Yield curve inversion: One year on (Part I)
On recession: False alarm or Cassandra warning?

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Summary

- The disinflation process in the US throughout 2023 is largely thanks to improvements in the supply condition, suppressing inflation expectations in the US to a degree without thus far plunging the economy into a recession.
- Pandemic tailwinds and still-ample liquidity within the system help the US economy to defy the recession expectation as the now-positive real wage growth help to bolster US consumers' purchasing power while the positive wealth effect encourages further consumption.
- The declining appetite for expansion among businesses in the US signals that the US economy remains exposed to the threat of a recession, which could be exacerbated by the risk of over-tightening following the Fed's adherence to the 2% inflation target.

- When the 10-2Y yield curve on US Treasuries began to invert on July 5 last year, market commentators took it as a sign of an impending recession. Fast forward a year, the US economy has remained resilient despite a record-breaking inversion. Indeed, strong macro data in the first half of 2023 has led to a growing belief that the US economy may defy the gravitational pull of a recession this time around.
- So what is happening with this trusty oracle of recession? Was it a false alarm, or is it a warning call that has gone somehow unheeded? We are going to examine it in a special 'anniversary' review/preview two-parter: this report focusing on recession risk and the next one on inflation outlook.

Putting the UST inversion on trial

- Allegations that UST inversion has 'misfired' is interesting, since it was never an explicit measure of recession probability to begin with. **Rather, it is primarily an indicator of inflation expectations**. When yields go higher in the short-term (relative to the long-term), it reflects the expectation that the price level may be too high for the Fed's preference ***(see Chart 1),*** necessitating tighter financing conditions with the hope that inflation (and subsequently interest rates) will be lower in the longer term.

- But this drop in inflation can be achieved in two ways: by reducing aggregate demand, which central bankers could engineer via rate hikes – or by increasing aggregate supply. The former usually means inflation, the latter not necessarily so. **We argue that the supply effect has dominated during the past year, allowing inflation to normalise without too much of a demand slowdown.** This was certainly helped by the fact that the initial impetus of high inflation came mainly from the supply-side, i.e. supply chain issues and the Russia-Ukraine War.

- US energy policies did a lot of legwork here, with the release of SPR and the price cap on Russian oil working to nullify the tactical advantages of oil exporters – despite the continued determination of OPEC+ to cut output – at least in the short-term. The end of lockdowns also helped, inasmuch as it shifted demand away from goods – which suffered from clogged-up supply chains – and towards services.

- Interestingly, China might just be America's inadvertent ally in its fight against inflation. China's structural strength in manufacturing has turned into an Achilles' heel, as feeble domestic demand led to an acute oversupply problem, making it essentially an exporter of deflation over the past year. Sluggish oil demand from China has also weakened the bargaining power of the Saudis and Russia vis-à-vis the West with respect to oil pricing.

"The disinflation process in 2023 is largely thanks to the low-hanging fruit of supply-side improvement"

- All these help explain why US inflation has declined to 4.0%, versus 9.1% in Jun-22 (when inversion was about to happen). But there is a problem here: the Fed's goal continues to be 2.0% inflation, whereas its preferred inflation measure (core PCE inflation) continues to hover just south of 5% without much signs of decline in the past 7 months. **So if the aforementioned 'low-hanging fruits' on the supply-side has been picked clean, the only path to reduce inflation further is through demand-side curtailment.**

Unstoppable demand vs immovable Fed

- So how had US demand defy the gravitational pull of an inverted UST yield curve? We point to several pandemic tailwinds that continue to blow the US economy towards positive growth. The first and perhaps tailwind was the excess savings from the pandemic-era stimulus check, which had allowed US consumers to maintain their consumption amidst the high inflation.

- The second tailwind is the shrinking workforce following the pandemic, which gives workers a greater say on their income level. The continued increase in nominal wage growth may not mean too much for US consumers in 2022, as the increase in wages does not compensate for the galloping inflation. In 2023, however, the sticky wages have finally catch-up with the price level ***(see Chart 2),*** translating to an upward trend in real wage growth (and thus, more purchasing power) as inflation continues to dive lower.

- Finally, households are also having greater net worth, thanks largely to the continued strength of the US residential property and capital markets. The former, as we mentioned in last week's report, was partly caused by a dearth of sellers in a rising rate environment. This has boosted new housing constructions and slows down the decline in housing prices – which normally would be the result of tighter Fed policies. Given the outsized importance of housing in a typical household's portfolio, the ensuing positive wealth effect probably plays a not-so-minor role in encouraging US consumers to keep consuming.

- Another factor that help generate a positive wealth effect for US consumers is the rebound in stocks value, which have now appreciated by 15.33% YTD (S&P 500). Apart from the hype surrounding AI stocks, the 2023 rally in the stock market may seem odd, given the drop in corporate earnings. What appears to be behind the rally, however, is the fact that **the US economy continue to benefit from ample liquidity within the system.**

- Despite its almost singular focus on taming inflation, the Fed does not turn a blind eye to its liquidity provisioning function. Central to this argument is the Bank Term Funding Facility (BTFP) policy established by the central bank in response to the turmoil in the US regional banking system. By accepting US Treasury (UST) and government-backed mortgage bonds at face value as collateral, the Fed effectively transforms the entire High-Quality Liquid Assets (HQLA) market into a source of shadow liquidity.

- Another significant liquidity event is the depletion of the Treasury General Account (TGA) prior to the debt-ceiling agreement, which enables trapped liquidity in the public sector to flow into the private sector. The TGA refill operation following the agreement to freeze the debt-ceiling raised concerns that it could potentially create a liquidity problem for the private sector, particularly the banking sector. Fortunately, the tactical decision by the US Treasury Department to prioritize the issuance of UST bills has thus far succeeded in drawing liquidity from the Fed's RRP account with minimal impact on liquidity within the banking system.

> ***"Still-ample liquidity and pandemic tailwinds explain the US economy's robust performance in the past year"***

- **To sum up, the robust performance of the US economy over the past four quarters can be attributed to two factors: the tailwinds from pandemic-era measures that have bolstered US consumers' purchasing power and the ample liquidity within the system that has helped stabilize asset valuations, resulting in a positive wealth effect for US consumers.** The question, then, is whether demand would remain strong if the Fed persist with its single-minded focus on fighting inflation.

- There are a few reasons to believe that US economic activity may be heading downwards, and that recession could still happen despite the UST inversion having been 'wrong' for more than a year. Firstly, households' excess savings are close to being depleted (probably by Q4-23) due to the lower saving rates in the past year. In fact, some of the fiscal largesse that had accrued to households since the pandemic is being rolled back, particularly the student loan payment pause which would end in August as part of the debt ceiling deal.

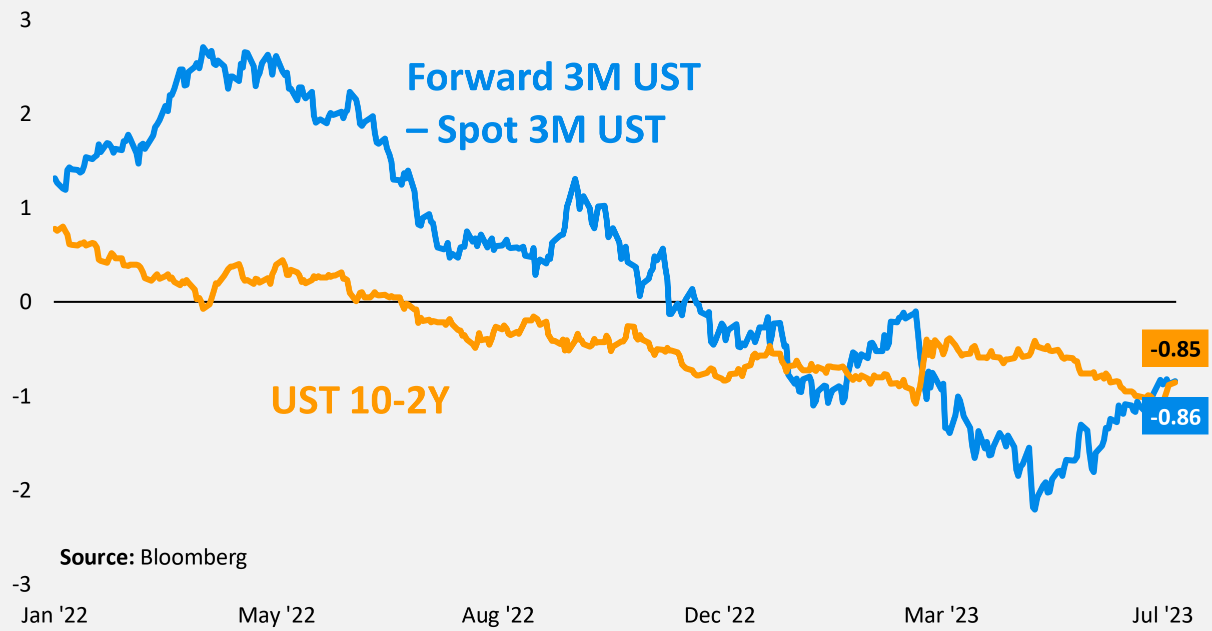
- **Secondly, while the ample liquidity may continue to prop up asset markets, its 'trickle down' to the real economy could decline as banks hold back on making new loans (*see Chart 3*)**. The (arguably still ongoing) slow-motion liquidity crunch in the banking sector are prompting tighter lending standards – limiting access to new financing even if the real economy wants to expand.
- And thirdly, **they might not really want to expand at the moment**, especially in the goods-producing sectors which are more exposed to the recession in Europe and the trade/tech disputes with China. US industrial production has been weakening, with the manufacturing PMI only once breaching 50 in the past 8 months. In turn, declining activities and earnings curb businesses' enthusiasm to expand, as apparent from weakening capital goods order ***(see Chart 4*)**. Existing workers are also facing reduced workloads, as indicated by the decrease in weekly working hours, particularly in the non-durable manufacturing and the leisure and hospitality sector. Thus, even the more domestically-oriented service sectors may not be immune to this slowdown, as demand for services begins to normalise after the pent-up has been unleashed.
- Less business expansion will likely translate to slower recruitment and weaker wage growth down the road, which might be fine if inflation continues to fall as it has been recently. However, workers in the US may start to notice a decrease in their working hours, which could impact their disposable income and hence their ability to consume. This would seem to be an ideal point at which the Fed starts easing policies again, safe in the knowledge that inflation has been tamed. **At some level, recession was always the price that the Fed was ready to pay to keep long-term inflation expectations tethered**. Mission accomplished, indeed.
- But the opposite case might happen – what if inflation rebounds instead? Recent developments have raised concerns about a potential increase in inflationary pressures, which could potentially reverse the recent recovery in real wage growth.. This would present the worst-case scenario for the Fed, as it would leave the central bank with limited room to address the threat of economic slowdown. Given the significance of this topic, it warrants a thorough and in-depth discussion, which we will delve into further in our upcoming report next week.

"Receding liquidity and the cooling labour market may threaten the two factors that hitherto help the US economy to defy a recession"

Chart 1

Defying expectations

The US economy continues to defy the recession expectation despite the inversion in both the mainstream yield curve (UST 10-2Y) and the Fed's favoured yield curve

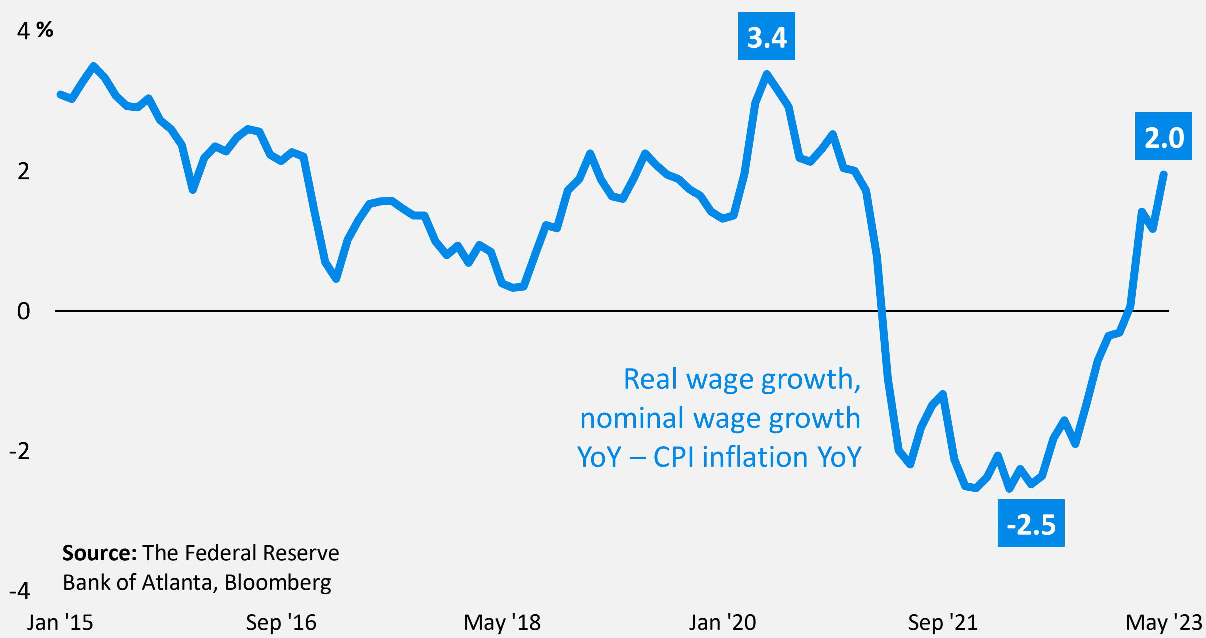


Source: Bloomberg

Chart 2

Wage growth for real

The increase in nominal wage growth finally catches up with changes in the price level in 2023, bolstering US consumers' purchasing power

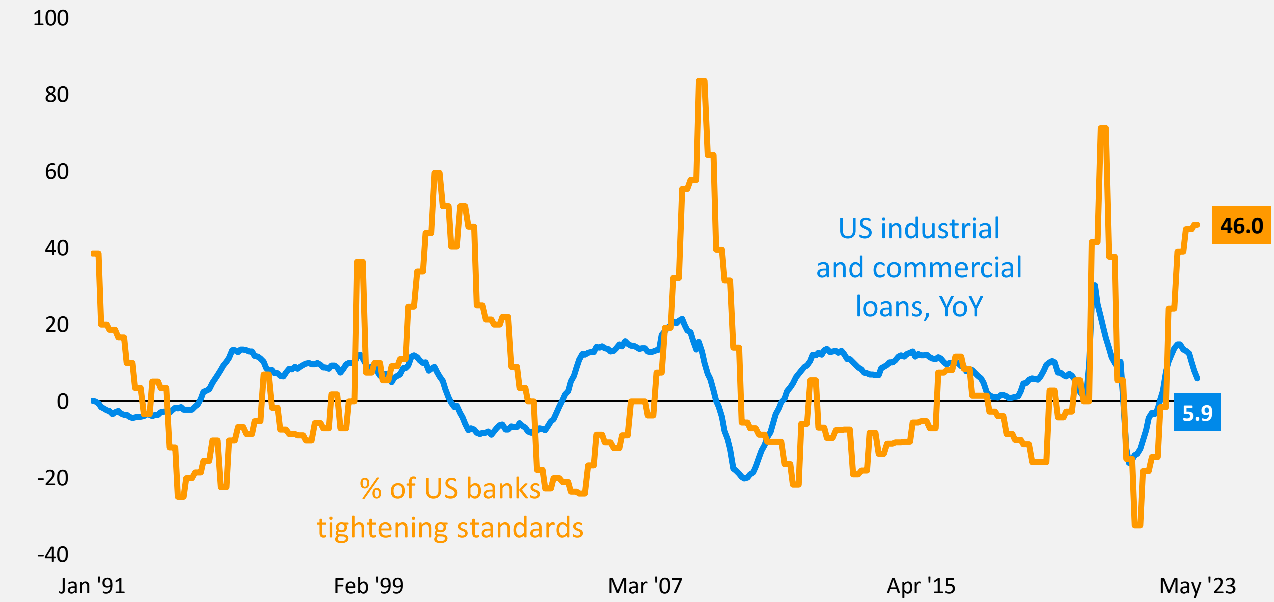


Source: The Federal Reserve Bank of Atlanta, Bloomberg

Chart 3

Trickle-down no more

Private sectors in the US may not benefit from the still-ample liquidity condition for too long as banks start to tighten their financing conditions

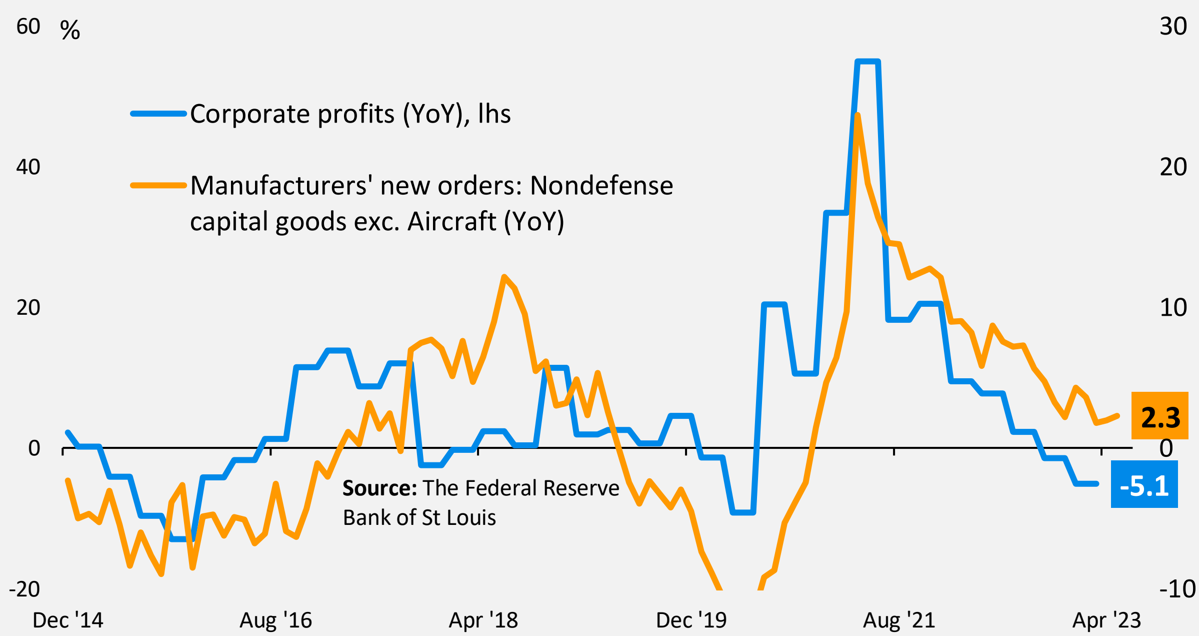


Source: The Federal Reserve Bank of St Louis

Chart 4

At the end of the line

Declining orders for capital goods amidst dwindling profits signal diminishing demand for businesses to expand which may cool the demand for labour



Source: The Federal Reserve Bank of St Louis

Economic Calendar

		Actual	Previous	Forecast*
3 July 2023				
ID	S&P Global Manufacturing PMI	52.5	50.3	50.6
ID	**Inflation Rate YoY**	**3.52%**	**4.0%**	**3.6%**
US	ISM Manufacturing PMI	46	46.9	46.3
6 July 2023				
US	Balance of Trade (USD Bn)	-69.0	-74.6	-68.7
7 July 2023				
ID	**Foreign Exchange Reserves (USD Bn)**	**137.5**	**139.3**	**139.0**
CN	Foreign Exchange Reserves (USD Tn)	3.19	3.18	3.1
10 July 2023				
CN	Inflation rate YoY	0%	0.2%	0.1%
ID	Consumer Confidence	127.1	128.3	128
ID	Motorbike Sales YoY	66.6%	113.4%	-
12 July 2023				
US	Inflation rate YoY	-	4.0%	3.6%
13 July 2023				
CN	Balance of Trade (USD Bn)	-	65.81	68.0
ID	Car Sales YoY	-	65.2%	-
14 July 2023				
EA	Balance of Trade (USD Bn)	-	-11.7	-16.4
17 July 2023				
CN	GDP Growth Rate YoY	-	4.5%	5.8%
ID	**Balance of Trade (USD Bn)**	**-**	**0.44**	**1.1**
20 July 2023				
ID	Retail Sales YoY	-	1.5%	-
ID	Foreign Direct Investment YoY	-	20.2%	-
25 July 2023				
ID	Loan Growth YoY	-	9.39%	-
ID	**Bank Indonesia policy announcement**	**-**	**5.75%**	**5.75%**
27 July 2023				
US	**Fed Interest Rate Decision**	**-**	**5.25%**	**5.5%**
ID	M2 Money Supply YoY	-	6.1%	-
EA	Deposit Facility Rate	-	3.5%	3.75%
31 July 2023				
EA	Inflation Rate YoY Flash	-	-	-

*Forecasts of some indicators are simply based on market consensus
Bold indicates indicators covered by the BCA Monthly Economic Briefing report

Selected Macroeconomic Indicator

Key Policy Rates	Rate (%)	Last Change	Real Rate (%)
US	5.25	Jul-23	1.25
UK	5.00	Jul-23	-3.70
EU	4.00	Jul-23	-1.50
Japan	-0.10	Jan-16	-3.30
China (lending)	4.35	Jul-23	4.35
Korea	3.50	May-23	0.80
India	6.50	Jun-23	2.25
Indonesia	5.75	Jun-23	2.23

Money Mkt Rates	10-Jul	-1 mth	Chg (bps)
SPN (1M)	4.74	4.50	24.6
SUN (10Y)	6.24	6.32	-7.9
INDONIA (O/N, Rp)	5.67	5.53	14.0
JIBOR 1M (Rp)	6.40	6.39	0.6

Bank Rates (Rp)	Apr	Mar	Chg (bps)
Lending (WC)	8.92	8.95	-2.71
Deposit 1M	4.18	4.20	-2.70
Savings	0.67	0.69	-1.70

Currency/USD	10-Jul	-1 mth	Chg (%)
UK Pound	0.778	0.795	2.30
Euro	0.909	0.930	2.34
Japanese Yen	141.3	139.4	-1.35
Chinese RMB	7.226	7.131	-1.32
Indonesia Rupiah	15,195	14,840	-2.34

Capital Mkt	10-Jul	-1 mth	Chg (%)
JCI	6,731.0	6,694.0	0.55
DJIA	33,944.4	33,876.8	0.20
FTSE	7,273.8	7,562.4	-3.82
Nikkei 225	32,189.7	32,265.2	-0.23
Hang Seng	18,479.7	19,390.0	-4.69

Foreign portfolio ownership (Rp Tn)	Jun	May	Chg (Rp Tn)
Stock	2,755.0	2,738.1	16.95
Govt. Bond	846.9	829.4	17.53
Corp. Bond	11.3	11.8	-0.47

Trade & Commodities	10-Jul	-1 mth	Chg (%)
Baltic Dry Index	1,024.0	1,055.0	-2.9
S&P GSCI Index	549.9	539.8	1.9
Oil (Brent, $/brl)	77.7	74.8	3.9
Coal ($/MT)	144.1	151.5	-4.9
Gas ($/MMBtu)	2.55	1.85	37.8
Gold ($/oz.)	1,925.4	1,961.2	-1.8
Copper ($/MT)	8,356.5	8,349.0	0.1
Nickel ($/MT)	20,816.0	21,031.0	-1.0
CPO ($/MT)	818.6	742.3	10.3
Rubber ($/kg)	1.30	1.32	-1.5

External Sector	May	Apr	Chg (%)
Export ($ bn)	21.72	19.28	12.61
Import ($ bn)	21.28	15.35	38.65
Trade bal. ($ bn)	0.44	3.94	-88.91
Central bank reserves ($ bn)*	139.3	144.2	-3.39

Prompt Indicators	Jun	May	Apr
Consumer confidence index (CCI)	127.1	128.3	126.1
Car sales (%YoY)	N/A	65.2	-28.8
Motorcycle sales (%YoY)	66.6	113.4	-19.4

Manufacturing PMI	Jun	May	Chg (bps)
USA	46.0	46.9	-90
Eurozone	43.4	44.8	-140
Japan	49.8	50.6	-80
China	50.5	50.9	-40
Korea	47.8	48.4	-60
Indonesia	52.5	50.3	220

Source: Bloomberg, BI, BPS
Notes:
Car and motorcycle sales data to be released on the third week of January 2022
^Data for January 2022
*Data from an earlier period
For changes in currency: **Black indicates appreciation against USD, **Red** otherwise
***For PMI, **>50** indicates economic expansion, **<50** otherwise

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Indonesia – Economic Indicators Projection

	2018	2019	2020	2021	2022	2023E
Gross Domestic Product (% YoY)	5.2	5.0	-2.1	3.7	5.3	5.0
GDP per Capita (US$)	3927	4175	3912	4350	4784	5285
Consumer Price Index Inflation (% YoY)	3.1	2.7	1.7	1.9	5.5	2.3
BI 7-day Repo Rate (%)	6.00	5.00	3.75	3.50	5.50	5.75
USD/IDR Exchange Rate (end of the year)**	14,390	13,866	14,050	14,262	15,568	15,173
Trade Balance (US$ billion)	-8.5	-3.2	21.7	35.3	54.5	35.3
Current Account Balance (% GDP)	-3.0	-2.7	-0.4	0.3	1.0	-0.7

*Estimated number

** Estimation of the Rupiah's fundamental exchange rate

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