High Inflation and the Hard Road Ahead

Karen Dynan
October 6, 2022
Fall 2022 Global Economic Prospects Event
Global inflation has climbed rapidly

Core Consumer Price Index Inflation
Percent change from previous year

Sources: Federal Reserve Bank of Dallas and US Bureau of Labor Statistics via FRED; last data point August 2022 (preliminary estimate for the non-US lines)
Central banks are tightening sharply

Year-on-Year Percentage Point Increases in Policy Interest Rates (as of October 5, 2022)

**Advanced Economies**

<table>
<thead>
<tr>
<th>Country</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>-1.50</td>
<td>0.00</td>
<td>3.00</td>
</tr>
<tr>
<td>USA</td>
<td>-1.50</td>
<td>0.00</td>
<td>3.00</td>
</tr>
<tr>
<td>New Zealand</td>
<td>-0.75</td>
<td>0.50</td>
<td>2.75</td>
</tr>
<tr>
<td>Australia</td>
<td>-0.65</td>
<td>0.00</td>
<td>2.50</td>
</tr>
<tr>
<td>UK</td>
<td>-0.65</td>
<td>0.15</td>
<td>2.00</td>
</tr>
<tr>
<td>Norway</td>
<td>-1.50</td>
<td>0.50</td>
<td>1.75</td>
</tr>
<tr>
<td>Sweden</td>
<td>0.25</td>
<td>0.00</td>
<td>1.75</td>
</tr>
<tr>
<td>Euro Area</td>
<td>0.00</td>
<td>0.00</td>
<td>1.25</td>
</tr>
<tr>
<td>Switzerland</td>
<td>0.00</td>
<td>0.00</td>
<td>1.25</td>
</tr>
<tr>
<td>Japan</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>

**Emerging Market and Developing Economies**

<table>
<thead>
<tr>
<th>Country</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hungary</td>
<td>-0.30</td>
<td>1.80</td>
<td>10.60</td>
</tr>
<tr>
<td>Colombia</td>
<td>-2.50</td>
<td>1.25</td>
<td>7.00</td>
</tr>
<tr>
<td>Chile</td>
<td>-1.25</td>
<td>3.50</td>
<td>6.75</td>
</tr>
<tr>
<td>Poland</td>
<td>-1.40</td>
<td>1.65</td>
<td>5.00</td>
</tr>
<tr>
<td>Brazil</td>
<td>-2.50</td>
<td>7.25</td>
<td>4.50</td>
</tr>
<tr>
<td>Peru</td>
<td>-2.00</td>
<td>2.25</td>
<td>4.25</td>
</tr>
<tr>
<td>South Africa</td>
<td>-3.00</td>
<td>0.25</td>
<td>2.50</td>
</tr>
<tr>
<td>India</td>
<td>-1.15</td>
<td>0.00</td>
<td>1.90</td>
</tr>
<tr>
<td>Korea</td>
<td>-0.75</td>
<td>0.50</td>
<td>1.50</td>
</tr>
<tr>
<td>Malaysia</td>
<td>-1.25</td>
<td>0.00</td>
<td>0.75</td>
</tr>
<tr>
<td>Indonesia</td>
<td>-1.25</td>
<td>-0.25</td>
<td>0.75</td>
</tr>
<tr>
<td>China</td>
<td>-0.30</td>
<td>-0.05</td>
<td>-0.15</td>
</tr>
</tbody>
</table>

Sources: Central bank sources and Obstfeld, *Uncoordinated Monetary Policies Risk a Historic Global Slowdown*
Global economic activity has slowed, and recessions loom in many countries.

Tighter monetary policy is a primary driver.

Direct effects of the energy-price shock from the war in Ukraine and a major slowdown in China reinforce the weakness.
Most advanced economies will experience weaker growth in 2023 than in 2022

Sources: Consensus forecasts for 2020-2021; author’s forecasts for 2022-2023.
The major emerging economies will follow divergent paths

China
- Stimulus not enough to offset drag from COVID shutdowns and property slump

India
- Further recovery thwarted by monetary tightening, external headwinds

Russia
- Significant economic fallout from Ukraine invasion will continue into 2023

Brazil
- Political gridlock in 2023

Sources: Consensus forecasts for 2020-2021; author’s forecasts for 2022-2023.
## Summary of the outlook for large economies

<table>
<thead>
<tr>
<th>Real GDP Growth (Y/Y)</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Output Growth</td>
<td>-3.1</td>
<td>5.8</td>
<td>2.9</td>
<td>1.8</td>
</tr>
<tr>
<td>United States</td>
<td>-2.8</td>
<td>5.9</td>
<td>1.7</td>
<td>-0.5</td>
</tr>
<tr>
<td>Euro Area</td>
<td>-6.2</td>
<td>5.2</td>
<td>3.1</td>
<td>-0.7</td>
</tr>
<tr>
<td>Japan</td>
<td>-4.6</td>
<td>1.7</td>
<td>1.6</td>
<td>1.3</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>-9.1</td>
<td>7.4</td>
<td>3.3</td>
<td>-0.8</td>
</tr>
<tr>
<td>China</td>
<td>2.2</td>
<td>8.1</td>
<td>3.0</td>
<td>4.3</td>
</tr>
<tr>
<td>India</td>
<td>-7.3</td>
<td>8.7</td>
<td>6.9</td>
<td>5.5</td>
</tr>
<tr>
<td>Russia</td>
<td>-2.7</td>
<td>4.7</td>
<td>-6.0</td>
<td>-4.5</td>
</tr>
<tr>
<td>Brazil</td>
<td>-4.1</td>
<td>4.6</td>
<td>2.3</td>
<td>-0.2</td>
</tr>
</tbody>
</table>

US inflation has not declined notably, despite almost a year of little economic growth

Furthermore, the inflation rate needs to fall by almost 3 percentage points to reach the Fed’s target.
Therefore, a recession will likely be needed to restore price stability.

**US 2023 Recession Probability**

<table>
<thead>
<tr>
<th>Percent</th>
<th>Consensus</th>
<th>Fall 2022 GEP</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>50</td>
<td>80</td>
</tr>
<tr>
<td>10</td>
<td>60</td>
<td>70</td>
</tr>
<tr>
<td>20</td>
<td>70</td>
<td>60</td>
</tr>
<tr>
<td>30</td>
<td>80</td>
<td>50</td>
</tr>
</tbody>
</table>

Sources: September 2022 Blue Chip Economic Indicators; author’s forecast

**US Real GDP**

Chained 2012 Dollars (Trillions)

Q4/Q4 GDP growth:
- 2022: -0.2
- 2023: -1.0

Sources: US Bureau of Economic Analysis via FRED; author’s forecast
Financial conditions are responding to Fed tightening

Sources: S&P Dow Jones Indices LLC via FRED; last data point October 4

Sources: Freddie Mac via FRED; last data point September 29
Financial market volatility will likely continue to be pronounced

A 1pp increase in interest rates has a much larger effect on the present value of a long stream of future returns when that increase is 1% => 2% than 3% => 4%

So, asset prices will swing more markedly with shifts in interest rates.

Also, interest rates have not increased significantly or been this high in a number of years, so investment portfolios and market participants’ mindsets may not be prepared for the higher rates to come.

Moreover, as Maury Obstfeld has noted, coincident-but-not-coordinated interest rate hikes by many central banks can have an especially large collective effect.
Housing demand is dropping, and consumer demand has slackened a bit

Housing Activity Indicators

Real Personal Consumption Expenditure

Percent change, monthly rate

Sources: US Census Bureau via FRED and National Association of Home Builders; last data point August 2022 for permits and September 2022 (preliminary) for homebuilder confidence

Sources: US Bureau of Economic Analysis via FRED; last data point August 2022
Yet, labor markets remain very tight

Job Openings per Unemployed Worker

Change in Average Hourly Earnings in All Private Industries

Percent Change, Annual Rate

Sources: US Bureau of Labor Statistics via Macrobond; last data point August 2022

Note: Adjusted for changing composition of employment using chain-weighted aggregation (by total hours worked) of average hourly earnings by industry sector
Source: Furman and Powell, A Tight US Labor Market Stays Tight
The scope for labor supply to expand and relieve tight labor markets looks limited.

Labor Force Participation Rate
Percent of population in age group

25-54

55 and older

Source: US Bureau of Labor Statistics via FRED; last data point August 2022

Foreign Born Population, Age 16-64
Thousands

Note: January changes incorporate annual adjustments to BLS population controls
US core inflation may not even have peaked

Breakdown of Core US CPI Inflation
Percent change from 12 months earlier

Source: US Bureau of Labor Statistics via FRED; last data point August 2022
The Fed will probably need to raise the policy rate substantially further

Federal Funds Rate

Percent

Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4  
2021 | 2022 | 2023 | 2024

Note: Dashed line corresponds to forecast
Source: Federal Reserve via FRED; author’s forecast
A soft landing is not the most likely outcome

**US Unemployment Rate**
Q4 level

- **GEP projection**
- **median FOMC projection**

**Projection of Core US Inflation**
Percent change in core PCE deflator from Q4 to Q4

- **GEP projection**
- **median FOMC projection**

Source: Federal Reserve; author’s forecast
But the US downturn will probably be mild by historical standards

Peak Unemployment in pre-2020 Recessions

By comparison, the GEP Fall 2022 forecast shows a peak unemployment rate of 5.5 percent.

A mild recession is likely because several factors will help facilitate the disinflation and mitigate the longer-term damage from the slowdown.

Source: Bureau of Labor Statistics via FRED; author's calculations
Inflationary supply shocks are abating

Global Supply Chain Pressure Index
Standard deviations from average value

Source: Federal Reserve Bank of New York; last data point August 2022

West Texas Intermediate Spot Price of Oil
Dollars per barrel

Source: US Energy Information Administration via FRED; last data point October 3
Inflation expectations remain fairly low

Long-term Inflation Expectations

Sources: University of Michigan, Survey of Professional Forecasters, Federal Reserve Bank of St. Louis via FRED. Lines are 3-month moving averages; dots are from a single point in time.
Moreover, solid household and business finances will serve as shock absorbers.

Aggregate Wealth by Income Percentile

After-tax Corporate Profits

Sources: Federal Reserve Distributional Financial Accounts; author's calculations
Source: Bureau of Economic Analysis via FRED
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