First-Quarter U.S. Economic Update

May 2022

Summary of Recent Economic and Market Developments

The U.S. economy was mixed in the first quarter, with overall real GDP down 1.4% but domestic final sales up 2.6%. Employment continued to rise briskly, the unemployment rate fell to 3.6%, and demand for workers remained strong. Personal income rose moderately, with solid gains in wages and salaries, but failed to keep pace with inflation. Nonetheless, real personal consumption expenditures rose 2.7% in Q1 as consumers dipped into savings and increased borrowing. Home sales slowed as higher prices and mortgage rates cooled demand, while high inflation turned strong nominal residential investment into only a 2.1% real gain. Industrial output rose strongly, up 7.6% in Q1, and capacity utilization reached its highest level since 2018. That prompted a 9.2% gain in business investment despite another small drop in structures investment. Trade (-3.2%), inventories (-0.8%), and government consumption (-0.5%) each made negative contributions to first quarter real GDP growth.

Inflation rose to the highest levels in 40 years, with the year-over-year CPI reaching a high of 8.5% in March and the PCE deflator touching 6.6% in March. Inflation broadened beyond food and energy prices, and the core (excluding food and energy) CPI rose to a peak 6.5% YoY in March, while the core PCE deflator reached its peak of 5.3% in February. While those levels probably mark the peak in inflation for this cycle, we do not expect to see major progress on inflation until the fourth quarter.

High inflation prompted a sharp turn in monetary policy. The Fed hiked the fed funds rate by 75 bp so far, and markets currently expect the funds rate to reach 2.75–3.00% by year-end, peaking around 3.25% in mid-2023. The Fed also ended quantitative easing in March and will begin to reduce its balance sheet in June. Yields on 10- and 30-year Treasuries rose by 126 and 109 bp, respectively, since the start of 2022, and credit spreads widened sharply as investor worries over recession mounted, leading to sizable negative returns so far in 2022. Although we anticipate a mild recession sometime after mid-2023, fundamental credit quality remains healthy. Leverage has continued to decline, while business bankruptcy filings, household and business debt service, and bank loan delinquencies and charge-offs all remain historically low. We think financial companies, which are the largest issuers in the preferred market, should benefit from higher interest rates and have the capital, earnings, and reserves to manage strains that a recession could bring. We believe today's higher yields on preferred and contingent capital securities offer a foundation for potentially better returns ahead.

Author's note: We changed the presentation of our Economic Update this quarter, organizing it by major economic sectors and markets. Most economic and market data now appear in tables and graphs, while accompanying prose focuses on explanation and analysis. In many data tables, we use green shading to highlight indicators that improved from the prior period, red shading on those that deteriorated, and no shading on indicators that were little changed. We hope you find the new format more readable and useful.

Economic Outlook

Figure 1: U.S. Gross Domestic Product

	Real GDP (QoQ%, AR; *Q4/Q4)				Nominal GDP (QoQ%, AR; *Q4/Q4)				Implicit Deflator (AR; *Q4/Q4)			
Sector	**2022:1**	**2021:4**	**2021***	**2020***	**2022:1**	**2021:4**	**2021***	**2020***	**2022:1**	**2021:4**	**2021***	**2020***
Gross Domestic Product (GDP)	-1.4%	6.9%	5.5%	-2.3%	6.5%	14.5%	11.8%	-1.0%	8.0%	7.1%	5.9%	1.3%
Personal Consumption Expenditures	2.7%	2.5%	6.9%	-2.4%	9.9%	9.0%	12.8%	-1.3%	7.0%	6.4%	5.5%	1.2%
PCE: Goods	-0.1%	1.1%	7.3%	7.7%	11.6%	11.4%	16.1%	7.2%	11.8%	10.2%	8.2%	-0.5%
PCE: Services	4.3%	3.3%	6.7%	-6.9%	9.0%	7.8%	11.1%	-5.1%	4.6%	4.4%	4.1%	2.0%
Fixed Investment	7.3%	2.7%	4.4%	0.5%	17.6%	11.8%	10.7%	2.2%	9.6%	8.9%	6.0%	1.7%
Business Investment	9.2%	2.9%	6.6%	-3.8%	16.7%	11.0%	10.2%	-3.0%	6.8%	7.8%	3.4%	0.8%
Structures	-0.9%	-8.3%	-2.6%	-20.0%	17.5%	14.0%	8.9%	-19.4%	18.5%	24.4%	11.8%	0.7%
Equipment	15.3%	2.8%	6.5%	-0.3%	23.1%	9.9%	9.2%	-1.1%	6.7%	6.9%	2.6%	-0.8%
Intellectual Property	8.1%	8.9%	11.5%	2.5%	9.8%	10.6%	12.0%	5.3%	1.7%	1.6%	0.4%	2.7%
Residential Investment	2.1%	2.2%	-1.5%	15.7%	20.2%	14.4%	11.9%	21.0%	17.8%	11.9%	13.6%	4.6%
Government Consumption	-2.7%	-2.6%	0.1%	1.2%	6.1%	4.8%	6.4%	3.0%	9.1%	7.6%	6.3%	1.8%
Federal	-5.9%	-4.3%	-1.1%	3.1%	0.7%	1.1%	3.6%	4.9%	7.0%	5.7%	4.7%	1.7%
State & Local	-0.8%	-1.6%	0.8%	0.0%	9.5%	7.1%	8.2%	1.9%	10.3%	8.9%	7.3%	1.9%
Domestic Final Sales	2.6%	1.7%	5.3%	-1.3%	10.6%	8.8%	11.3%	0.1%	7.8%	7.0%	5.7%	1.4%
Private Domestic Final Sales	3.7%	2.6%	6.4%	-1.8%	11.5%	9.6%	12.3%	-0.6%	7.6%	6.9%	5.6%	1.3%

Legend for all Figures: AR = Annual Rate; SA = Seasonally Adjusted; MA = Moving Average; C.O.P. = Change over Period
Data source for all tables is Macrobond, unless noted otherwise.

The U.S. economy turned in a mixed performance in the first quarter, with stronger domestic final sales but weaker overall growth (Figure 1). Inflation-adjusted gross domestic product (real GDP) slipped 1.4%, as slower inventory accumulation and a sharply wider trade deficit together subtracted 4.0% from Q1 growth. Nominal GDP rose strongly in most sectors, with federal government spending a notable exception. However, inflation worsened across most major sectors of the economy, reaching the highest levels in 40 years. After inflation, personal consumption expenditures and residential investment rose moderately, business investment jumped, and government consumption fell for the second consecutive quarter. This "stagflationary" combination of strong nominal growth, sticky inflation, and modest real growth is likely to remain a theme into 2023.

Economists expect real GDP growth to average 2.7% in 2022, with growth of 3.0% in Q2, 2.7% in Q3, and 2.2% in Q4 as tighter monetary policy dampens demand.[1] While that growth rate would be down substantially from 2021, it would be more in line with its long-term trend of 2.0-2.5%. The outlook for 2023-24 is a much tougher call. Inflation and the Federal Reserve's response to it, developments in Ukraine, COVID's impact on global supply chains and consumer activity, and the midterm elections, are just a few of the challenges facing the economy next year. For now, economists expect 2.1% and 2.0% growth in 2023 and 2024, respectively. Those forecasts imply that the Fed will engineer an economic "soft landing" by reducing core PCE inflation (currently over 5%) close to its 2% long-term target while avoiding a recession. With such high inflation, that will be a very difficult task. We think a recession beginning in the second half of 2023 or in 2024 is more likely. However, we do not see over-investment in homes, inventories, or plant and equipment that typically lead from boom to bust. As a result, our anticipated recession should be mild.

[1] Bloomberg *Monthly Economic Survey*, May 13, 2022, Bloomberg L.P.

Employment, Income and Spending

Figure 2: Employment Overview

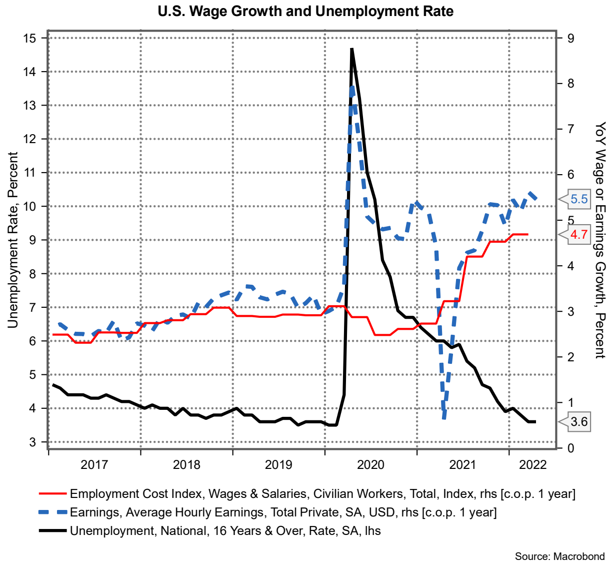
Employment	**MoMΔ (Level for Rates)**			**QoQ Change**			**YoY% Change**		**Chg vs.**
(Thousands except percents)	**Apr-22**	**Mar-22**	**Feb-22**	**2022:1**	**2021:4**	**2021:3**	**Apr-22**	**Mar-22**	**Feb-20**
Nonfarm Payrolls	428	428	714	1,646	1,912	1,630	4.6%	4.5%	(1,190)
Private	406	424	704	1,620	1,882	1,544	5.2%	5.0%	(500)
Household Employment	(353)	736	548	2,483	2,169	2,194	4.5%	5.1%	(761)
Labor Participation Rate %	62.2%	62.4%	62.3%	0.5%	0.2%	0.1%	0.5%	0.9%	-1.2%
Unemployment Rate	3.6%	3.6%	3.8%	-0.3%	-0.8%	-1.2%	-2.4%	-2.4%	0.1%

	MoM% Change			**QoQ% Change**			**YoY% Change**		
Average Hourly Earnings	**Apr-22**	**Mar-22**	**Feb-22**	**2022:1**	**2021:4**	**2021:3**	**Apr-22**	**Mar-22**	**Feb-20**
Average Hourly Earnings, All	0.31%	0.47%	0.13%	4.8%	6.1%	5.3%	5.5%	5.6%	3.7%

	QoQ% Chg (not annualized)				**YoY% Change**				
Employment Cost Index	**2022:1**	**2021:4**	**2021:3**	**2021:2**	**2022:1**	**2021:4**	**2021:3**	**2021:2**	**2019:4**
Employment Cost, Total, Civilian	1.4%	1.0%	1.2%	0.8%	4.5%	4.0%	3.7%	2.9%	2.7%

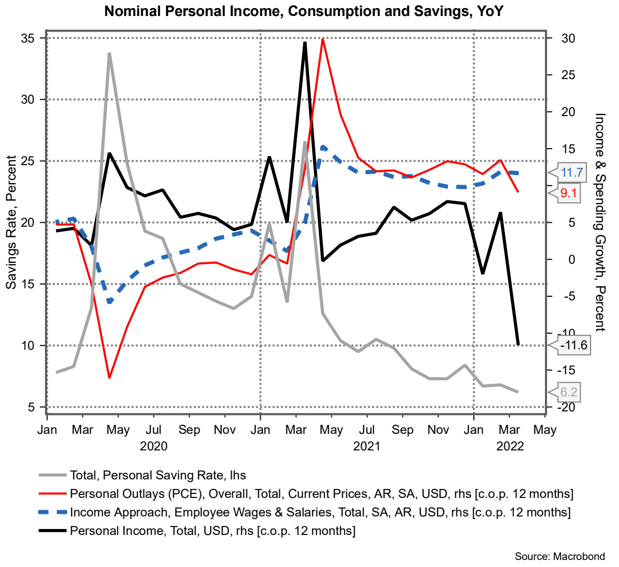
The **labor market** added 1.65 million new jobs in the first quarter and another 428,000 in April, pushing the unemployment rate down to 3.6%, just 0.1% above its pre-pandemic level (Figure 2). While Q1 employment growth was down from 4Q2021's pace, it edged out Q3 and remained very strong. Employment as measured by the household survey was even stronger in Q1 at 2.48 million, although a decline in April left the payroll survey (2.07 million) and household survey (2.13 million) reporting similar gains so far in 2022. Payroll and household employment levels have rebounded to within roughly 1 million of their pre-pandemic peaks in February 2020. Considering that the payroll and household surveys recorded 22 and 25 million job losses, respectively, between February and April 2020, it has been a remarkable recovery that has driven significant gains in wage and salary income.

Figure 3: Strong Demand Boosting Wages



Source: Macrobond

Figure 4: Savings Keeping Spending Up



Source: Macrobond

Prospects for continued job growth—and higher wages—remain bright, although the current pace of job gains is bound to slow. Demand for labor remains strong, with over 11.5 million job openings in March, or more than 1.9 open positions for every unemployed person. The problem is a lack of workers. The labor force has grown by only about 2% over the past year, compared to a 4.6% jump in payroll jobs. Although labor participation has been rising, it remains below pre-pandemic levels (Figure 2), and many people who left the labor force may not return. Without more workers, job openings will remain unfilled, leading to bidding wars as employers compete for talent. Wages and salaries have risen significantly over the past year and are rising faster than when unemployment was at a similar level before the pandemic (Figure 3). Although higher wages are desirable, they can be inflationary if not accompanied by productivity growth. Unfortunately, productivity dropped substantially in Q1, boosting unit labor costs considerably (up 7.2% YoY in Q1). With economic growth likely to slow this year, we expect this imbalance will be resolved by a slower pace of hiring that should first stabilize wage growth and, eventually, bring labor costs back down to levels consistent with long-term labor productivity growth.

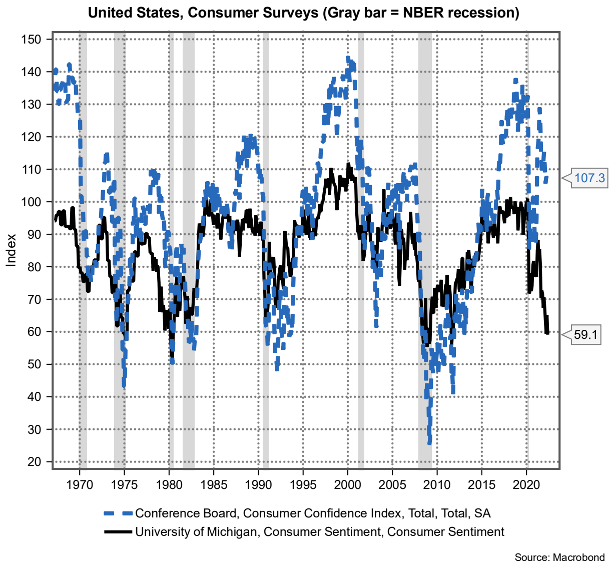
Figure 5: Personal Income and Spending

Personal Income and	**MoM Change**			**QoQ Change**			**YoY Change**		
Consumption	**Mar-22**	**Feb-22**	**Jan-22**	**2022:1**	**2021:4**	**2021:3**	**2022:1**	**2021:4**	**2021:1**
Personal Income	0.51%	0.73%	0.18%	5.2%	2.4%	3.0%	-3.0%	7.2%	16.1%
Wages & Salaries	0.58%	1.05%	0.51%	8.9%	10.9%	12.6%	11.3%	10.0%	2.9%
Real Disposable Pers. Inc.	-0.38%	0.15%	-0.27%	-2.0%	-5.6%	-4.1%	-10.9%	-0.2%	15.1%
ex Transfer Payments	-0.30%	0.38%	-0.14%	-0.1%	1.4%	3.2%	2.4%	1.9%	-0.1%
Nominal PCE	1.11%	0.62%	2.05%	9.9%	9.0%	7.4%	11.3%	12.8%	3.9%
excl. Food & Energy	0.67%	0.59%	1.97%	8.7%	8.3%	6.6%	10.7%	12.0%	3.7%
Goods	1.22%	0.27%	4.52%	11.6%	11.4%	-2.1%	10.7%	16.1%	15.8%
Services	1.05%	0.81%	0.77%	9.0%	7.8%	12.9%	11.6%	11.1%	-1.5%
Real PCE	0.24%	0.10%	1.51%	2.7%	2.5%	2.0%	4.7%	6.9%	2.1%

Personal income grew strongly in nominal terms in Q1, but high inflation pushed real disposable personal income growth into negative territory (Figure 5). Much of the weakness in income compared to prior periods is attributable to the end of pandemic-related transfer payments. Excluding transfers, real disposable personal income was up modestly last year and was about flat in Q1. As noted earlier, wage and salary income rose briskly and was a key support to spending (Figure 4). After inflation, however, even those gains were modest.

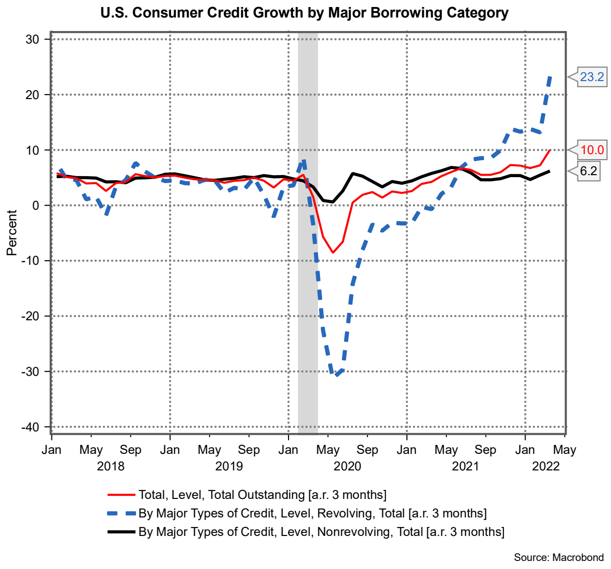
Nominal **personal consumption expenditure** (PCE) was very strong in the first quarter, with solid growth in both goods and services (Figures 4 & 5). While inflation took its toll, real PCE growth accelerated over the past several quarters. US consumers see rising wages and high job availability, and they are spending. However, high inflation, weak financial markets, and worries over war in Ukraine have pushed consumer confidence down sharply. The University of Michigan's preliminary consumer sentiment survey for May revealed confidence at levels usually seen in or near a recession (Figure 6). Nevertheless, a parallel survey from the Conference Board, which has not yet been released for May, has shown less deterioration in confidence. So far, weaker confidence has not dented spending. Overall and core "retail control" categories of retail sales rose 0.9% and 1.0% (not annualized), respectively, in April. Adjusting those nominal sales for inflation using the CPI deflator, they are up 5.8% and 3.9%, respectively, at an annual rate compared to the Q1 average, leaving spending off to a strong start in Q2. For now, we expect continued moderate gains in PCE, albeit at a slowing pace from mid-year as Fed tightening begins to dampen demand and job growth slows.

Figure 6: Consumer Confidence Down, Out?


United States, Consumer Surveys (Gray bar = NBER recession)

Source: Macrobond

Figure 7: Credit Card Borrowing Surging


U.S. Consumer Credit Growth by Major Borrowing Category

Source: Macrobond

Given modest real income growth, real spending gains were enabled by reduced savings and, increasingly, borrowing. The **personal saving rate** declined to 6.2% in March and an average of 6.6% in Q1, slightly below the pre-pandemic rate of about 7% (Figure 4). Consumers are still sitting on large saving buffers accumulated during the pandemic, when spending slumped. It is not surprising that they are spending down those savings now, especially when prices of essential items like housing, food, and energy have risen quickly.

Those savings are not unlimited, though, and it appears that some consumers have turned to credit card borrowing to support spending. Revolving credit balances rose at a 23.2% annualized rate over three months ending in March, up sharply since year-end and far above an average of about 4% in 2018 and 2019 (Figure 7). While aggregate consumer balance sheets remain healthy, with low ratios of household debt-to-GDP and interest expense-to-income, the recent acceleration in credit card borrowing could be an early sign of broader strain from rising living costs. We will be watching both consumer confidence and growth in consumer credit over coming months.

The Housing Market

Figure 8: Residential Investment, Home Sales, and Home Prices

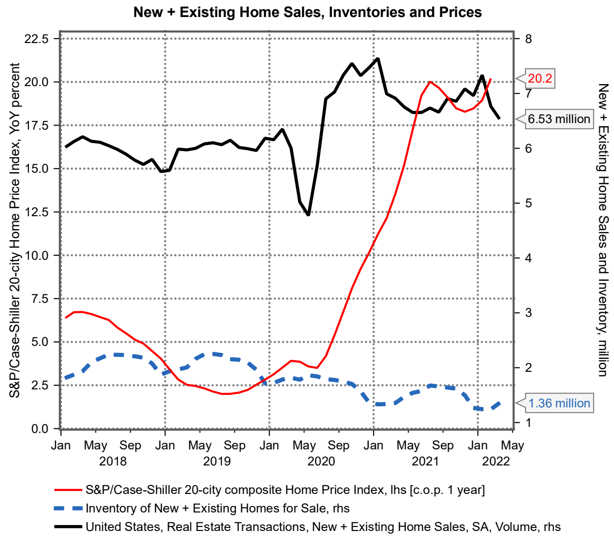
	Quarterly Rate				YoY Rate				
Residential Investment	**2022:1**	**2021:4**	**2021:3**	**2021:2**	**2022:1**	**2021:4**	**2021:3**	**2021:1**	**2019:4**
Nominal Residential Inv, AR	20.2%	14.4%	6.0%	1.8%	10.4%	11.9%	18.4%	22.1%	4.7%
Real Residential Inv, AR	2.1%	2.2%	-7.7%	-11.7%	-4.0%	-1.5%	5.5%	13.9%	2.2%
Implicit Deflator, AR	17.8%	11.9%	14.8%	15.3%	14.9%	13.6%	12.2%	7.1%	2.4%

	Sales, AR			QoQ Change, AR			YoY Change		
Home Sales & Prices	**Mar-22**	**Feb-22**	**Jan-22**	**2022:1**	**2021:4**	**2021:3**	**2022:1**	**2021:4**	**2020:4**
New + Existing Home Sales (000)	6,533	6,765	7,335	-5.0%	12.4%	4.8%	-4.3%	-6.5%	23.2%
Homes available for sale (000)	1,022	923	919	-48.8%	-49.9%	27.2%	-14.3%	-14.5%	-20.0%
S&P/Case-Shiller 20-city HPI Chg*	n/a	2.4%	1.7%	18.6%	14.5%	19.0%	18.4%	18.4%	9.2%

* QoQ and YoY change calculated using average index values of January and Feburary for 2022:1

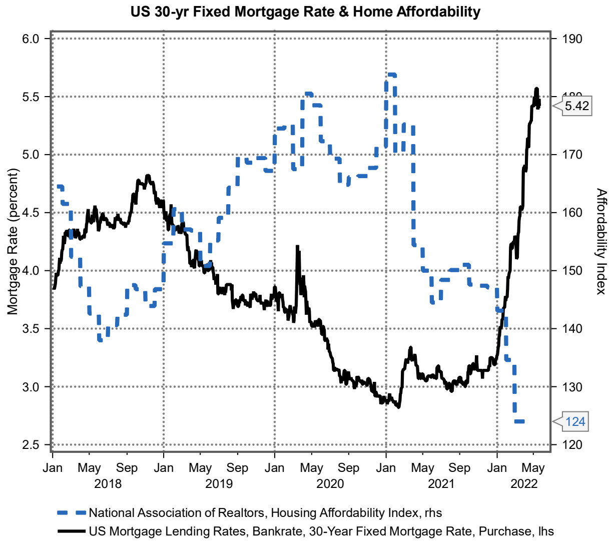
The **housing market** was mixed in the first quarter. Residential investment posted another small gain in real terms, as high inflation consumed most of a strong nominal increase in investment spending (Figure 8). Home sales slowed in Q1, although they remained at a relatively high level. Rising employment, accommodative monetary policy (until recently), and higher rental prices have driven strong demand for homes since mid-2020. Sales rose from under 5 million units early in the pandemic to over 7 million units as recently as January 2022 (Figure 9). With 30-year mortgage rates around 3% during most of that period and incomes rising, home affordability improved for the first year or so of the pandemic (Figure 10). However, a surge in home prices and, more recently, much higher mortgage rates caused affordability to drop to levels last seen in the mid-2000s' housing boom. It appears to be affecting homebuyers. A recent survey from the National Association of Homebuilders and Wells Fargo revealed a sharp decline in its housing market index, falling to 69 in May from an average of 79 over the prior three months.

Figure 9: Home Prices Up, Sales Down



Source: Macrobond

Figure 10: Mortgage Rates Up, Affordability Down

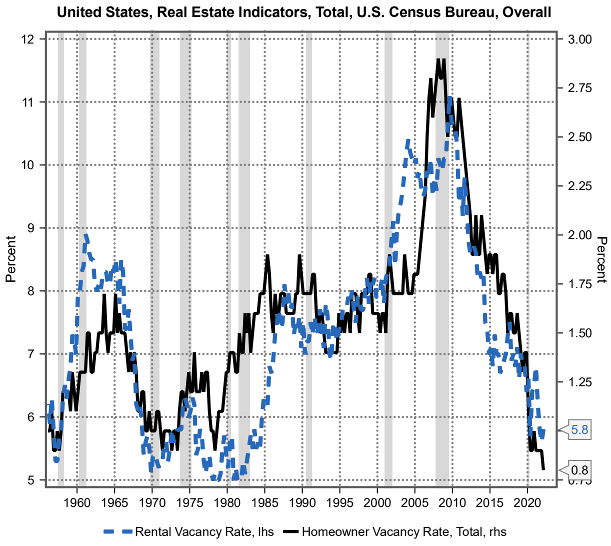


Source: Macrobond

Inflation in the housing sector is running at an extraordinarily high rate (17.8% in Q1), putting upward pressure on core inflation. The Fed wants to reduce it. It probably does not want *lower* home prices, but it certainly wants to slow their *increase*. Mortgage rates are a key transmission mechanism for monetary policy, and higher mortgage rates are bound to dampen home price gains, especially given today's already-low affordability.

We expect a slowdown in home sales, smaller home price gains, and muted residential investment in real terms. However, we do not think Fed tightening will prompt another housing crash. Home prices are going up mostly because demand is firm on rising employment and supply is extremely tight, not because of speculative excesses. The homeowner vacancy rate hit a new low in Q1 since records began in 1956, and rental vacancy is the lowest since the mid-1980s (Figure 11). Long-term housing fundamentals are good, and residential investment will be a bright spot for the economy again, but not in the face of sustained tightening by the Fed.

Figure 11: Housing Availability Extremely Tight



Source: Macrobond

Business Investment and Industrial Output

Figure 12: Industrial Production, Orders, and Business Investment

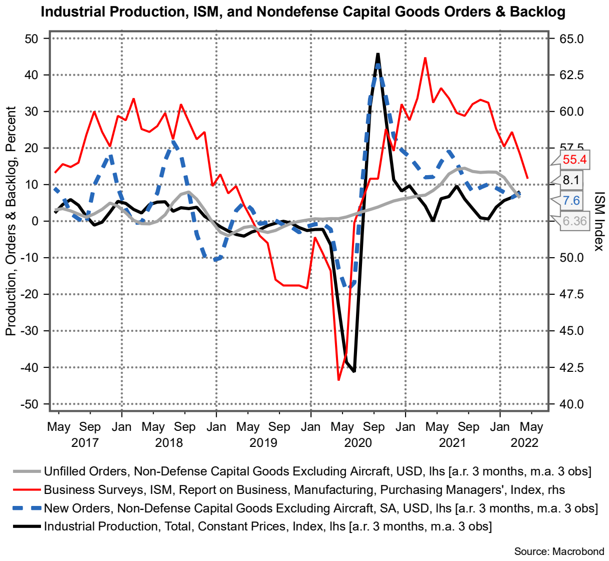
	MoM Change			QoQ Change			YoY Change		
Industrial Output	**Apr-22**	**Mar-22**	**Feb-22**	**2022:1**	**2021:4**	**2021:3**	**2022:1**	**2021:4**	**2021:1**
Industrial Production	1.08%	0.86%	1.00%	7.6%	3.8%	3.4%	5.6%	4.5%	-1.3%
Manufacturing	0.75%	0.84%	1.37%	5.1%	5.4%	3.8%	5.2%	4.5%	-0.1%
	MoM Change			**QoQ Change**			**YoY Change**		
Mfg Orders & Shipments	**Mar-22**	**Feb-22**	**Jan-22**	**2022:1**	**2021:4**	**2021:3**	**2022:1**	**2021:4**	**2021:1**
Manufacturing Orders, total	1.79%	1.79%	0.30%	12.2%	14.0%	10.2%	12.4%	12.1%	4.1%
NDCG ex aircraft*	0.85%	0.85%	-0.25%	4.7%	10.1%	11.8%	11.2%	12.4%	5.3%
Real core orders**	0.02%	-1.15%	0.38%	-2.4%	4.0%	1.6%	14.0%	27.7%	16.2%
Mfg Shipments, NDCG ex air	0.12%	0.12%	0.83%	10.6%	13.4%	10.4%	12.5%	11.2%	3.2%
Real core shipments**	-0.71%	-0.08%	0.84%	4.7%	3.6%	3.7%	19.3%	22.5%	7.2%

* NDCG = Nondefense Capital Goods ** NDCG ex aircraft, deflated using PPI Final Demand: Capital Equipment

Business Fixed	**Quarterly Rate (AR)**				**YoY Rate**				
Investment	**2022:1**	**2021:4**	**2021:3**	**2021:2**	**2022:1**	**2021:4**	**2021:3**	**2021:2**	**2019:4**
Nominal Busi. Investment	16.7%	11.0%	6.0%	10.2%	10.9%	10.2%	10.7%	13.9%	4.0%
Real Business Investment	9.2%	2.9%	1.7%	9.2%	5.7%	6.6%	9.0%	1.3%	3.1%
Implicit Deflator	6.8%	7.8%	4.3%	0.9%	4.9%	3.4%	1.6%	12.5%	0.9%

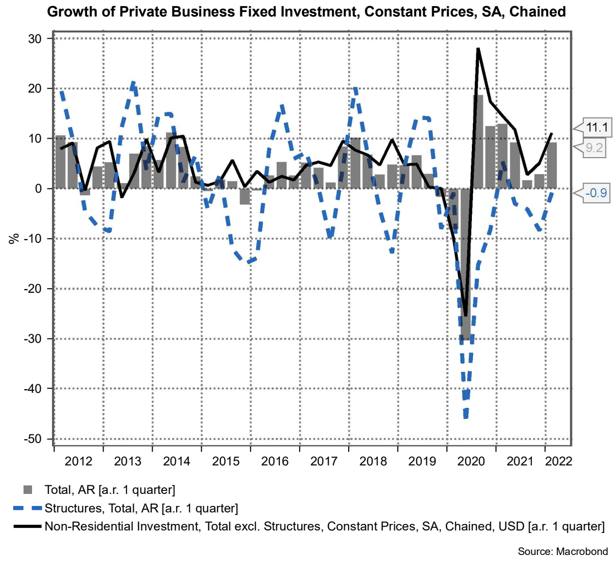
Industrial production accelerated in the first quarter, with solid gains in mining and manufacturing excluding motor vehicles and a large rise in utility output after mild weather in Q4 reduced utility output. Industrial output continued to rise at a solid pace in April (Figure 12). Rising manufacturing output suggests that labor and materials shortages remain a constraint but eased somewhat. However, supply chain disruptions from the war in Ukraine may not yet be visible in this data. We should get a better picture over coming months.

Figure 13: Output Up, but Caution Ahead



Source: Macrobond

Figure 14: Core Business Investment Jumped

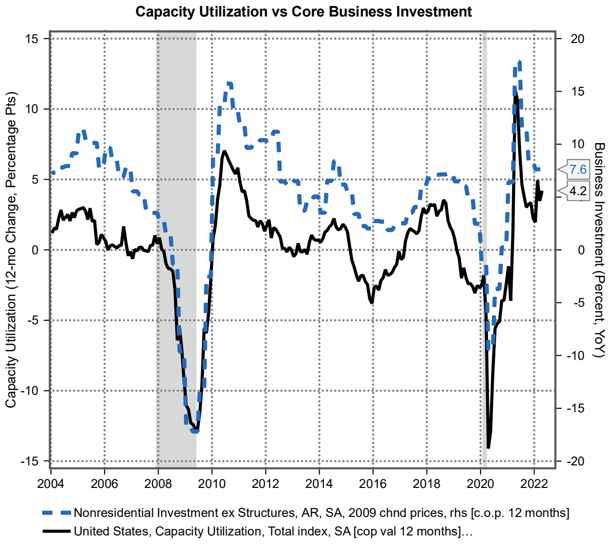


Source: Macrobond

The Institute for Supply Management's manufacturing survey fell to 55.4 (50 is neutral) from about 60 in Q4 and suggests a slower pace of expansion ahead (Figure 13). Manufacturing orders rose impressively in Q1, although orders for core capital goods (nondefense, excluding aircraft) were substantially weaker, falling an estimated 2.4% after inflation. Backlogs grew moderately (+6.9%), and inventories rose, but they remain historically lean relative to shipments. Capacity utilization rates rose to 79.0% in April, which should drive continued demand for capital equipment. Output should benefit as supply constraints gradually improve, order backlogs are filled, and investment in capital goods remains sturdy, but it will face headwinds from tighter monetary policy as the year progresses.

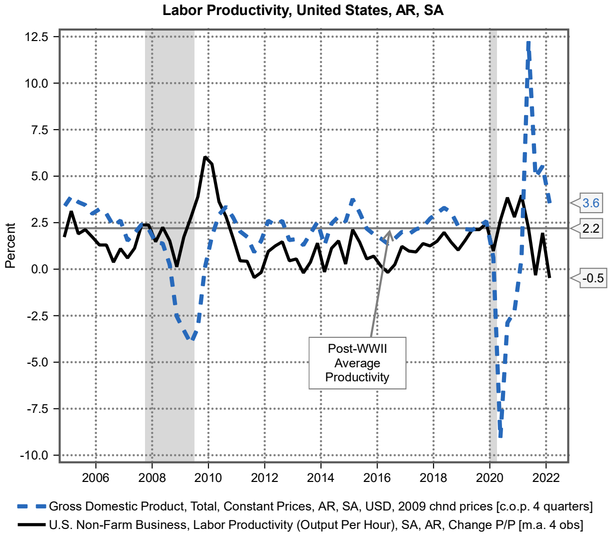
Real **business investment** rose strongly in the first quarter despite another small decline from structures (Figure 14). Like residential investment, nominal investment in business structures was up 17.5% in Q1, but real investment was down 0.9% as the implicit deflator jumped 18.5%. It is likely to remain subdued until the inflation rate for all types of construction come down. Away from structures, however, businesses added 11.9% to real investments in equipment and intellectual property in Q1, where inflation was a more moderate 4.1%. Rising capacity utilization suggests investment should remain strong as businesses seek to boost productivity at a time when hiring workers is difficult (Figure 15). We expect real business investment excluding structures to grow around 5% over the balance of 2022.

Figure 15: Rising Utilization Supports CapEx…



Source: Macrobond

Figure 16: …but Productivity has Fallen



Source: Macrobond

A potential stumbling block to stronger investment—not to mention hiring—is a decline in productivity in recent quarters. Businesses invest in capital to raise productivity. If that does not happen, investment is likely to slow at some point. Typically, productivity follows GDP growth, but that did not happen in the wake of the pandemic (Figure 16). Unprecedented job losses boosted productivity as output fell by less than payrolls. When workers were rehired and the labor market tightened, productivity fell as hiring outpaced gains in output. We expect productivity to revert to its usual cyclical pattern over the next several years and that businesses will continue to invest. Of course, slower GDP growth should mean moderating investment spending as well, consistent with our outlook.

International Trade, Inventories, and Government Consumption

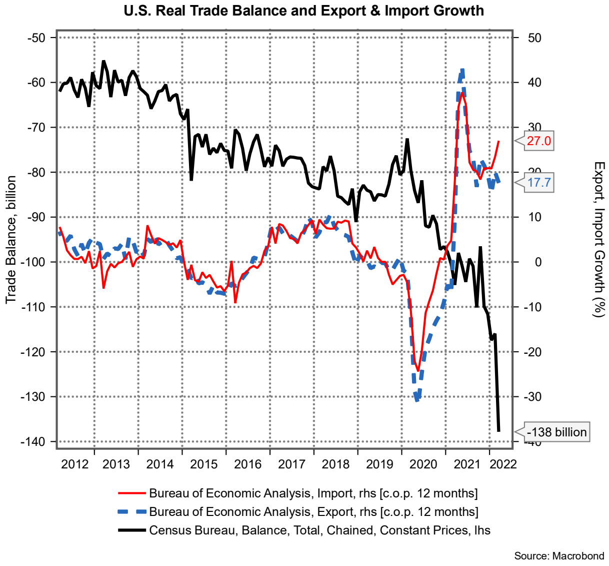
Figure 17: Contribution to Change in GDP from Net Exports, Inventories & Government

	Contribution to Quarterly GDP				Contribution to Annual GDP			
Contribution to Change in GDP, %	2022:1	2021:4	2021:3	2021:2	2021	2020	2019	2018
Real GDP	-1.40	6.90	2.30	6.70	5.70	-3.40	2.30	2.90
Net Exports	-3.20	-0.23	-1.26	-0.18	-1.40	-0.29	-0.18	-0.27
Private Inventories	-0.84	5.32	2.20	-1.26	0.35	-0.52	0.05	0.16
Government Expenditure & Investment	-0.48	-0.46	0.17	-0.36	0.09	0.43	0.38	0.24
Federal	-0.39	-0.29	-0.35	-0.38	0.04	0.33	0.25	0.20
State & Local	-0.08	-0.17	0.52	0.02	0.04	0.10	0.14	0.04

Foreign trade, inventories and government spending and investment all contributed to the economy's first-quarter decline. Net exports was the biggest negative, followed by a slower pace of inventory accumulation (Figure 17). Government spending also subtracted a bit from growth as pandemic-related spending programs in 2020 and 2021 largely ended by Q1.[2]

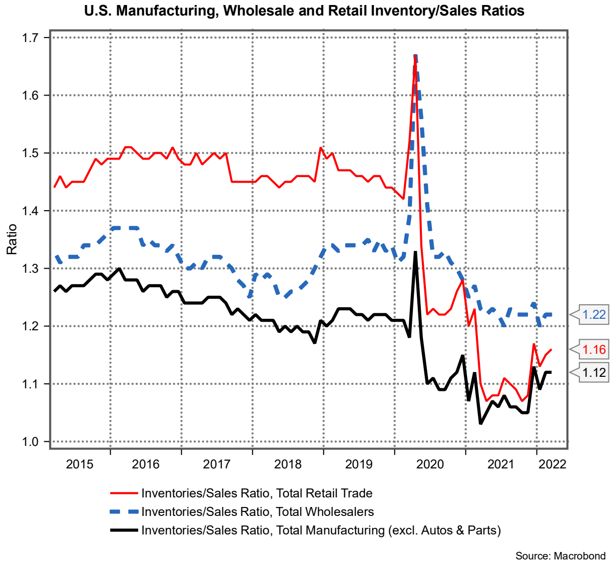
The **trade deficit** widened sharply in Q1 as import growth accelerated while export growth flattened out—albeit at a high level (Figure 18). A strong US dollar helped to restrain inflation in consumer goods to a relatively modest 3.1% over 12 months ending in April, boosting demand for imported goods. Inflation across all imports over that period was 12%, but that was still well below export inflation of 18%. Despite trade tensions and worries about globalization's demise, US trade volumes continued to rise quickly. Real imports in Q1 were 15% (not annualized) higher than in 4Q2019, although real exports were 8% lower.

Figure 18: Trade Up; Drag Set to Diminish



Source: Macrobond

Figure 19: Low Inventories Supporting Orders



Source: Macrobond

[2] Given massive stimulus payments by the federal government to both households and businesses in 2020 and 2021, it may seem counterintuitive that government spending had a relatively minor impact on annual GDP in those years. However, those were mostly *transfer* payments that are recorded in GDP accounts as consumption expenditures when spent by the households and businesses that received them (including Paycheck Protection Program payments, that were indirectly spent by employees).

Businesses continued to add to **inventories** in the first quarter. However, inventory gains in Q1 were less than in Q4, which translated to a negative contribution to Q1 GDP (Figure 17). Inventory-to-sales ratios are now mostly higher than in 2021, but they remain well below pre-pandemic levels across major sectors (Figure 19). We expect inventories to rise, contributing to higher orders and output over coming quarters. Their contribution to GDP will vary quarter-to-quarter, but inventory accumulation should add modestly to growth this year.

With little new spending on tap so far in 2022, real **government consumption** fell 0.7% in the first quarter. Federal government spending fell 1.5%, while state and local spending slipped 0.2%. They were down 1.1% and up 0.8%, respectively, over the past year. The Biden administration continues to push a slimmed-down “Build Back Better” plan, but prospects for its passage this year appear remote. Federal receipts were up 39% in the fiscal year beginning October 1, 2021 through April 30, 2022 compared to the year-earlier period, including a 68% surge in individual income taxes. Outlays were down 18% as pandemic spending fell sharply, leaving a much-reduced deficit of $360 billion on the same basis. We expect modest growth in real state and local government spending over the balance of the year, but federal spending is likely to remain subdued.

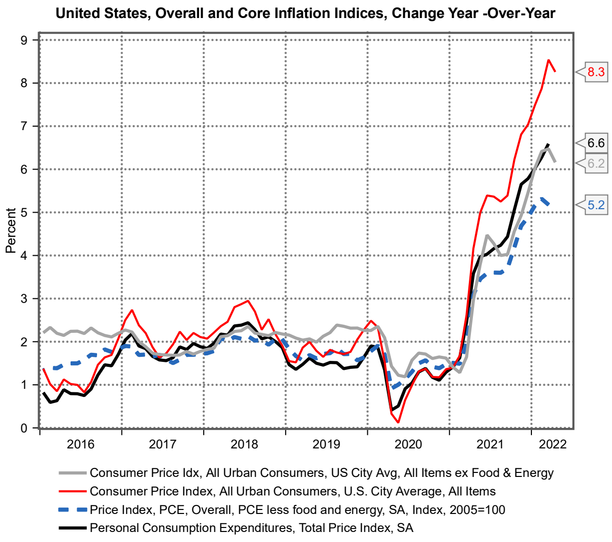
Inflation

Figure 20: Inflation Rates

Key Inflation Rates	MoM Change			QoQ Change (AR)			YoY Change			
	Apr-22	Mar-22	Feb-22	2022:1	2021:4	2021:3	2022:1	2021:4	2021:1	2019:4
Consumer Price Index	0.3%	1.2%	0.8%	9.2%	7.9%	6.7%	8.0%	6.7%	1.9%	2.0%
ex food & energy	0.6%	0.3%	0.5%	6.5%	5.6%	5.3%	6.3%	5.0%	1.4%	2.3%
Owners' Equiv. Rent	0.5%	0.4%	0.4%	5.3%	5.1%	3.8%	4.3%	3.5%	2.0%	3.3%
	Apr-22	Mar-22	Feb-22	2022:1	2021:4	2021:3	2022:1	2021:4	2021:1	2019:4
PPI Final Demand	0.5%	1.6%	1.1%	13.1%	8.7%	10.5%	10.7%	9.6%	2.9%	1.1%
ex food & energy	0.4%	1.2%	0.5%	10.4%	7.0%	9.5%	9.0%	7.9%	2.5%	1.4%
	Mar-22	Feb-22	Jan-22	2022:1	2021:4	2021:3	2022:1	2021:4	2021:1	2019:4
PCE Deflator, total	0.9%	0.5%	0.5%	7.0%	6.4%	5.3%	6.3%	5.5%	1.8%	1.5%
ex food & energy	0.3%	0.3%	0.5%	5.2%	5.0%	4.6%	5.2%	4.6%	1.7%	1.6%
Goods	1.7%	1.0%	0.8%	11.7%	10.2%	7.3%	9.6%	8.2%	1.3%	-0.2%
Services	0.4%	0.2%	0.4%	4.6%	4.4%	4.3%	4.6%	4.1%	2.1%	2.3%

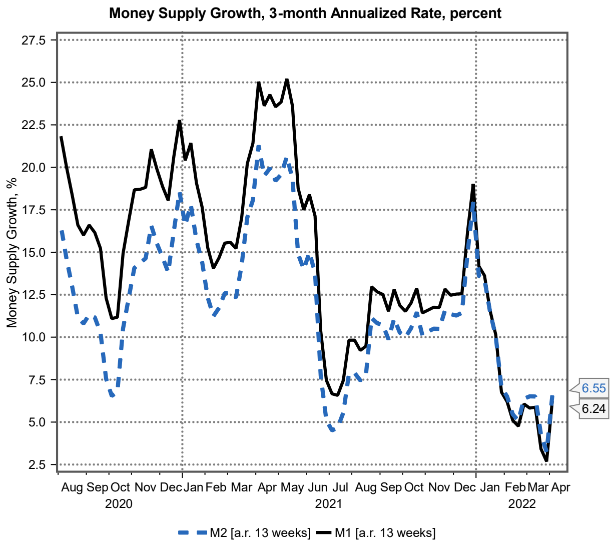
Inflation soared in the first quarter, reaching the highest levels in more than 40 years. Using Q1 average index levels compared to the year-ago quarter for our calculations, the Consumer Price Index (CPI) rose 8.0%, the Producer Price Final Demand Index (PPI) was up 10.7% and the PCE deflator rose 6.3% (Figure 20). The same indices excluding volatile food and energy prices show slightly lower inflation, but they are still very high.

Figure 21: Inflation High but Likely Peaking



Source: Macrobond

Figure 22: Money Growth Down, Finally



Source: Macrobond

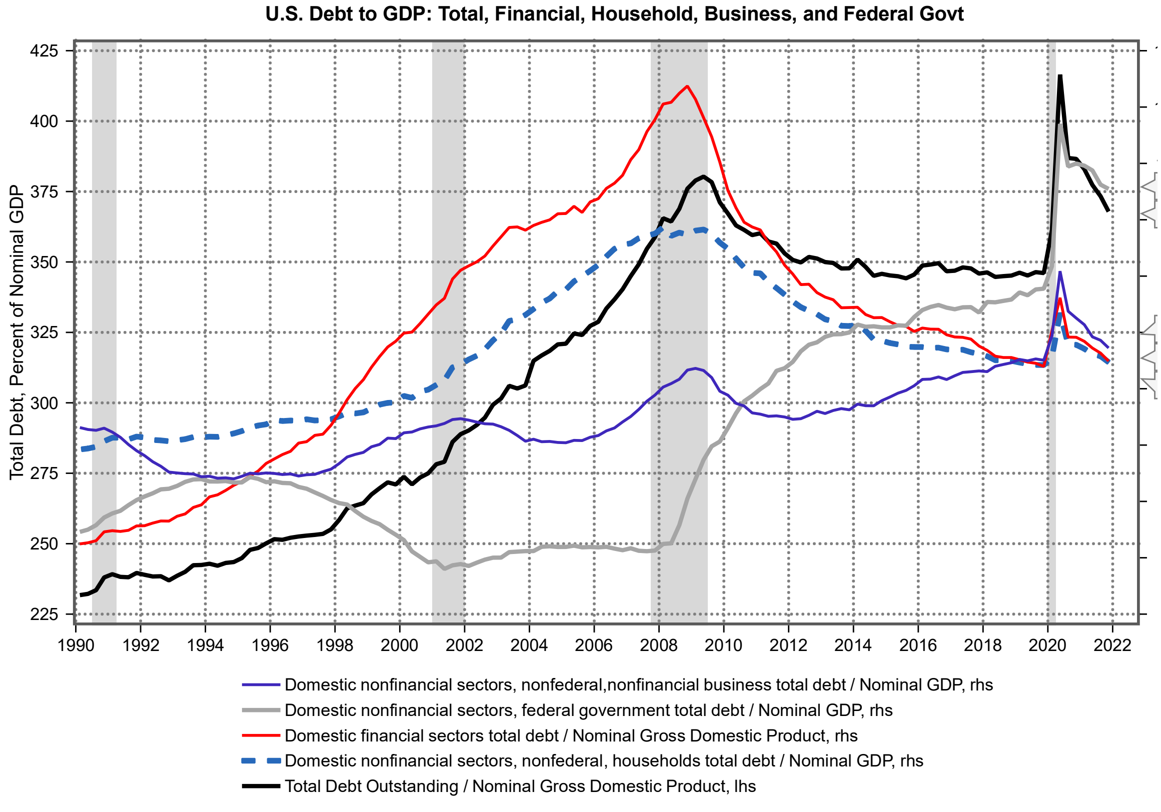
The only good news in these numbers is that year-over-year inflation on a monthly basis appears to have peaked (Figure 21). Inflation began to post large monthly gains in February or March 2021, depending on the index. With those gains now rolling out of annual inflation calculations, inflation should decline over the next several months. However, inflation has spread well beyond food and energy prices to core components that tend to be sticky, such as services and owners' equivalent rent. Progress on inflation could be limited until demand slows or supply constraints diminish. The Fed cannot do much about the latter, but it can affect the former. The Fed intends to tighten policy and slow the economy, which, in time, will bring inflation down.

There is some good news on inflation prospects, however. Money supply growth, which was running above 10% for most of last year, has slowed considerably in 2022 (Figure 22). Money growth did not cause today's high inflation. A rapid global recovery in demand combined with supply constraints did that. However, easy monetary policy and rapid money growth accommodated higher inflation. It will take some time to have an impact, but slower money growth should help slow inflation and is a welcome development.

We expect that inflation will decline materially in the fourth quarter of this year. By then, the economy should be slowing in response to tighter monetary policy and waning employment growth. This is likely true not only in the US but in most developed markets as well, which should help reduce shortages and other supply chain problems globally. In addition, large monthly inflation gains from 4Q2021 will start rolling out of year-over-year inflation calculations, pulling down annual inflation rates. In summary, we expect only limited progress on inflation over the next several quarters but more meaningful declines from Q4 onwards. Until then, the US economy will experience a period of stagflation, with slowing growth and stubbornly high inflation. That phase should be relatively short, although there is risk that inflation is less cooperative than we expect. We will be following inflation developments closely.

Aggregate Debt Ratios

Figure 23: Debt-to-GDP Continues to Decline



Source: Federal Reserve Flow of Funds F

Broad **balance sheet trends** through the fourth quarter of 2021 (latest data available) show that debt-to-GDP ratios continued to decline across borrowing sectors (Figure 23). Overall debt-to-GDP fell to 368%, and given rapid growth in nominal GDP, it probably fell again in Q1. Private sector borrowing relative to GDP is near pre-pandemic levels, with households, financial businesses and nonfinancial businesses all reducing leverage. Federal government debt also fell, but it remains much higher than before the pandemic and is responsible for nearly all the increase in overall debt-to-GDP over that time. Household and financial businesses borrowing is relatively low: just slightly above their pre-pandemic levels and well below their peaks during the global financial crisis. In contrast, nonfinancial business leverage, while falling in recent quarters, remains above its financial crisis peak. Higher interest rates could add a significant burden to heavily indebted (i.e., low- or non-rated) nonfinancial businesses or to companies unable to pass through rising costs, and we remain watchful for signs of strain in that sector. For the economy as a whole, and for households and financial businesses in particular, we do not believe debt levels pose a major risk to our outlook.

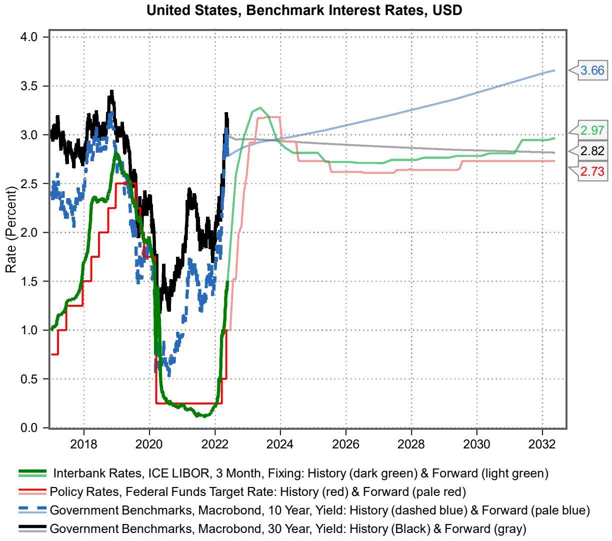
Interest Rate and Monetary Policy Outlook

Figure 24: Key Interest and Policy Rates

Interest Rates (%, end of period)	5/20/22	2022:1	2021:4	2021:3	2021:2	2021:1	2020:4	2020:3
Fed funds rate target (upper bound)	1.00	0.50	0.25	0.25	0.25	0.25	0.25	0.25
3-month LIBOR	1.51	0.96	0.21	0.13	0.15	0.19	0.24	0.23
2-Yr Treasury note yield	2.60	2.28	0.73	0.28	0.25	0.16	0.13	0.13
10-Yr Treasury note yield	2.78	2.32	1.52	1.52	1.45	1.74	0.93	0.69
30-Yr Treasury note yield	2.99	2.44	1.90	2.08	2.06	2.41	1.65	1.46

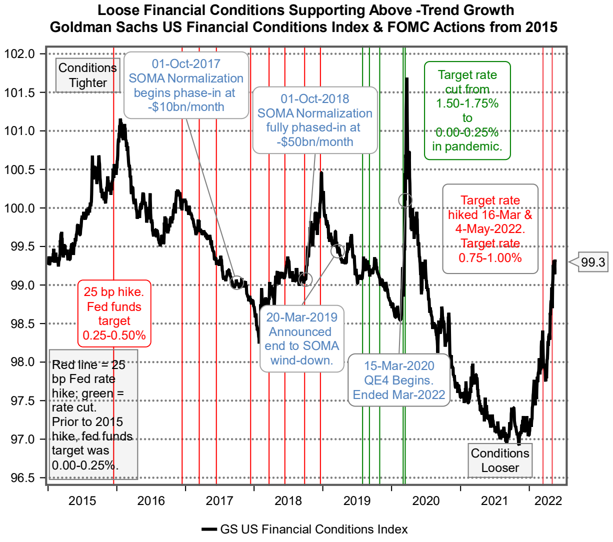
Long-term **Treasury rates** rose sharply in the first quarter and continued an upward march since then as high and persistent inflation caused the Federal Reserve to shift the market's expectations over the path of monetary policy (Figure 24). Since the beginning of this year, 10- and 30-year Treasury yields rose by 126 and 109 basis points (bp), respectively, as of May 20, significantly more than the 75 bp of rate hikes the Fed has implemented to date. Accordingly, the yield curve steepened from the very short end to intermediate and long maturities but flattened from 2-year maturities out. Market forward rates point to more policy tightening ahead (Figure 25).

Figure 25: Markets Expect More Rate Hikes[3]



Source: Macrobond (historical rates), Bloomberg (forwards)

Figure 26: Fed Removes the Punchbowl



Source: Goldman Sachs, Bloomberg

The Federal Reserve abandoned its prior thesis that inflation would be "transitory" and shifted monetary policy from easing, to on hold, to tightening. As recently as December 2021, the Federal Open Market Committee (FOMC) projected that the fed funds rate would end 2022 at 0.9% (consistent with a target range of 0.75–1.00%). Instead, the funds rate reached that level following the May 4 FOMC meeting, and current Fed guidance signals 50 bp rate hikes at both the June 15 and July 27 meetings, with markets forecasting another roughly 100

[3] The fed funds effective rate recently has traded about 17 bp below the top end of the FOMC target range. In Figure 25, we add 17 bp to forward rates implied by overnight index swaps (OIS) to align them with the upper band of historic target rates.

bp of hikes over the balance of 2022. That would bring the fed funds target range to about 2.75–3.00% at year-end 2022, some 2% higher than Fed guidance entering the year. For now, markets expect one more 25 bp rate hike in 2023 and a peak fed funds rate of about 3.25% in mid-2023, followed by a gradual decline back to a long-term neutral rate of about 2.75% (Figure 25).

Simultaneously, the FOMC accelerated the pace of "tapering" the Fed's securities purchases that it previously announced in November 2021, ending purchases in March, about three months earlier than planned. The Fed will begin to reduce system open market account holdings by up to $30 billion of Treasuries and $17.5 billion of agency mortgage-backed securities per month starting in June; the pace of reductions will double in September. Initially, the Fed will achieve those reductions by not reinvesting maturing Treasuries (primarily notes and bonds, not Treasury bills) and principal paydowns on mortgages. Later, it intends to sell securities when needed to reach those targets, although probably not until 2023.

The FOMC's more-rapid pace of rate hikes and earlier timing of balance sheet runoff caused a major shift in market expectations and sentiment, and interest rates responded accordingly. Higher short- and long-term interest rates, a stronger dollar, wider credit spreads, and sharply lower common stock prices caused financial conditions to tighten significantly (Figure 26). However, financial conditions remain easier than they were at their peak in 2018, when the Fed was leaning against inflation only a little above 2% (see Figure 21). Inflation is much higher today, which suggests a need for considerably tighter financial conditions ahead.

As we explained in our 1Q2021 *Economic Update*, the FOMC made a policy choice to let inflation rise in exchange for a more rapid recovery in employment. It is clear now that the Fed left monetary policy too loose for too long. As we noted earlier, we expect only modestly lower inflation until Q4. Given that economic data is reported with a lag of a month or two, a sizable decline in inflation may not be visible until early 2023. Accordingly, the FOMC is likely to hike rates at every meeting this year as it seeks to tighten monetary policy enough to slow the economy and bring demand into better (non-inflationary) alignment with supply. Market forward rates already incorporate that view for 2022. We expect a modestly higher peak fed funds rate (3.50–3.75%) in 2023 than the market currently prices (3.00–3.25%), but that should mean only another 25–50 bp rise in intermediate interest rates between now and then, with stable or lower rates to follow.

However, slower economic growth due to tighter monetary policy probably leads to higher unemployment, and it does not take a large rise in unemployment to tip the economy into recession. Given lags in monetary policy, we think risk of recession is low for the next 12 months, but it rises thereafter. The Fed may be able to engineer a "soft landing" if the supply side of the economy improves while the demand side slows. A severe recession is a risk, but we do not see over-investment in homes, inventories, or plant and equipment that typically lead from boom to bust. We think a mild recession is the most likely outcome, and we believe preferred issuers are well prepared to handle it, as we discuss in the next section.

Credit Conditions and Outlook

Figure 27: Selected Credit Spreads and Quality Metrics

Credit Spreads (bp, end of period)	**5/20/22**	**2022:1**	**2021:4**	**2021:3**	**2021:2**	**2021:1**	**2020:4**	**2020:3**
ICE-BofAML Index, spread to worst								
US Corporate (C0A0)	153	121	95	84	82	91	98	139
US High Yield (H0A0)	501	371	330	331	318	353	390	545
US Preferred & Hybrid (P8JC)	326	240	178	170	137	166	203	262
10-Yr Interest Rate Swap Spread (bp)	6.5	5.8	6.3	2.3	(2.6)	3.6	0.8	2.5

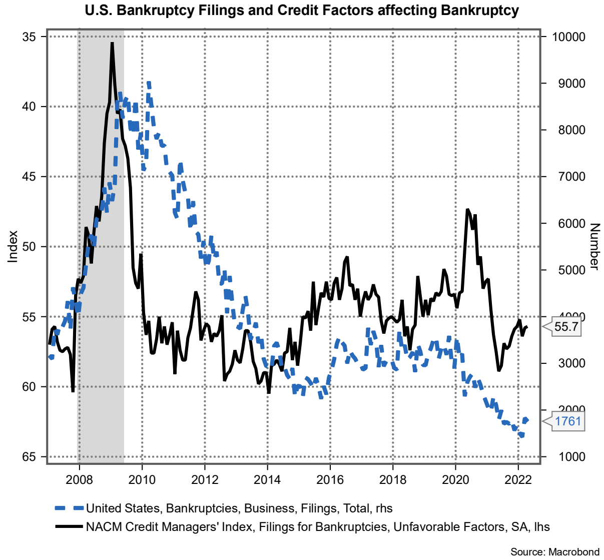
	Delinquencies (% of loans)				**Charge-Offs (% of loans)**			
Bank Loan Quality (%) (FRB)	**2021:4**	**2021:3**	**2021:2**	**2021:1**	**2021:4**	**2021:3**	**2021:2**	**2021:1**
US Banks, Total Loans	1.30	1.28	1.32	1.48	0.19	0.20	0.26	0.33
Commercial & Industrial	1.08	1.02	1.05	1.16	0.13	0.15	0.21	0.26
Commercial Real Estate	0.77	0.85	0.92	1.04	0.03	0.04	0.05	0.05
Consumer	1.64	1.52	1.45	1.67	0.91	0.89	1.24	1.61

Bank Capital & Reserves*	**2022:1**	**2021:4**	**2021:3**	**2021:2**	**2021:1**	**2020:4**	**2019:4**
Common Equity Tier 1 Capital Ratio (%)	10.64	10.85	11.23	11.38	11.49	11.04	10.62
Loan-loss Reserve/Non-perf. Loans (%)	229	236	228	229	236	220	162

* Average of peer group of 31 large US banks (Source: S&P Capital IQ)

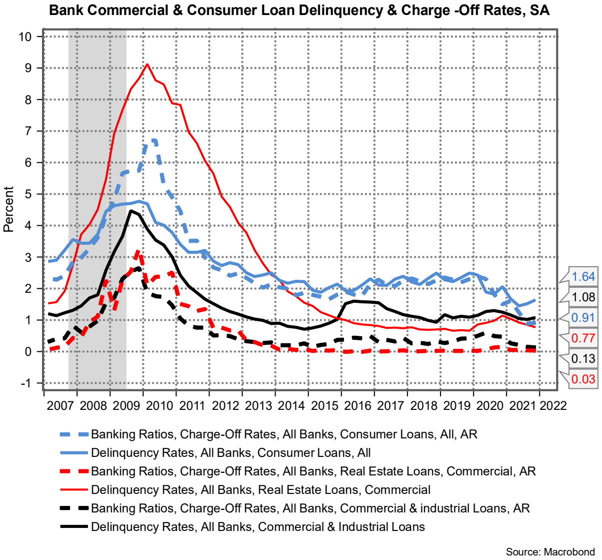
Although you would not know it judging by wider credit spreads, credit fundamentals were broadly stable in the first quarter. Business bankruptcy filings were only slightly above historic lows reached at the end of 2021 (Figure 28). Factors unfavorable to bankruptcy filings as measured by the National Association of Credit Management were little changed in Q1 and remain at a historically low level. We remain watchful of highly leveraged credits, mostly among nonfinancial borrowers, as interest rates rise, but so far, financial strains at businesses appear limited.

Figure 28: Bankruptcies Remain Subdued



Source: Macrobond

Figure 29: Problem Loans Near Record Lows

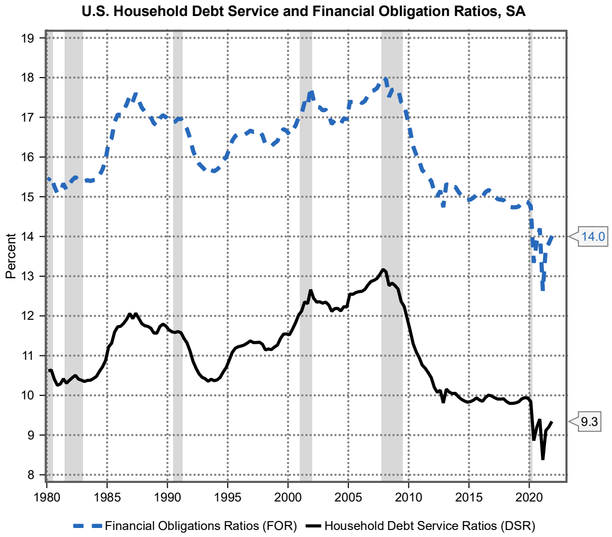


Source: Macrobond

Bank loan quality was steady or slightly better in Q1, as it has been for the past year (Figures 27 and 29). Charge-offs remain near record lows, and delinquencies are low and stable. Bank loan quality remains outstanding. While there are risks on the horizon, banks are prepared to manage through a recession. Common Equity Tier 1 (CET1) capital protects banks against unexpected (but inevitable) credit, market, and operational losses. In addition, it is the only layer of capital that is junior to preferred stock — and banks' CET1 ratio is strong (Figure 27). The ratio of loan-loss reserves to non-performing loans is also high at 229%, up from 162% prior to the pandemic. Along with pretax, pre-provision earnings, loan-loss reserves are an important layer of protection for CET1; more is better. At the end of June, the Federal Reserve will release this year's Comprehensive Capital Analysis and Review (CCAR) and Dodd-Frank Act stress testing (DFAST) results for large US banks. We expect another strong showing from these institutions.

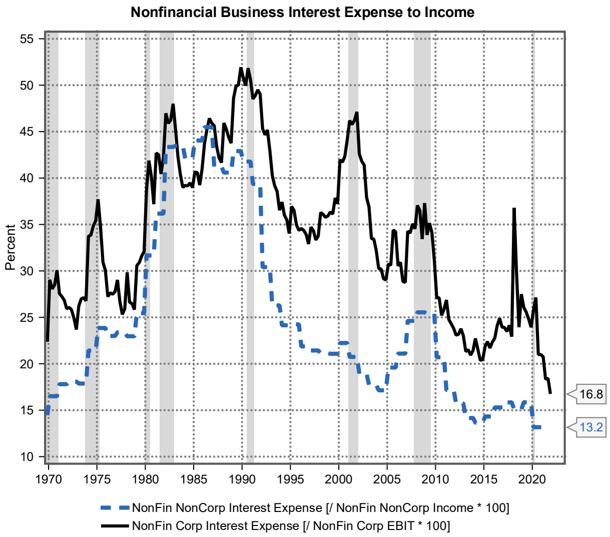
Turning to major borrowing groups, **household debt service** is historically low and currently not a burden to consumers. The Federal Reserve's debt service ratio (DSR) and financial obligation ratio (FOR) estimate payments on household debt and major household obligations[4] as a percentage of disposable personal income. As of 4Q2021 (latest data available), the DSR was 9.3% and the FOR was 14.0%, both relatively low (Figure 30). While higher interest rates probably will boost those ratios, it will take time, given that most household loans (excluding revolving credit, such as credit cards) have fixed terms. Of course, higher interest costs should dampen discretionary spending, and it is one of the reasons we expect slower consumer spending growth as the year progresses.

Figure 30: Household Debt Not a Burden



Source: Macrobond

Figure 31: Nonfinancial Interest Expense Low

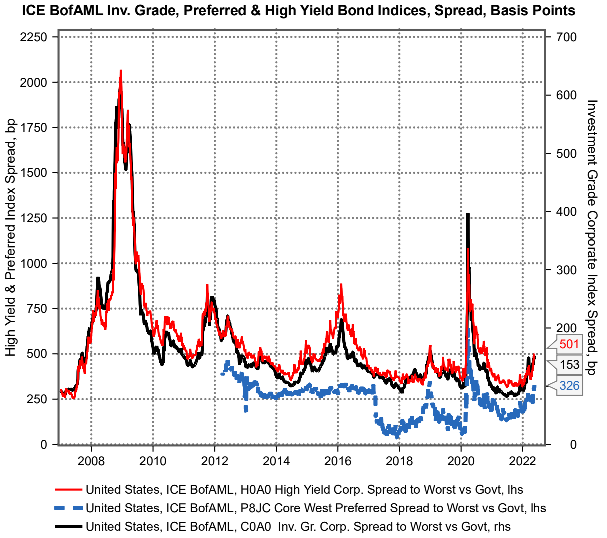


Source: Macrobond

[4] Household debt service includes payments on home mortgage loans, student and personal loans, and automobile, marine and recreational vehicle loans. The financial obligation ratio (FOR) adds in residential rent payments for renters, property taxes and homeowner's insurance payments for owner-occupied property, and personal automobile lease payments. See https://www.federalreserve.gov/releases/housedebt/about.htm.

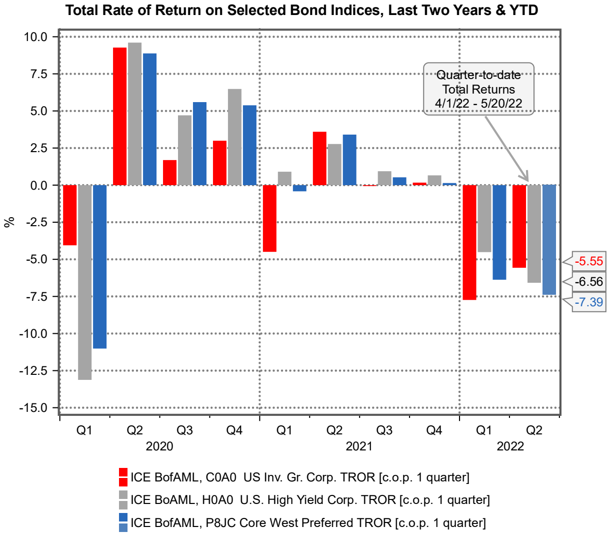
Similarly, nonfinancial business interest-to-income ratios, which we calculate using data from the Federal Reserve's Flow of Funds (Z.1) report, are also low (Figure 31). As of 4Q2021, nonfinancial corporate business interest expense to earnings before interest and taxes was 16.8%. For nonfinancial non-corporate businesses, the comparable ratio was 13.2% in 2020 (underlying data is annual, with a lag). Both ratios are at their lowest levels since the 1960s. In addition, nonfinancial companies have been funding investment spending with internal cash flow for most of the past 3½ years. As of 4Q2021, the "financing gap" was -$253 billion (i.e., capital expenditures less than internally generated funds). These businesses are not overextended. Of course, as interest rates rise, interest expense ratios should increase, and some highly leveraged companies may face bankruptcy or restructuring — but we do not expect widespread problems servicing debt at nonfinancial businesses.

Figure 32: Spreads Wider on Recession Fear



Source: ICE Bank of America Merrill Lynch

Figure 33: Bond Returns Plunged this Year



Source: ICE BofAML

Despite these strong credit fundamentals, a rapid shift to tighter monetary policy and recession fear drove **credit spreads** wider this year, especially for high-yield bonds. Investment-grade and high-yield corporate bond spreads widened 58 and 171 bp, respectively, from year-end 2021 through May 20, 2022 (Figures 28 and 32).[5] Spreads on the preferred index widened 148 bp over the same period, falling between investment grade and high-yield spreads.[6]

While we illustrate preferred spreads using spread to worst, preferreds' complex call features distort this simple spread measure in certain market environments, especially when prices of most preferred securities are above par. We like to compare total rate of return, which combines the impacts of issuer redemptions, credit spread and Treasury yield changes on

[5] Investment-grade corporate bond spread is represented by the ICE BofA U.S. Corporate Index^{SM} (C0A0) "Yield to Worst versus Government" yield spread series. "Spread to Worst" is the lower of yield to call and yield to maturity minus yield on a comparable Treasury security. Index data through 5/20/2022.

[6] Preferred index is the ICE BofA 8% Constrained Core West Preferred & Junior Subordinated Securities Index^{SM} (P8JC). Index inception date was 3/31/2012; data through 5/20/2022.

bond returns. Figure 33 shows total returns on selected ICE BofA indices in recent quarters. So far, 2022 has been a terrible year for almost all asset classes, including investment-grade and high yield corporate bonds and preferred securities. Total return so far in 2022 on the preferred index (-13.29%) was slightly worse than the investment-grade corporate bond index (-12.86%) and trailed the high yield index (-10.78%) by a wider margin.[7]

We think markets underappreciate the credit fundamentals of preferreds in this environment. Both investment grade and high-yield indices are dominated by nonfinancial companies, which are more exposed to rising interest rates. That is less of a concern for investment grade companies — although the interest-rate duration of the investment grade bond index is longer than the preferred index — but it is a clear risk for many high-yield companies. In contrast, financial companies, which are by far the largest issuers of preferred securities, tend to *benefit* from rising rates. Banks today are asset-sensitive, meaning interest income tends to rise more quickly than deposit cost as interest rates move up, boosting margins. Higher rates mean insurance companies earn more on their investment portfolios. Finance companies also tend to raise their lending rates faster than their funding costs. Of course, credit risk also increases with tighter monetary policy, so there is a limit to the benefit of higher rates for financial companies. However, (i) we think rates would need to rise considerably further before that risk becomes worrisome, and (ii) problems at households and businesses to which financial firms lend would come before loan quality deteriorates. Nonfinancial firms should feel any pain from a recession first. Finally, we think financial companies are well prepared for a recession, if that is what lies ahead.

Higher yields are likely to remain a headwind to preferred returns for now. However, given the rise in rates and spreads that has already occurred, we think much of the adjustment is behind us and that today's yields of over 6% (with some issues much higher) offer a foundation for potentially better returns ahead. We believe long-term investors should focus on the benefits that preferred and contingent capital securities continue to offer: moderate interest rate risk, high income, and good credit quality.

Flaherty & Crumrine Incorporated
May 20, 2022

[7] Total return is not annualized and includes both price change and income. Past performance does not guarantee future performance.

© 2022, Flaherty & Crumrine Incorporated. All rights reserved. This commentary contains forward-looking statements. You are cautioned that such forward-looking statements are subject to significant business, economic and competitive uncertainties and actual results could be materially different. There are no guarantees associated with any forecast; the opinions stated here are subject to change at any time and are the opinion of Flaherty & Crumrine Incorporated. Further, this document is for personal use only and is not intended to be investment advice. Any copying, republication or redistribution in whole or in part is expressly prohibited without written prior consent. The information contained herein has been obtained from sources believed to be reliable, but Flaherty & Crumrine Incorporated does not represent or warrant that it is accurate or complete. The views expressed herein are those of Flaherty & Crumrine Incorporated and are subject to change without notice. The securities or financial instruments discussed in this report may not be suitable for all investors. No offer or solicitation to buy or sell securities is being made by Flaherty & Crumrine Incorporated.