“We are in a recession.”

“We are not in a recession.”

“We are in a recession!”

“We are not in a recession!”

Recently there has been significant debate about what it means to be in recession. Second quarter GDP growth in the U.S. was negative, a second consecutive quarter of decline. Two consecutive quarters of negative GDP growth has often been used as a proxy for recession but it is not a hard and fast rule. In the U.S., the National Bureau of Economic Research (NBER) officially dates recessions using a broad-based approach that looks at several variables. Incoming data provides conflicting perspectives on the current state of the economy so the news headlines were awash with competing definitions of what it means to be in recession. The debate grew so ferocious that Wikipedia had to freeze edits to its page for “recession” because of warring edits.

While the GDP data suggest the U.S. economy might have moved into recession in the first half of the year, the underlying data do not yet point to a recession. The U.S. economy added 528,000 jobs in July. As U.S. Treasury Secretary Janet Yellen noted, “when you’re creating almost 400,000 jobs a month, that is not a recession.” Industrial production rose at a healthy 6.2% annualized rate in Q2, which strongly suggests that the economy is not in a recession. At least not yet.

The economy is slowing. Americans continue to shift their consumption preferences back towards services and away from goods. Spending on durable goods was down in the second quarter. This seems to be leading factories to taper back production. For example, U.S. factory output of consumer goods fell 0.7% for the second consecutive month in June.

Consumer spending on durable goods in the United States is up 20% since the start of the pandemic.
Spending on services is only up 1% over the same time period. However, since January 2021, spending on services is up 8% while spending on durable goods is down 1%. We aren’t buying durable goods like we did in the early months of the pandemic.

Demand is slowing and new orders are weakening. At the same time, this is helping ease supply chain disruptions and inflationary pressures brought on by fiscal and monetary stimulus, strong demand for goods, and short supply. Inflation in the U.S. is up 8.5% over the last year. But much of this increase is being driven by energy prices and food costs. Energy prices are up roughly 33% over the last year and food prices are up nearly 11%. Excluding food and energy, consumer prices are still up a high 5.9% over the last year. Oil prices have come down off their March and June highs and inflationary pressures should continue to ease in the coming months. The financial markets expect inflation rates to moderate but it will probably take until the back half of 2023 to see inflation rates approach historical norms. The 10-year breakeven inflation rate has declined somewhat in the last two months, but remains historically high.

China’s central bank unexpectedly cut two key interest rates in early August after data showed economic activity slowed broadly in July. China’s “zero COVID” policy continues to exert downward pressure on the economy. China has largely abandoned 2022 economic growth targets. A statement released last month by the Politburo stated that, “strict control and prevention measures must be applied whenever there is [a COVID] outbreak.” There was no mention of the previous GDP target of 5.5%. Instead, the government reports it wants “the best outcome” for the economy without assigning a specific growth figure for what that might mean. Recession fears are mounting in China.

In Europe, the region avoided a GDP decline in the second quarter, a surprise to many. Germany, the region’s largest economy, reported flat growth, but France came back from a decline in the first quarter and several markets grew sharply thanks to an influx of service spending related to summer tourism and travel.

On net, the global economic picture looks worse than it did a month ago, despite some positive developments. We have subsequently lowered our projections for economic growth in the regions we cover. In the United States, we now expect 2% growth in 2022. We had expected 2.5% growth. We expect the economy to grow just 1.1% in 2023 compared to our prior forecast of nearly 2%. In Europe, we expect 2.6% growth this year followed by 1.4% growth next year. China is likely looking at 3% growth for the year, a sharp decline from the early goal of 5.5%.

---

**-0.9%**

The U.S. economy declined for a second consecutive quarter, suggesting to many that the economy moved into recession in the first half of the year.

**528,000**

The U.S. economy added 528,000 new jobs in July, offering conflicting data that suggests the underlying economy is still growing, despite signs the economy is slowing.

**8.7%**

The GDP deflator was up at an 8.7% annual rate in Q2, the fastest pace of any quarter since 1981.

**6.2%**

Industrial production rose a healthy 6.2% annualized rate in Q2, further refuting the idea that the U.S. economy is in recession.
U.S. OUTLOOK

ECONOMIC GROWTH

The U.S. economy declined at a 0.9% annual rate in the second quarter. This comes on the heels of a 1.6% annualized decline in the first quarter. Economists had expected a 0.4% rise in GDP. For many, two consecutive quarters of GDP decline signals recession. Although we do not believe the economy entered recession in the first half of 2022, the GDP report was certainly weak. The pace of inventory growth slowed, and this alone cut GDP growth by 2 percentage points during the quarter. Home building declined 14% (annualized) and commercial construction fell 11.8% (annualized). Both business investment in equipment and consumer spending on goods fell during the quarter. Consumer spending rose 1% during the quarter thanks to spending on services. While positive, growth slowed from the prior three quarters (average growth of 2.1%).

<table>
<thead>
<tr>
<th>2022 ECONOMIC GROWTH (GDP % Change)</th>
<th>2023 ECONOMIC GROWTH (GDP % Change)</th>
<th>2022 EXCHANGE RATE (v. USD)</th>
<th>2023 EXCHANGE RATE (v. USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNITED STATES</td>
<td>2.0%</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>CANADA</td>
<td>3.4%</td>
<td>1.27</td>
<td>1.26</td>
</tr>
<tr>
<td>MEXICO</td>
<td>1.8%</td>
<td>20.41</td>
<td>20.88</td>
</tr>
<tr>
<td>EURO AREA</td>
<td>2.6%</td>
<td>1.05</td>
<td>1.12</td>
</tr>
<tr>
<td>CHINA</td>
<td>4.0%</td>
<td>6.75</td>
<td>6.52</td>
</tr>
</tbody>
</table>

EMPLOYMENT

The U.S. economy added a whopping 528,000 new jobs in July. Payroll gains for May and June were also revised up 28,000 jobs. Nonfarm payrolls surpassed pre-COVID levels for the first time. The unemployment rate dropped to 3.5% in July, finally reaching pre-COVID levels. The largest increases in the month were in education & health services (+122,000), leisure & hospitality (+96,000), and professional & business services (+89,000, including temps). Manufacturing added 30,000 new jobs during the month, the 15th consecutive monthly increase. Average hourly earnings rose 0.5% and are up 5.2% over the last year. Normally this would be solid news but inflation is running at close to 9% which means inflation-adjusted wages are falling. There is no sign of a recession in the labor market.
SENTIMENT
The Index of Consumer Sentiment showed little change in July. The index rose 3% over the last month, but the index was at a historically low level. July is the second lowest reading on record. The index is off 36.6% over the last year. Buying conditions for durables remains near the all-time low reached last month so it is unsurprising that consumer spending for durable goods was weak during the second quarter. Inflation, rightfully, continues to dominate consumers’ attention. The final July reading of the median expected year-ahead inflation rate was 5.2%, comparable to the prior two months. Long run expectations came in at 2.9%. Despite strong job gains during the month, consumer expectations for the labor market continue to soften.

TRADE-WEIGHTED U.S. DOLLAR INDEX
The Trade-Weighted U.S. Dollar Index rose 2.2% in July and is up 8.6% over the last year. In the last month, the dollar reached parity with the Euro for the first time in two decades. Even with mounting economic uncertainty, the dollar has gained ground against other currencies. The dollar continues to rise with expectations that the Federal Reserve will be the most aggressive Central Bank in raising interest rates. The dollar had declined somewhat in recent weeks but rose across the board on the strong July labor figures. The market expects the Federal Reserve to continue to raise rates aggressively, even as the global economy slows.

MANUFACTURERS’ SENTIMENT (PMI)
The U.S. manufacturing sector expanded for a 26th consecutive month. The Manufacturing PMI was little changed in the last month, declining 0.2 percentage points to 52.8. We continue to see signs that demand is weakening. The New Orders Index fell to 48, a 1.2 percentage point decline over the last month and a sign that new orders continue to contract. The Production Index fell 1.4 percentage points to 53.5, but continues to suggest that production is expanding. The Backlog of ORders Index fell 1.9 percentage points to 51.3. In some positive news, the Price Index fell 18.5 percentage points to 60. This is the lowest reading since August 2020.
U.S. END MARKETS FOR ELECTRONICS

U.S. industrial production declined 0.2% in June and prior months were revised lower. This is the first decline in industrial production in 6 months. Manufacturing declined 0.5% in June (-1.2% including prior revisions). Auto production fell 1.5% while non-auto manufacturing fell 0.4%. Utility output fell 1.4% in June while mining production increased 1.7%.

AUTOMOTIVE PRODUCTS
Auto production fell 1.5% in the month. Production is up 12.5% over the last year but still down 1.1% from pre-pandemic levels.

TRANSIT EQUIPMENT
Transit equipment production declined 1.5% over the last month. The sector is up 9.9% over the last year and 12.6% from pre-pandemic levels.

INFORMATION PROCESSING & RELATED EQUIPMENT
Production in the information processing and related equipment sector inched up 0.1% during the month. The sector is up 1.1% over the last year.

INDUSTRIAL & OTHER EQUIPMENT
The industrial sector rose 0.6% during the last month. The sector is up 9.7% over the last year and up 6.4% from the start of the pandemic.

DEFENSE & SPACE EQUIPMENT
The defense and space equipment segment fell 0.2% in June. The sector is up 3.3% over the last year and 9.7% since the pandemic began.
Overall capacity utilization fell slightly during the month of June, declining from 80.3% to 80%. Manufacturing capacity utilization fell to 79.3% from 79.8% the prior month. Computer and electronic production capacity utilization fell 0.3% (0.3 percentage points) to 71.5%. Electrical equipment, appliances and components utilization rose 1.3% to 82.7%. Utilization in the auto sector fell 1.6% to 74.1%. Capacity utilization in the aerospace and miscellaneous transportation equipment sector inched up to 71.5%, the highest rate since March 2019.
The European economy continues to prove somewhat resilient to massive headwinds. GDP rose 0.7% in the euro area in the second quarter compared to the prior quarter (2.8% annualized). Consensus expectations had expected 0.2% growth. In the EU, GDP rose 0.6% (2.4% annualized). France, the region’s second largest economy, grew 0.5%, after a 0.2% contraction in the first quarter. Spain and Italy enjoyed strong growth of 1.1% and 1% respectively as tourists flocked to these destinations in the aftermath of COVID lockdowns. Germany, the region’s largest economy, was flat in the quarter as supply chain disruptions dragged on growth. Divergent growth in Europe masks underlying economic weakness. Yes, tourism rebounded, but the region continues to face the pressures of high inflation and uncertainty around energy supplies amid Russia’s war with Ukraine as we head into the back half of 2022.

### EUROPEAN OUTLOOK

<table>
<thead>
<tr>
<th>Q/Q PERCENTAGE CHANGE</th>
<th>Y/Y PERCENTAGE CHANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>2021Q3</td>
<td>2021Q4</td>
</tr>
<tr>
<td>EURO AREA</td>
<td>2.3%</td>
</tr>
<tr>
<td>EU (27)</td>
<td>2.2%</td>
</tr>
<tr>
<td>GERMANY</td>
<td>0.7%</td>
</tr>
<tr>
<td>FRANCE</td>
<td>3.3%</td>
</tr>
<tr>
<td>ITALY</td>
<td>2.7%</td>
</tr>
<tr>
<td>SPAIN</td>
<td>2.6%</td>
</tr>
</tbody>
</table>

### 2022 ECONOMIC GROWTH (GDP % CHANGE)  
### 2023 ECONOMIC GROWTH (GDP % CHANGE) 

| EURO AREA      | 2.6%    | 1.4%    |
| GERMANY        | 1.6%    | 1.6%    |
| FRANCE         | 2.4%    | 1.3%    |
| NETHERLANDS    | 2.7%    | 1.6%    |
EMPLOYMENT
The euro area seasonally-adjusted unemployment rate remained at 6.6% in June. The unemployment rate is down from 7.9% in June 2021. The EU unemployment rate was 6.0% in June 2022, unchanged from the prior month but down from 7.2% in June 2021. Czechia reported the lowest unemployment rate in the euro area at 2.4%, followed by Poland (2.7%), Germany (2.8%), Hungary (3%), Malta (3%), and Norway (3.2%).

MANUFACTURERS’ SENTIMENT (PMI)
The S&P Global Eurozone Manufacturing PMI fell from 52.1 in June to 49.8, a 25-month low. The eurozone manufacturing sector fell further into contraction as the Eurozone Manufacturing Output Index fell from 49.3 to 46.3. A deepening downturn in manufacturing was also joined by a slowdown in the service sector. High inflation is taking a toll on demand, leading to a decline in new orders. On a positive note, pricing pressures have started to moderate. Output price inflation and input costs have slowed to 15-month and 17-month lows. The decline in euro area manufacturing activity and sentiment was felt in the largest economies. Germany, France, Italy and Spain all recorded Manufacturing PMIs that were below 50, consistent with contracting conditions.
E.U. END MARKETS FOR ELECTRONICS

Manufacturing output rose 1.4% in May and previous months were revised higher according to Eurostat data. Manufacturing output hit an all-time high in May. 0.3% in April, the second consecutive decline and the second decline since October 2021. Manufacturing output is up 2.8% over the last year and up a similar 2.8% since the start of the pandemic.

The electronics industry, which includes categories such as components, loaded boards, computers, communications equipment and consumer electronics, saw output increase 8.6% in May, though previous months data was revised down to show a 10% decline in April. The sector is down 6.7% over the last year but up 10.9% from pre-pandemic levels.

Motor vehicle manufacturing production rose 2% in May as supply chain disruptions ease. Auto production in the European Union is now up 3.7% over the last year but remains off 27.6% from pre-pandemic levels.

The air and spacecraft manufacturing sector declined 2% in May. The segment is up 7.8% over the last year but off 17.8% since the start of the pandemic.

E.U. Manufacturing Output

E.U. Manufacture of Motor Vehicles
**European Union Manufacture of Computer, Electronic & Optical Products (Y/Y % Change)**

-19.9%

**European Union Manufacture of Air & Spacecraft & Related Machinery (Y/Y % Change)**

6.7%