March 14, 2025

FIXED INCOME MUSINGS

US INFLATION—ONE STEP FORWARD, ONE STEP BACK

February Inflation Data Appeared Good On First Glance

The rise in US core CPI and core PPI inflation in February fell short of expectations. Markets briefly responded favourably to the CPI data released on March 12, with equities recovering some of the losses from March 10 and 11.

...But Details Were Less Encouraging

However, enthusiasm over disinflation progress waned after a closer look at the details revealed that the deceleration in core CPI inflation was largely driven by volatile categories like airfares, while the prices of goods and services relevant for core PCE inflation—the Fed's preferred measure—were less encouraging. This includes an increase in medical services prices.

Recent Inflation Data Suggest the Fed is Still on Hold

We believe that rebalancing in the labor, auto, and rental markets has the potential to allow inflation to ease, inviting the Fed to resume rate cuts later this year. However, we are also mindful of the inflationary effects that tariffs and other policies, such as immigration controls, might introduce, even if they are later adjusted.

The latest inflation data are unlikely to prompt the Fed to change its stance in the near term. We will gain a better understanding of how Fed officials are factoring in the backdrop of heightened policy uncertainty at next week's FOMC meeting, which will feature an updated statement of economic projections and dot plot projection for the policy rate.

Inflation in February Fell Short of Expectations

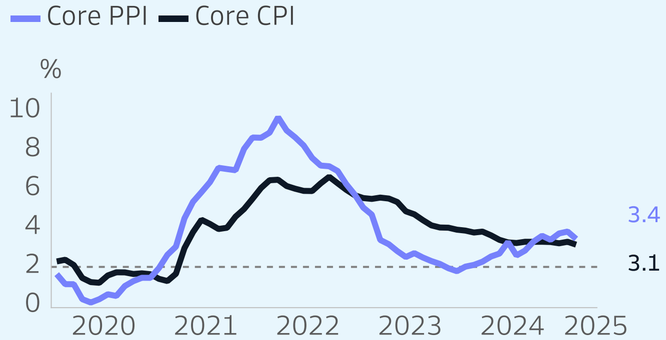
US Inflation: Month-over-Month (%)

	Core PPI	Core CPI
Cycle High	1.22%	0.80%
3-Month Average	0.27%	0.29%
February 2025 - Expectation	0.30%	0.30%
February 2025 - Realised	-0.05%	0.23%

Source: Goldman Sachs Asset Management, Macrobond, Goldman Sachs Global Investment Research for median forecast. As of March 2025. Cycle high is based on reading since May 2020 based on the NBER definition of the current US expansion.

The Annual Disinflation Rate Has Slowed Down

US inflation: Year-over-Year (%)



Source: Macrobond, Goldman Sachs Asset Management. As of February 2025.

US IG CREDIT KEEPS ITS COOL AMID EQUITY MARKET TURMOIL

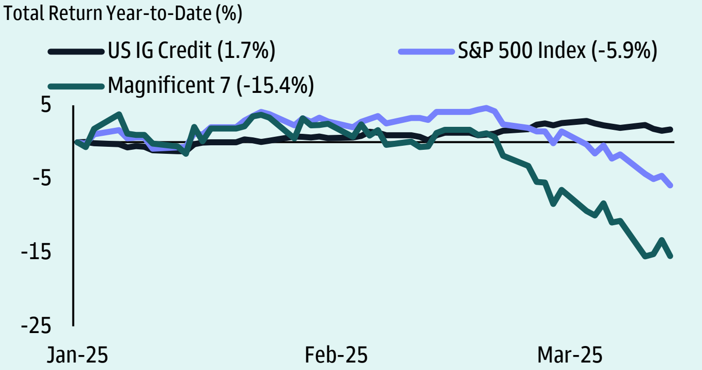
The US investment grade (IG) credit market has outperformed US equities amid recent risk-off sentiment driven by hawkish tariff policies and concerns over the US economy. In particular, IG credit derivatives, which are highly liquid and therefore usually highly responsive to sentiment swings, have widened less than expected given the equity market weakness and volatility[1]. Meanwhile, cash IG corporate bond markets have widened 14 basis points year-to-date to 96 basis points, a relatively orderly move considering the scale of the equity market decline[2]. This is somewhat surprising given the historically tight starting point for credit spreads at the beginning of the year, which suggested a low bar for spreads to widen. We attribute this resilience to various factors:

- **Strong underlying credit fundamentals,** as confirmed by the latest earnings season.
- **Continued expectations for limited downgrades of IG companies into the high yield market,** as noted in our Q1 Fixed Income Outlook. This, combined with strong fundamentals, likely explains why long-term institutional investors, including insurance companies with 'buy and maintain' portfolios, are maintaining their credit exposures.
- **A gradual rise in the VIX index,** rather than sudden spike.
- **Divergence in sector composition between US IG credit and the US equity market,** with technology, semiconductors, and software—key sectors affected by the equity market drawdown—representing a smaller share in the US IG credit market[3].

Outlook

On one hand, the orderly widening of spreads suggests the market is steadily reassessing risk premia amid higher macro, policy, and political uncertainty. If this continues, credit spreads may settle at a higher level and not revisit recent tight levels.

Credit Has Outperformed Equities Amid Growth Concerns



Source: Macrobond, Goldman Sachs Asset Management, Bloomberg US Corporate Total Return Value, S&P 500 Index Total Return, Bloomberg Magnificent 7 Total Return Index. As of March 13, 2025. Returns are in USD. The "Magnificent 7" refers to seven major US large-cap technology companies that have significantly driven US equity returns in recent years. These companies are Apple, Microsoft, Amazon, Nvidia, Meta Platforms (formerly Facebook), Tesla and Alphabet (Google's parent company).

In addition, the limited response in IG credit spreads to equity market moves so far suggests further equity weakness and a rise in the VIX could push spreads wider.

On the other hand, when the VIX Index is in the 25-30 range, prospects for future excess returns for IG credit tends to improve, especially over the next 3- and 6-month horizons.[1] However, the limited credit widening so far suggests room for spread compression may be muted.

Portfolio Perspectives

Given strong credit fundamentals, we continue to see value in seeking income from US corporate credit. Recent market volatility has loosened valuation constraints, allowing us to add to high conviction views at more attractive valuations.

We would also highlight that total return investors have been insulated from the risk-off tone, as most income from corporate bonds comes from high interest rates rather than credit spreads, mitigating downside risks from equity market volatility or economic growth deterioration.

[1] Source: Goldman Sachs Asset Management analysis. This analysis examines the largest 1-month movement in the US CDX index compared to the performance of the S&P 500 index and the rise in the VIX index since the CDX index was created on October 24, 2003. As of March 2025.
[2] Source: Bloomberg US Aggregate Corporate Index option adjusted spread as of March 11, 2025.
[3] Source: Goldman Sachs Global Investment Research Global Markets Daily: The Shrinking Beta Between Credit and Equities (September 26, 2024).

SIGNAL FROM NOISE: CONSUMER ABS

On March 3, we addressed concerns about the health of the US consumer, highlighting fundamental factors such as low unemployment, wealth gains, and real wage growth that suggest a constructive outlook for consumer spending. These factors also support healthy household balance sheets, crucial for sustaining income potential on consumer asset-backed securities (ABS), which include credit card debt, auto loans, personal loans, and student loans.

This week, we address two concerns regarding consumer ABS:

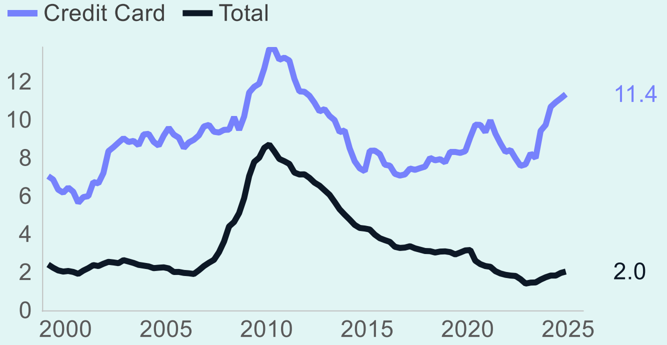
- **A rise in delinquency rates on consumer debt,** particularly credit card debt, reported by the Federal Reserve Bank of New York.
- **A decline in the quality of borrowers for new unsecured personal loans,** with over a third falling into the subprime category, according to Equifax[1].

Despite these trends, we remain constructive on the consumer ABS market due to a positive selection bias, where pooled loans are of higher quality. The average credit score on newly originated consumer unsecured ABS is the highest since the initial tightening of credit standards during the early days of the COVID-19 pandemic[1]. As a result, the credit quality of the ABS market is higher than the broader consumer unsecured loan market, with the subprime bucket[2] not exceeding 10% of any vintage year[1].

In summary, while some consumer loans may be turning sour, those are not necessarily the ones being securitized. Therefore, the rise in aggregate delinquency rates and the increase in lending to consumers with lower credit scores are not concerns for investors in the consumer ABS market at this stage. This improvement in underwriting standards explains why spreads on these securities are tight relative to historical levels. We continue to believe that ABS sectors, including consumer ABS, offer attractive income potential.

Overall delinquencies on consumer loans have increased slightly but…

% of US consumer loans that are 90 days or more overdue



Source: Macrobond, Goldman Sachs Asset Management. As of Q4 2024.

…delinquencies on loans included in consumer unsecured ABS have remained stable or decreased in recent months

% of loans in the pool of consumer unsecured ABS that are 60 days or more overdue

Source: Intex, Goldman Sachs Global Investment Research Global Markets Daily: Beyond the Headlines: Solid Fundamentals in Consumer ABS (March 4, 2025). Seasonally Adjusted.

In Case You Missed It

Income Generation: Seeking Steady Streams in Unstable Times

[1] Source: Goldman Sachs Global Investment Research Global Markets Daily: Beyond the Headlines: Solid Fundamentals in Consumer ABS (March 4, 2025). Vintage year refers to the specific years when loans were originated and pooled together into securities.
[2] Subprime borrowers are individuals with lower credit scores, typically below 620. These borrowers are considered higher risk because they have a history of missed payments, high debt levels, or other financial issues. Loans given to subprime borrowers often come with higher interest rates and less favorable terms to compensate for the increased risk. For context, FICO credit scores range from 300 to 850 and are used by lenders to assess the creditworthiness of borrowers. The higher the score, the better the creditworthiness.

WAGE GROWTH STRENGTH SIGNALS MORE BOJ RATE HIKES

Bottom Line: Shunto wage increase data in Japan indicate firm wage growth for the third consecutive year. While the BoJ may wait for final wage data before responding, we expect the policy rate to rise further this year and remain underweight on Japanese rates.

Context: The "Shunto" wage negotiations in Japan are annual spring discussions between labor unions and companies, typically occurring in March. These negotiations set the tone for wage growth, consumer spending and inflation.

Firm Wage Growth Three Years in a Row: For 2025, the initial Shunto wage increase data released on March 14 shows a base pay rise of 3.8%. Although this is below the 4.5% requested by the unions on March 6, it is above last year's first agreement of 3.7% (which ended up being realized at 3.6%) and exceeds consensus expectations for a modest decline to 3.4%. The data reflects three consecutive years of wage deals aligning with or above levels consistent with 2% inflation. For context, we estimate that trend labor market productivity growth of 0.5% or less suggests trend wage growth should be around 2.5% to be consistent with 2% overall inflation.

A Cycle of Wage Growth and Inflation: The strong wage hike requests reflect high inflation, companies' awareness of the need for wage hikes to secure workers amid a growing labor shortage, solid demand, and sustained corporate earnings. The pass-through of wage hikes into retail prices has expanded, and labor unions have stronger bargaining power in this environment.

BoJ Policy Rate—The Only Way is Up: These wage deals are similar to those during the peak years of the early 1990s heated economy when inflation was 3-4% and the policy rate was 5-6% and are stronger than comparable wage settlement data for the Eurozone and the UK this year.

Firm Japanese Wage Growth for Three Consecutive Years

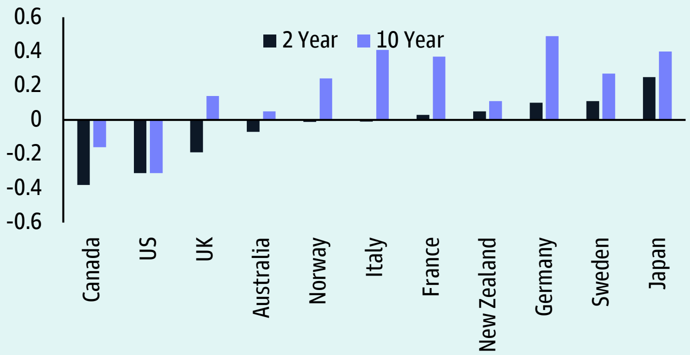
JTUC-RENGO Announcement of Shunto Wage Hikes

2024	Final Agreed	Base pay rise	3.6%
		Headline	5.1%
2025 Shunto	Request	Base pay rise	4.5%
		Headline	6.1%
	Agreed (1st Data Collection)	Base pay rise	3.8%
		Headline	5.5%

Source: JTUC-RENGO Goldman Sachs Global Investment Research: Japan: 2025 Shunto: First Shunto Wage Hike Data (March 14, 2025). There are typically multiple rounds of data collection in the Shunto wage negotiations. **Base pay** refers to the fundamental salary increase agreed upon during the negotiations. This is the core wage hike that applies to all employees and is a crucial focus for economists and policymakers. **Headline pay** includes the base pay increase plus any additional scheduled wage hikes and bonuses. It represents the total wage growth that employees receive.

We Expect Further Increases in JGB Yields

Government Bond Yield Changes YTD (%)



Source: Macrobond. As of March 13, 2025.

Investment Perspectives: The initial rally in Japanese government bonds in response to the data was puzzling. This may reflect expectations that the BoJ will likely require further data before it resumes rate hikes, along with domestic political uncertainty. We maintain underweight exposure to Japanese government bonds (JGBs)—the largest underperformer among major developed market rates this year—considering the cycle between wages and prices calls for further normalization in the BoJ policy rate, which remains extremely low at 0.5%.

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CENTRAL BANK SNAPSHOT

	INTEREST RATE POLICY	BALANCE SHEET POLICY	OUTLOOK	OUR OUTLOOK RELATIVE TO MARKET-IMPLIED PRICING
Fed	**Federal funds rate**: 4.25-4.5% **Last change**: December and November 2024 (-25bps), September 2024 (-50bps) **Hiking cycle duration**: 17 months **Rate at the start of latest hiking cycle**: 0.25%	The Fed has been reducing its balance sheet passively since June 2022. The FOMC decided to decrease the pace of this reduction starting in June 2024, with the monthly runoff scaling down from $60 billion to $25 billion.	We expect rate cuts to resume in the second half of the year assuming inflation continues to improve. **Expected rate at end-2025**: 3.75-4% **Neutral rate estimate**: 2.75-3.50%	Slightly dovish
ECB	**Deposit facility rate**: 2.5% **Last change**: March and January 2025 (-25bps) December, October, November and September 2024 (-25bps) **Hiking cycle duration**: 15 months **Rate at the start of the latest hiking cycle**: -0.5%	The ECB started reducing its balance sheet in March 2023 and ceased reinvestments from its APP in July 2023. The reinvestment of proceeds from maturing securities under the PEPP will gradually decrease starting July 2024 and conclude in December 2024.	We anticipate two additional 0.25% rate cuts, bringing the policy rate down to 2%. The future trajectory will depend on US tariff policy. We do not expect the economic impacts of German fiscal spending to be felt until 2026 and beyond. **Expected rate at end-2025**: 2% **Neutral rate estimate**: 2.0 – 2.25%	Slightly dovish
BoE	**Bank Rate**: 4.5% **Last change**: February 2025 (-25bps), November and August 2024 (-25bps) **Hiking cycle duration**: 21 months **Rate at the start of the latest hiking cycle**: 0.1%	The BoE has actively been reducing its balance sheet since November 2022. At the September 2024 meeting, the MPC voted to maintain the pace of gilt stock reduction at £100bn. Given higher redemptions, this implies a notable reduction in the pace of active sales.	We anticipate rate cuts at each Monetary Policy Report meeting in 2025 (May, August, November). **Expected rate at end-2025**: 3.75% **Neutral rate estimate**: 2.50-3.0%	Dovish
BoJ	**Policy deposit rate**: 0.5% **Last change**: January 2025 (25bps), July 2024 (+15bps), March 2024 (+20bps) **Duration of negative rates**: 98 months **Rate at start of the latest hiking cycle**: -0.10%	The gradual reduction plan for JGB purchases will be from around ¥6tn per month to around ¥3tn over 18-months. Reduced bond buying will initially concentrate on intermediate maturity bonds.	We anticipate ongoing policy normalization in 2025. **Expected rate at end-2024**: 1% **Neutral rate estimate**: 1.0-1.50%	Hawkish

Source: Goldman Sachs Asset Management. As of March 14, 2025. Abbreviations: Pandemic Emergency Purchase Program (PEPP). The economic and market forecasts presented herein are for informational purposes as of the date of this document. There can be no assurance that the forecasts will be achieved. Please see additional disclosures at the end of this document. The neutral rate estimates come with a degree of uncertainty. They are derived from a combination of fundamental, market, and model-based assessments. The ranges for the Fed, BoE and BoJ reflect the diversity of these estimates. For the ECB, the range represents the spectrum of policymakers' estimates, which has been adjusted based on our discretionary perspective. Estimated neutral rates by central banks are as follows: BoE 2-3%, BoJ 1-2.5%, Fed 2.4-3.8%, ECB 1.5-3%. The economic and market forecasts presented herein have been generated by Goldman Sachs Asset Management for informational purposes as of the date of this presentation. They are based on proprietary models and there can be no assurance that the forecasts will be achieved. Please see additional disclosures at the end of this presentation.

SOVEREIGN BOND YIELDS (%)

	Latest (%)	Year-to-date Change (bps)	1-Year Change (bps)	Last 10-year Percentile
US 2 Year	3.9	-31	-64	77
US 10 Year	4.3	-31	11	91
US 2-10 Slope	0.3	0	75	46
US Treasury 10-Year Inflation-Protected	2.0	-26	12	91
Germany 2 Year	2.2	10	-66	81
Germany 10 Year	2.9	49	53	99
Japanese 10 Year	1.5	40	76	100
UK 10 Year	4.7	14	75	100
Chinese 10 Year	1.8	16	-50	2

Source: Macrobond, Goldman Sachs Asset Management. Based on data available as of 14 March 2025.

EXCHANGE RATES

	Latest	Year-to-date Change (%)	1-year Change (%)
Euro (€ per $)	0.92	-4.2	0.6
British Pound (£ per $)	0.77	-3.0	-1.2
Japanese Yen (¥ per $)	147.73	-5.9	0.0
Chinese Yuan Renminbi (CNY per $)	7.24	-0.8	0.8

Source: Macrobond, Goldman Sachs Asset Management. Based on data available as of 14 March 2025.

FIXED INCOME SECTOR YIELDS (%)

	Latest (%)	Last 10 year average (%)	Year-to-date change (bps)	Last 10 year Percentile
US Investment Grade	5.2	3.7	-14	81
European Investment Grade	3.4	1.6	17	80
UK Investment Grade	5.5	3.4	5	88
US High Yield	7.7	6.7	18	71
European High Yield	5.7	4.5	23	73
EM External	7.7	6.4	-17	74
EM Corporate	6.3	5.4	-17	74
US Agency MBS	5.0	3.1	-27	89
US ABS	4.9	3.1	-17	76
US Munis	3.8	2.5	6	94
US CMBS	5.0	3.3	-33	77

Source: Macrobond, Goldman Sachs Asset Management, ICE BofAML and J.P. Morgan. Based on data available as of 14 March 2025.

FIXED INCOME SECTOR SPREADS (BASIS POINTS)

	Latest (bps)	Last 10 year average (bps)	Year-to-date change (bps)	Last 10 Year Percentile
US Investment Grade	97	127	15	17
European Investment Grade	90	123	-11	11
UK Investment Grade	101	147	10	3
US High Yield	340	430	48	21
European High Yield	310	400	-1	18
EM External	8	6	0	26
EM Corporate	237	329	11	5
US Agency MBS	46	38	4	68
US ABS	86	97	5	51
US CMBS	93	97	-2	50

Source: Macrobond, Goldman Sachs Asset Management, ICE BofAML and J.P. Morgan. Based on data available as of 14 March 2025.

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	Quarterly Fixed Income Outlook	Outlook on the economic landscape and key investment views.
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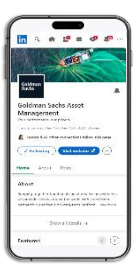
Insight Highlight

Fixed Income Musings Explore Prior Editions



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Sector Spread Indexes

US Investment Grade Corporates: ICE BofAML US Corporate Index

US High Yield Corporates: ICE BofAML US Corporate High Yield Index

European Investment Grade Corporates: ICE BofAML Euro Corporate Index

European High Yield Corporates: ICE BofAML Euro High Yield Index

US Municipals: ICE BofAML Municipal Securities Index

ABS: ICE BofAML US Fixed Rate Asset-Backed Securities Index

MBS: ICE BofAML US Agency Mortgage-Backed Securities Index

CMBS: ICE BofAML Fixed Rate AAA Rated CMBS Index

EM External Debt: J.P. Morgan, EMBI Global Diversified Face Constrained Index

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