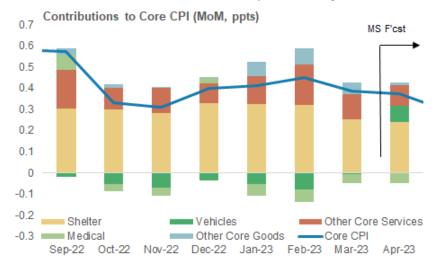
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## **US Economics** | North America

# CPI Preview: Sideways in April

We expect monthly core inflation to move sideways in April. We see more deceleration in core services, coupled with a temporary pick-up in core goods. We forecast core CPI increased by 0.38%MoM (5.5%YoY), and headline by 0.46%MoM (5.1%YoY). We provide key components/risks to watch.

Exhibit 1: Core inflation to remain elevated on a pause in core goods deflation



Source: Bureau of Labor Statistics, Morgan Stanley Research forecasts

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For important disclosures, refer to the Disclosure Section, located at the end of this report.



### April CPI

Our estimates suggest core inflation experienced a short-lived pick-up in April, with no further acceleration beyond. We forecast core CPI increased by 0.38%M (vs. 0.3% cons), matching the March pace, while strong energy prices should lift headline CPI inflation (0.46% MSe vs 0.4% cons).

On a year-on-year basis, headline inflation is on track to rise to 5.1% after 5.0% in March due to base effects. Core inflation should see a small decrease to 5.5% YoY from 5.6% last month.

**Goods prices accelerate, services prices slow down.** Core goods prices are likely to tick up on the back of rising vehicle prices. We also expect airline fares to remain strong and shelter to reaccelerate following a weak print in March. However, gradual slowing in hotels and in other core services should help to offset strength in services elsewhere (Exhibit 2).

Contributions to Core CPI (MoM, ppts) 0.7 MS F'cst 0.6 0.5 0.4 0.3 0.2 0.1 0 -0.1-0.2Shelter Vehicles Other Core Services -0.3 Medical Other Core Goods Core CPI Nov-22 Dec-22 Jan-23 Feb-23 Mar-23 Apr-23 Sep-22 Oct-22

**Exhibit 2:** Core inflation to remain elevated on a pause in core goods deflation

Source: BLS, Morgan Stanley Research forecasts

Core goods prices increased, on top of an up-tick last month. Vehicle prices play a key role in our forecast of strong deflationary pressures from the goods side throughout the year. After six months of sharp and larger-than-expected declines, and a higher but still negative March print, our leading indicators point toward a more notable acceleration in April. Our preliminary forecast points to a rebound in used car prices, coming in at 1.54%M after -0.88%M last month. We will update our forecast after the Manheim Index for the full month is released on Friday. Meanwhile, new car prices should also see a slight increase before turning marginally negative in the second half of the year. News around price cuts from some of the major auto manufacturers further increases the probability of new car prices falling into deflation, but we expect a sharper decrease in prices for used cars throughout the year as the relationship between used and car prices normalizes (see here for an analysis between used and new car prices). On the back of higher prices in the auto categories, core goods prices

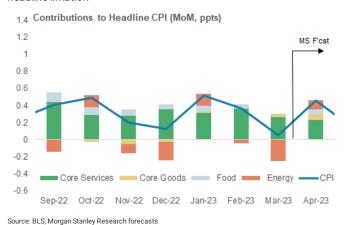


overall should tick up this month, though broader deflation should set in across goods categories in coming months as weaker demand in our outlook takes its toll. Excluding autos, we see core goods inflation about flat at 0.04%M in April after three months of 0.3-0.4%M prints.

Despite a re-acceleration in housing inflation, core services inflation should slow at the margin again. After housing fell 23bp in March to 0.49%M, we are expecting a correction in April bringing housing back up to 0.58%M. This is due to the March report showing a significantly larger drop than the persistence in housing CPI indicates. This pickup in housing inflation should partly be counteracted by lower hotel prices after 4 prints above 1.0%M. Medical inflation should again be a major drag on core services inflation in April. On the back of a reset of health insurance inflation in October, the medical component has been and will continue to be deflationary through September of this year. Travel-related prices should remain elevated through April but not to the magnitude we saw in 2022. Surging jet fuel costs, pent-up demand, and low airline capacity drove airfare prices up by 15.7%M in April 2022. Though we expect prices will remain higher than pre-pandemic levels this spring, airline capacity improvements will keep airfare growth below last year's peak. Relative to very strong February and March prints, sequential inflation should slow in airfares.

With medical price deflation continuing and strong but decelerating travel inflation, the core services ex-housing aggregate, a key focus of Fed Chair Powell, should moderate to 0.16%M after coming in at 0.40%M prior. However, note that the Fed is mostly concerned with the PCE price index, which uses a different calculation for medical services that is not affected by the health insurance reset. We currently track core services ex-housing PCE inflation at 0.24%M in April (vs 0.24%M in March).

**Exhibit 3:** High energy prices will help drive the acceleration in headline inflation



**Exhibit 4:** Turnaround in core goods to be offset by somewhat softer core services

CPI %MoM	Jan-23	Feb-23	Mar-23	Apr-23 F'cst	
Headline	0.52	0.37	0.05	0.46	
Core	0.41	0.45	0.38	0.38	
Energy	1.97	-0.56	-3.52	1.46	
Food	0.51	0.39	0.01	0.44	
Core Goods	0.07	-0.01	0.18	0.32	
New Vehicles	0.23	0.18	0.38	0.57	
Used Vehicles	-1.94	-2.77	-0.88	1.44	
Apparel	0.83	0.81	0.26	0.20	
Core Services	0.55	0.62	0.45	0.40	
OER	0.67	0.70	0.48	0.57	
Rent	0.74	0.76	0.49	0.58	
Hotels	1.20	2.26	2.70	0.13	
Medical Services	-0.68	-0.70	-0.50	-0.60	
Airfare	-2.15	6.38	3.96	1.90	
Core services ex-housing	0.36	0.50	0.40	0.16	

Source: BLS, Morgan Stanley Research forecasts

#### **Key Components in the April CPI**

An increase in energy prices and some further acceleration in food inflation appear likely to weigh on headline CPI inflation, while core CPI faces cross-currents. Despite stronger headline and sticky core, underlying services details show material deceleration, which would still give the Fed something to hang onto for its inflation/policy narrative (Exhibit 3). Core services ex housing runs at 0.16% on the



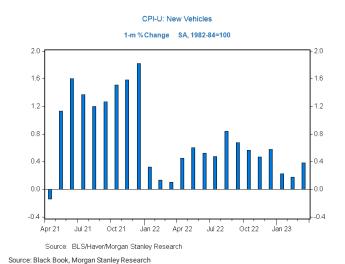
month, which would be the lowest print for the category over the last 9 months (Exhibit 4).

#### 1. Autos:

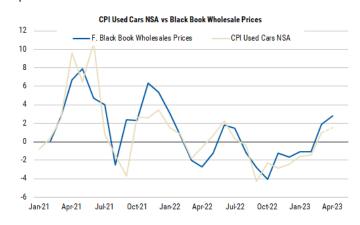
New car prices decelerated in January and February but ticked back up in March (Exhibit 5). We see April new car prices continuing to accelerate as supply and inventories remain low at the same time that MoM sales came in above expectations. The April seasonal should help balance the acceleration of new car prices.

Used cars may see continued upward pressure as well — while the Manheim used car value index was down MoM in April, most of that decrease was due to seasonal adjustment (and Manheim uses different seasonal adjustment than the BLS for CPI), whereas unadjusted used car prices in Manheim were up MoM and other indicators, such as Black Book prices, are pointing to continued upside (Exhibit 6).

Exhibit 5: New Cars Came Up Last Month After Decelerating Prior



**Exhibit 6:** Black Book Prices Indicate an Upside Risk to Used Cars in April



Source: BLS, Morgan Stanley Research Forecasts

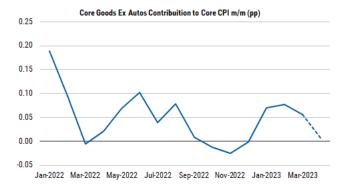
### 2. Goods ex Autos:

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Core goods prices ex autos have come very strong in the last three months (Exhibit 7). Upside in prices for alcohol, tobacco, apparel, and home furnishings helped keep core goods prices ex autos elevated. There is scope for more broadly based softening in some of these components – particularly apparel and home furnishings – in April, the declaration is also supported by the seasonal factors that will likely push to more significant downside.

**Exhibit 7:** Core Goods Ex Autos Risks to the Downside After Three Strong Prints



Source: BLS, Morgan Stanley Research forecasts

#### 3. Rent & OER:

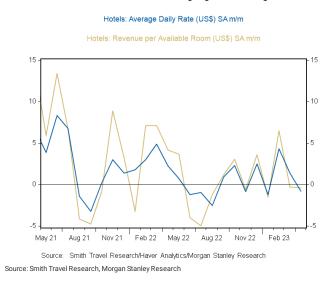
Rent and Owners' Equivalent Rent inflation dropped in March after months of very sticky prints. Given the higher-than-expected drop last month, we expect upside risk from a correction, bringing OER and rent back up to the 0.6%M territory (Exhibit 8).

Hotels should slightly help offset the pick up in Shelter coming from OER and rent. After seeing 4 months of over 1.0%M growth, we expect hotels to come back down as revenue per available room, the average daily rate and occupancy rate all saw significant declines in April (Exhibit 9).

**Exhibit 8:** CPI Shelter Saw a 16bp Decrease in March. Expect a Higher Print in April



Exhibit 9: Hotel Indicators are Showing Signs of Easing



4. Travel and Other Volatile Services:

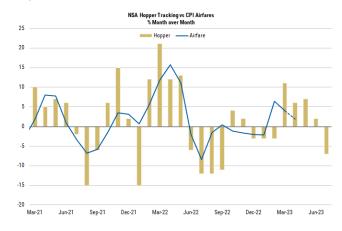
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After increasing 6.4%M and 4.0%M in February and March respectively, high frequency tracking data point to a still-elevated but lower print in April airfares (Exhibit 10). However, the seasonality in April, should help decrease the upside risk.

Chair Powell and the FOMC have emphasized the persistence in inflation in core services (ex housing). Excluding shelter, travel, and health insurance, CPI services inflation has been strong, but several of these services line items have been particularly volatile in recent months. Strength more recently kept services inflation from exhibiting a more substantial deceleration. We see core services ex housing coming down in April. However, given the volatility in the underlying sectors, motor vehicle insurance, motor vehicle maintenance & repair, communication services, and certain education services, all should be watched in the report as potential sources of surprise.

**Exhibit 10:** Airfare to Continue to Decelerate but Remain Elevated in April



Source: Hopper, BLS, Morgan Stanley Research forecasts

Based on our current CPI forecasts, core PCE is on track to increase 0.33%M, compared to 0.28%M in March.

Exhibit 11details our monthly forecast across CPI and PCE inflation through December 2024.

Exhibit 11: Inflation Forecast Table

Headline PCE	% Change - Year-over-Year				% Change - Month-over-Month					
Feb-22         6.4         5.4         7.9         6.4         Feb-22         0.59         0.37         0.71         0.47           Mar-22         6.8         5.4         8.5         6.5         Mar-22         0.95         0.37         1.01         0.31           Apr-22         6.4         5.0         8.3         6.2         Apr-22         0.20         0.31         0.40         0.47           May-22         6.5         4.9         8.6         6.0         May-22         0.61         0.38         0.92         0.63           Jul-22         6.4         4.7         8.5         5.9         Jul-22         -0.99         0.63         1.19         0.60           Jul-22         6.3         4.9         8.3         6.3         Aug-22         0.27         0.55         0.23         0.58           Sep-22         6.3         4.9         8.3         6.3         Aug-22         0.27         0.55         0.23         0.58           Sep-22         6.3         4.9         8.3         6.3         Aug-22         0.27         0.55         0.23         0.58           Sep-23         5.2         8.2         6.6         6         Sep-		Headline PCE	Core PCE	Headline CPI	Core CPI		Headline PCE	Core PCE	Headline CPI	Core CPI
Mar-22         6.8         5.4         8.5         6.5         Mar-22         0.95         0.37         1.01         0.31           Apr-22         6.4         5.0         8.3         6.2         Apr-22         0.20         0.31         0.40         0.47           May-22         6.5         4.9         8.6         6.0         May-22         0.61         0.38         0.92         0.63           Jul-22         7.0         5.0         9.1         5.9         Jul-22         0.99         0.63         1.19         0.60           Jul-22         6.4         4.7         8.5         5.9         Jul-22         0.09         0.08         -0.03         0.31           Aug-22         6.3         4.9         8.3         6.3         Aug-22         0.27         0.55         0.23         0.58           Sep-22         6.3         5.2         8.2         6.6         Sep-22         0.34         0.46         0.41         0.57           Ot-22         6.7         4.8         7.1         6.0         Nov-22         0.17         0.22         0.21         0.31           Jan-23         5.4         4.7         6.4         5.6         Jan	Jan-22	6.1	5.2	7.5	6.0	Jan-22	0.53	0.47	0.61	0.56
Apr-22         6.4         5.0         8.3         6.2         Apr-22         0.20         0.31         0.40         0.47           May-22         6.5         4.9         8.6         6.0         May-22         0.61         0.38         0.92         0.63           Jun-22         7.0         5.0         9.1         5.9         Jun-22         0.99         0.63         1.19         0.60           Jul-22         6.4         4.7         8.5         5.9         Jul-22         4.099         0.08         -0.03         0.31           Aug-22         6.3         4.9         8.3         6.3         Aug-22         0.27         0.55         0.23         0.58           Sep-22         6.3         5.2         8.2         6.6         Sep-22         0.34         0.46         0.41         0.57           Oct-22         6.1         5.1         7.7         6.3         Oct-22         0.42         0.31         0.49         0.33           Nov-22         5.7         4.8         7.1         6.0         Nov-22         0.17         0.22         0.21         0.31           Jan-23         5.4         6.6         6.5         5.7         D	Feb-22	6.4	5.4	7.9	6.4	Feb-22	0.59	0.37	0.71	0.47
May-22         6.5         4.9         8.6         6.0         May-22         0.61         0.38         0.92         0.63           Jun-22         7.0         5.0         9.1         5.9         Jun-22         0.99         0.63         1.19         0.60           Jul-22         6.4         4.7         8.5         5.9         Jul-22         0.09         0.08         -0.03         0.31           Aug-22         6.3         4.9         8.3         6.3         Aug-22         0.27         0.55         0.23         0.58           Sep-22         6.3         5.2         8.2         6.6         6.6         5.9-22         0.34         0.46         0.41         0.57           Oct-22         6.1         5.1         7.7         6.3         Oct-22         0.42         0.31         0.49         0.33           Nov-22         5.7         4.8         7.1         6.0         Nov-22         0.17         0.22         0.21         0.31           Jan-23         5.4         4.7         6.4         5.6         Jan-23         0.60         0.56         0.52         0.41           Feb-23         5.1         4.7         6.0         5	Mar-22	6.8	5.4	8.5	6.5	Mar-22	0.95	0.37	1.01	0.31
Jun-22         7.0         5.0         9.1         5.9         Jun-22         0.99         0.63         1.19         0.60           Jul-22         6.4         4.7         8.5         5.9         Jul-22         -0.09         0.08         -0.03         0.31           Aug-22         6.3         4.9         8.3         6.3         Aug-22         0.27         0.55         0.23         0.58           Sep-22         6.3         5.2         8.2         6.6         Sep-22         0.34         0.46         0.41         0.67           Oct-22         6.1         5.1         7.7         6.3         Oct-22         0.42         0.31         0.49         0.33           Nov-22         5.7         4.8         7.1         6.0         Nov-22         0.17         0.22         0.21         0.31           Jan-23         5.4         4.7         6.4         5.6         Jan-23         0.60         0.56         0.52         0.41           Feb-23         5.1         4.7         6.4         5.6         Jan-23         0.00         0.35         0.37         0.45           Mar-23         4.2         4.6         5.0         5.6         M	Apr-22	6.4	5.0	8.3	6.2	Apr-22	0.20	0.31	0.40	0.47
Jul-22 6.4 4.7 8.5 5.9 Jul-22 -0.09 0.08 -0.03 0.31 Aug-22 6.3 4.9 8.3 6.3 Aug-22 0.27 0.55 0.23 0.58 Sep-22 6.3 5.2 8.2 6.6 Sep-22 0.34 0.46 0.41 0.57 Oct-22 6.1 5.1 7.7 6.3 Oct-22 0.42 0.31 0.49 0.33 Nov-22 5.7 4.8 7.1 6.0 Nov-22 0.17 0.22 0.21 0.31 0.49 0.33 Dec-22 5.3 4.6 6.5 5.7 Dec-22 0.20 0.37 0.13 0.40 Jan-23 5.4 4.7 6.4 5.6 Jan-23 0.60 0.56 0.52 0.41 Dec-22 5.3 4.6 6.5 5.7 Dec-22 0.20 0.37 0.13 0.40 Jan-23 5.4 4.7 6.4 5.6 Jan-23 0.60 0.56 0.52 0.41 Dec-23 5.1 4.7 6.4 5.6 Jan-23 0.60 0.56 0.52 0.41 Dec-24 0.5 Dec-25 0.7 Dec-2	May-22	6.5	4.9	8.6	6.0	May-22	0.61	0.38	0.92	0.63
Aug-22         6.3         4.9         8.3         6.3         Aug-22         0.27         0.55         0.23         0.58           Sep-22         6.3         5.2         8.2         6.6         Sep-22         0.34         0.46         0.41         0.57           Oct-22         6.1         5.1         7.7         6.3         Oct-22         0.42         0.31         0.49         0.33           Nov-22         5.7         4.8         7.1         6.0         Nov-22         0.17         0.22         0.21         0.31           Dec-22         5.3         4.6         6.5         5.7         Dec-22         0.20         0.37         0.13         0.40           Jan-23         5.4         4.7         6.4         5.6         Jan-23         0.60         0.56         0.52         0.41           Feb-23         5.1         4.7         6.0         5.5         Feb-23         0.30         0.35         0.37         0.45           Mar-23         4.2         4.6         5.0         5.6         Mar-23         0.08         0.28         0.05         0.38           Apr-23         4.4         4.6         5.1         5.5         Apr	Jun-22	7.0	5.0	9.1	5.9	Jun-22	0.99	0.63	1.19	0.60
Sep-22         6.3         5.2         8.2         6.6         Sep-22         0.34         0.46         0.41         0.57           Oct-22         6.1         5.1         7.7         6.3         Oct-22         0.42         0.31         0.49         0.33           Nov-22         5.7         4.8         7.1         6.0         Nov-22         0.17         0.22         0.21         0.31           Dec-22         5.3         4.6         6.5         5.7         Dec-22         0.20         0.37         0.13         0.40           Jan-23         5.4         4.7         6.4         5.6         Jan-23         0.60         0.56         0.52         0.41           Feb-23         5.1         4.7         6.0         5.5         Feb-23         0.30         0.35         0.37         0.45           Mar-23         4.2         4.6         5.1         5.5         Apr-23         0.40         0.33         0.46         0.38           May-23         3.9         4.5         4.2         5.1         May-23         0.15         0.25         0.13         0.29           Jul-23         3.0         4.0         3.1         4.8         Jul	Jul-22	6.4	4.7	8.5	5.9	Jul-22	-0.09	0.08	-0.03	0.31
Oct-22         6.1         5.1         7.7         6.3         Oct-22         0.42         0.31         0.49         0.33           Nov-22         5.7         4.8         7.1         6.0         Nov-22         0.17         0.22         0.21         0.31           Dec-22         5.3         4.6         6.5         5.7         Dec-22         0.20         0.37         0.13         0.40           Jan-23         5.4         4.7         6.4         5.6         Jan-23         0.60         0.56         0.52         0.41           Feb-23         5.1         4.7         6.0         5.5         Feb-23         3.00         0.35         0.37         0.45           Mar-23         4.2         4.6         5.0         5.6         Mar-23         0.08         0.28         0.05         0.38           Apr-23         4.4         4.6         5.1         5.5         Apr-23         0.40         0.33         0.46         0.38           May-23         3.9         4.5         4.2         5.1         May-23         0.15         0.25         0.13         0.29           Jul-23         3.0         4.0         3.1         4.8         Jul	Aug-22	6.3	4.9	8.3	6.3	Aug-22	0.27	0.55	0.23	0.58
Nov-22         5.7         4.8         7.1         6.0         Nov-22         0.17         0.22         0.21         0.31           Dec-22         5.3         4.6         6.5         5.7         Dec-22         0.20         0.37         0.13         0.40           Jan-23         5.4         4.7         6.4         5.6         Jan-23         0.60         0.56         0.52         0.41           Feb-23         5.1         4.7         6.0         5.5         Feb-23         0.30         0.35         0.37         0.45           Mar-23         4.2         4.6         5.0         5.6         Mar-23         0.08         0.28         0.05         0.38           Apr-23         4.4         4.6         5.1         5.5         Apr-23         0.40         0.33         0.46         0.38           May-23         3.9         4.5         4.2         5.1         May-23         0.15         0.25         0.13         0.29           Jul-23         3.0         4.0         3.1         4.8         Jul-23         0.11         0.19         0.11         0.23           Jul-23         3.1         3.7         3.3         4.2         Aug	Sep-22	6.3	5.2	8.2	6.6	Sep-22	0.34	0.46	0.41	0.57
Dec-22   5.3	Oct-22	6.1	5.1	7.7	6.3	Oct-22	0.42	0.31	0.49	0.33
Jan-23   5.4   4.7   6.4   5.6   Jan-23   0.60   0.56   0.52   0.41	Nov-22	5.7	4.8	7.1	6.0	Nov-22	0.17	0.22	0.21	0.31
Feb-23         5.1         4.7         6.0         5.5         Feb-23         0.30         0.35         0.37         0.45           Mar-23         4.2         4.6         5.0         5.6         Mar-23         0.08         0.28         0.05         0.38           May-23         3.9         4.5         4.2         5.1         May-23         0.15         0.25         0.13         0.29           Jun-23         3.0         4.0         0.3.1         4.8         Jun-23         0.11         0.19         0.11         0.23           Jul-23         3.2         4.1         3.2         4.6         Jul-23         0.08         0.16         0.08         0.20           Aug-23         3.1         3.7         3.3         4.2         Aug-23         0.23         0.15         0.32         0.18           Sep-23         2.9         3.4         3.1         3.8         Sep-23         0.16         0.16         0.08         0.20           Nov-23         2.6         3.2         2.7         3.8         Oct-23         0.66         0.16         0.10         0.27           Nov-23         2.6         3.2         2.8         3.7         N										
Mar-23         4.2         4.6         5.0         5.6         Mar-23         0.08         0.28         0.05         0.38           Apr-23         4.4         4.6         5.1         5.5         Apr-23         0.40         0.33         0.46         0.38           May-23         3.9         4.5         4.2         5.1         May-23         0.15         0.25         0.13         0.29           Jul-23         3.0         4.0         3.1         4.8         Jun-23         0.11         0.19         0.11         0.23           Aug-23         3.1         3.7         3.3         4.2         Aug-23         0.21         0.16         0.08         0.20           Aug-23         2.9         3.4         3.1         3.8         Sep-23         0.23         0.15         0.32         0.18           Oct-23         2.6         3.2         2.7         3.8         Oct-23         0.6         0.16         0.10         0.27           Nov-23         2.6         3.2         2.8         3.7         Nov-23         0.18         0.16         0.28         0.27           Jan-24         2.1         2.5         2.7         3.4         Jan-										
Apr-23         4.4         4.6         5.1         5.5         Apr-23         0.40         0.33         0.46         0.38           May-23         3.9         4.5         4.2         5.1         May-23         0.15         0.25         0.13         0.29           Jun-23         3.0         4.0         3.1         4.8         Jun-23         0.11         0.19         0.11         0.23           Jul-23         3.2         4.1         3.2         4.6         Jul-23         0.08         0.16         0.08         0.20           Aug-23         3.1         3.7         3.3         4.2         Aug-23         0.23         0.15         0.32         0.18           Sep-23         2.9         3.4         3.1         3.8         Sep-23         0.16         0.15         0.20         0.19           Oct-23         2.6         3.2         2.7         3.8         Oct-23         0.06         0.16         0.10         0.27           Nov-23         2.6         3.2         2.8         3.7         Nov-23         0.18         0.16         0.28         0.27           Dec-23         2.7         2.9         3.1         3.6         Dec	Feb-23		4.7	6.0		Feb-23	0.30	0.35	0.37	0.45
May-23         3.9         4.5         4.2         5.1         May-23         0.15         0.25         0.13         0.29           Jun-23         3.0         4.0         3.1         4.8         Jun-23         0.11         0.19         0.11         0.23           Jul-23         3.2         4.1         3.2         4.6         Jul-23         0.08         0.16         0.08         0.20           Aug-23         3.1         3.7         3.3         4.2         Aug-23         0.23         0.15         0.32         0.18           Sep-23         2.9         3.4         3.1         3.8         Sep-23         0.16         0.15         0.20         0.19           Oct-23         2.6         3.2         2.7         3.8         Oct-23         0.6         0.16         0.10         0.27           Nov-23         2.6         3.2         2.8         3.7         Nov-23         0.18         0.16         0.28         0.27           Dec-23         2.7         2.9         3.1         3.6         Dec-23         0.27         0.15         0.43         0.26           Jan-24         2.1         2.5         2.7         3.4         Jan-						Mar-23				
Jun-23         3.0         4.0         3.1         4.8         Jun-23         0.11         0.19         0.11         0.23           Jul-23         3.2         4.1         3.2         4.6         Jul-23         0.08         0.16         0.08         0.20           Aug-23         3.1         3.7         3.3         4.2         Aug-23         0.23         0.15         0.32         0.18           Sep-23         2.9         3.4         3.1         3.8         Sep-23         0.16         0.15         0.20         0.19           Oct-23         2.6         3.2         2.7         3.8         Oct-23         0.06         0.16         0.10         0.27           Nov-23         2.6         3.2         2.8         3.7         Nov-23         0.18         0.16         0.28         0.27           Dec-23         2.7         2.9         3.1         3.6         Dec-23         0.27         0.15         0.43         0.26           Feb-24         1.9         2.3         2.5         3.2         Feb-24         0.07         0.15         0.11         0.26           Apr-24         2.0         2.2         2.7         3.1         Mar						Apr-23				
Jul.23         3.2         4.1         3.2         4.6         Jul.23         0.08         0.16         0.08         0.20           Aug-23         3.1         3.7         3.3         4.2         Aug-23         0.23         0.15         0.32         0.18           Sep-23         2.9         3.4         3.1         3.8         Sep-23         0.16         0.15         0.20         0.19           Oct-23         2.6         3.2         2.7         3.8         Oct-23         0.06         0.16         0.10         0.27           Nov-23         2.6         3.2         2.8         3.7         Nov-23         0.18         0.16         0.20         0.27           Dec-23         2.7         2.9         3.1         3.6         Dec-23         0.27         0.15         0.43         0.26           Jan-24         2.1         2.5         2.7         3.4         Jan-24         0.07         0.15         0.11         0.26           Feb-24         1.9         2.3         2.5         3.2         Feb-24         0.12         0.15         0.19         0.25           Apr-24         1.8         2.0         2.5         2.9         Apr	May-23	3.9	4.5	4.2	5.1	May-23	0.15	0.25	0.13	0.29
Aug-23         3.1         3.7         3.3         4.2         Aug-23         0.23         0.15         0.32         0.18           Sep-23         2.9         3.4         3.1         3.8         Sep-23         0.16         0.15         0.20         0.19           Oct-23         2.6         3.2         2.7         3.8         Oct-23         0.06         0.16         0.10         0.27           Nov-23         2.6         3.2         2.8         3.7         Nov-23         0.18         0.16         0.28         0.27           Dec-23         2.7         2.9         3.1         3.6         Dec-23         0.27         0.15         0.43         0.26           Jan-24         2.1         2.5         2.7         3.4         Jan-24         0.07         0.15         0.11         0.26           Feb-24         1.9         2.3         2.5         3.2         Feb-24         0.12         0.15         0.19         0.25           Mar-24         1.9         2.3         2.5         3.2         Feb-24         0.12         0.15         0.19         0.25           Apr-24         1.8         2.0         2.5         2.9         Apr										
Sep-23         2.9         3.4         3.1         3.8         Sep-23         0.16         0.15         0.20         0.19           Oct-23         2.6         3.2         2.7         3.8         Oct-23         0.06         0.16         0.10         0.27           Nov-23         2.6         3.2         2.8         3.7         Nov-23         0.18         0.16         0.28         0.27           Dec-23         2.7         2.9         3.1         3.6         Dec-23         0.27         0.15         0.43         0.26           Jan-24         2.1         2.5         2.7         3.4         Jan-24         0.07         0.15         0.43         0.26           Feb-24         1.9         2.3         2.5         3.2         Feb-24         0.12         0.15         0.11         0.26           Mar-24         2.0         2.2         2.7         3.1         Mar-24         0.14         0.15         0.29         0.25           Apr-24         1.8         2.0         2.5         2.9         Apr-24         0.14         0.15         0.22         0.24           May-24         1.7         1.9         2.4         2.9         May						Jul-23				
Oct.23         2.6         3.2         2.7         3.8         Oct.23         0.66         0.16         0.10         0.27           Nov.23         2.6         3.2         2.8         3.7         Nov.23         0.18         0.16         0.28         0.27           Dec.23         2.7         2.9         3.1         3.6         Dec.23         0.27         0.15         0.43         0.26           Jan.24         2.1         2.5         2.7         3.4         Jan.24         0.07         0.15         0.11         0.26           Feb.24         1.9         2.3         2.5         3.2         Feb.24         0.12         0.15         0.19         0.25           Mar.24         2.0         2.2         2.7         3.1         Mar.24         0.14         0.15         0.19         0.25           Apr.24         1.7         1.8         2.0         2.5         2.9         Apr.24         0.21         0.14         0.32         0.24           Apr.24         1.7         1.9         2.4         2.9         May.24         0.01         0.14         0.02         0.23           Jul.24         1.7         1.8         2.6         2.9	Aug-23	3.1	3.7		4.2	Aug-23	0.23		0.32	0.18
Nov-23         2.6         3.2         2.8         3.7         Nov-23         0.18         0.16         0.28         0.27           Dec-23         2.7         2.9         3.1         3.6         Dec-23         0.27         0.15         0.43         0.26           Jan-24         2.1         2.5         2.7         3.4         Jan-24         0.07         0.15         0.11         0.26           Feb-24         1.9         2.3         2.5         3.2         Feb-24         0.12         0.15         0.19         0.25           Mar-24         2.0         2.2         2.7         3.1         Mar-24         0.14         0.15         0.19         0.25           Apr-24         1.8         2.0         2.5         2.9         Apr-24         0.14         0.15         0.22         0.25           Apr-24         1.7         1.9         2.4         2.9         May-24         0.01         0.14         0.02         0.23           Jul-24         1.7         1.8         2.6         2.9         Jul-24         0.16         0.14         0.02         0.23           Jul-24         1.7         1.8         2.6         2.9         Jul										
Dec-23         2.7         2.9         3.1         3.6         Dec-23         0.27         0.15         0.43         0.26           Jan-24         2.1         2.5         2.7         3.4         Jan-24         0.07         0.15         0.11         0.26           Feb-24         1.9         2.3         2.5         3.2         Feb-24         0.12         0.15         0.19         0.25           Mar-24         2.0         2.2         2.7         3.1         Mar-24         0.14         0.15         0.22         0.25           Apr-24         1.8         2.0         2.5         2.9         Apr-24         0.21         0.14         0.32         0.24           May-24         1.7         1.9         2.4         2.9         May-24         0.01         0.14         0.02         0.23           Jul-24         1.7         1.8         2.5         2.9         Jul-24         0.16         0.14         0.24         0.23           Jul-24         1.7         1.8         2.6         2.9         Jul-24         0.06         0.13         0.11         0.22           Aug-24         1.7         1.8         2.6         2.9         Aug										
Jan-24         2.1         2.5         2.7         3.4         Jan-24         0.07         0.15         0.11         0.26           Feb-24         1.9         2.3         2.5         3.2         Feb-24         0.12         0.15         0.19         0.25           Mar-24         2.0         2.2         2.7         3.1         Mar-24         0.14         0.15         0.22         0.25           Apr-24         1.8         2.0         2.5         2.9         Apr-24         0.21         0.14         0.32         0.24           May-24         1.7         1.9         2.4         2.9         May-24         0.01         0.14         0.02         0.23           Jun-24         1.7         1.8         2.5         2.9         Jun-24         0.16         0.14         0.02         0.23           Jul-24         1.7         1.8         2.6         2.9         Jul-24         0.06         0.13         0.11         0.22           Aug-24         1.7         1.8         2.6         2.9         Aug-24         0.23         0.13         0.11         0.22           Sep-24         1.7         1.7         2.6         3.0         Sep	Nov-23	2.6	3.2	2.8	3.7	Nov-23	0.18	0.16	0.28	0.27
Feb.24         1.9         2.3         2.5         3.2         Feb.24         0.12         0.15         0.19         0.25           Mar-24         2.0         2.2         2.7         3.1         Mar-24         0.14         0.15         0.22         0.25           Apr-24         1.8         2.0         2.5         2.9         Apr-24         0.21         0.14         0.32         0.24           May-24         1.7         1.9         2.4         2.9         May-24         0.01         0.14         0.02         0.23           Jun-24         1.7         1.8         2.6         2.9         Jun-24         0.16         0.14         0.24         0.23           Jul-24         1.7         1.8         2.6         2.9         Jun-24         0.6         0.13         0.11         0.22           Aug-24         1.7         1.8         2.6         2.9         Aug-24         0.23         0.13         0.11         0.22           Aug-24         1.7         1.8         2.6         2.9         Aug-24         0.23         0.13         0.11         0.22           Sep-24         1.7         1.7         2.6         3.0         Sep-										
Mar-24         2.0         2.2         2.7         3.1         Mar-24         0.14         0.15         0.22         0.25           Apr-24         1.8         2.0         2.5         2.9         Apr-24         0.21         0.14         0.32         0.24           May-24         1.7         1.9         2.4         2.9         May-24         0.01         0.14         0.02         0.23           Jul-24         1.7         1.8         2.5         2.9         Jul-24         0.16         0.14         0.24         0.23           Jul-24         1.7         1.8         2.6         2.9         Jul-24         0.06         0.13         0.11         0.22           Sep-24         1.7         1.8         2.6         2.9         Aug-24         0.23         0.13         0.36         0.22           Sep-24         1.7         1.7         2.6         2.9         Oct-24         0.04         0.01         0.04         0.02           Oct-24         1.6         1.7         2.6         2.9         Oct-24         0.02         0.12         0.04         0.20										
Apr-24     1.8     2.0     2.5     2.9     Apr-24     0.21     0.14     0.32     0.24       May-24     1.7     1.9     2.4     2.9     May-24     0.01     0.14     0.02     0.23       Jun-24     1.7     1.8     2.5     2.9     Jun-24     0.16     0.14     0.24     0.23       Jul-24     1.7     1.8     2.6     2.9     Jul-24     0.06     0.13     0.11     0.22       Aug-24     1.7     1.8     2.6     2.9     Aug-24     0.23     0.13     0.36     0.22       Sep-24     1.7     1.7     2.6     3.0     Sep-24     0.14     0.13     0.23     0.22       Oct-24     1.6     1.7     2.6     2.9     Oct-24     0.02     0.12     0.04     0.20										
May-24         1.7         1.9         2.4         2.9         May-24         0.01         0.14         0.02         0.23           Jun-24         1.7         1.8         2.5         2.9         Jun-24         0.16         0.14         0.24         0.23           Jul-24         1.7         1.8         2.6         2.9         Jul-24         0.06         0.13         0.11         0.22           Aug-24         1.7         1.8         2.6         2.9         Aug-24         0.23         0.13         0.36         0.22           Sep-24         1.7         1.7         2.6         3.0         Sep-24         0.14         0.13         0.23         0.22           Oct-24         1.6         1.7         2.6         2.9         Oct-24         0.02         0.12         0.04         0.20										
Jun-24     1.7     1.8     2.5     2.9     Jun-24     0.16     0.14     0.24     0.23       Jul-24     1.7     1.8     2.6     2.9     Jul-24     0.06     0.13     0.11     0.22       Aug-24     1.7     1.8     2.6     2.9     Aug-24     0.23     0.13     0.36     0.22       Sep-24     1.7     1.7     2.6     3.0     Sep-24     0.14     0.13     0.23     0.22       Oct-24     1.6     1.7     2.6     2.9     Oct-24     0.02     0.12     0.04     0.20										
Jul-24     1.7     1.8     2.6     2.9     Jul-24     0.06     0.13     0.11     0.22       Aug-24     1.7     1.8     2.6     2.9     Aug-24     0.23     0.13     0.36     0.22       Sep-24     1.7     1.7     2.6     3.0     Sep-24     0.14     0.13     0.23     0.22       Oct-24     1.6     1.7     2.6     2.9     Oct-24     0.02     0.12     0.04     0.20										
Aug-24     1.7     1.8     2.6     2.9     Aug-24     0.23     0.13     0.36     0.22       Sep-24     1.7     1.7     2.6     3.0     Sep-24     0.14     0.13     0.23     0.22       Oct-24     1.6     1.7     2.6     2.9     Oct-24     0.02     0.12     0.04     0.20										
Sep-24         1.7         1.7         2.6         3.0         Sep-24         0.14         0.13         0.23         0.22           Oct-24         1.6         1.7         2.6         2.9         Oct-24         0.02         0.12         0.04         0.20										
Oct.24 1.6 1.7 2.6 2.9 Oct.24 0.02 0.12 0.04 0.20										
Nov-24 1.6 1.7 2.5 2.8 Nov-24 0.16 0.12 0.25 0.20										
Dec-24 1.6 1.6 2.5 2.8 Dec-24 0.25 0.12 0.39 0.20	Dec-24	1.6	1.6	2.5	2.8	Dec-24	0.25	0.12	0.39	0.20

Source: BLS, BEA, Morgan Stanley Research forecasts



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