FINANCE CLUB UNIPI

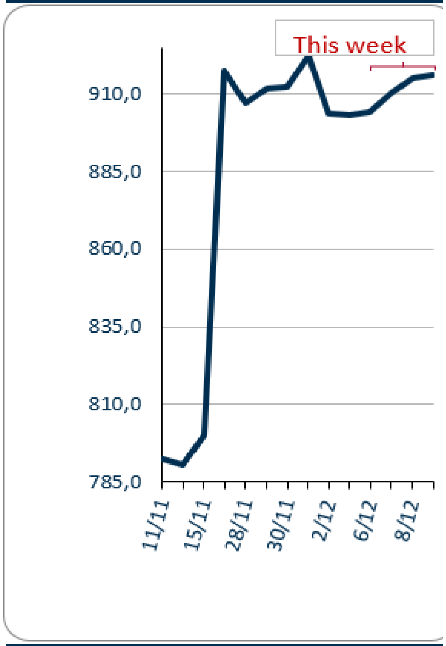
FINANCIAL MARKETS DEPARTMENT

WEEKLY OUTLOOK

12-16.12.2022

GREECE | GI is being held back by ECB's terminal rate announcement

ASE General Index Closing Prices



Source: Bloomberg

MARKET COMMENTS & DRIVING EVENTS

Over the last week the ASE Composite Index decreased by 0.45% and fell to 911.85 points, still above the 200 moving average trying to maintain levels above 900 points. The FTSE Large Cap during this week declined by 0.43%, reaching a price of 2,210.36. The markets appeared to be very promising at the beginning of the previous week as a major deal between Fairfax and MYTILINEOS took place. More specifically FAIRFAX became the second biggest shareholder of MYTILINEOS, by investing 50 mn more, while also having the option to add another 50 mn to its investment. Despite the strong start the week didn't favor the country's markets as the ECB announced another 50 basis points interest hike, while it signaled that the terminal rate would also be higher, meaning that the fight against inflation would take longer than what analysts and investors expected. The week ending in uncertainty and volatility as derivatives expired and AUTOHELLAS entered the FTSE taking IPTO's place.

Conclusion & outlook

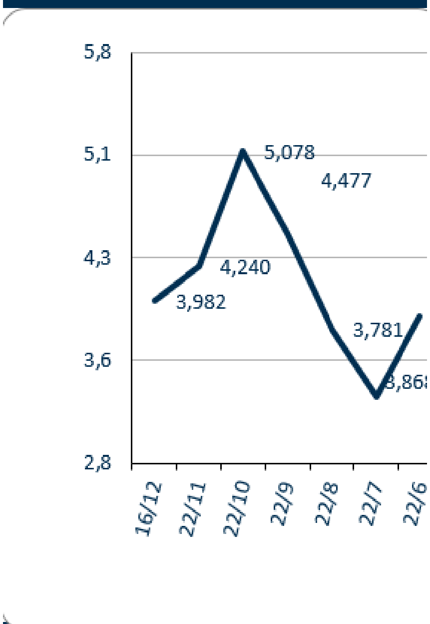
Despite the difficult challenges the Athens Stock Exchange faced last week, its performance was better compared to the European moving average. Also, most of the Greek listed companies had a great 9month financial results, which was a catalyst for investors to strengthen their positions. The ASE index managed to stay for the fourth week comfortably above 900 units, although the unfavorable environment makes the critical level of 925-930 units seem distant.

News & Economy

The ECB signals higher terminal rate

The European Central Bank opted to ease off the gas and go with a weaker interest rate increase of 50 basis points following two consecutive 75-point increases as it continues its fight against inflation, which is still five times higher than the bank's declared target. After reaching a record 10.6% in October, annual inflation in the Eurozone fell to 10% in November. The ECB's official aim for inflation is 2% over the medium term. The Directors' Board However stated that it intends to increase interest rates even higher in order to try to reduce inflation to manageable levels.Rising interest rates, together with the energy crisis and related uncertainty, are expected to contribute to a significant slowdown in the Eurozone economy in 2023. The ECB estimates that GDP may contract in the current and next quarters, but for the whole of next year foresees a marginal increase of 0.5% which will strengthen to 1.9% in 2024.

10Y Greek Bond YTM



Source: Bloomberg

Borrowing is getting more expensive-Bond Yields

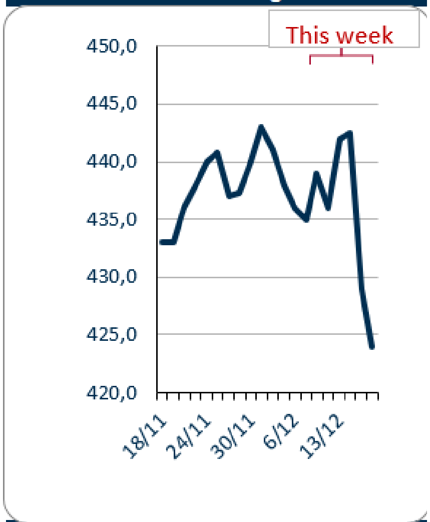
Now since Eurozone borrowing costs rose on Friday, investors revised upward their expectations for bond yields after the ECB pledged further monetary tightening. Greek 10-year bonds were under significant pressure, with the yield jumping around 29 basis points to the 4.4% range. The German 10-year bond yield rose 11 basis points to 2.18%. The 2-year yield rose 11 basis points to 2.5%, the highest level since late 2008. The yield spread between Italian and German 10-year bonds rose to 213 basis points, the widest since November 9. The corresponding difference with Greek is around 222 units.

EUROPE | European markets plummet after ECB announces higher terminal rate

The European Market faced another week of selloff as investors are concerned about a new recession. The FED announced a 50-basis point increase in interest rates on Wednesday. The European Central Bank and the Bank of England followed with a 0.5% increase. In the Eurozone Area the interest rate is at 2.5% and in the UK 3.5%. Specifically, the BoE has raised hikes by a combined of 325 basis points in 2022 alone hitting the record of 2008. Although, the GDP of the UK has risen by

Athens Stock Exchange General Index Movers	Weekly Change
Top Gainers	
Marfin Investmnet	14,47%
Fourlis Hld	9,97%
Kri-Kri Milk	6,00%
Premia AE	5,74%
Athens Medical	4,74%
Top Losers	
Space Hellas	-18,63%
ADMIE	-6,01%
Papoutsanis	-5,98%
Thessaloniki Water & Sewage	-5,28%
Athens Water	-4,93%

STOXX 600 Closing Prices



Source: Bloomberg

EUR/USD

Source: Bloomberg

by 0.5% since September, reaching the level before the pandemic and their unemployment rate rose to 3.7% from 3.6% as consumer spending has decreased. In Germany, the CPI of November was announced 10%, 0.4% down the prior month as it was forecasted, meaning there has been a slight decrease of prices. The Eurozone industrial data of October was announced facing a decrease of 2.8% as the region is confronting high energy prices. On the corporate front, Inditex announced a 24% increase in net profit which led to a higher stock price by 1.3%. Weekly, the CAC 40 fell 3.37% at 6,452 points, the DAX ended at 13,893 falling 3.32% and the FTSE 100 dropped 1.93% ending at 7,332 points. Overall, investors are afraid of a new, more harsh recession and are selling off their stocks. Regarding the war in Ukraine, Russia is continuing with missile attacks and there has been no retreat.

***STOCK OF THE WEEK*: Bayer AG NA (DAX: BAYGn)** is a company that operates as a life science company worldwide. Pharmaceuticals, consumer health and crop science are its segments. A range of products primarily for cardiology and women's health care regarding pharmaceuticals. Providing specialty therapeutics in oncology, hematology, and ophthalmology; and diagnostic imaging equipment and contrast agents, as well as cell and gene therapy. Nonprescription over-the-counter medicines, medical products, medicated skincare products are some of the consumer health segments. Lastly the crop science includes chemical and biological crop protection products, improved plant traits, are some of Bayer's products. The company settled with the US state of Oregon by paying 698Million$ to resolve claims of environmental pollution by chemicals. Furthermore, Bayer agreed to pay 40Million$ to settle the claims over the use of kickbacks and false statements related three prescription drugs. On Friday the stock price closed at EURO 48,56 with a daily 3,8% pullback as well as a weekly plummet of 8,17%.

US | Fed hawkish stance drives down the markets

Markets & Economy

Equity markets fell over 2% last week, as a more hawkish Federal Reserve stance and weakening economic data underlined a risk-off posture. Dow Jones Industrial Average slipped -1.7% closing at 32,920 points, NASDAQ closed at 10,705 down -2.7% and the S&P 500 closed at 3,852 losing -2.1%. Even though the CPI inflation data came below expectations for the second continuous month, it has yet to move significantly lower to fall back towards the central bank's 2% target, thus turning the market sentiment lower leading to the second weekly session of losses. However, bond yields were sent lower with the 10-Year Treasury yield hovering around 3.49% down -0.1% from the week prior on hopes for a lower-rate environment. Inflationary pressures are trending in the right direction with the Consumer Price Index up 7.1% in November compared to a year earlier, versus forecasts of a 7.3% increase, while the core measure advanced 6% y-o-y, all lowering the markets expectations for the fed funds rate down to a 4.75%-5% peak rate from about 5.25% that investors were projections earlier this year. In their December meeting during the week, the Fed announced a 0.5% rate hike, bringing the fed funds rate to about 4.5% while indicating a peak of 5.1% in 2023, a largely anticipated move by the markets leaving room for investors to focus on Jerome Powell's commentary on the path of the economy and their updated economic projections. Those projections were viewed as incrementally more conservative as officials are anticipating economic growth to slow down to 0.5% in 2023, down from the 1.2% figure in their September meeting, while also increasing core inflation expectations to 3.5% in 2023, from 3.1%. Such figures are indicating no rate cuts until 2024, as the central bank would need to see more evidence that inflation is moderating, as even though goods inflation is easing, other parts of core services inflation remain sticky, driven largely by the tight labor market. The weak November retail sales added to the cautious sentiment by declining0.6% m-o-m, while forecasts were showing a decrease of 0.15%,signaling that consumer demand might be stalling and the effect of restrictive monetary policy will produce a mild recession in 2023 as the US economy is 70% driven by consumption. However, it would take more evidence to constitute a trend given elevated saving rates, higher wage gains and the tight labor market will support consumer confidence. Speaking of which initial jobless claims fell in the lowest point since September in the week ended December 10th by decreasing to 211.000 marking a positive tone on the economic outlook. The Fed policy will remain in the spotlight in the months ahead as the central bank will continue to battle inflation while trying not to cause too much damage in the economy, even though it is expected that if inflation continues to moderate and the global economy weakens the central bank will have less incentive to maintain an overly restrictive monetary policy.

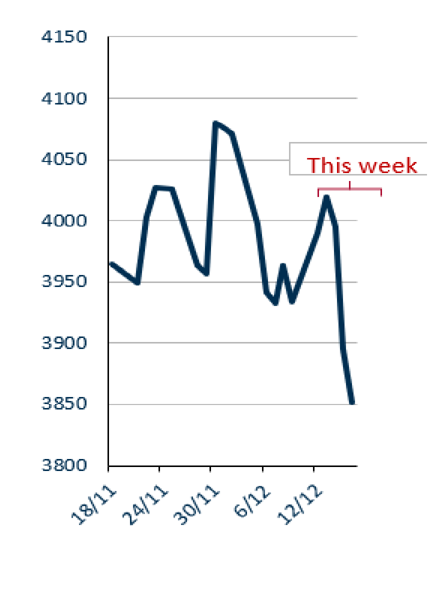
STOCKS | Performance & Fundamental Analysis

Moderna Inc. (NASDAQ: $MRNA) is a biotechnology company that engages in the development of transformative medicines base on messenger ribonucleic acid (mRNA), to improve patients' lives. Infectious diseases, immuno-oncology, rare diseases, autoimmune and cardiovascular diseases are a range of diseases their vaccines and therapeutics are developed for. Its product pipeline includes a range of modalities such as: prophylactic vaccines, cancer vaccines, intertumoral immuno-oncology, localized regenerative therapeutics, systemic secreted therapeutics, and systemic intracellular therapeutics. The price of Moderna's stock soared this week following the news of a personalized cancer vaccine mRNA-4157/V040 in cooperation with Merck's (NYSE: $MRK) cancer treatment Keytruda cut the risk of skin cancer recurrence by 44% compared with a treatment of only Keytruda. In 2023 the two companies plan to begin phase 3 trial in melanoma and will furthermore target additional tumor types. Also the FDA planned to hold a meeting next month regarding whether initial dose of COVID-19 vaccines need to be updated to combat circulating variants. Morgan Stanley analysts put the target price for Moderna at $209 per share from the prior $170 after the personal cancer vaccine that the company announced. They expect a $30,7Billion adjuvant market size. After a small pullback from the week before with a 2.74% loss for the stock, last week Moderna saw a huge rally with a 19.63% just on Tuesday. The price closed on Friday at $193.29, up 8.96% on weekly basis.

Horizon Therapeutics Public Limited Company (NASDAQ: $HZNP) is a biopharmaceutical company focused on researching, developing, and commercializing medicines that address critical needs for people impacted by rare and rheumatic diseases. Horizon, primarily markets products in the United States, which represented 97% of Horizon's 2019 worldwide sales. It was founded in 2005 and is headquartered in Dublin, Ireland. Their stock opened with $9.00 in its Jul 28, 2011 IPO. Moreover, its portfolio comprises 12 medicines in the areas of rare diseases, gout, ophthalmology, and inflammation. On Monday 12/12, Horizon Therapeutics, came to agreement for a buyout of $27.8 billion ($116.50 per share) by Amgen Inc (NASDAQ: $AMGN), boosting its rare diseases portfolio in the biggest buyout in the sector in 2022. This news wasn't exactly a surprise. Horizon revealed a couple of weeks ago that it was in preliminary discussions with Amgen, Johnson & Johnson, and Sanofi about potentially being acquired. The deal for Horizon represents a 47.9% premium from Horizon's closing price Nov. 29, when talks were disclosed. The disclosure by the Ireland-domiciled company was required by Irish law. The deal is expected to close in the first half of next year. If it doesn't happen, Amgen will pay Horizon a termination fee of $974.4 million. As a result, Horizon shares surged 15.49%, at $112.36, continuing the upward trend they had since November, when negotiations started. Last but not least, Horizon's stock price closed at $112.88, on Friday, up 15.99% on weekly basis.

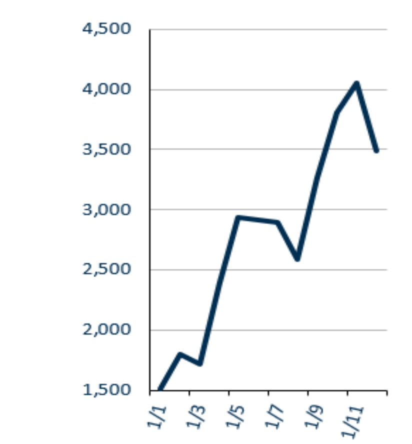
Coupa Software Inc. (NASDAQ: COUP) is an information technology company that specializes in the fields of procurement, finance, and cloud-based financial applications. The company offers cloud spend management (CSM) solutions that help companies control and gain visibility into their indirect spending while generating savings that go directly to the bottom line. The company was incorporated in 2006 and is headquartered in San Mateo, California. Coupa drew the attention of multiple investors recently. Private equity firm Thoma Bravo managed to seal a deal with Coupa. This is an all-cash transaction with an enterprise value of $8.0 billion, resulting in stock

S&P 500 Closing Prices



Source: Bloomberg

US 10Y Bond YTM

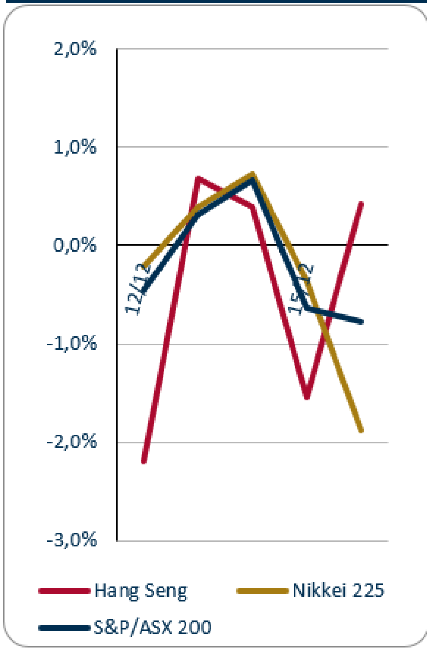


Source: Bloomberg

Nasdaq Movers	Weekly Change
Top Gainers	
Docu Sign	14,46%
Moderna	8,99%
Atlassian Corp	7,23%
Align	4,98%
Seagen	4,52%
Top Losers	
Charter Communications	-19,88%
Tesla	-16,10%
Lucid Group	-15,09%
Netflix	-9,16%
Baidu	-6,17%

S&P 500 Movers	Weekly Change
Top Gainers	
Fortune Brands Home & Security	10,80%
Moderna	8,99%
Halliburton Company	8,60%
Universal Health Services	6,63%
Under Armour	6,51%
Top Losers	
Charter Communications	-19,88%
Tesla	-16,10%
Trimble	-13,34%
United Airlines	-10,71%
Warner Bros	-10,64%

APAC Daily Returns



Source: Bloomberg

skyrocketed to 26.7% increase. Before takeover rumors began, Coupa's stock had lost more than three-quarters of its value, despite having bookings all over the year and increased sales. As a part of this deal, Coupa shareholders will receive $81 per share in cash, indicating a 77% premium to Coupa's closing stock price on November 22. Ever since its inception, the company has been incurring operating losses and does not expect to turn profitable soon due to ongoing investments in research & development and sales & marketing. Given that Thoma Bravo has made several tech acquisitions in the past and has managed to stabilize the businesses under its umbrella, the acquisition of Coupa could bode well for the business. The deal is expected to close in the first half of 2023, assuming Coupa Software's shareholders approve the deal and the software stock gets the necessary regulatory approvals. Company's stock price closed at $78.72 on Friday, up 26.78% on weekly basis.

APAC | Japanese manufacturing misses the forecasts-Chinese chip makers blacklisted by US

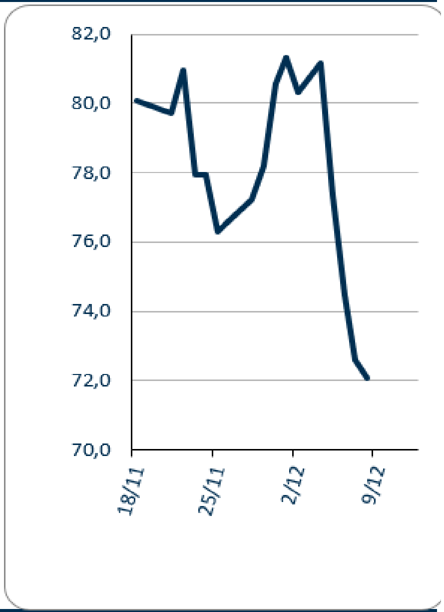
Markets & Economy

This week proved to be the exact opposite from the previous one regarding the Asian markets, as Hang Seng lost 450.2 points or 2.26% of its value closing at 19,450.67, the Japanese Nikkei 225 decreased by 1.34% or 373.89 points closing at 27,527.12 and the Chinese CSI 300 recorded a weekly decline of 1.1% or 44.01 points finishing the week at 3,954.23. The driving factor behind the Asian markets' poor performance were a slew of central banks around the world, most importantly Fed and the ECB, in addition to raising the interest rates once more they announced that the terminal rates would also be higher, meaning that the fight against inflation would take longer than originally expected. In Japan, the manufacturing sector shrank more than the analysts' forecasts which took its toll on many industrial stocks bringing down the Nikkei 225 by almost 2% on Friday's session. Despite that, the overall business activity increased mostly due to the services sector's strong performance which managed to outweigh the PMI weak results. In China, uncertainty looms over the markets despite the fact that major companies avoided delisting from U.S exchanges as U.S accounting watchdog reported that it gained full access to audit firms in the country. Moreover, the Biden administration added 22 major Chinese companies tin the A.I chip sector to a trade blacklisted, extending its breakdown on the country's chip industry. Furthermore, China's economy seems to be losing momentum as the industrial output missed expectations for a 3.6% increase in the past month as it rose by 2.2%, marking its slowest growth since May. This was a result of the disruptions caused to major manufacturing hubs due to the harsh zero covid policy the government implemented in the previous months.

COMMODITIES | Commodities mixed after new cycle of rate hikes and recession worries

This week, oil prices rallied after a series of weekly sessions with huge losses. The two main benchmarks ended the weekly session on the green side, with WTI Crude oil yielding +4.13%, with a closing price of $74.45/b, and Brent surged 3.86%, at 79.04$/b. The week started with an uptrend as supply tightening fears and recession fears, which have been affecting and will continue to affect commodity markets, bolstered prices. Supply worries came after Keystone pipeline which ships 620,000 barrels per day of Canadian crude from Alberta to the United States, remained closed and has raised the prospects of an oil stock decline. Adding to that, president Vladimir Putin of Russia has threatened with a production cut after western powers implemented their plan of a $60/b price cap for seaborne imports of Russian oil. Since then, Russian oil has actually been trading under that price, with countries such as India and China taking the opportunity to fill up their stock. The lower-than-expected CPI was another important catalyst boosting prices. On Thursday, prices reversed after a series of economic indexes came lower and the new rate hike by the FED, and all the major central banks, sent investors away. Oil prices were pressured by an increase of the U.S. dollar, a natural effect of rate hikes, and

Crude Oil WTI Futures



Source: Bloomberg

a drop in PMI measures which could signal a forthcoming drop in demand for raw material. U.S. inventories rose by a staggering 10.2 million barrels in the week to December 9, adding to the pressure. U.S. Natural Gas prices had a roller coaster weekly session with prices settling higher, at $6.6/MMbtu, with a gain of 5.68%. Prices were mainly affected by a mix of a stronger U.S. dollar, the grim outlook of the economy and warmer than normal temperatures. The main contributor to the weekly gain was the report by the EIA of a 50 bcf draw in inventories for the just-ended week to Dec. 9 despite the warmer weather, pushing prices. European Natural Gas, faced a big 15.54% loss after four consecutive weeks of gains. European Natural gas benchmark ICE Dutch TTF consolidated at €117.5/mega-watt hour. Gold prices also faced a wild week with prices surging on Tuesday to a 6-month high price and then tumbling to the closing price of $1800.2/ounce, losing 0.58%. Gold has largely lost its status as a safe haven this year, as rising U.S. interest rates pushed up the opportunity cost of holding non-yielding assets. This saw the dollar largely overtake gold as the market’s favored safe haven, despite growing fears of a U.S. recession. Likewise, this week gold skyrocketed after the fall of inflation from 7.7% in October to 7.1% in November, but after the new rate hike and the new surge of the U.S. dollar led to the fall of the precious metal slightly over the $1800 mark.

Dec 2022	This week's economic calendar
MON 19	EUR:German Ifo Business Climate Index(Dec)(fx:87.4)
	GBP:CBI Industrial Trends Orders (Dec)(fx:-9)
	CNY:PBoC Loan Prime Rate
	JPY:BoJ Monetary Policy Statement
	JPY:BoJ Press Conference
	AUD: RBA Meeting Minutes
TUE 20	EUR: German PPI(MoM)(Nov) (fx: -2.2%)
	USD:Building Permits (Nov)(fx:1.483M)
	CAD: Core Retail Sales (MoM)(Oct)(fx:1.5%)
	USD:Housing Starts(Nov)(fx:1.400M)
	CAD: Retail Sales (MoM)(Oct)(fx:1.5%)
	USD:API Crude Oil Stock
WED 21	USD:Current Account(USD)(Nov)(fx:-4.90B)
	INR: RBI MPC Meeting Minutes
	CAD:Core CPI (MoM)(Nov)
	USD:CB Consumer Confidence(Dec)(fx:101.0)
	USD: Existing Home Sales (Nov)(fx:4.20M)
	USD: Crude Oil Inventories
	USD:20-Year Bond Auction
THU 22	GBP: GDP(YoY)(fx:2.4%)
	GBP: GDP(QoQ) (fx: -0.2%)
	USD: GDP(QoQ)(Q3) (fx:2.9%)
	USD:Initial Jobless Claims (fx:225K)
	RUB:Central Bank Reserves(USD)
FRI 23	USD:Core Durable Goods Orders(MoM)(Nov)(fx:0.1%)
	USD:Core PCE Price Index (MoM)(Nov)(fx:0.2%)
	USD:New Home Sales(Nov)(fx:595K)
	USD:New Home Sales(MoM)(Nov)
	USD:CFTC Nasdaq 100 speculative net positions
	USD:U.S. Baker Hughes Oil Rig Count

What to look for this week

On Monday 04:00 the German IFO Business Climate Index is going to be released with an expectation increase up to 87.4, which will be very positive for the EUR and the Bank of Japan Monetary Policy Statement is about to be released. The next day, USD is expected to be influenced by the Building Permits release which analysts estimate that will drop down to 1.483M. Wednesday will be an important day for USD as CB Consumer Confidence, a major economic indicator for the economic activity, will be released with a forecast at 101.0. At the same time, another key indicator of the overall economic strength is going to be released, the Existing Home Sales (USD) one, which is expected to be about 4.20M - lower than the previous (4.43M). On Thursday, the Gross Domestic Product (GDP)(QoQ) will be announced for both UK and US. At this quarter, the UK GDP is forecasted to be at – 0.2%, which will have a negative impact on the GBP, while US GDP is expected to be stable at 2.9%. On the same day, UK yearly GDP is about to be announced too and analysts estimate to decrease, unfortunately, down to 2.4%. Lastly, on Friday, the main event is that markets of the United Kingdom, New Zealand and Australia will close earlier than normal due to the upcoming Christmas holidays, whereas the U.S. New Home Sales is estimated to decrease down to 595K, causing problems to the USD.

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