Global Economics Monthly Review

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Please see important disclaimer on the last page of this report
Key Issues

The Big Picture (p. 3)

- Economic activity started in 2018 on a positive note.
- Inflation is expected to rise in the upcoming months.
- The gradual process of monetary normalization is expected to continue.
- The interest rate differentials between the US and other major economies are expected to widen.
- Falling bond and equity prices appear to reflect rising expectations for inflation and policy normalization.

Global Economic Forecast Table (p. 5)

United States (p. 6)

- Further improvement in economic activity and solid labor market reports.
- Growth outlook was revised upward.
- Inflation is set to increase in 2018.
- Upward pressure on short-term yields. The yield curve may flatten slightly further.

Euro Area (p. 10)

- further improvement in the growth environment.
- Financial institutions and the European Commission upgraded the region’s growth outlook.
- Inflation is still subdued, but expected to recover in 2018.
- ECB concerns regarding euro appreciation and rising interest rate expectations.
Global Economics – The Big Picture

Global economic activity started 2018 on a positive note: Based on recently released economic data for the major advanced and emerging economies, global economic activity continued to rise in early 2018. The fourth quarter preliminary national accounts results were solid despite the expected moderation, "correcting" after the previous two strong quarters. The slight slowdown in the fourth quarter was driven by the US, eurozone, China, and probably Japan, based on monthly hard and soft data.

Based on leading economic indicators such as industrial orders, backlogs of goods, job creation, and business sentiment surveys, the solid global economic expansion is expected to continue at least in the short-run. The global purchasing managers’ index reached a 40-month high in January, as manufacturers and service providers benefitted from a synchronized improvement in economic activity and supportive financial conditions.

Manufacturing activity is being driven by, among other things, the recovery in commodity prices, mainly crude oil, which increased investment and production feasibility. Based on the available official data and current business surveys, we believe the global economic activity growth rate accelerated to 3.7% in 2017, following 3.2% growth in 2016. Moreover, we expect global economic activity to continue to grow solidly in 2018 at around the same pace as in 2017.

Inflation is expected to rise in 2018: Global headline inflation rose in the second half of 2017 due to, among other things, the rise in commodity prices and an improvement in demand. That said, core inflation has remained moderate in the major economies. The recent increase in US wage growth may put some upward pressure on underlying inflation in the US. Also, other economies may experience a rise in core inflation, albeit to a lesser extent compared to the US. This may be driven by the rise in inflation expectations as the demand environment and global labor markets continue to improve.

The gradual normalization process of monetary policies is expected to continue. Interest rate differentials between the US and other major economies are expected to widen: As a result of the positive prospects regarding economic activity and a
recovery in the inflation environment, some of the major central banks initiated normalization steps, in tandem with the tightening policy in the US, which is expected to continue at least throughout 2018. During the past two months, several central banks raised their interest rates, including the US, Canada, Mexico, Turkey, China, Czech Republic, Romania, and more. Brazil and Russia were among the central banks that cut their rates.

We expect the tightening cycle to continue in some of the major developed economies, but the process is expected to be moderate and gradual. The federal funds rate in the US is expected to rise faster than in other major economies in the world. The Fed is expected to raise its interest rate in the upcoming meeting on March 21st for the sixth time in this current tightening cycle, while last October it started the balance sheet normalization process. It should be noted that if the recent stock market volatility will strengthen and persist, then we do not rule out a postponement for the next interest rate hike.

**Falling bond and equity prices probably reflect rising expectations for inflation and policy normalization:**

Since the end of January, global equity indices have fallen sharply. It appears the falls in equity prices were not affected by the global economic activity data, which continue to be positive and even supportive for equities. The falls in equity prices were probably related to the rise in Treasury bond yields, as both "products" are alternative investment channels.

The recent upward trend in Treasury yields started in September 2017, and the trend strengthened in early 2018. We expected this recent rise in bonds yields, it was just a question of timing. The factors that supported the trend include: increases in global inflation expectations supported by solid demand and commodity prices; heightened interest rate expectations in the US; an expected increase in the US budget deficit due to the tax reform, and as a result, a marked increase in Treasury issuances; balance sheet normalization by the Fed; prospects for policy normalizations in the other major economies, including the euro area, Canada, and the UK; and more.

We believe the main factor driving the correction in equity prices was the rising of yields-to-maturity, along with the actual increase in central bank interest rates and the expected tightening policy by the Fed. Higher rates may increase financial expenses for
businesses. In tandem, prospects for an increase in inflation probably also have an effect on equities, this could be the case, especially if the rise in inflation is a result of an increase in commodity prices and/or wages, which lifts corporate costs and may hinder gross profits. It should be noted that the falls in the equity indices were from historic high levels.

All in all, global growth is expected to remain supportive for corporates revenues. However, global financial markets may continue to experience volatility in the short-run as policy normalization around the world is set to continue, and business earnings may experience some headwinds down the road from rising financial expenses and cost of revenue. Also, equity valuation levels are relatively high by past standards.

Leumi Global Economic Forecast, As of February 2018

<table>
<thead>
<tr>
<th>GDP – Real Growth Rate</th>
<th>2015</th>
<th>2016</th>
<th>2017E</th>
<th>2018F</th>
<th>2019F</th>
</tr>
</thead>
<tbody>
<tr>
<td>World</td>
<td>3.3%</td>
<td>3.2%</td>
<td>3.7%</td>
<td>3.7%</td>
<td>3.8%</td>
</tr>
<tr>
<td>USA</td>
<td>2.9%</td>
<td>1.6%</td>
<td>2.2%</td>
<td>2.3%</td>
<td>2.4%</td>
</tr>
<tr>
<td>UK</td>
<td>2.2%</td>
<td>1.8%</td>
<td>1.6%</td>
<td>1.4%</td>
<td>1.5%</td>
</tr>
<tr>
<td>Japan</td>
<td>1.3%</td>
<td>1.0%</td>
<td>1.8%</td>
<td>1.5%</td>
<td>1.6%</td>
</tr>
<tr>
<td>Eurozone</td>
<td>2.0%</td>
<td>1.7%</td>
<td>2.5%</td>
<td>2.2%</td>
<td>1.9%</td>
</tr>
<tr>
<td>South East Asia (ex. Japan)</td>
<td>4.5%</td>
<td>4.5%</td>
<td>5.0%</td>
<td>4.7%</td>
<td>4.8%</td>
</tr>
<tr>
<td>China</td>
<td>6.9%</td>
<td>6.7%</td>
<td>6.8%</td>
<td>6.4%</td>
<td>6.3%</td>
</tr>
<tr>
<td>India</td>
<td>7.9%</td>
<td>7.1%</td>
<td>6.7%</td>
<td>7.6%</td>
<td>7.9%</td>
</tr>
<tr>
<td>Latin America</td>
<td>0.1%</td>
<td>-0.7%</td>
<td>1.2%</td>
<td>2.1%</td>
<td>2.3%</td>
</tr>
<tr>
<td>Israel</td>
<td>2.5%</td>
<td>4.0%</td>
<td>3.0%</td>
<td>3.4%</td>
<td>3.3%</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Trade Volume, Growth (%)</th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Global</td>
<td>2.5%</td>
<td>2.3%</td>
<td>4.6%</td>
<td>4.3%</td>
<td>4.0%</td>
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</table>

<table>
<thead>
<tr>
<th>CPI, Annual Average (%)</th>
<th></th>
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<tbody>
<tr>
<td>USA</td>
<td>0.1%</td>
<td>1.3%</td>
<td>2.1%</td>
<td>2.2%</td>
<td>2.3%</td>
</tr>
<tr>
<td>UK</td>
<td>0.1%</td>
<td>0.7%</td>
<td>2.7%</td>
<td>2.6%</td>
<td>2.2%</td>
</tr>
<tr>
<td>Japan</td>
<td>0.5%</td>
<td>1.0%</td>
<td>0.5%</td>
<td>1.1%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Eurozone</td>
<td>0.8%</td>
<td>-0.1%</td>
<td>1.5%</td>
<td>1.5%</td>
<td>1.6%</td>
</tr>
<tr>
<td>Israel</td>
<td>-0.6%</td>
<td>-0.5%</td>
<td>0.3%</td>
<td>0.5%</td>
<td>0.6%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Interest rates, Year End</th>
<th></th>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>US Fed</td>
<td>0.25-0.50%</td>
<td>0.50-0.75%</td>
<td>1.25-1.50%</td>
<td>1.75-2.25%</td>
<td>2.50-3.00%</td>
</tr>
<tr>
<td>Bank of England</td>
<td>0.50%</td>
<td>0.25%</td>
<td>0.50%</td>
<td>0.50-0.75%</td>
<td>1.00-1.25%</td>
</tr>
<tr>
<td>Bank of Japan-Policy Rate</td>
<td>0.00%</td>
<td>-0.10%</td>
<td>-0.10%</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>ECB-Main Refi</td>
<td>0.05%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Israel</td>
<td>0.10%</td>
<td>0.10%</td>
<td>0.10%</td>
<td>0.25%</td>
<td>1.00%</td>
</tr>
</tbody>
</table>
**United States**

**Economic Activity and the Labor Market - the improvement in economic activity is expected to continue in the short-run:**

- US GDP grew 2.6% q/q annualized in Q4-17 (chart 1), slightly below consensus expectations, and less than the previous quarter (3.2%). Growth was driven by solid household activity and a continuing positive trend in business spending (chart 2), while net exports and inventories slightly declined. The underlying figures in Q4-17 were stronger than implied by the GDP figure. This is evident in the surge in "US Final Sales to Private Domestic Purchasers", which strips out many of the one-time factors that drove the GDP figure. In addition, based on monthly data and business surveys, we do not rule out a slight upward revision to the preliminary estimate.

- The recent flow of monthly current activity data and leading indicators suggests that US economic activity continues to improve. Retail sales rose solidly in December (chart 3) driven by strong gains in building materials and non-store retail categories. On a year-over-year basis, retail sales rose 6.3%, the highest increase since the first quarter of 2012, suggesting strong private spending.

- The US January employment data were positive overall, as non-farm payrolls grew strongly, the unemployment rate remained at its multi-year low of 4.1% (chart 4), the participation rate remained within its medium-term range, and wage growth accelerated. The improvement in the labor market and in consumer confidence levels supports further strength in private spending in the short-run at least.
Economic Activity and the Labor Market (Continued) - the improvement in economic activity is expected to continue in the short-run at least:

- Industrial production rose strongly in December (chart 5), driven mainly by utilities output due to weather conditions. In addition, mining output rose further, supported by the continuing increase in crude oil prices. The recent rise in drilling rigs was modest, and is expected to support a moderate rise in oil output in the short-run at least.

- Based on leading indicators such as factory orders (chart 6) and various business surveys (chart 7), the positive trend in manufacturing is expected to continue at least in the short-run.

- Housing starts fell in December, driven by a sharp fall in single-family starts. Data for October and November were revised upward. In all, fourth quarter housing starts were higher on average than the third quarter data. The strong sentiment, price increases, solid demand, and low housing inventories are expected to support a continuation in the positive trend in housing starts throughout 2018 (chart 8).

- We expect further strength in domestic demand in 2018, supported by, among other things, the tax reform, labor market improvements, the wealth effect, and an increase in business sentiment. Recently, we revised upward our growth forecast and we currently expect some acceleration in 2018 compared to last year.
The Inflation Environment - set to increase in 2018:

- Inflation has recovered since the beginning of the second half of last year (chart 1), after falling in the first half of the year. PCE December inflation came in line with previous estimations at 1.7% y/y compared to 1.8% in November. At the core level, durable goods deflation continues to be offset by modest services inflation, leaving inflation below the Fed’s target (2%) at 1.5%.

- The recent recovery in inflation was supported by, among other things, higher gasoline prices due to the increase in oil prices (chart 2), a recovery in vehicle and medical care prices, and the recent depreciation of the US dollar, which supported import prices as well as producer prices up (chart 3).

- Inflation is expected to rise slightly in 2018 and could rise above the Fed’s inflation target, driven by supportive base effects, rising commodity prices, a weaker dollar, and trade protectionism measures. Moreover, based on various business surveys and the positive trends in domestic demand and in employment, we do not rule out further wage growth (chart 4), which will also support an indirect increase in consumer prices. On the other hand, rising competition and low productivity are expected to weigh on inflation in the medium-term.

- Based on market-derived inflation expectations and inflation forecasts among financial institutions and businesses, inflation is expected to rise further in the short-run.
Monetary Policy and Interest Rates - upward pressure on short-term yields:

- At its last meeting on January 31st, the Fed kept its interest rate and balance sheet policies unchanged, as expected. The changes in the January statement were minor. The Fed slightly upgraded its view on economic activity and employment, while maintaining its assessment on inflation and the balance of risks almost unchanged.

- Overall, the tone of the January statement, in tandem with the supportive financial conditions (chart 1), indicate the Fed is not going to change soon its interest rate projections: 2.00-2.25% by the end of 2018.

- In the last two months, interest rate expectations rose and they are currently pricing between two to three rate hikes in 2018 (overall 62bp), in line with Leumi’s estimations. We still expect that the Fed will increase the interest rate in the meeting on March 21st. As mentioned above, we do not rule out a postponement of the interest rate hike (p. 4).

- The interest rate path and the balance sheet normalization process supported the rise in Treasury yields. There are also other factors that support this view, including the rise in inflation expectations (chart 2) and an expected increase in Treasury issuances. Alongside the increase in yields, the volatility measure of the 10-year US bond increased to its highest level since November, 2016. On average in 2018, we expect the 10-year yield to maturity to be 2.8-3.0%.

- We expect the yield at the short-end of the curve to rise relative to the current level of the longer-end, supported by the interest rate path (Chart 3). This may lead to a further, albeit very modest, flattening of the yield curve (chart 4). At the current level, the flattening trend does not signal expectations for a recession in the near-term or a change in the interest rate cycle in the short-run (see our December 2017 edition).
Euro Area

Economic Activity - further improvement in the growth environment. Financial institutions and the European Commission upgraded the region's growth outlook:

- Based on the preliminary flash estimate, euro area (EA) Q4 GDP expanded 0.6% q/q, in line with the consensus expectation but slightly slower than the 0.7% in Q3. On a year-over-year basis, the EA economy rose 2.7%, attesting to a robust growth environment. That said, note that the economy is currently growing above its potential, and we expect some moderation in 2018 and in the following years.

- The expenditure breakdown has not been published yet (due on March 7th), but based on monthly data, EA growth was likely driven by domestic demand, as the net trade contribution to growth was probably minor (chart 2).

- EA monthly survey data suggest further strength in the beginning of the year. The European Commission January economic indicator posted the second highest figure since end-2000 (chart 2), supported by solid sentiment in all sectors. Consumers remained optimistic, with their expectations of the general economic situation in the next 12 months at an all-time high. The surveys are consistent with strong growth in the first quarter of the year.

- Retail sales declined sharply in December, “correcting” after a strong rise in November. We expect consumer spending to remain strong at least in the short-run and to remain a primary growth engine in the EA, as the unemployment rate continues to decrease (chart 3) and consumer confidence is at a multi-year high (chart 4).
Inflation Environment- still subdued, but expected to recover in 2018:

- The EA headline inflation rate slightly declined from 1.4% to 1.3% in January as expected, driven by energy inflation and food inflation. Core inflation edged up from 0.9% to 1.0%. Both headline and core inflation have remained at low levels, below the ECB’s target of somewhat below 2% (chart 1).

- The appreciation in the exchange rate of the euro probably weighed to some extent on inflation recently, and if it continues, it may limit to some extent a recovery in the short-run at least (chart 2).

- Market-derived inflation expectations continued to rise recently (chart 3), supported by commodity prices and solid domestic demand. An additional rise in expectations may affect EA labor market wage agreements, and support a further recovery in wage growth (chart 4). Based on various surveys, in the past year businesses reported a continuing rise in input prices and output prices. These increases may be "rolled over" to consumer prices in the short-medium term.

- Looking forward, the rise in commodity prices, mainly in oil, in tandem with the strength in domestic demand, and some recovery in wage growth, are likely to feed through to higher inflation during 2018, mainly in the second quarter of the year as some base effects are expected to fade out of the equation and provide some tailwind to inflation.
Monetary Policy and Financial Indicators - ECB concerns regarding euro appreciation and rising interest rate expectations:

- At its recent monetary meeting on January 25th, the ECB left its monetary policy unchanged, as expected, leaving real rates deep in negative territory (chart 1). The president of the ECB, Mario Draghi, delivered an optimistic view on EA growth. He referred to the recent robust pace of economic expansion, which strengthens the ECB’s confidence that inflation will gradually converge towards its inflation objective.

- At the same time, Mr. Draghi showed some concern about the recent euro appreciation (chart 2), which has been supported by the improvement in EA macro-economic conditions and risks. Note that despite the euro appreciation, EA exports grew solidly, driven by global growth. Another concern mentioned by the ECB is the rising market expectations about future policy rate hikes (chart 3). Mr. Draghi stated that the discussion on changing the forward guidance “has not really started” yet. We expect it to start sometimes soon, and it may be somewhat adjusted later on this year due to the improvement in the EA economy.

- The latest monetary statement repeated that interest rates are still expected to be on hold until “well past the horizon of the net asset purchases”. We expect subtle changes in the ECB’s forward guidance in the next upcoming meetings, some further tapering steps in 2018, or a discontinuation of QE purchases by the end of the year (chart 4), but interest rates are expected to remain unchanged in 2018. This may lead to a further rise in the German 10Y yield to maturity, along with a slight increase of the steepness of the 10-2 curve.
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