The U.S. economy continues to surpass expectations this year. We have raised our forecast for GDP growth for 2023 from 1.2% last month to 1.6% this month. We started the year with a forecast of just 0.5% GDP growth in 2023. The U.S. economy looks like it will avoid the “stagflation” scenario where economic growth slows (stagnates), but inflation remains high.

There are still numerous risks to the economy. Central Banks continue to push interest rates higher. Both the Federal Reserve and the European Central Bank (ECB) raised interest rates by 25 basis points in July. We could see another rate hike in September in the U.S. and Chair Powell made it clear that the Fed is unlikely to cut interest rates in 2023 so rates are likely to stay high for longer than many expect. Monetary policy is significantly tighter and the economy has not yet fully absorbed the full breadth of tightening. The full impact of monetary tightening on demand has not yet fully materialized. While inflation is down, core inflation, which excludes energy and food costs, remains persistent in the U.S. and Europe.

The narrative is a bit more cloudy in Europe. While inflation remains high, the underlying economy appears weaker which will cause the ECB to move more cautiously. Several countries have dipped into recession. Germany’s economy was flat in Q2, after falling for two consecutive quarters. But both France and Spain reported strong economic growth in Q2 which should help curtail a major recession in Europe. Regardless, the outlook in Europe is more tepid.

Manufacturer sentiment remains subdued in both the U.S. and Europe according to the PMI surveys in each region. But the U.S. is showing good resiliency and data over the last month should make us a bit more optimistic about the second half. New orders for durable goods surged in June, rising 4.7%. Much of this growth is the result of the transportation component which shot up 12.1% on the back of a 69.4% leap in civilian aircraft bookings. Excluding transportation, durable goods were up 0.6% in June, a respectable growth rate.
Inventory investment made a small positive contribution to growth in Q2 (+0.1 percentage point) after subtracting 2.1 percentage points from GDP growth in Q1. A small gain after a big decline suggests businesses are being very cautious with inventories and the risk of a meaningful decline in the coming quarters is unlikely. The ISM reports that the Customers’ Inventories Index dropped into “too low” territory, which could also add support for future production.

U.S. manufacturers also appear to be investing in capacity - setting a generally bullish tone for the years ahead. In the U.S. construction hiring rose 23,000. Given significant downward pressure on residential construction, these jobs are flowing into industrial and manufacturing projects. Business investment is improving. Investment in structures jumped 9.7% after rising 15.8% in two consecutive quarters. Equipment spending rose 10.8% in Q2 after contracting 8.9% in Q1.

The labor market is also holding up well. Initial claims for state unemployment benefits fell by 7,000 to a seasonally adjusted 221,000 for the week ending July 22. This is the lowest level since February. Yes, job growth eased in June to its slowest pace in 30 months, but the labor market is still tight.

Another important labor trend is playing out in the workweek data. The average workweek has remained on the low end of the trend. Aggregate hours increased just 0.1% in Q2 after rising 2.4% in Q1. Generally a cut in hours suggests lower production schedules due to weak demand. Declining hours often precede layoffs. But firms might actually be cutting hours in order to maintain headcount. Firms might see any slowdown as temporary and they are mindful of how difficult it was to hire the workers they needed when the economy reopened. Rather than cut workers and be caught understaffed during an economic upswing, firms might be trying to keep workers on payroll. We did see temporary help services cut jobs for the 6th time in the past 8 months, suggesting firms are not turning to temp staff. But it does look like they might be trying to retain workers even when faced with lower demand which could suggest that we will see less unemployment with any downturn.

<table>
<thead>
<tr>
<th>9.7%</th>
<th>1M</th>
<th>4.7%</th>
<th>$1,575.62</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment in structures rose 9.7% in Q2, after rising 15.8% in each of the last two quarters.</td>
<td>The number of existing homes for sale is down to a seasonally adjusted 1.0M units. Only two months since 1999 have been lower.</td>
<td>The three-month annualized change in retail sales was up 4.7%, showing consumers are still spending.</td>
<td>Drewry’s composite World Container Index increased by 2.5% to $1,575.62 per 40ft container. This is down 85% from the peak in September 2021 and is 41% lower than the 10-year average.</td>
</tr>
</tbody>
</table>
U.S. OUTLOOK

ECONOMIC GROWTH
The U.S. economy is holding up much better than expected so far this year. U.S. GDP rose 2% in Q1, a strong upward revision from the previous 1.3% estimate which itself had been revised from an initial 1.1% estimate. Large revisions to consumer spending and net exports drove the revisions. Consumer spending rose an annualized 4.2% during the quarter - contributing 2.8 percentage points of growth. This month we received the first look at Q2 GDP numbers which also surpassed expectations. The economy grew 2.4% in Q2. Business investment turned higher during the quarter, led by strong investment in structures. Investment in structures was up 9.7%, after rising 15.8% in each of the last two quarters. Equipment spending was up 10.8% after declining 8.9% in Q1.

<table>
<thead>
<tr>
<th></th>
<th>2023 ECONOMIC GROWTH (GDP % Change)</th>
<th>2024 ECONOMIC GROWTH (GDP % Change)</th>
<th>2023 EXCHANGE RATE (v. USD)</th>
<th>2024 EXCHANGE RATE (v. USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNITED STATES</td>
<td>1.6%</td>
<td>0.7%</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>CANADA</td>
<td>1.2%</td>
<td>1.2%</td>
<td>1.33</td>
<td>1.29</td>
</tr>
<tr>
<td>MEXICO</td>
<td>2.2%</td>
<td>1.5%</td>
<td>18.52</td>
<td>19.73</td>
</tr>
<tr>
<td>EURO AREA</td>
<td>0.6%</td>
<td>1.2%</td>
<td>1.10</td>
<td>1.15</td>
</tr>
<tr>
<td>CHINA</td>
<td>5.4%</td>
<td>4.8%</td>
<td>7.01</td>
<td>6.67</td>
</tr>
</tbody>
</table>

EMPLOYMENT
U.S. nonfarm payrolls added 209,000 jobs in June and gains for April and May were revised down by 110,000, for a net gain of just 99,000 jobs. This is the first meaningful hint of slowdown in hiring, but the labor market remains firm. Employment has risen an average of 278,000 per month through the first 6 months and we saw an average of 399,000 new jobs added each month in 20212. In June, healthcare added 65,000 jobs, together with construction (+23,000), leisure and hospitality added (+21,000), and manufacturing (+7,000). The unemployment rate slipped to 3.6% from 3.7% in May.
SENTIMENT
Consumer sentiment is up sharply in the last two months. Sentiment rose 8.8% in June, further strengthening in the second half of the month. The short-run economic outlook surged 28% and the long-run outlook rose 11%. The rise was driven in part by the resolve on the debt ceiling issue at the start of the month and improving optimism regarding lower inflation. Year-ahead inflation expectations declined for the second consecutive month, falling to 3.3% in June from 4.2% in May. Sentiment in July rose an additional 11%, hitting its highest levels since October 2021. Long-term business conditions rose 18%, while short-term business conditions were up 14%.

TRADE-WEIGHTED U.S. DOLLAR INDEX
The dollar continued to drift lower through the first half of July, but regained ground in the second half of the month. The U.S. Dollar Index (DXY) traded below 100 for the first time in 15 months. But the second half of the month brought strong economic data suggesting the Federal Reserve still has room to raise interest rates. Fed Chair Powell left open the possibility of another hike in September, following a 25 basis point increase in July. While the European Central Bank also raised its target rate by 25 basis points in July, economic data out of Europe has been less positive.

MANUFACTURERS’ SENTIMENT (PMI)
U.S. manufacturing sentiment remained negative for the 8th consecutive month in June. The manufacturing PMI fell to its lowest point since the pandemic and other metrics deteriorated in the last month. The PMI level suggests the rate of contraction is accelerating. The Production Index fell into contractionary territory after a month in expansionary territory. The Employment Index also fell back into contractionary territory. The New Orders Index gained ground but remains in contractionary territory. Right now, manufacturers appear to feel less optimistic about the second half of the year.
U.S. END MARKETS FOR ELECTRONICS

U.S. industrial production fell 0.5% in June and was down 0.8% including downward revisions to prior months. The manufacturing sector declined 0.3% during the month.

AUTOMOTIVE PRODUCTS
Auto production fell 3% during the month. Non-auto manufacturing fell 0.1%. Auto production remains up 9.5% in the past year and non-auto manufacturing is down 1%.

TRANSIT EQUIPMENT
Transit equipment production fell 1.1% during the month. The sector is up 4.9% over the last year.

INFORMATION PROCESSING & RELATED EQUIPMENT
Production in the information processing and related equipment sector rose 1.2% during the month. The sector is down 2% over the last year.

INDUSTRIAL & OTHER EQUIPMENT
The industrial sector slipped 0.1% last month. The sector is down 1.2% over the last year.

DEFENSE & SPACE EQUIPMENT
The defense and space equipment segment rose 1.5%. The sector is up 5.2% over the last year.

Recession Industrial Production: Manufacturing (Y/Y % Change)
12 per. Mov. Avg. (Industrial Production: Manufacturing (Y/Y % Change))

Recession Industrial Production: Automotive products (Y/Y % Change)
12 per. Mov. Avg. (Industrial Production: Automotive Products (Y/Y % Change))
### Business Transit Equipment (Y/Y % Change)

![Graph showing Business Transit Equipment (Y/Y % Change)]

- **Recession**
- **Industrial Production: Business Transit equipment (Y/Y % Change)**
- **12 per. Mov. Avg. (Industrial Production: Business Transit equipment (Y/Y % Change))**

### Information Processing & Related Equipment (Y/Y % Change)

![Graph showing Information Processing & Related Equipment (Y/Y % Change)]

- **Recession**
- **Industrial Production: Information processing and related equipment (Y/Y % Change)**
- **12 per. Mov. Avg. (Industrial Production: Information processing and related equipment (Y/Y % Change))**

### Industrial & Other Equipment (Y/Y % Change)

![Graph showing Industrial & Other Equipment (Y/Y % Change)]

- **Recession**
- **Industrial Production: Industrial and other equipment (Y/Y % Change)**
- **12 per. Mov. Avg. (Industrial Production: Industrial and other equipment (Y/Y % Change))**

### Defense & Space Equipment (Y/Y % Change)

![Graph showing Defense & Space Equipment (Y/Y % Change)]

- **Recession**
- **Industrial Production: Defense and space equipment (Y/Y % Change)**
- **12 per. Mov. Avg. (Industrial Production: Defense and space equipment (Y/Y % Change))**
Overall capacity utilization fell to 78.9% in June. Manufacturing capacity declined to 78% in June, down from 78.3% in May. Computer and electronic production capacity utilization rose 0.8% to 68.4%. Electrical equipment, appliances and components utilization fell 0.1% to 78.7%. Utilization in the auto sector fell 3.2% to 76.6%. Capacity utilization in the aerospace and miscellaneous transportation equipment sector rose to 69.3%.
**ECONOMIC GROWTH**
The European economy fell during the first quarter of the year, edging down 0.1% in the euro area, but rising 0.1% in the EU. The economy is up 1.0% in both the Euro area and the EU compared to the first quarter of last year. Poland recorded the highest increase compared to last quarter, growing 3.8%. Luxembourg rose 2%, Portugal rose 1.6%, and Croatia was up 1.4%. The Netherlands fell 0.7%, Austria declined 0.3%, and Ireland fell 2.7%. Hungary, Lithuania, Estonia, Ireland, and Germany all recorded two consecutive quarters of negative GDP growth, an often used barometer that indicates recession. Germany’s economy was flat in Q2 as well, the worst performing large economy in Europe. In Q2, France was up 0.5%, better than expected. And Spain rose 0.4%.

**EUROPEAN OUTLOOK**

<table>
<thead>
<tr>
<th>Q/Q PERCENTAGE CHANGE</th>
<th>Y/Y PERCENTAGE CHANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>2022Q2</td>
<td>2022Q2</td>
</tr>
<tr>
<td><strong>EURO AREA (20)</strong></td>
<td>0.8%</td>
</tr>
<tr>
<td><strong>EUROPEAN UNION (EU)</strong></td>
<td>0.7%</td>
</tr>
<tr>
<td><strong>GERMANY</strong></td>
<td>-0.1%</td>
</tr>
<tr>
<td><strong>FRANCE</strong></td>
<td>0.5%</td>
</tr>
<tr>
<td><strong>ITALY</strong></td>
<td>1.0%</td>
</tr>
<tr>
<td><strong>SPAIN</strong></td>
<td>2.5%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2023 ECONOMIC GROWTH (GDP % CHANGE)</th>
<th>2024 ECONOMIC GROWTH (GDP % CHANGE)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EURO AREA</strong></td>
<td>0.6%</td>
</tr>
<tr>
<td><strong>GERMANY</strong></td>
<td>-0.2%</td>
</tr>
<tr>
<td><strong>FRANCE</strong></td>
<td>0.6%</td>
</tr>
<tr>
<td><strong>NETHERLANDS</strong></td>
<td>0.8%</td>
</tr>
</tbody>
</table>
EMPLOYMENT
The unemployment rate for the euro area remained at 6.5% in May and the EU unemployment rate moved down one-tenth of a percentage point to 5.9%. Unemployment in Europe is at the lowest levels in 30 years. Czechia unemployment fell to 2.4%, the lowest in Europe. Poland has the second lowest unemployment rate at 2.7%. Germany’s unemployment rate was unchanged at 2.9%. Germany’s unemployment rate remains extremely low despite two consecutive quarters of negative growth and flat economic growth in Q2.

MANUFACTURERS’ SENTIMENT (PMI)
The eurozone manufacturing PMI fell to 44.2 in June, a 37-month low and the 12th consecutive month the index has fallen below 50, separating contraction and expansion. The contraction in the European manufacturing sector appears to be intensifying. Factory output declined at the sharpest rate since October 2022. Demand seems to be weakening across numerous countries. Austria, Germany, Italy, Ireland and the Netherlands all registered their sharpest declines in business conditions in the last three years.
E.U. END MARKETS FOR ELECTRONICS

Manufacturing output rose 1.3% in May from the prior month. Output is down 2% from the year-ago period.

The electronics industry, which includes categories such as components, loaded boards, computers, communications equipment, and consumer electronics, fell 1.8% (month-on-month) in the last month. The sector is down 8.3% over the last year.

Motor vehicle manufacturing output rose 2.7% (month-on-month) during May. The sector is up 27.5% over the last year.

The air and spacecraft manufacturing sector rose 0.7% in May. The sector is up 17.1% over the last year.

E.U. Manufacturing Output

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

-8.3%

E.U. Manufacture of Air & Spacecraft & Related Machinery (Y/Y % Change)

17.1%

European Union Manufacture of computer, electronic and optical products (Y/Y % Change)

European Union Manufacture of air and spacecraft and related machinery (Y/Y % Change)

12 per. Mov. Avg.