

Economic and Fixed Income Indicators

| Currencies | 7/19/2023 | Daily (%) | MTD (%) | YTD (%) |
|-----------------------------------|-----------|------------|----------|----------|
| EUR/USD | 1.12 | (0.2) | 2.7 | 4.6 |
| GBP/USD | 1.29 | (0.7) | 1.9 | 7.1 |
| AUD/USD | 0.68 | (0.6) | 1.6 | (0.6) |
| USD/CHF | 0.86 | 0.1 | (4.1) | (7.1) |
| USD/JPY | 139.7 | 0.6 | (3.2) | 6.5 |
| Dollar Index | 100.3 | 0.3 | (2.6) | (3.1) |
| Bloomberg Asia Dollar Index | 92.7 | (0.5) | 1.2 | (2.0) |
| USD/KRW | 1,266 | 0.4 | (2.0) | 0.0 |
| USD/SGD | 1.33 | 0.2 | (3.0) | (1.1) |
| USD/CNY | 7.22 | 0.5 | (0.4) | 4.7 |
| USD/INR | 82.1 | 0.1 | 0.1 | (0.8) |
| USD/IDR | 14,995 | (0.1) | 0.0 | (3.7) |
| USD/IDR 1 Month NDF | 15,005 | 0.1 | (0.3) | (3.4) |
| USD/MYR | 4.54 | 0.0 | (2.7) | 3.1 |
| USD/THB | 34.0 | (0.5) | (4.0) | (1.6) |
| USD/PHP | 54.5 | 0.2 | (1.3) | (2.2) |
| Rates | 7/19/2023 | Daily (bp) | MTD (bp) | YTD (bp) |
| US Treasuries 10-Year | 3.75 | (3.7) | (8.8) | (12.7) |
| Germany Bund 10-Year | 2.44 | 4.9 | 4.6 | (13.3) |
| Japan JGB 10-Year | 0.47 | (1.4) | 6.5 | 4.4 |
| LIBOR Overnight | 5.06 | 0.0 | 0.0 | 74.4 |
| LIBOR 1-Month | 5.37 | 0.0 | 15.1 | 97.7 |
| Indonesia INDOGB 10-Year | 6.21 | 0.4 | (5.3) | (73.2) |
| Indonesia INDOGB 5-Year | 5.88 | (1.1) | (3.0) | (32.3) |
| Indonesia INDOGB 2-Year | 6.03 | 0.7 | 16.1 | (4.5) |
| INDOGB-UST (bp) | 245.97 | 6.3 | 3.5 | (60.6) |
| Indonesia INDON 10-Year | 4.77 | (3.8) | (5.4) | (2.8) |
| Indonesia INDON 5-Year | 4.88 | (3.2) | 9.6 | 19.6 |
| Indonesia INDON 2-Year | 5.40 | (0.5) | 17.6 | 60.4 |
| INDON-UST (bp) | 101.97 | 2.0 | 3.4 | 9.8 |
| Indonesia Corporate AAA 10-Year | 7.07 | 0.4 | (13.8) | (67.8) |
| Indonesia Corporate AAA 5-Year | 6.61 | (1.1) | (8.5) | (19.0) |
| Indonesia Corporate AAA 2-Year | 6.64 | 0.7 | 11.3 | 15.3 |
| INDONIA | 5.57 | (5.7) | (34.4) | 54.5 |
| JIBOR 1-Month | 6.40 | 0.0 | 0.4 | 19.9 |
| Bond Indexes | 7/19/2023 | Daily (%) | MTD (%) | YTD (%) |
| S&P Global Bond Developed Index | 179.8 | 0.0 | 0.2 | 2.2 |
| EMBI Global Index | 808.7 | 0.1 | 1.4 | 5.3 |
| iShare USD EMBI Index | 87.1 | 0.1 | 1.3 | 2.8 |
| ICBI Index | 369.1 | 0.1 | 0.5 | 7.1 |
| IDMA Index | 102.2 | 0.0 | 1.0 | 4.9 |
| INDOBeX Government Bond Index | 361.5 | 0.1 | 0.6 | 7.2 |
| INDOBeX Corporate Bond Index | 412.2 | 0.0 | 0.4 | 5.1 |
| Prices | 7/19/2023 | Daily (%) | MTD (%) | YTD (%) |
| ID CDS 5-Year | 80.7 | (0.6) | (6.3) | (19.0) |
| JCI | 6,830 | (0.5) | 2.5 | (0.3) |
| S&P-Goldman Sachs Commodity Index | 572.0 | 1.7 | 5.7 | (6.3) |
| FR0095 | 102.24 | 0.0 | 0.1 | 3.1 |
| FR0096 | 105.74 | (0.1) | 0.3 | 5.2 |
| FR0097 | 107.94 | 0.1 | 1.7 | 7.8 |
| FR0098 | 107.63 | (0.1) | 1.2 | 7.1 |

Source: Bloomberg, SSI Research

Foreign interest towards domestic bond market is hampered by banking interest rate mismatch

Foreign interest towards the prospects of domestic bonds was somewhat hampered by the doubtful atmosphere among domestic investors. The large interest of foreign investors was reflected in the foreign capital inflow into the bond market following the announcement of US CPI inflation data on Wednesday (7/12), which came in at USD 527.4mn. Unfortunately, the yields on INDOGB 2Y and 10Y were stuck at 6% and 6.2%, respectively, mainly due to banking interest rate mismatch; The JIBOR 1W and 1M rates, which act as the bottom for the 2Y and 10Y yields, were stuck at 6% and 6.4%, respectively. The frustration of foreign investors led to a theory that the INDOGB 10Y yield could drop lower than the 7DRRR (current: 5.75%). In our opinion, the 5.75% rate is no longer necessary, given the slowdown in inflation (current: 3.5% yoy; the figure might drop to 2.6% yoy by the end of the year). We believe that investors' frustration might be overcome if Bank Indonesia starts its rate hike cut cycle. We expect the INDOGB 10Y yield and rupiah to stay in their respective ranges of 6.2-6.3% and IDR 14,950-15,050 per USD today.

Fixed Income News: Incoming bids at the July 18 SBSN auction came in at IDR 24.3tn (7/4: IDR 34tn). The drop in demand in the SBSN auction was a complete contrast from the increase in demand at the latest SUN auction (7/11) to IDR 47.8tn (6/27: IDR 37.6tn). In the SBSN auction, the 13Y instrument PBS037 reported the largest issuance value (IDR 1.8tn), followed by 16Y (PBS034) and 25Y (PBS033) instruments (IDR 1.7tn each). (DJPPR)

Global Economic News: UK CPI inflation fell to 7.9% yoy in June (May: 8.7% yoy; Cons: 8.2% yoy). Its core CPI inflation also fell to 6.9% yoy (May: & Cons: 7.1% yoy). The larger-than-expected drop in inflation reduced expectations of the August rate hike from 50 bps to 25 bps. We predict BOE's FY23 terminal interest rate to reach 5.5%. (Financial Times)

Domestic Economic News: Foreign debt fell to USD 398.3bn in May (Apr: USD 403bn), mainly caused by the drop in the value of private foreign debt by USD 3bn to USD 196.5bn and government foreign debt by USD 1.5bn to USD 192.6bn. Therefore, the ratio of foreign debt to GDP fell to 29.7% (Apr: 30%). We believe that the drop in foreign debt can reduce Indonesia's external financial risks amid uncertainty over the ongoing policy rate hikes in developed countries. (Kontan)

Recommendation: FR0040, FR0081, FR0084, FR0086, FR0089, FR0094, PBS017, PBS036.

Lionel Priyadi

Macro Strategist

lionel.priyadi@samuel.co.id

+6221 2854 8854

Economic Calendar

| Time (Jakarta) | Country | Data and Event | Period | Survey | Prior |
|------------------|---------|------------------------|--------|--------|-------|
| 07/20/2023 08:15 | CH | 5-Year Loan Prime Rate | 20-Jul | 4.20% | 4.20% |
| 07/20/2023 08:15 | CH | 1-Year Loan Prime Rate | 20-Jul | 3.55% | 3.55% |
| 07/20/2023 19:30 | US | Initial Jobless Claims | 15-Jul | 241k | 237k |
| 07/20/2023 21:00 | US | Existing Home Sales | Jun | 4.21m | 4.30m |

JN = Japan - US = United States - CH = China - EC = Eurozone Aggregate - ID = Indonesia - GE = Germany - FR = France - UK = United Kingdom

Daily Economic & Fixed Income Report

Economic-Currencies-Commodities-Fixed Income-Politics-Policies



Economic & Fixed Income Analysis

20 July 2023

| No. | Series | Issue Date | Maturity Date | Tenure (Year) | Coupon Rate | Actual Price | Yield to Maturity | Yield Curve | Valuation Price | Spread to YC (bps) | Recommendation | Duration |
|-----|--------|------------|---------------|---------------|-------------|--------------|-------------------|-------------|-----------------|--------------------|----------------|----------|
| 1 | FR39 | 8/24/2006 | 8/15/2023 | 0.07 | 11.8% | 100.57 | 2.3% | 2.9% | 100.65 | (63.19) | Expensive | 0.07 |
| 2 | FR70 | 8/29/2013 | 3/15/2024 | 0.66 | 8.4% | 101.61 | 5.8% | 3.4% | 103.20 | 235.94 | Cheap | 0.64 |
| 3 | FR77 | 9/27/2018 | 5/15/2024 | 0.82 | 8.1% | 101.83 | 5.8% | 3.6% | 103.60 | 210.94 | Cheap | 0.79 |
| 4 | FR44 | 4/19/2007 | 9/15/2024 | 1.16 | 10.0% | 104.47 | 5.9% | 4.1% | 106.62 | 177.72 | Cheap | 1.10 |
| 5 | FR81 | 8/1/2019 | 6/15/2025 | 1.91 | 6.5% | 100.90 | 6.0% | 4.9% | 102.91 | 109.69 | Cheap | 1.80 |
| 6 | FR40 | 9/21/2006 | 9/15/2025 | 2.16 | 11.0% | 110.25 | 5.8% | 5.1% | 111.99 | 76.07 | Cheap | 1.94 |
| 7 | FR84 | 5/4/2020 | 2/15/2026 | 2.58 | 7.3% | 103.46 | 5.8% | 5.3% | 104.58 | 44.75 | Cheap | 2.34 |
| 8 | FR86 | 8/13/2020 | 4/15/2026 | 2.74 | 5.5% | 99.09 | 5.9% | 5.4% | 100.23 | 45.46 | Cheap | 2.56 |
| 9 | FR56 | 9/23/2010 | 9/15/2026 | 3.16 | 8.4% | 107.18 | 5.8% | 5.6% | 107.99 | 25.30 | Cheap | 2.80 |
| 10 | FR37 | 5/18/2006 | 9/15/2026 | 3.16 | 12.0% | 117.45 | 5.8% | 5.6% | 118.36 | 25.39 | Cheap | 2.69 |
| 11 | FR90 | 7/8/2021 | 4/15/2027 | 3.74 | 5.1% | 97.98 | 5.7% | 5.8% | 97.87 | (3.44) | Expensive | 3.42 |
| 12 | FR59 | 9/15/2011 | 5/15/2027 | 3.82 | 7.0% | 103.50 | 6.0% | 5.8% | 104.11 | 16.70 | Cheap | 3.36 |
| 13 | FR42 | 1/25/2007 | 7/15/2027 | 3.99 | 10.3% | 114.83 | 6.0% | 5.8% | 115.54 | 17.27 | Cheap | 3.37 |
| 14 | FR94 | 3/4/2022 | 1/15/2028 | 4.50 | 5.6% | 98.40 | 6.0% | 5.9% | 98.69 | 7.68 | Cheap | 3.99 |
| 15 | FR47 | 8/30/2007 | 2/15/2028 | 4.58 | 10.0% | 115.96 | 6.0% | 6.0% | 116.03 | (0.08) | Expensive | 3.74 |
| 16 | FR64 | 8/13/2012 | 5/15/2028 | 4.83 | 6.1% | 100.44 | 6.0% | 6.0% | 100.55 | 2.32 | Cheap | 4.17 |
| 17 | FR95 | 8/19/2022 | 8/15/2028 | 5.08 | 6.4% | 102.24 | 5.9% | 6.0% | 101.48 | (17.67) | Expensive | 4.34 |
| 18 | FR99 | 1/27/2023 | 1/15/2029 | 5.50 | 6.4% | 101.72 | 6.0% | 6.1% | 101.43 | (6.38) | Expensive | 4.68 |
| 19 | FR71 | 9/12/2013 | 3/15/2029 | 5.66 | 9.0% | 113.89 | 6.1% | 6.1% | 113.66 | (5.36) | Expensive | 4.55 |
| 20 | FR78 | 9/27/2018 | 5/15/2029 | 5.83 | 8.3% | 110.15 | 6.1% | 6.1% | 110.27 | 1.51 | Cheap | 4.68 |
| 21 | FR52 | 8/20/2009 | 8/15/2030 | 7.08 | 10.5% | 123.80 | 6.3% | 6.2% | 124.06 | 3.10 | Cheap | 5.23 |
| 22 | FR82 | 8/1/2019 | 9/15/2030 | 7.16 | 7.0% | 104.18 | 6.3% | 6.2% | 104.28 | 1.36 | Cheap | 5.69 |
| 23 | FRSDG1 | 10/27/2022 | 10/15/2030 | 7.25 | 7.4% | 104.75 | 6.5% | 6.3% | 106.44 | 28.09 | Cheap | 5.71 |
| 24 | FR87 | 8/13/2020 | 2/15/2031 | 7.58 | 6.5% | 101.35 | 6.3% | 6.3% | 101.32 | (0.72) | Expensive | 5.98 |
| 25 | FR85 | 5/4/2020 | 4/15/2031 | 7.75 | 7.8% | 108.91 | 6.3% | 6.3% | 108.85 | (1.50) | Expensive | 5.98 |
| 26 | FR73 | 8/6/2015 | 5/15/2031 | 7.83 | 8.8% | 115.09 | 6.3% | 6.3% | 114.99 | (2.03) | Expensive | 5.83 |
| 27 | FR54 | 7/22/2010 | 7/15/2031 | 7.99 | 9.5% | 120.41 | 6.2% | 6.3% | 119.83 | (8.88) | Expensive | 5.91 |
| 28 | FR91 | 7/8/2021 | 4/15/2032 | 8.75 | 6.4% | 100.96 | 6.2% | 6.3% | 100.19 | (11.69) | Expensive | 6.77 |
| 29 | FR58 | 7/21/2011 | 6/15/2032 | 8.92 | 8.3% | 112.78 | 6.3% | 6.4% | 112.76 | (0.81) | Expensive | 6.52 |
| 30 | FR74 | 11/10/2016 | 8/15/2032 | 9.08 | 7.5% | 108.03 | 6.3% | 6.4% | 107.76 | (4.06) | Expensive | 6.69 |
| 31 | FR96 | 8/19/2022 | 2/15/2033 | 9.59 | 7.0% | 105.74 | 6.2% | 6.4% | 104.37 | (18.91) | Expensive | 7.05 |
| 32 | FR65 | 8/30/2012 | 5/15/2033 | 9.83 | 6.6% | 102.34 | 6.3% | 6.4% | 101.67 | (9.38) | Expensive | 7.25 |
| 33 | FR68 | 8/1/2013 | 3/15/2034 | 10.66 | 8.4% | 115.71 | 6.3% | 6.4% | 114.90 | (10.06) | Expensive | 7.38 |
| 34 | FR80 | 7/4/2019 | 6/15/2035 | 11.92 | 7.5% | 109.09 | 6.4% | 6.5% | 108.54 | (6.48) | Expensive | 8.11 |
| 35 | FR72 | 7/9/2015 | 5/15/2036 | 12.83 | 8.3% | 115.53 | 6.4% | 6.5% | 115.23 | (3.54) | Expensive | 8.29 |
| 36 | FR88 | 1/7/2021 | 6/15/2036 | 12.92 | 6.3% | 99.96 | 6.3% | 6.5% | 97.96 | (23.21) | Expensive | 8.90 |
| 37 | FR45 | 5/24/2007 | 5/15/2037 | 13.83 | 9.8% | 122.92 | 7.1% | 6.5% | 129.31 | 60.92 | Cheap | 8.23 |
| 38 | FR93 | 1/6/2022 | 7/15/2037 | 14.00 | 6.4% | 100.13 | 6.4% | 6.5% | 98.79 | (14.79) | Expensive | 9.35 |
| 39 | FR75 | 8/10/2017 | 5/15/2038 | 14.83 | 7.5% | 109.47 | 6.5% | 6.5% | 109.19 | (3.05) | Expensive | 9.23 |
| 40 | FR98 | 9/15/2022 | 6/15/2038 | 14.92 | 7.1% | 107.63 | 6.3% | 6.5% | 105.67 | (19.97) | Expensive | 9.46 |
| 41 | FR50 | 1/24/2008 | 7/15/2038 | 15.00 | 10.5% | 136.78 | 6.6% | 6.5% | 137.65 | 7.01 | Cheap | 8.75 |
| 42 | FR79 | 1/7/2019 | 4/15/2039 | 15.75 | 8.4% | 117.70 | 6.6% | 6.5% | 117.89 | 1.46 | Cheap | 9.43 |
| 43 | FR83 | 11/7/2019 | 4/15/2040 | 16.75 | 7.5% | 108.73 | 6.6% | 6.6% | 109.54 | 7.41 | Cheap | 9.97 |
| 44 | FR57 | 4/21/2011 | 5/15/2041 | 17.84 | 9.5% | 129.50 | 6.6% | 6.6% | 130.56 | 8.10 | Cheap | 9.70 |
| 45 | FR62 | 2/9/2012 | 4/15/2042 | 18.75 | 6.4% | 98.35 | 6.5% | 6.6% | 97.84 | (4.94) | Expensive | 10.99 |
| 46 | FR92 | 7/8/2021 | 6/15/2042 | 18.92 | 7.1% | 105.64 | 6.6% | 6.6% | 105.86 | 1.83 | Cheap | 10.69 |
| 47 | FR97 | 8/19/2022 | 6/15/2043 | 19.92 | 7.1% | 107.93 | 6.4% | 6.6% | 105.90 | (17.64) | Expensive | 11.06 |
| 48 | FR67 | 7/18/2013 | 2/15/2044 | 20.59 | 8.8% | 121.60 | 6.8% | 6.6% | 124.08 | 19.02 | Cheap | 10.54 |
| 49 | FR76 | 9/22/2017 | 5/15/2048 | 24.84 | 7.4% | 106.71 | 6.8% | 6.6% | 109.05 | 18.26 | Cheap | 11.81 |
| 50 | FR89 | 1/7/2021 | 8/15/2051 | 28.09 | 6.9% | 102.29 | 6.7% | 6.6% | 102.92 | 4.79 | Cheap | 12.62 |

Daily Economic & Fixed Income Report

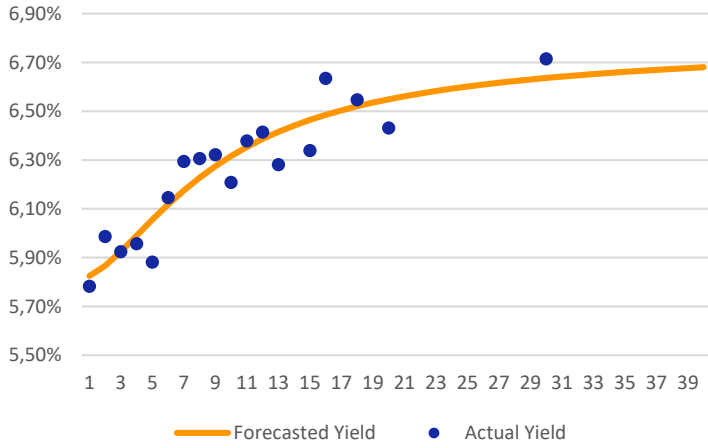
Economic-Currencies-Commodities-Fixed Income-Politics-Policies



Economic & Fixed Income Analysis

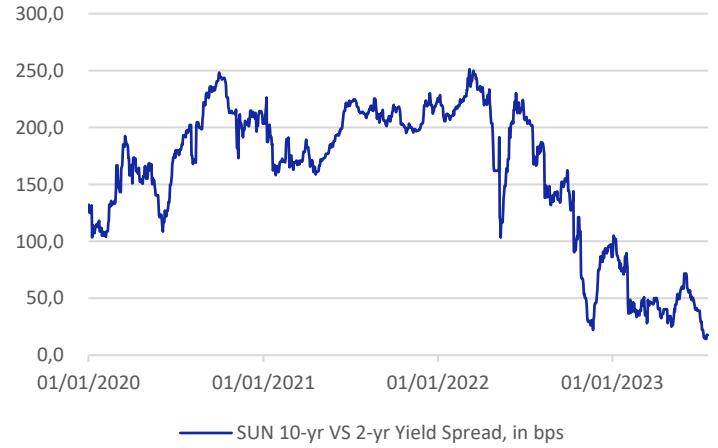
20 July 2023

Chart 1. Samuel's Yield Curve Forecast



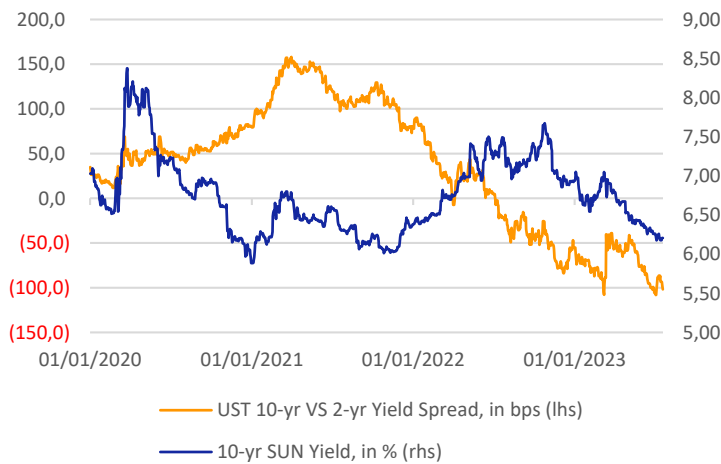
Source: Bloomberg

Chart 2. Leading Indicator for Indonesian Economic Recession



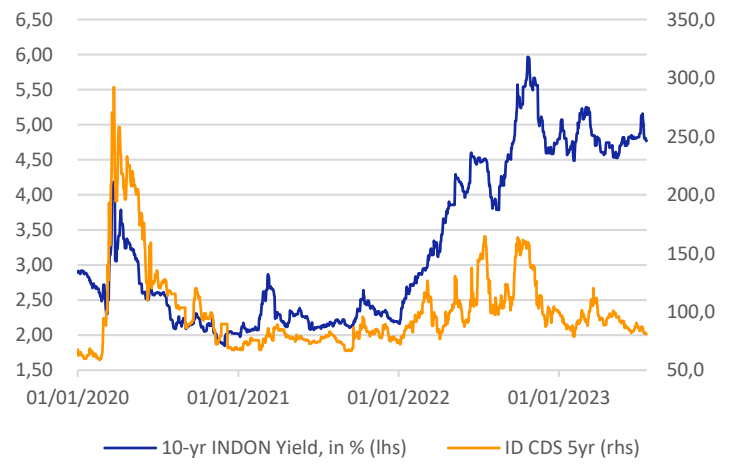
Source: Bloomberg

Chart 3. Leading Indicator for US-Indonesia Bond Market Linkage



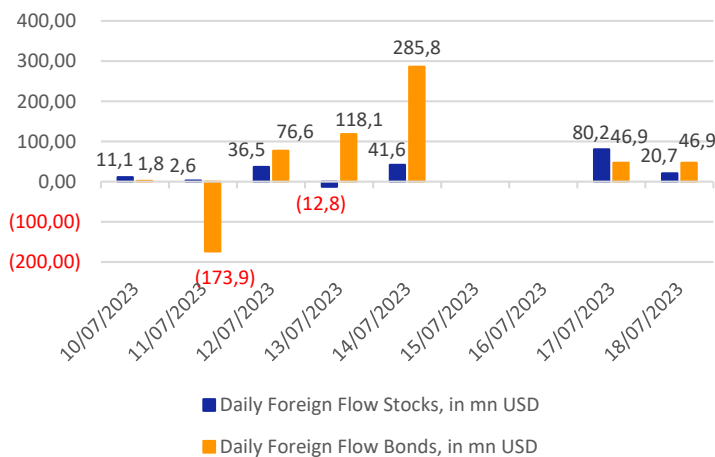
Source: Bloomberg

Chart 4. Leading Indicator for Bond Market Volatility



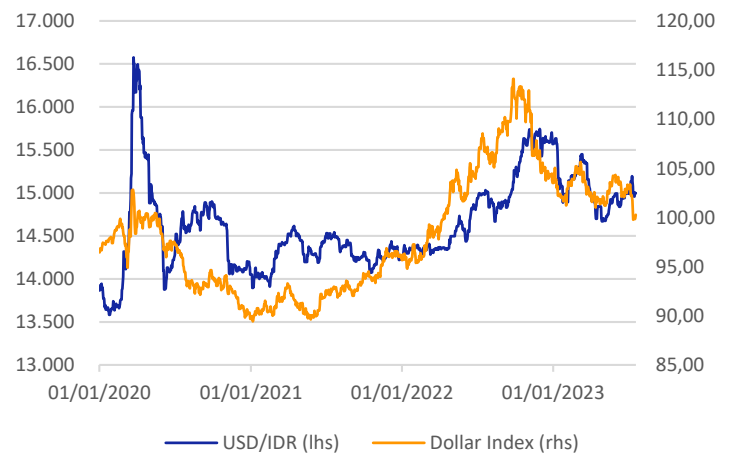
Source: Bloomberg

Chart 5. Foreign Capital Flow Indicator



Source: Bloomberg

Chart 6. Exchange Rate Indicator



Source: Bloomberg

Daily Economic & Fixed Income Report

Economic-Currencies-Commodities-Fixed Income-Politics-Policies



Economic & Fixed Income Analysis

20 July 2023

| Research Team | | | |
|---------------------------------|--|--------------------------------|-----------------|
| Prasetya Gunadi | Head of Equity Research, Strategy, Banking, Digital Banks | prasetya.gunadi@samuel.co.id | +6221 2854 8320 |
| Lionel Priyadi | Macro Equity Strategist | lionel.priyadi@samuel.co.id | +6221 2854 8854 |
| Muhamad Alfatih, CSA, CTA, CFTe | Senior Technical Analyst | m.alfatih@samuel.co.id | +6221 2854 8129 |
| William Mamudi, CFTe, CMT, CCT | Senior Technical Analyst | william.mamudi@samuel.co.id | +6221 2854 8382 |
| Yosua Zisokhi | Cement, Cigarette, Paper, Plantation, Telco Infra, Chemicals | yosua.zisokhi@samuel.co.id | +6221 2854 8387 |
| M. Farras Farhan | Media, Poultry, Oil & Gas, Technology | farras.farhan@samuel.co.id | +6221 2854 8346 |
| Pebe Peresia | Automotive, Consumer Staples, Retail | pebe.peresia@samuel.co.id | +6221 2854 8339 |
| Juan Oktavianus Harahap | Coal, Metal Mining | juan.oktavianus@samuel.co.id | +6221 2854 8846 |
| Jonathan Guyadi | Banking, Healthcare, Telco | jonathan.guyadi@samuel.co.id | +6221 2854 8321 |
| Adolf Richardo | Editor | adolf.richardo@samuel.co.id | +6221 2864 8397 |
| Ashalia Fitri Yuliana | Research Associate | ashalia.fitri@samuel.co.id | +6221 2854 8389 |
| Daniel Aditya Widjaja | Research Associate | daniel.aditya@samuel.co.id | +6221 2854 8322 |
| Laurencia Hiemas | Research Associate | laurencia.hiemas@samuel.co.id | +6221 2854 8392 |
| Brandon Boedhiman | Research Associate | brandon.boedhiman@samuel.co.id | +6221 2854 8392 |

| Equity Institutional Team | | | |
|---------------------------|------------------------------------|---------------------------------|-----------------|
| Benny Bambang Soebagjo | Head of Institutional Equity Sales | benny.soebagjo@samuel.co.id | +6221 2854 8312 |
| Ronny Ardianto | Institutional Equity Sales | ronny.ardianto@samuel.co.id | +6221 2854 8399 |
| Anthony Yunus | Institutional Equity Sales | anthony.yunus@samuel.co.id | +6221 2854 8314 |
| Widya Meidrianto | Institutional Equity Sales | widya.meidrianto@samuel.co.id | +6221 2854 8317 |
| Fachruly Fiater | Institutional Sales Trader | fachruly.fiater@samuel.co.id | +6221 2854 8325 |
| Lucia Irawati | Institutional Sales Trader | lucia.irawati@samuel.co.id | +6221 2854 8173 |
| Alexander Tayus | Institutional Equity Dealer | alexander.tayus@samuel.co.id | +6221 2854 8319 |
| Leonardo Christian | Institutional Equity Dealer | leonardo.christian@samuel.co.id | +6221 2854 8147 |

| Equity Retail Team | | | |
|---------------------|------------------------------|--------------------------------|-----------------|
| Joseph Soegandhi | Head of Equity | joseph.soegandhi@samuel.co.id | +6221 2854 8872 |
| Damargumilang | Head of Equity Retail | damargumilang@samuel.co.id | +6221 2854 8309 |
| Clarice Wijana | Head of Equity Sales Support | clarice.wijana@samuel.co.id | +6221 2854 8395 |
| Gitta Wahyu Retnani | Equity Sales & Trainer | gitta.wahyu@samuel.co.id | +6221 2854 8365 |
| Vincentius Darren | Equity Sales | darren@samuel.co.id | +6221 2854 8348 |
| Michael Alexander | Equity Sales | michael.alexander@samuel.co.id | +6221 2854 8369 |
| Sylviawati | Equity Sales | sylviawati@samuel.co.id | +6221 2854 8112 |
| Wandha Ahmad | Equity Sales | wandha.ahmad@samuel.co.id | +6221 2854 8316 |
| Handa Sandiawan | Equity Sales | handa.sandiawan@samuel.co.id | +6221 2854 8302 |
| Denzel Obaja | Equity Sales | denzel.obaja@samuel.co.id | +6221 2854 8342 |
| Wahyudi Budiyo | Dealer | wahyudi.budiyo@samuel.co.id | +6221 2854 8152 |

| Fixed Income Sales Team | | | |
|--------------------------|----------------------|-------------------------------|-----------------|
| R. Virine Tresna Sundari | Head of Fixed Income | virine.sundari@samuel.co.id | +6221 2854 8170 |
| Rudianto Nugroho | Fixed Income Sales | rudianto.nugroho@samuel.co.id | +6221 2854 8306 |
| Sany Rizal Keliobas | Fixed Income Sales | sany.rizal@samuel.co.id | +6221 2854 8337 |
| Safitri | Fixed Income Sales | safitri@samuel.co.id | +6221 2854 8376 |
| Khairanni | Fixed Income Sales | khairanni@samuel.co.id | +6221 28548104 |
| Saldy Achmad Yanuar | Fixed Income Sales | saldy.achmad@samuel.co.id | +6221 28548384 |
| Nadya Attahira | Fixed Income Sales | nadya.attahira@samuel.co.id | +6221 2854 8305 |

DISCLAIMERS: Analyst Certification: The views expressed in this research accurately reflect the personal views of the analyst(s) about the subject securities or issuers and no part of the compensation of the analyst(s) was, is, or will be directly or indirectly related to the inclusion of specific recommendations or views in this research. The analyst(s) principally responsible for the preparation of this research has taken reasonable care to achieve and maintain independence and objectivity in making any recommendations. This document is for information only and for the use of the recipient. It is not to be reproduced or copied or made available to others. Under no circumstances is it to be considered as an offer to sell or solicitation to buy any security. Any recommendation contained in this report may not be suitable for all investors. Moreover, although the information contained herein has been obtained from sources believed to be reliable, its accuracy, completeness and reliability cannot be guaranteed. All rights reserved by PT Samuel Sekuritas Indonesia.