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Global Investment Research

The Goldman Sachs Group, Inc.

The US Consumer 2023 Outlook

Likely muddling along rather than crashing down

December 2022

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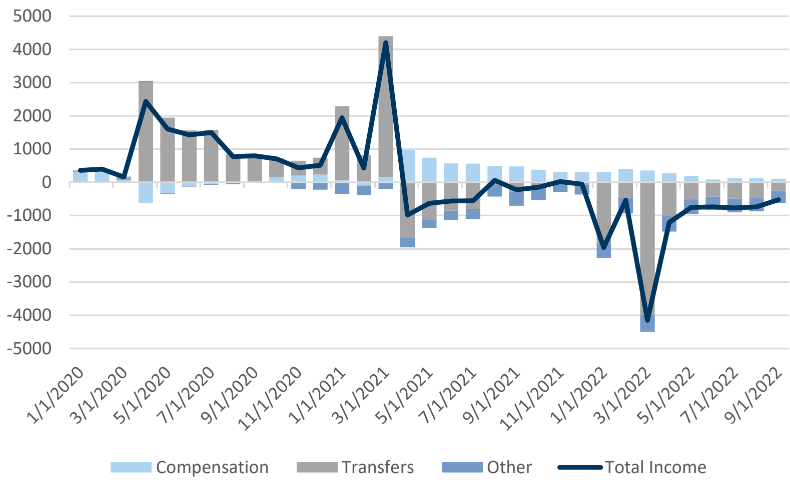
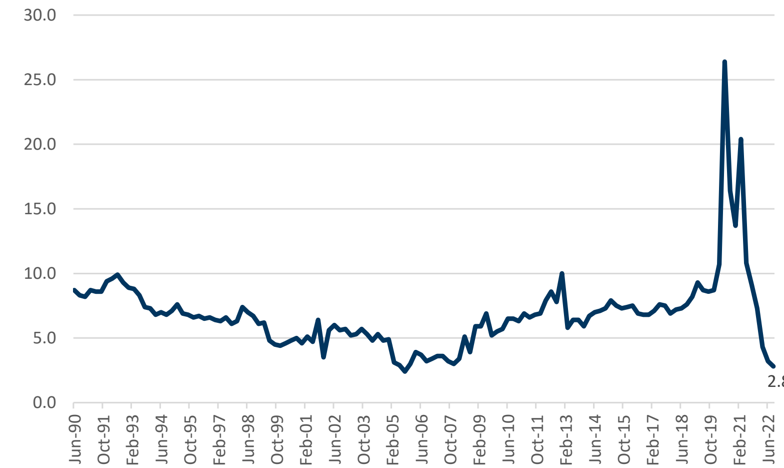
Consumer Dashboard charts we are watching

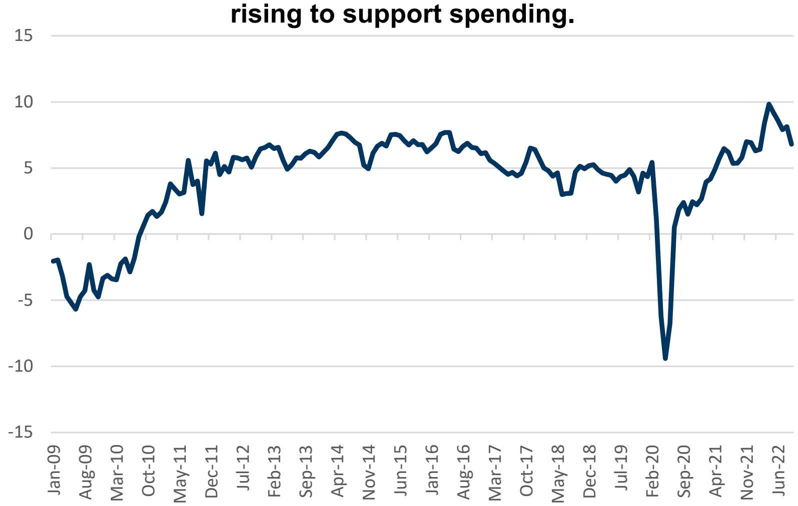
Discretionary personal income still in decline on lower government transfers (i.e., stimulus)



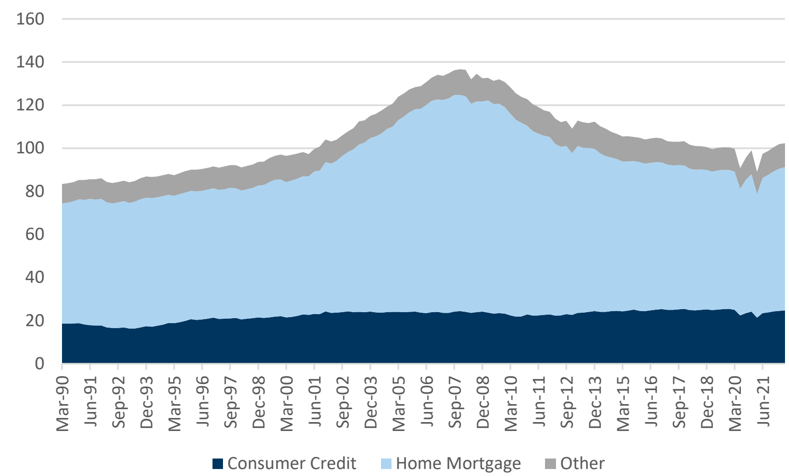
Consumer savings rate (% of income) has dropped to support spending, but from exceptionally high levels



Consumer Credit (3-mn moving avg. SAAR % change) has also rising to support spending.



But the household debt-to-income ratio is back near pre-COVID levels and not elevated by historical standards



Source: US Bureau of Labor Statistics, OECD, US Bureau of Economic Analysis (BEA), Goldman Sachs Global Investment Research

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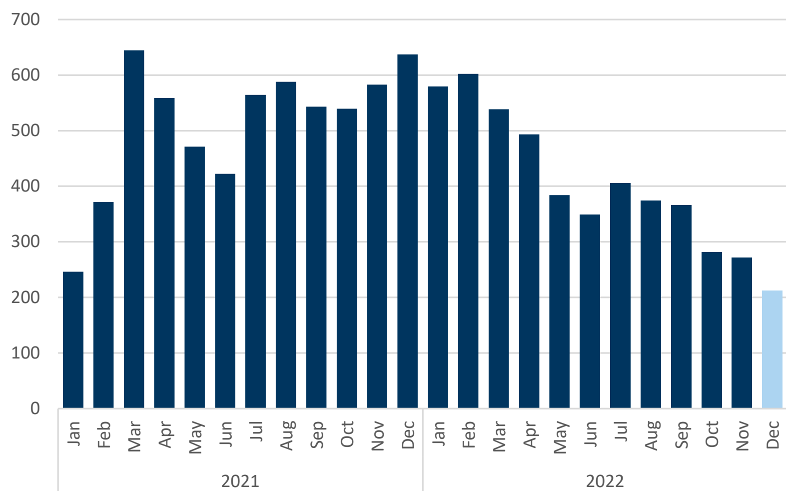
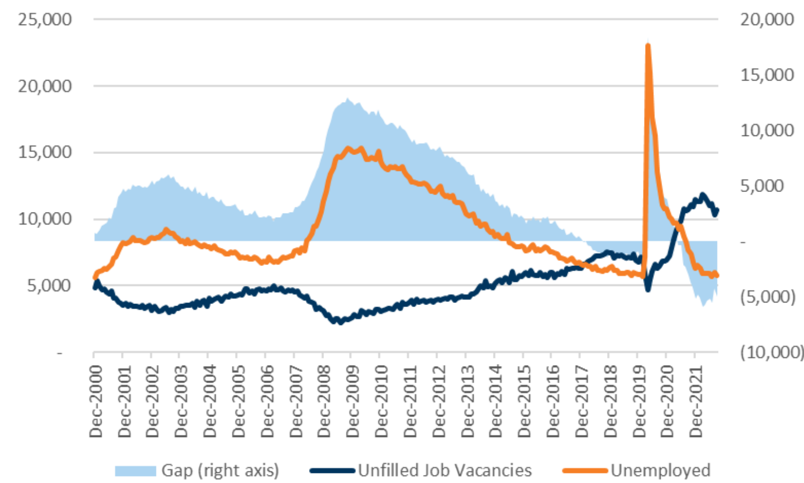
Consumer Dashboard charts we are watching

Employment growth is slowing (net job gains, ‘000’s, 3 mn avg.)

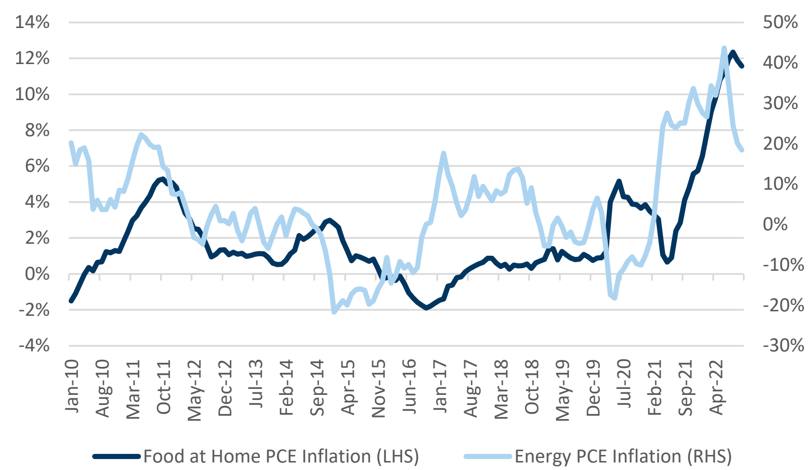


And there remains a surplus of 5mn job vacancies, net of unemployed



Wage inflation is sustaining as a result

And essential expenditure inflation is moderating



Source: US Bureau of Labor Statistics, OECD, US Bureau of Economic Analysis (BEA), Goldman Sachs Global Investment Research

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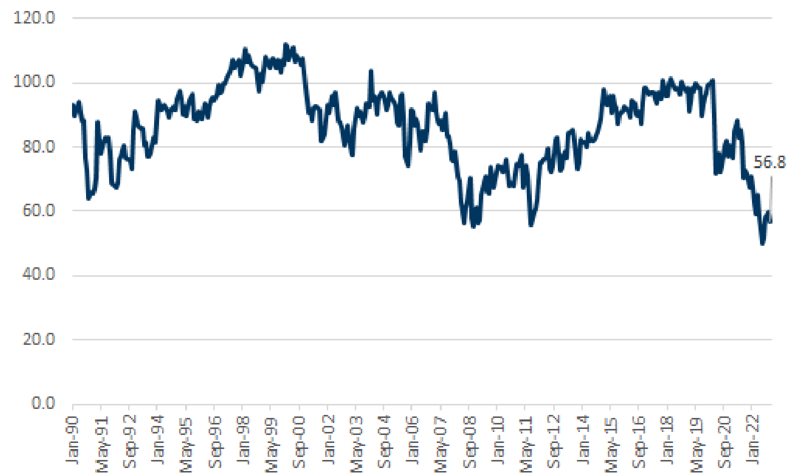
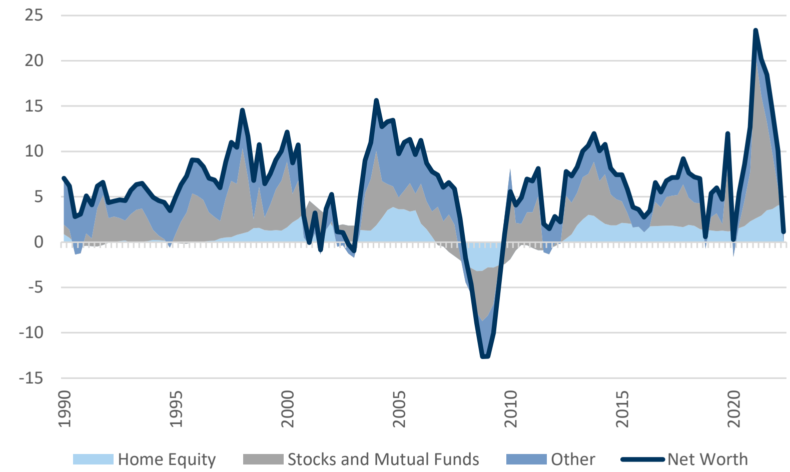
Consumer Dashboard charts we are watching

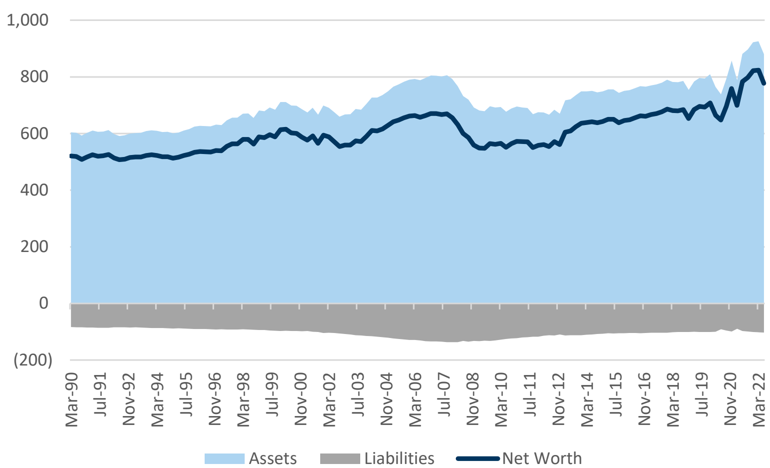
Moderated consumer sentiment is somewhat concerning



And abating net worth gains, with net worth contraction possible, is an incremental risk to spending



But while net worth as a % of DPI is now contracting, it remains elevated by historical standards



Source: US Bureau of Labor Statistics, OECD, US Bureau of Economic Analysis (BEA), University of Michigan, Goldman Sachs Global Investment Research

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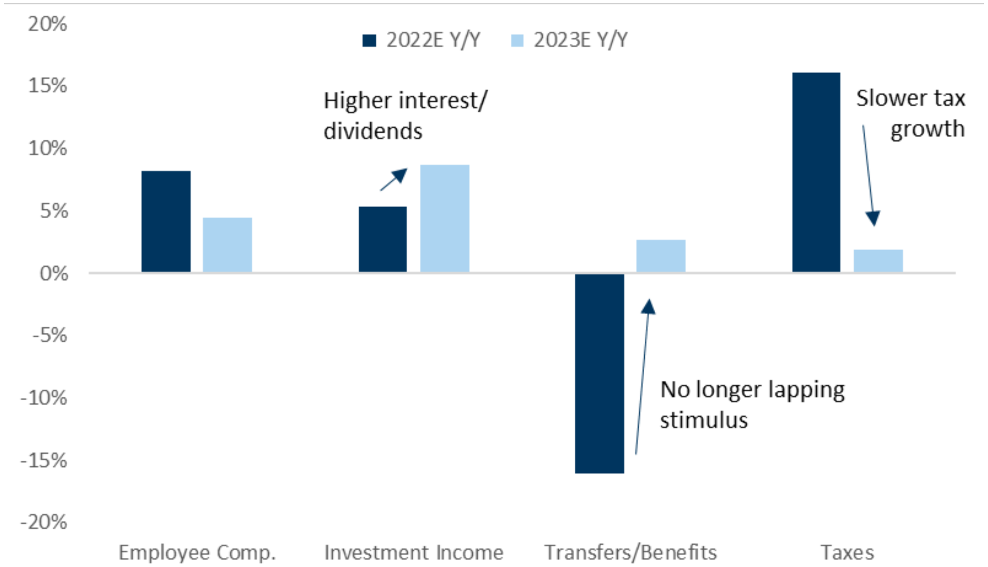
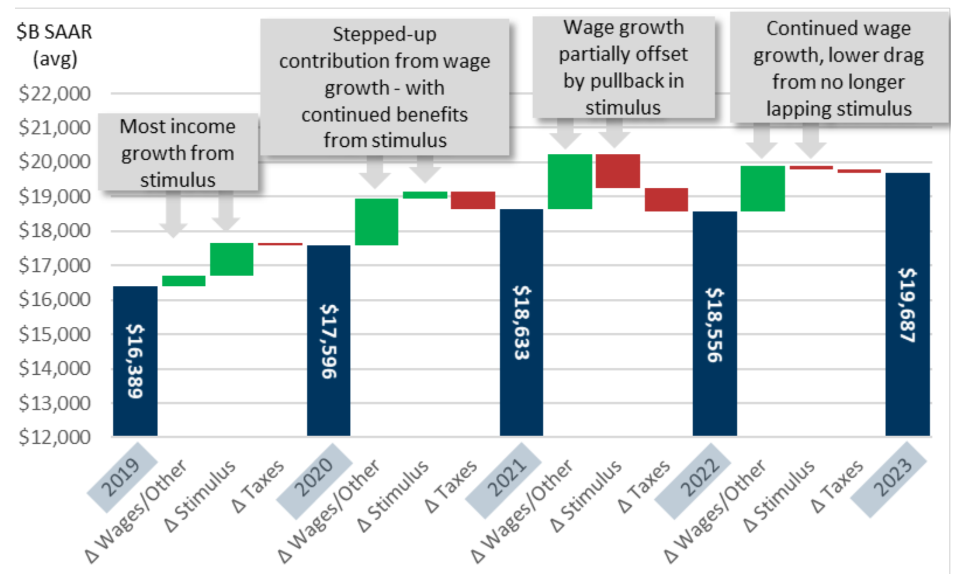
The need to borrow-to-buy should end in 2023

- In 2023, the impact of lapping stimulus will go away, and we expect another strong year of wage growth, slower tax growth, and higher interest income due to rising rates to boost DPI growth
- Disposable personal income is expected to grow +6.1% in 2023

Three of the four main buckets of DPI are slated to improve in 2023, while wage growth is expected to moderate, but still grow, as the Fed seeks to tame inflation



Overall disposable personal income ($B, SAAR) is likely to be up y/y in 2023 after declining slightly in 2022, due to strong wage/interest income growth, slower tax growth, and higher cost of living adjustments



Source: US Bureau of Labor Statistics, US Bureau of Economic Analysis (BEA), Goldman Sachs Global Investment Research

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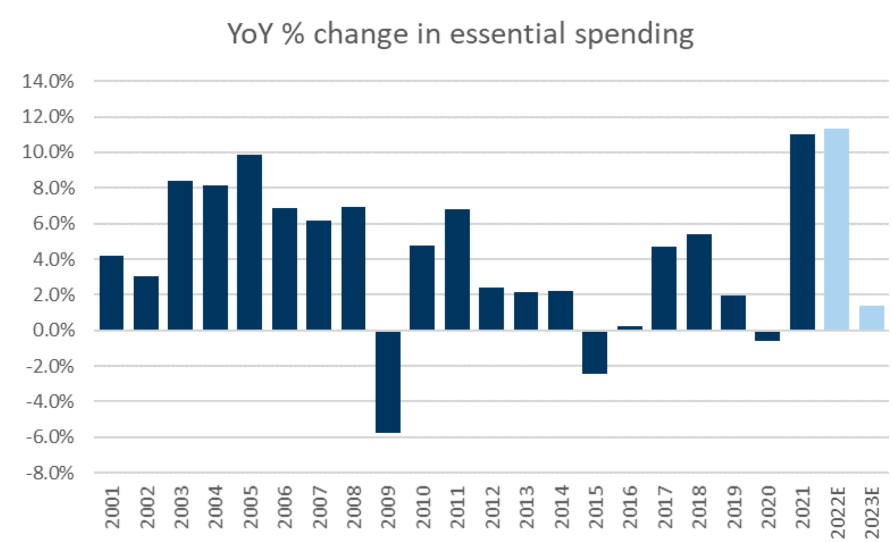
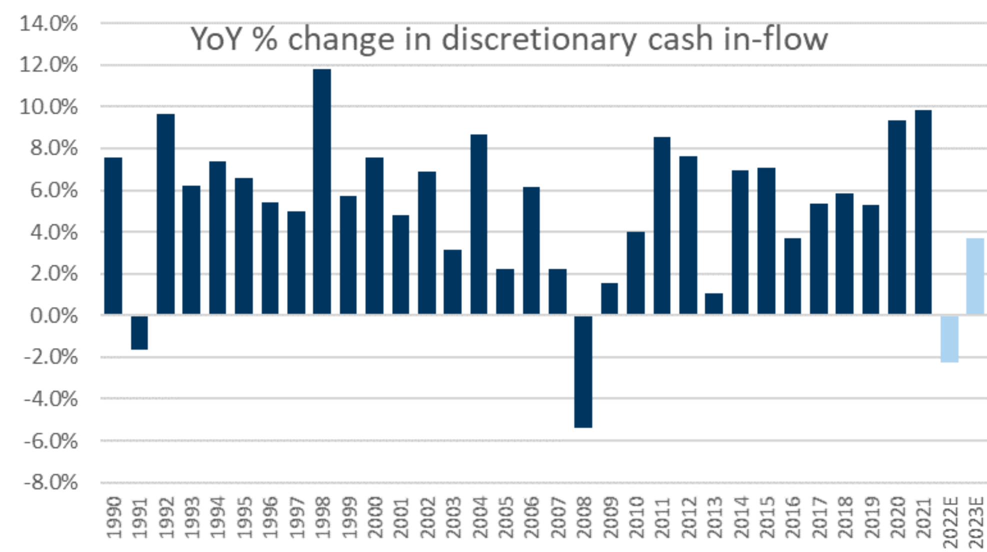
Inflation headwind poised to moderate, aiding flow through of DPI to discretionary cash in-flow

- Solid DPI growth to be accompanied by slower growth in obligatory expenditures, resulting in a return to discretionary cash in-flow
- Energy deflation & slowing inflation + declining volumes for food at home drive essential expenditures to slow (+1.4% in 2023 vs. +11% in 2022)
- Financial obligations move higher (+9.5% y/y), primarily due to rising rates

Slowing growth for essential expenditures weigh less on DPI growth in 2023, driving overall US household discretionary cash in-flows up YoY



Overall disposable cash in-flows (net of obligatory expenditures) to re-accelerate in 2023 after declining in 2022 for the first time since the Great Recession



Source: US Bureau of Economic Analysis (BEA), Federal Reserve Board, Haver Analytics, Energy Information Administration, Bureau of Labor Statistics, CME Group, Federal Housing Finance Agency, Goldman Sachs Global Investment Research

Overlay savings rate up-tick and a path to slower, but still positive, PCE is evident

- In 2023, expect discretionary cash in-flow to re-accelerate, while a slightly higher savings rate limits flow-through to consumer expenditures
- It collectively illustrates a path to slower, but still positive spending growth in 2023

	2019	2020	2021	2022E	1Q23E	2Q23E	3Q23E	4Q23E	2023E	
Disposable Personal Income	**$16,389**	**$17,596**	**$18,633**	**$18,555**	**$4,817**	**$4,884**	**$4,955**	**$5,031**	**$19,687**	
% change	**5.0%**	**7.4%**	**5.9%**	**-0.4%**	**6.0%**	**6.0%**	**6.0%**	**6.4%**	**6.1%**	**<-- Nominal DPI growth muted in 2022 on stimulus lap; bounce back expected on wage growth & lower cap gains tax in 2023.**
Cash adjustments	$450	$484	$467	$395	$99	$94	$90	$85	$367	
% change	**9.3%**	**7.6%**	**-3.6%**	**-15.5%**	**-9.2%**	**-7.7%**	**-5.4%**	**-5.1%**	**-7.0%**	
"Cash income"	**$16,838**	**$18,080**	**$19,100**	**$18,950**	**$4,916**	**$4,978**	**$5,045**	**$5,116**	**$20,054**	
% change	**5.1%**	**7.4%**	**5.6%**	**-0.8%**	**5.7%**	**5.7%**	**5.8%**	**6.1%**	**5.8%**	**<-- 2023 cash income & total HH cashflow to mirror DPI**
Borrowing	$182	-$3	$230	$316	$100	$103	$66	$54	$323	**Mortgage Equity Withdrawals down YoY**
% change	4.4%	NM	-8390.1%	37.4%	28.2%	-0.9%	-24.4%	16.4%	2.3%	
Total household cash flow	**$17,105**	**$18,292**	**$19,928**	**$20,008**	**$5,164**	**$5,206**	**$5,214**	**$5,252**	**$20,836**	
% change	**4.9%**	**6.9%**	**8.9%**	**0.4%**	**5.1%**	**3.7%**	**3.4%**	**4.3%**	**4.1%**	
Financial obligations	-$2,432	-$2,468	-$2,521	-$2,660	-$703	-$719	-$736	-$754	-$2,912	
% of DPI	14.8%	14.0%	13.5%	14.3%	14.6%	14.7%	14.9%	15.0%	14.8%	**<-- Financial obligations continue to rise with higher rates**
% change	5.6%	1.5%	2.1%	5.5%	8.7%	9.4%	9.7%	10.0%	9.5%	
Essential spending[2]	-$2,214	-$2,200	-$2,442	-$2,719	-$690	-$687	-$693	-$686	-$2,757	**<-- Essential spend up big in 2022, slower growth in 2023 on NRG**
% change	1.9%	-0.6%	11.0%	11.3%	3.5%	-0.3%	1.2%	1.3%	1.4%	
Discretionary cash flow	**$12,459**	**$13,623**	**$14,965**	**$14,629**	**$3,771**	**$3,799**	**$3,785**	**$3,812**	**$15,167**	**<-- Discretionary cash in-flow down in '22 w/ bounce back expected in '23**
$ change	**$628.0**	**$1,164.7**	**$1,341.9**	**-$335.8**	**$172.3**	**$128.4**	**$97.7**	**$139.6**	**$538.0**	
% change	**5.3%**	**9.3%**	**9.9%**	**-2.2%**	**4.8%**	**3.5%**	**2.6%**	**3.8%**	**3.7%**	
Savings adjustment										
Savings rate (% of income)	**8.8%**	**16.8%**	**11.9%**	**3.6%**	**3.9%**	**4.1%**	**4.4%**	**4.6%**	**4.3%**	**<-- Slight rebound in savings rate**
YoY chg	1.3%	8.0%	-4.9%	-8.3%	-0.4%	0.7%	1.0%	1.4%	0.7%	
Savings from cash flow	**$1,629**	**$2,957**	**$2,447**	**$982**	**$289**	**$302**	**$283**	**$288**	**$1,161**	
Adj. discretionary cash flow	**$10,830**	**$10,666**	**$12,518**	**$13,648**	**$3,481**	**$3,497**	**$3,502**	**$3,525**	**$14,006**	**<-- … drives slowing, but positive, adj. DCF growth**
% change	**3.4%**	**-1.5%**	**17.4%**	**9.0%**	**4.7%**	**2.6%**	**1.7%**	**1.5%**	**2.6%**	

Source: US Bureau of Economic Analysis (BEA), Federal Reserve Board, Haver Analytics, Energy Information Administration, Bureau of Labor Statistics, CME Group, Federal Housing Finance Agency, Goldman Sachs Global Investment Research

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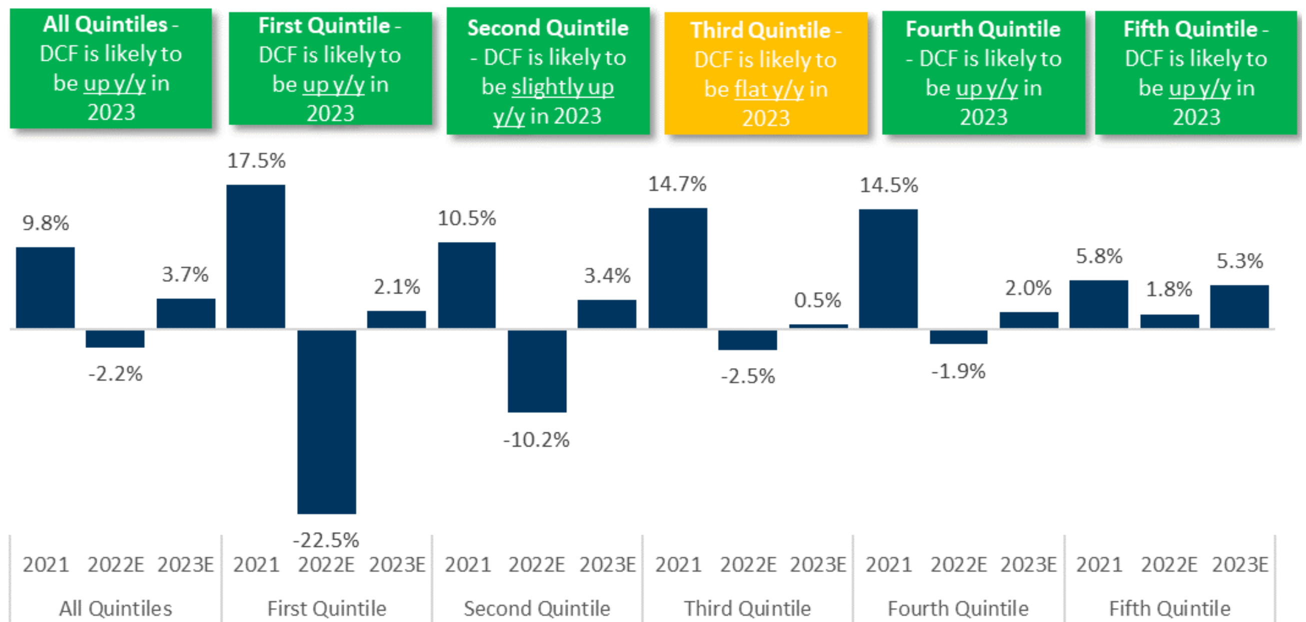
Disparities across income cohorts are less obvious in 2023, though middle income appears marginally worse

Y/Y % change in discretionary cash in-flow overall & by income quintile for 2021, 2022 & 2023 ($B, SAAR)



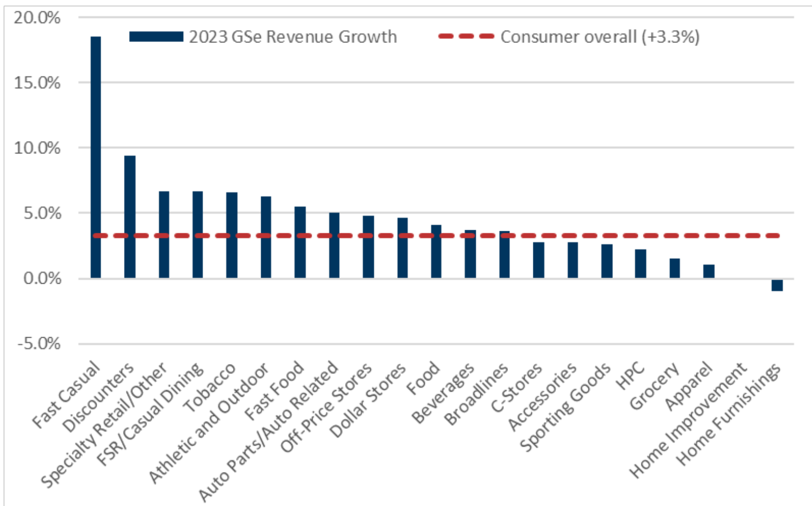
- Lower income consumer wallets poised to re-accelerate:
  - No longer lapping stimulus; essential expenditures, which are poised to moderate, are highest for this group (40% of cash income vs. 20% for high income)
- Middle income consumer to see the slowest growth
  - Despite strong wage growth, this group sees most of the downsides of higher rates (higher exposure vs. to financial obligations increasing, mortgage equity withdrawals decreasing) and fewer of the benefits (higher interest/dividend income)
- Upper income consumers will again see the highest change in y/y income/ spending power
- Note: While there are differences between the cohorts, this year see the fewest differences between cohorts since the onset of the pandemic

Source: US Bureau of Economic Analysis (BEA), Federal Reserve Board, Haver Analytics, Energy Information Administration, Bureau of Labor Statistics, CME Group, Federal Housing Finance Agency, Goldman Sachs Global Investment Research

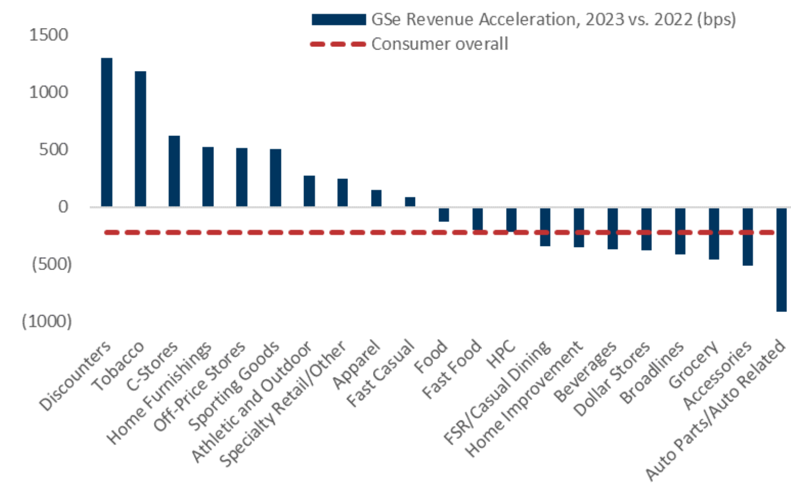
Macro outlook aligns with our bottom-up forecasts

Slower, but sustained rev. growth & margin driven EPS acceleration

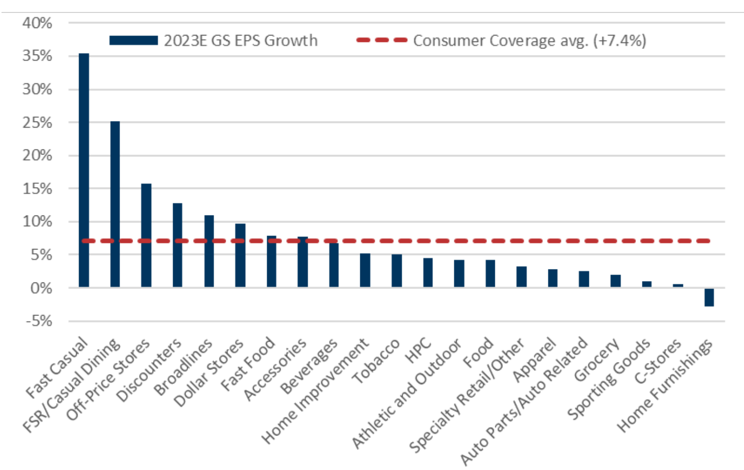
We model sustained sales growth for all subsectors apart from Home Furnishings…



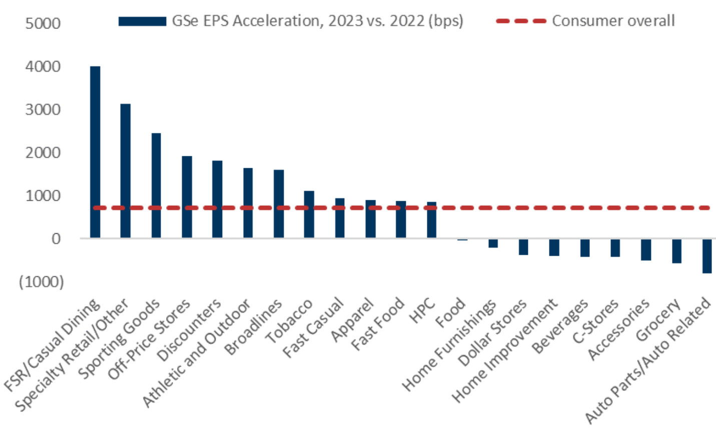
…though we do model growth slowing sequentially, as PCE growth is expected to be positive but slower



We expect EPS growth across nearly all subsectors…



…with improved margins more than offsetting slower revenues, driving EPS acceleration overall



Source: Goldman Sachs Global Investment Research

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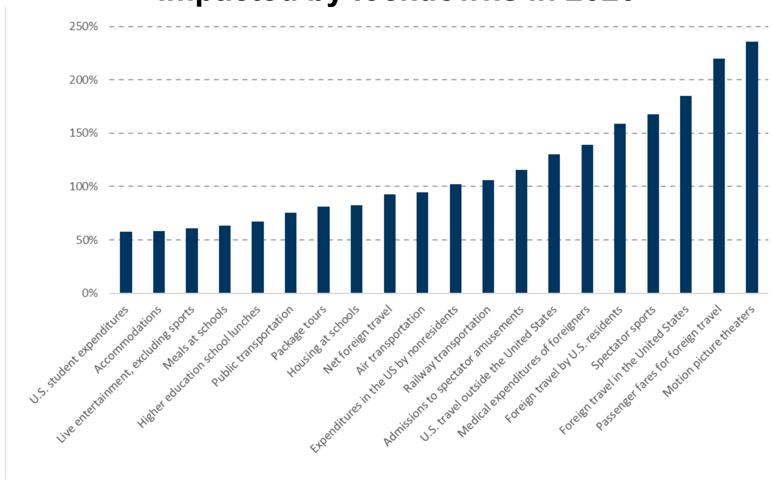
Disparities on share of wallet shifts likely to sustain, but at less meaningful levels

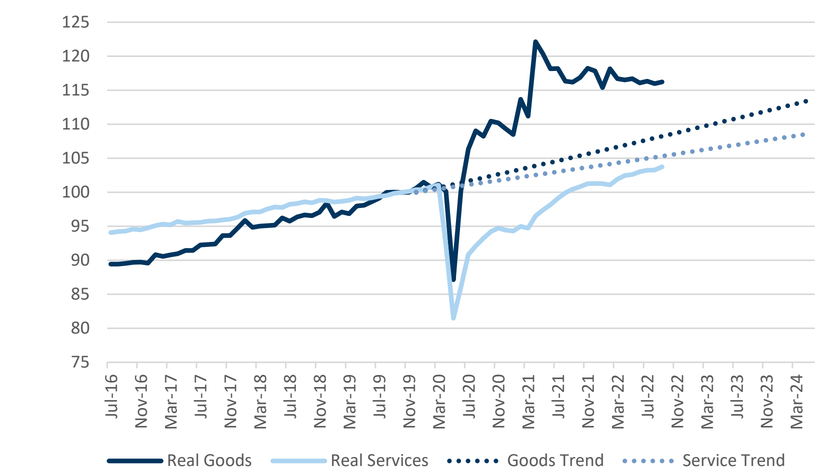
The fastest growing categories in 2022 were those most-impacted by lockdowns in 2020



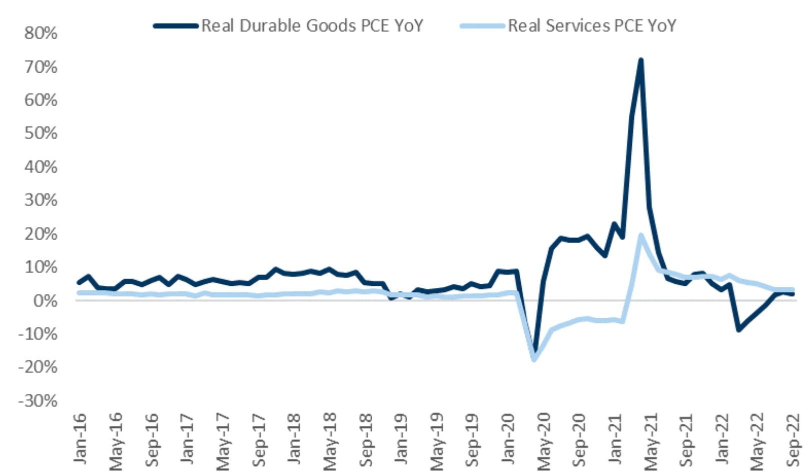
…wallet share has nearly caught up to historical levels

Categories of spending - share of total	2022'TD	Vs. Hist.
Gasoline and other energy goods (NDG)	2.9%	(19bps)
Clothing and footwear (NDG)	2.8%	(19bps)
Luggage and similar personal items (DG)	0.2%	2
Physician services (S)	0.9%	(7bps)
Dental services (S)	0.2%	(3bps)
Motor vehicle services (S)	1.9%	(13bps)
Ground transportation (S)	0.3%	(6bps)
Air transportation (S)	0.9%	15
Membership clubs, sports centers, parks, theaters (S)	1.1%	(34bps)
Gambling (S)	0.9%	(11bps)
Food services (S)	6.1%	60
Accommodations - Hotels, Motels, Housing at Schools (S)	1.1%	2
Personal care services (S)	0.9%	(13bps)
Clothing/ footwear services - laundry, dry cleaning, etc. (S)	0.1%	(4bps)
Foreign travel by U.S. residents (S)	1.1%	(4bps)
Aggregate of the above listed categories	**21.5%**	**(55bps)**

A "durable goods recession" likely to continue as real PCE normalizes with pre-Covid trend line



…following outsized growth in 2020 and 2021



Source: US Bureau of Economic Analysis (BEA), Goldman Sachs Global Investment Research

Downside scenarios

- We outline two downside scenarios, with unemployment +2pp/+5pp vs our 3.9% base case. In a shallow recession, the after-savings DCF would still grow 1%

	1Q23E	2Q23E	3Q23E	4Q23E	2023E	Comments
Base Case						
Discretionary Personal Income	4,817	4,884	4,955	5,031	19,687	<- baseline assumes 3.9% unemployment,
YoY	6.0%	6.0%	6.0%	6.4%	6.1%	+4.4%/+8.7% wage/investment income growth and +1.9% income/FICA tax growth
Essential Expenditures & Financial Obligations	(1,394)	(1,407)	(1,429)	(1,440)	(5,669)	
YoY	6.0%	4.4%	5.4%	5.7%	5.4%	
Discretionary Cash In-flow	3,771	3,799	3,785	3,812	15,167	
YoY	4.8%	3.5%	2.6%	3.8%	3.7%	
Savings Rate	3.9%	4.1%	4.4%	4.6%	4.3%	
After savings DCF	**3,481**	**3,497**	**3,502**	**3,525**	**14,006**	
YoY	**4.7%**	**2.6%**	**1.7%**	**1.5%**	**2.6%**	
Shallow Recession: unemployment + 2 pts; wages, salaries and disbursements -2pts						
Discretionary Personal Income	4,759	4,826	4,896	4,972	19,453	
YoY	4.7%	4.7%	4.7%	5.1%	4.8%	<-- 1.2% lower on 2% lower wage assumption
Essential Expenditures & Financial Obligations	(1,394)	(1,407)	(1,429)	(1,440)	(5,669)	<-- no change, though recession is usually
YoY	6.0%	4.4%	5.4%	5.7%	5.4%	accompanied with sequential deflation
Discretionary Cash In-flow	3,713	3,741	3,726	3,753	14,932	
YoY	3.2%	1.9%	1.0%	2.2%	2.1%	
Savings Rate	3.9%	4.1%	4.4%	4.6%	4.3%	<-- assume no change to savings rate
After savings DCF	**3,426**	**3,441**	**3,446**	**3,468**	**13,781**	
YoY	**3.0%**	**0.9%**	**0.1%**	**-0.1%**	**1.0%**	
Deeper Recession: unemployment + 5 pts; wages, salaries and disbursements -5pts						
Discretionary Personal Income	4,672	4,738	4,808	4,882	19,100	<-- 3% lower than base case on 5% lower
YoY	2.8%	2.8%	2.9%	3.2%	2.9%	wage assumption
Essential Expenditures & Financial Obligations	(1,394)	(1,407)	(1,429)	(1,440)	(5,669)	<-- no change, though recession is usually
YoY	6.0%	4.4%	5.4%	5.7%	5.4%	accompanied with sequential deflation
Discretionary Cash In-flow	3,626	3,653	3,638	3,663	14,580	
YoY	0.8%	-0.5%	-1.4%	-0.3%	-0.3%	
Savings Rate	3.9%	4.1%	4.4%	4.6%	4.3%	<-- assume no change to savings rate
After savings DCF	**3,342**	**3,357**	**3,361**	**3,383**	**13,444**	
YoY	**0.5%**	**-1.5%**	**-2.4%**	**-2.6%**	**-1.5%**	

Source: US Bureau of Economic Analysis (BEA), Federal Reserve Board, Haver Analytics, Energy Information Administration, Bureau of Labor Statistics, CME Group, Federal Housing Finance Agency, Goldman Sachs Global Investment Research

What's Priced In?

While the XLP and XLY both screen rich vs. history, our Hardlines/Softlines in discretionary and tobacco/C-stores in staples screen as fertile ground to hunt for good relative value investments

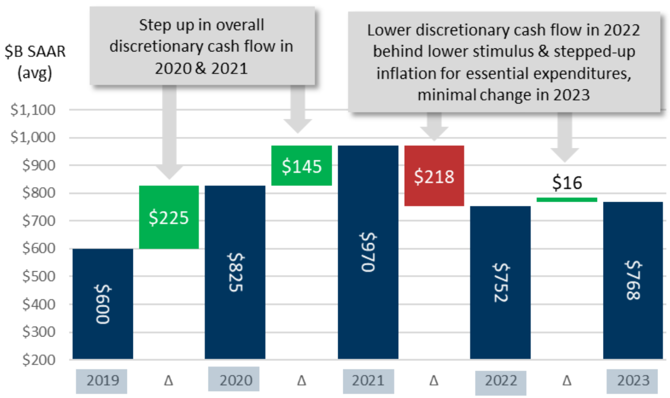
	Absolute P/E (market-weighted)			Relative P/E (market-weighted)			Absolute P/E (market-weighted)		Relative P/E (market-weighted)	
	2023 P/E mult		Current rel to	2023 P/E mult		Current rel to	2008	Current rel to	2008	Current rel to
	Current	10-Yr Avg	10-Yr Avg	Current	10-Yr Avg	10-Yr Avg	avg	2008 avg	avg	2008 avg
Beverages	26.9x	23.2x	116%	150%	135%	111%	16.6x	162%	123%	122%
Tobacco	15.1x	16.7x	90%	84%	98%	86%	13.2x	114%	98%	86%
HPC	27.1x	22.3x	121%	151%	130%	116%	15.8x	171%	117%	129%
Packaged Food	21.1x	19.6x	108%	118%	114%	103%	15.3x	138%	113%	104%
Broadlines	27.7x	22.2x	125%	155%	129%	119%	15.7x	176%	116%	133%
Dollar Stores	22.0x	19.5x	113%	122%	114%	108%	-	-	-	-
Grocers	16.4x	18.2x	90%	92%	106%	86%	13.9x	119%	102%	90%
Discounters	35.8x	39.7x	90%	200%	232%	86%	-	-	-	-
C-Stores	17.2x	19.5x	88%	96%	114%	84%	13.8x	124%	102%	94%
Fast Food	29.5x	25.7x	115%	164%	150%	110%	16.0x	184%	118%	139%
FSR/Casual Dining	21.2x	24.2x	88%	118%	141%	84%	11.8x	179%	87%	136%
Fast Casual	40.7x	45.7x	89%	227%	267%	85%	15.3x	266%	113%	201%
Lodging/Leisure	17.0x	25.8x	66%	95%	151%	63%	11.5x	147%	85%	111%
Home Improvement	18.7x	21.6x	87%	104%	126%	83%	14.3x	130%	106%	99%
Home Furnishings	8.5x	20.0x	43%	47%	117%	41%	18.1x	47%	133%	36%
Sporting Goods	8.8x	11.9x	74%	49%	70%	71%	16.7x	53%	123%	40%
Auto Parts/Auto Related	20.7x	18.9x	109%	115%	110%	105%	15.3x	135%	113%	102%
Specialty Retail	18.1x	30.7x	59%	101%	179%	56%	12.1x	149%	89%	113%
Accessories	8.8x	13.4x	66%	49%	78%	63%	11.7x	75%	86%	57%
General Apparel	15.1x	17.2x	88%	84%	100%	84%	13.5x	112%	100%	85%
Off-Price Stores	27.6x	27.9x	99%	154%	163%	94%	14.0x	197%	103%	149%
Department Stores	6.2x	10.9x	57%	34%	64%	54%	13.2x	47%	97%	36%
Athletic & Outdoor Apparel	33.4x	33.1x	101%	186%	193%	97%	15.7x	214%	115%	162%
S&P 500	**17.9x**	**17.1x**	**105%**	**100%**			**13.6x**	**132%**		
Consumer Staples (XLP)	21.8x	20.0x	109%	121%	116%	104%	14.7x	148%	109%	112%
Consumer Discretionary (XLY)	26.7x	24.4x	110%	149%	142%	105%	20.7x	129%	152%	98%
Communication Services (XLC)	16.3x	20.6x	79%	91%	120%	75%				
Energy (XLE)	8.1x	8.9x	91%	45%	52%	87%	10.5x	77%	77%	58%
Financials (XLF)	13.8x	13.9x	100%	77%	81%	95%	18.3x	76%	135%	57%
Healthcare (XLV)	17.1x	16.7x	102%	95%	97%	98%	12.7x	135%	93%	102%
Industrials (XLI)	20.7x	20.1x	103%	115%	117%	99%	12.6x	165%	92%	125%
Materials (XLB)	15.0x	17.7x	85%	84%	103%	81%	16.3x	92%	120%	70%
Real Estate (XLRE)	17.2x	19.8x	87%	96%	116%	83%				
Technology (XLK)	21.6x	19.7x	110%	121%	115%	105%	15.0x	144%	111%	109%
Utilities (XLU)	20.0x	17.8x	112%	112%	104%	107%	13.4x	150%	98%	113%

Source: Factset, Goldman Sachs Global Investment Research

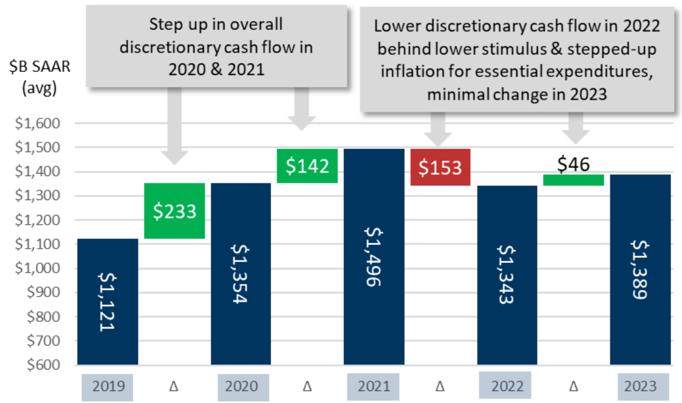
Goldman Sachs

A closer look at disposable cash in-flow by quintile

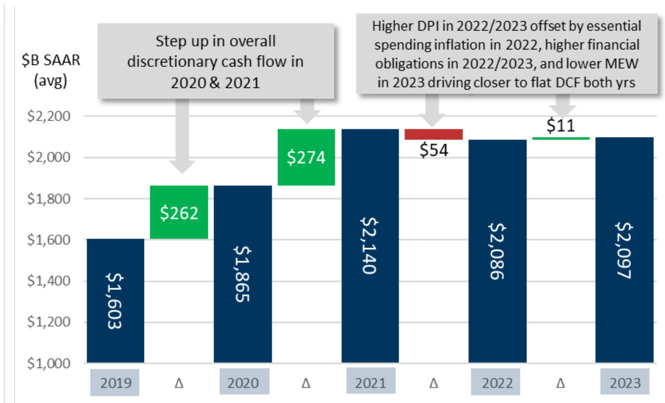
Lowest income quintile: Wage growth no longer offset by lapping stimulus; essential expenditures to moderate



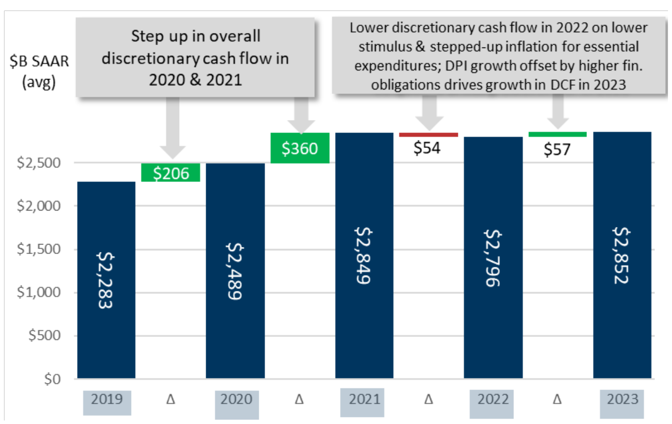
Second income quintile: Similar dynamics at play compared to 1st quintile, but higher DPI growth due to interest/dividend income, more transfers (COLA)



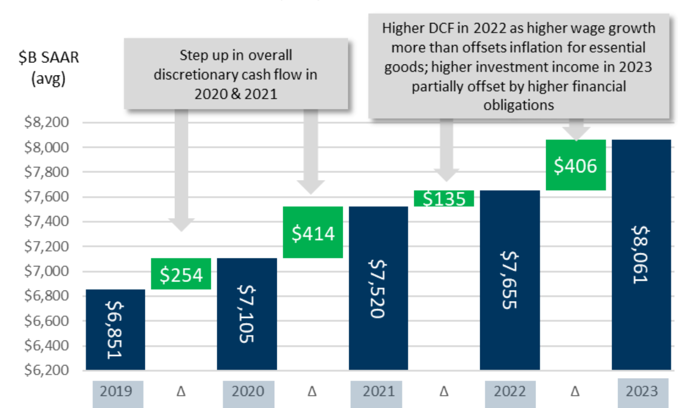
Middle income quintile: Higher wage growth, but less benefit from moderation in inflation & higher interest income; most impacted by lower mortgage equity withdrawals (MEW)



Fourth income quintile: Strong DPI growth, more benefit from higher interest income, but also see a drag from lower MEW



Highest income quintile: Strongest DPI growth and limited effects from higher financial obligations, lower MEW



Source: US Bureau of Economic Analysis (BEA), Goldman Sachs Global Investment Research

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Goldman Sachs Investment Research global Equity coverage universe

	Rating Distribution			Investment Banking Relationships		
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