPFR.

The lower risk appetite and financial deterioration in emerging economies with relatively more fragile macroeconomic fundamentals led to high volumes of portfolio outflows from these countries in the second quarter of 2018. This trend continued, albeit with a slight loss of momentum, in the third quarter of the year (Chart 2.4.4). However, it should be noted that portfolio flows to emerging economies were barely but somewhat stabilized as of September and bond markets started post inflows in the last week of the same month.

Table 2.4.1: Composition and Regional Distribution of Fund Flows to Emerging Economies (Quarterly, Billion USD)

		Total	Portfolio Composition		Regional Composition			
			Bond Funds	Stock Funds	Asia	Europe	Latin America	Middle East and Africa
2015	Q1	-8.6	1.9	-10.5	-8.1	2.2	-2.4	-0.2
	Q2	-8.0	1.4	-9.4	-6.9	0.4	-2.0	0.4
	Q3	-45.3	-16.5	-28.8	-23.8	-6.5	-10.8	-4.1
	Q4	-22.3	-12.7	-9.6	-11.1	-3.0	-6.4	-1.9
2016	Q1	-4.5	-1.2	-1.6	-2.5	-1.4	-0.3	-0.3
	Q2	-1.4	7.3	-8.7	-4.5	0.7	1.9	0.6
	Q3	42.4	26.1	16.3	17.9	7.5	12.4	4.7
	Q4	-17.4	-9.3	-8.1	-12.6	-0.8	-2.7	-1.3
2017	Q1	32.7	19.9	12.8	8.2	7.7	12.4	4.3
	Q2	52.6	24.4	28.2	25.2	7.6	14.5	5.4
	Q3	37.1	17.3	19.8	19.4	4.9	9.2	3.5
	Q4	29.5	11.8	17.6	14.8	3.7	8.3	2.7
2018	Q1	57.9	12.0	46.0	34.1	6.5	12.0	5.3
	Q2	-10.4	-10.4	0.0	-0.7	-4.3	-3.3	-2.1
	Q3	-9.9	-3.6	-6.3	-4.6	-1.4	-3.2	-0.7

Source: EPFR.

On a regional basis, all emerging economies continued to post portfolio outflows from both bond and stock markets in the third quarter of 2018 (Table 2.4.1). In this period, portfolio movements in countries that are relatively more fragile in financial and macroeconomic terms such as Argentina, Brazil, South Africa and Turkey suffered from more adverse effects, while portfolio movements towards China presented a comparatively more favorable outlook.

The prospect of a sustained tightening in financial conditions of advanced economies, geopolitical uncertainties, and possible adverse effects of increased protectionism in global trade signal that the weak course currently observed in portfolio flows to emerging economies will also continue in the upcoming period. Additionally, the change of investor behaviors underlying the portfolio movements exacerbates the vulnerability of emerging economies to likely global shocks (Box 2.1).

## Box 2.1

### Changing Behavior of Global Portfolio Investors in Emerging Market Economies

Portfolio flows to emerging market economies (EMEs) have accelerated following the expansionary liquidity policies of advanced economies after the global financial crisis (GFC). The presence of global funds can boost investment and growth in EMEs and help develop domestic financial markets. Yet, at the same time, the behavior of global fund flows may increase the volatility in asset markets, amplifying the boom and bust periods through the balance sheet channel. Indeed, following the “taper tantrum”<sup>1</sup> on 22 May 2013, there were sharp withdrawals from EME bond and equity markets, which led to a drastic depreciation in their currencies, leaving the EME corporations with higher financing risks. Thus, understanding the investor behavior during these large portfolio shifts is crucial, given the increasing trend in bond market financing of the corporate sector.

The volatile and procyclical nature of capital flows, coupled with their massive volume, has always been a key concern for policymakers. The literature points out that different types of capital flows display different behaviors, thereby creating different concerns for policymakers. It is conventionally assumed that within the portfolio flows, bonds tend to introduce more fragility compared to equities. Within the debt liabilities, a distinction between foreign and local currency instruments is relevant as well. Greater ratios of foreign currency debt to total debt are associated with increased risks of currency and debt crises, although the final impact depends on a country’s reserves and policy credibility. Although the introduction of local currency instruments over the last decade has led to a decreasing importance of foreign currency debt, one third of the EME corporate bonds are still denominated in foreign currency, which remains a key issue in financially less sophisticated EMEs. Duration of bonds is another critical aspect to be taken into account. Short-term debt instruments are riskier than long-term ones within all categories, and the long-term instruments are, in principle, more sensitive to the fundamentals of the economy.

When we explore the micro structure of portfolio flows, the type of investor turns out to be an important sub-division. Among non-resident investors, institutional investors may pursue different strategies than retail investors and this may result in different responses to local and global shocks. For instance, the rising trend of benchmarking among institutional investors may increase the degree of exposure to exogenous shocks, as the cross-country co-movement of asset prices increases. In addition, non-residents are more likely to react to global shocks whereas residents are more likely to react to local shocks. In this context, recent studies emphasize the balancing role of local investors in financial markets in economies that are integrated with global markets.

#### Stylized Facts Regarding the Changing Investor Behavior...

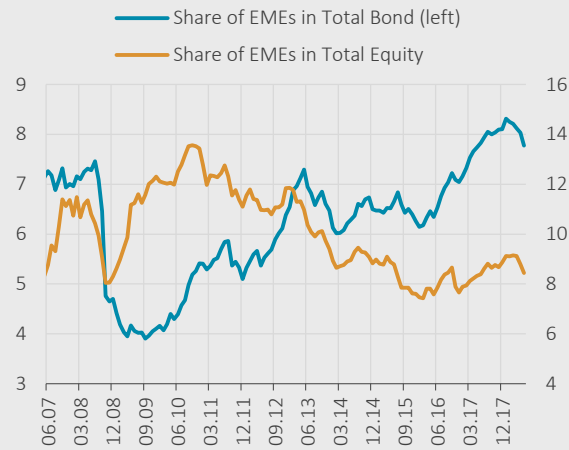
The composition of portfolio flows towards EMEs altered significantly after the “taper talk” in May 2013. The EPFR<sup>2</sup> data reveals an outstanding shift of portfolio flows from equities towards bonds. Global portfolio investors increased their presence in EMEs over the past

<sup>1</sup> In this speech, Ben Bernanke, the president of the Fed of the time, signaled for the first time that the quantitative expansion program will be terminated gradually.

<sup>2</sup> Emerging Portfolio Fund Research, Inc.

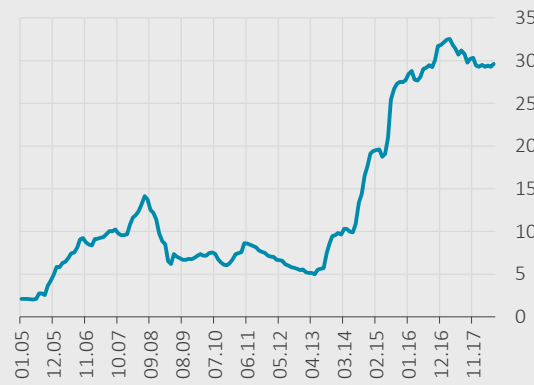
decade, especially in bond markets. The share of EME bonds in global bond funds has doubled since the GFC (Chart 2.a). Moreover, the share of short-term bonds in total EME bond flows has increased significantly after May 2013 (Chart 2.b).

**Chart 2.a: Share of EMEs in Total Bond and Equity Flows**



Source: EPFR.

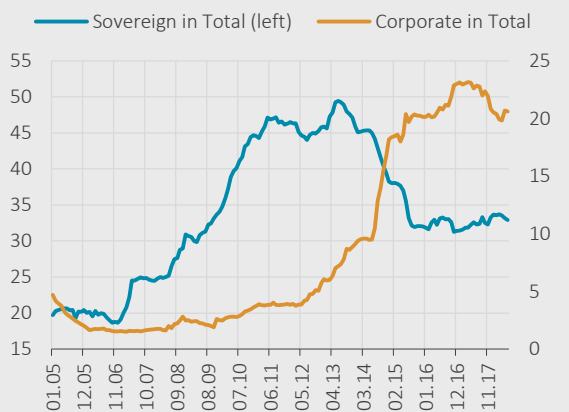
**Chart 2.b: Share of Short-Term Bonds in EMEs**



Source: EPFR.

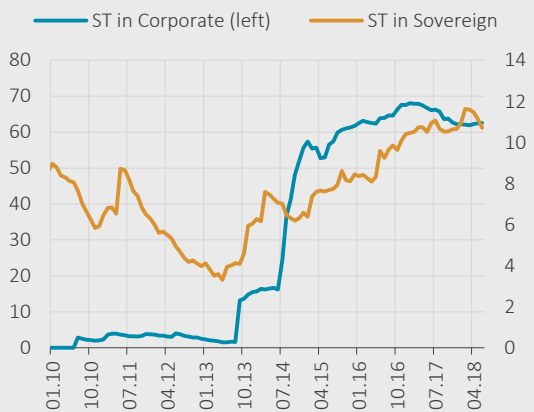
There has been a notable rotation from government bonds to corporate bonds after the taper tantrum (Chart 2.c). Namely, the share of corporate sector bonds in total EME bonds has increased from 2.5 percent at the end of 2009 to 20 percent currently. At the same time, the duration of bonds shifted towards short-term (Chart 2.d).

**Chart 2.c: Issuer Breakdown of EME Bonds**



Source: EPFR.

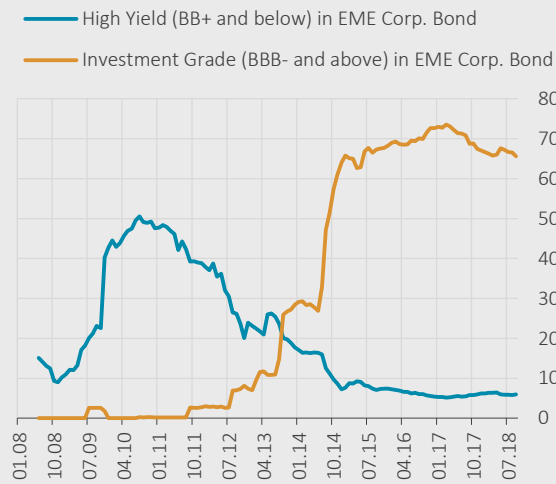
**Chart 2.d: Share of Short-term Bonds in EME Fund Flows**



Source: EPFR.

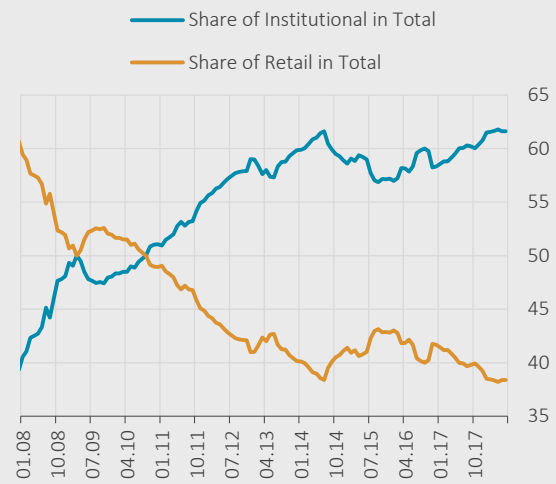
Although investors have increased their exposure to corporate bonds in EMEs, asset allocation has shifted to safer securities (Chart 2.e). The share of corporate bonds with higher investment grade has surged from 0.5 percent in 2010 to almost 70 percent in 2018. In this respect, following the “taper talk”, the motivation of investors significantly shifted away from the “high yield” motivation of the post-GFC period. Correspondingly, it is safe to say that country-specific factors have been more decisive in investor behavior after the second half of 2013. Finally, the investor type breakdown of EME assets shows a gradual increase in the share of institutional investors, whereas the share of retail investors depicts a steady downward trend (Chart 2.f).

Chart 2.e: Breakdown of EME Corporate Bonds in Terms of Riskiness



Source: EPFR.

Chart 2.f: Investor Breakdown of EME Bonds



Source: EPFR.

In sum, there has been a dramatic change in the composition of portfolio flows to EMEs that has increasingly shifted from long to shorter term, from sovereign to corporates, and from equities to bonds. In addition, institutional investors tend to have a stronger appetite for EME assets, resulting in a declining share of retail investors. With the retrenchment of global liquidity, these changes may imply higher sensitivity to global shocks, posing significant challenges for emerging economies. At this point, the first line of defense would be to design and implement a solid macroeconomic framework in order to strengthen the resilience of the economy against external finance shocks and to complement it with country-specific macroprudential policies. Furthermore, the changing behavior of investors now requires a communication strategy that would help investors adopt a longer term perspective of the economies.