20th Annual Metro Economy Outlook

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October 24, 2019

The Economic & Geopolitical Outlook: What Are the Risks and Opportunities Ahead?

Bernard Baumohl
Chief Global Economist
www.EconomicOutlookGroup.com
We are at a “Pivotal Moment” in US Economic History!

The economy is well into its 11th straight year of growth, the longest stretch ever!

The fundamentals still look very good:

• Unemployment rate (3.5%). Tightest labor market in 50 years!
• “Real wages” keep climbing and consumers are spending.
• Inflation remains dormant!
• Borrowing costs among the lowest ever seen.
• There’s ample capital looking for investments.
• Technological innovations continue to transform the fabric of our economy and society.

But worries of recession have become more widespread.

Is this business cycle about to peak?
Three most common causes of past recessions


2. A major geopolitical eruption that causes oil prices to spike. Sharply higher energy costs can bring economic activity to a screeching halt. (1973-1975, 1980)

• A trade war with China that spirals out of control. The world economy is in danger of shutting down as global exports shrinks and countries devalue currencies.

• Federal Reserve can not bail out this economy with lower rates! Monetary policy is being held hostage to geopolitical events. Nor is there room for more fiscal stimulus, given $1 trillion deficits.

• Geopolitical threats are flashing “RED.” (Syria, Iran, North Korea, South China Sea, Hong Kong, Venezuela, India/Pakistan, Brexit)

• Threat of extreme political warfare as the 2020 presidential campaign heats up. A divisive, highly polarized political climate may depress consumer and business spending.
Main Forecast for U.S. GDP growth

Scenario 1: US & China achieve ‘phase one’ interim deal. Some rollback in tariffs. Talks continue.

Prob: 55%

Sources: BEA, Office of Management & Budget; Federal Reserve, The Economic Outlook Group,
Alternate Forecast for U.S. GDP growth

Scenario 2: The trade war continues to escalate in 2020. No deal seen before presidential election.

Prob: 30%

Recession risk in 2020: 35%

Sources: BEA, Office of Management & Budget; Federal Reserve, The Economic Outlook Group,
### Alternate Forecast for U.S. GDP growth

**Scenario 3:** US and China reach a comprehensive trade deal mid-2020. World economy rebounds.

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**Average annual growth rate since WW II:**

- 1948-1965: 2.3%
- 1966-1985: 2.5%
- 1986-2018: 3.1%

**Forecast:**

- 2021: 3.1%

*Source: The Economic Outlook Group.*
It all comes down to the consumer: Spending will increase but at a moderate pace.

Factors that **support** household spending 2019 and 2020:

1. Robust job market.
2. Wages rising faster than inflation --> boosts purchasing power.
3. Surge in mortgage refinancing has increased spendable income.
4. Relatively low gasoline prices leaves more cash in consumer pockets.
5. Consumer confidence on the economic outlook still firm, if wobbly.
6. eCommerce + digital payments + faster deliveries = encourages impulse buying.

Factors that will **suppress** growth in spending:

1. After 10 yrs. of shopping, consumer demand naturally wanes.
2. Household debt now at a record $13.8 trillion. Delinquencies inching higher.
3. Demographic changes will alter the composition of spending.
Unemployment at historic lows; Yet job openings still greatly exceed those unemployed!

Overall UNEMPLOYMENT RATE: 3.5% – September 2019
Less than a high school degree (4.8%)
High School graduates (3.6%)
Some College or Associate Degree (2.9%)
Graduates with Bachelor’s Degree & Higher (2.0%)

Job openings: Total Nonfarm
Number of unemployed

August Job openings: 7.1 million
Sept. unemployed: 5.7 million
Historic tug-of-war over inflation:
eCommerce is the greatest deflationary force in modern economic history

Factors depressing inflation
- eCommerce
- Globalization
- Stronger dollar
- Improved productivity
- Changing demographics
- Low interest rates
- Moderate energy prices
- Decline in union membership

Factors pushing inflation higher
- Rising wages
- Tariffs
- Firms testing pricing power

Inflation 1.8%
(core PCE price index Aug. YOY)

Fed’s target is 2.0%
Companies are scaling back investments. Hard to deploy capital when there are so many economic and geopolitical uncertainties.

-- Evidence mounts of recession in manufacturing. So is a full-blown economic downturn next?
-- Trade tensions slash global trade and cause havoc with international supply chains.
-- Corporate profits are under pressure due to rising labor costs, tariffs and limited pricing power.
-- Passage of the USMCA stalled in Congress. Will it be a casualty of election year politics?
-- How will the outcome of 2020 presidential election impact trade, tax and spending policies?
Above “50” indicates new orders are expanding
Below “50” indicates new orders are contracting

ISM: New Orders - Manufacturing

Source: Institute for Supply Management

ISM: New Orders - Non-Manufacturing (Services)
To avoid paying higher tariffs on goods from China, US firms have increased imports from other Asian suppliers

(\% change in Asian exports to the US 1st half 2019 vs. 1st half in 2018)

Source: US Commerce Department (Trade on C.I.F. Basis)
Coping with rising tariffs: What can US manufacturers and importers do?

1. Negotiate with existing foreign suppliers to reduce prices.

2. Seek out another supplier or relocate plants elsewhere in Asia, but…
   --- do other countries have enough skilled workers? Machine tools? Adequate quality control?
   --- does that country have sufficient infrastructure: modern roads, rails and ports?
   --- how likely is it the US will also boost tariffs on those countries?

3. Is it time to rethink domesticating supply chains?
   • Trans-ocean shipping costs to increase:
     --- Cargo shipping industry has consolidated. Cost to transport goods will rise.
     --- New IMO caps on sulfur emissions for ocean going vessels to drive freight rates up too.
   • Reassessing the productivity and reliability of domestic suppliers.
     --- AI, robotics, 3-D printing can help produce more at lower costs.
     --- A US supplier/manufacturer could improve just-in-time inventory management.
     --- Question: Will your customers accept higher prices if the product was made in the US?
### Baseline Forecast: 2019 - 2021

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</table>
So...what could possibly go wrong?
Recession Warning Signs: 12 Key Indicators to Monitor Now!

**Consumer spending patterns:**
- Consumer purchases of durable goods (BEA)
- Consumer delinquency rates (FRB)
- Confidence levels; 3-month moving average (CB & UofM)
- New single family home sales / Pending Homes sales (Census; NAR)

**Employment data**
- Average weekly OT hours worked; manufacturing (BLS)
- Applications for unemployment benefits (BLS)

**Business:**
- ISM manufacturing – new orders (ISM)
- Ratio of building permits to new starts (Census)
- Chemical Activity Barometer (ACC)
- Wholesale Inventories (Census)

**Banking:**
- Senior loan officer survey by Federal Reserve (FRB)

**Capital Markets:**
- Inversion of the yield curve (10-yr. minus 2 yr & 3-M)
Moderate: A full blown global trade and currency war triggers new financial crises

- Trade talks w/China collapse; US threatens more tariffs on Europe, India, Vietnam.
- Volume of world trade shrinks. Global wave of competitive currency devaluations.

HIGH: Exogenous shocks pose the greatest threat to the economy.

1. Foreign adversary launches cyber attack that paralyzes parts of the US economy.
2. US and Chinese military confrontation: South China Sea, Hong Kong, Taiwan.
3. Saudi Arabia retaliates against Iran. Threat of full scale war looms.
4. Iran enriches uranium above 20%. Prompts US or Israel to strike back militarily.
5. India and Pakistan edge closer to nuclear war as tensions soar over Kashmir.
1. Companies should undertake “rigorous” stress tests to identify areas of vulnerabilities.
   • Conduct “what if” scenarios: Introduce adverse hypothetical scenarios (e.g. systemic power failure or events that can disrupt operations, revenue flow, access to the internet & intranet and block credit lines.)
   • How to cope under such dire circumstances and remain both operational and profitable?

2. Buy cyber theft insurance, upgrade software, and hire reputable firms to hack into your system.
   • Average time it takes a U.S. firm to identify a breach = 201 days
   • Average time it takes to contain the breach = 70 days
   • Average cost of a single data breach = more than $4 million (Source: IBM)

3. Geopolitical threat anticipation:
   • Dedicate a risk management team to engage in geopolitical forecasting, especially where one has foreign exposure (e.g., customers, supply chain sources, key investors, real estate, banking relationships.)

4. Customers demand reliability of service --- or they’ll walk! Be proactive. Focus on being agile.
   • Prepare in advance a governance plan that can be implemented quickly to mitigate any harmful fallout from an external shock. *Your firm’s reputation is always at risk.*
## GDP Growth - Global Economy

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**Growth Leaders**
- India
- China
- Indonesia
- Vietnam
- Peru
- Israel

**Moderate Growth**
- Australia
- US
- Chile

**Sluggish Growth**
- UK
- Canada
- Russia
- Japan

**In or Near Recession**
- Eurozone
- Argentina
- Brazil
- Mexico
- Venezuela
- Iran
Decrepit infrastructure holds back economic growth:
But money and politics often gets in the way of much-needed repairs.

EXAMPLES:
• Philadelphia still relies on underground pipes installed *before* the Civil War.
• 84,000 bridges considered functionally obsolete.
• 58,000 bridges deemed “structurally deficient,” yet still carry 180 million cars a day!
• There are more than 650 water main breaks a day on average in the US; 240,000 a year.
• Leakages and spills waste an average of **5.8 billion gallons of water each day!**

Sources: American Society of Civil Engineers, American Water Works Association, Center for Neighborhood Technology
Outlook for WTI oil: $55 - $70 bbl next two years
However add another $5 to $15 premium when geopolitical tensions increase

Sources: US Energy Information Administration, The Economic Outlook Group
# Key Foreign Exchange Rates
(per U.S. dollar, year-end level)

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<td>3.87</td>
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<td>4.11</td>
<td>4.12</td>
</tr>
<tr>
<td>Mexican pesos</td>
<td>19.79</td>
<td>19.68</td>
<td>20.10</td>
<td>20.50</td>
<td>19.85</td>
</tr>
</tbody>
</table>

The Economic Outlook Group
Top priority of Pres. Xi Jinping and Communist Party Leadership:
Maintain economic & political stability in China AT ALL COST!

BACKGROUND:
1. Since the 1970s, China has pursued a hybrid mix of Communism & Capitalism.
3. But its success as a global manufacturing hub brought new problems that stumped the CP.
4. China loses labor cost advantage; Excess industrial capacity means idling plants or more dumping.
5. Debt levels have exploded at state-owned industries and private firms leading to defaults.
6. Financial stress, loss of competitiveness, trade war with the US = slowest GDP growth in 27 years!
7. NEXT? China to allow gradual economic slowing; wait out US trade conflict thru 2020 election.

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real GDP growth %</td>
<td>6.8</td>
<td>6.6</td>
<td>6.1</td>
<td>5.8</td>
</tr>
<tr>
<td>Private consumption %</td>
<td>6.4</td>
<td>6.3</td>
<td>6.0</td>
<td>5.9</td>
</tr>
<tr>
<td>Inflation %</td>
<td>1.6</td>
<td>2.1</td>
<td>2.0</td>
<td>2.3</td>
</tr>
<tr>
<td>Unemployment rate (avg.)*</td>
<td>3.8</td>
<td>3.8</td>
<td>3.8</td>
<td>3.8</td>
</tr>
<tr>
<td>RMB (per US dollar)</td>
<td>6.5</td>
<td>6.8</td>
<td>7.0</td>
<td>7.1</td>
</tr>
</tbody>
</table>

*RMB (per US dollar) data from The Economic Outlook Group.
New home construction to remain listless next 18 months. Will rebound in 2021 with an improving economy and greater demand.

Total housing starts and permits: Annual total, in thousands

<table>
<thead>
<tr>
<th>Year</th>
<th>Housing Starts: % Growth</th>
<th>Housing Permits: % Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>-2.4% (1.22 Mill)</td>
<td>-9.0% (1.20 Mill)</td>
</tr>
<tr>
<td>2020</td>
<td>-0.4% (1.21 Mill)</td>
<td>-0.8% (1.19 Mill)</td>
</tr>
<tr>
<td>2021</td>
<td>+4.0% (1.26 Mill)</td>
<td>+4.2% (1.27 Mill)</td>
</tr>
</tbody>
</table>

Sources: The Department of Commerce, The Economic Outlook Group
Homebuilders confront a perfect storm!

Cost of building material has increased due to tariffs.
(Steel, aluminum, softwood lumber, plastic pipes, screws, bolts)

Severe shortage of skilled labor.
- Number of residential construction workers is down 20% from 2006.
- After the housing bust, many found more lucrative opportunities in the shale oil-related industry.
- One in four construction workers were immigrants. (Source: NAHB)

The burden of excessive government regulations:
- Local, state and federal requirements account for 25% of constructing cost of a home.

Scarcity of suitable land: Price of lots in preferred locations have skyrocketed.
- Builders moving out into “Xburbs” to construct more affordable homes.
- But high-end homes still provide greater margins for builders.
Housing demand has been lackluster!

- Household formation has slowed:
  --- aging demographics
  --- birth rates are lowest in 30 years
  --- severe curbs on immigration
  --- US population growth now slowest in 80 years
  --- Household formation to slow from 1.40 million (2018) to 1.22 million (2023)

- Millennials and Gen Zs are more budget conscious.
  --- High college debt burdens (record $1.6 billion) have made renting more attractive
  --- Pressure to build private savings because of doubts on solvency of SS and Medicare
  --- Witnessed financial crisis: saw home values plummet and how friends/families declared bankruptcy
  --- Uncertain about future economy given the trade war and fears of a global recession.

- Provisions of the 2017 Tax Act raised the after-tax cost of homeownership

- Banks tightening lending standards given lateness in the credit cycle.

- Lack of affordable entry level homes:
  --- Large investment firms buying thousands of homes for rent; record numbers of flippers in the market.
US vs. China: Who has the capacity to endure more economic and political pain?

1. Will there be sufficient political cohesion in the White House for a protracted trade war as we get closer to 2020 elections?

   Tension is brewing in the WH between China hawks (Lighthizer and Navarro) and the pragmatists (Mnuchin and Kudlow). Who will have Trump’s support as the presidential race heats up?

2. Xi Jinping may be president “for life” but the Politburo is getting impatient.

   • Xi still needs to listen to both Communist Party hardliners AND those favoring market-oriented reforms.
   • Several of China’s top policymakers are US trained economists. (Liu He, Yi Gang)
   • China celebrates the 70th anniversary of its founding in October. Symbolizes liberation from Western dominance.
   • Xi will closely monitor US polls in the 2020 presidential election.
   • Chinese leaders believe Trump’s criticism of the Federal Reserve reflects his fear the US economy is in trouble.

3. Do not underestimate China’s ability to withstand US pressure.

   • Weaponize the RMB vs. US dollar --or-- scale back net new purchases of US treasuries
   • Encourage local shadow banks to resume lending to private firms
   • Further slash RRR and other interest rates
   • Impose new red tape on US firms operating in China
   • Boycott purchases of US goods
   • Ignore US sanctions against North Korea and Iran
   • Slash tariffs on imported goods from US competitors
US - China trade war

Trump and Xi have blundered into a minefield of tariffs, retaliations and other provocations. A “phase one” interim trade deal is likely --- but little else will be accomplished before the 2020 US elections.

US goals:
1. Slash the US trade deficit with China
2. Get China to codify a new trading relationship with the US.
   • Protect US intellectual property.
   • End forced joint ventures & transfer of proprietary technology.
   • Stop exports of counterfeit goods.
   • End its cyber warfare against US firms & military.
   • Seek strong measures to monitor and enforce future trade agreements.

China’s goals: Maintain domestic economic & political stability at all costs!
• Avoid formalizing trade reforms into law; emphasize agreements as memorandum of understandings.
• Seek immediate rollback of all punitive US tariffs once a deal is made.
• Otherwise stall, bob & weave and offer minimal concessions until after US elections.
Chinese visitors to the US declines for the first time in 15 years!

Source: US National Travel & Tourism Office