Our competitive edge stems from our unique access to key global decision-makers and a diverse platform of portfolio companies. This unique information gateway informs our view of the world, and provides a benchmark against which our global outlook (and associated risks) for growth, inflation and the discount rate (interest rates) can be judged. The underlying views are forged by an analysis of the interconnections between three key pillars of the economic infrastructure (namely the structural trends, cyclical dynamics and global adjusting forces) that shape the medium-term outlook for the global economy and financial market performance.

The scorecard reviews the directional impact of economic indicators ranging from structural trends like geopolitics and the regulatory backdrop to cyclical dynamics and global adjusting forces on the three key primitives – growth, inflation and interest rates. This is compared to our assessment of what the market is pricing in for these factors.
Synchronized global growth is being sustained. The upswing in growth momentum has been supported across a broad swathe of countries, reinforcing positive growth dynamics.

We maintain a constructive view on the medium-term outlook for the global economy, however, we remain attentive to potential headwinds over the medium term.

**Global Macroeconomic Outlook**

**Developed Markets:**
Sustained and Synchronized, Above-Trend Growth
Cyclical conditions are gaining momentum and broadening globally. Our expectation is for the shift from “nudge-thru” to a more synchronized above-trend growth to be sustained over the medium-term, more than compensating for the lingering structural headwinds.

**Inflation to Remain Tepid, Drift Modestly Higher:**
Despite strong above-trend growth, the inflation picture remains tepid with the secular forces continue to constrain price pressures. Nevertheless, we view above-trend growth conditions as training inflation higher, but we are not on the threshold yet where wages accelerate meaningfully.

**Fed Leads Gradual Hiking Cycle:**
As the Fed walks the way on higher rates, we expect yields to drift modestly higher. However, the gradual pace of policy tightening should temper any risk of a disorderly adjustment higher, ensuring relatively favourable global financial conditions.

**Emerging Markets:**
Most EMs are in the early days of a cyclical upturn that we expect to strengthen over the next two years, having an unprecedented external shock. Three key forces are aligning in EMs favor – seeing global US funding conditions, a healing global trade cycle and sustained short-term China dividend. This should pave the way for a continued steady capital inflow back into EMs following recent years’ retrenchment.

**Fixed Income:**

- **U.S. Dollar:** Fairly Priced for a Firm Global Demand to Support Prices
- **EQUITIES:** Slight Upside Bias to Field
- **CREDIT:** One More Leg to Go?
- **COMMODITIES:** Firming global demand should provide a favourable backdrop for commodity prices going forward, and even though excess capacity remains in a number of key commodities (such as energy), the supply-demand dynamics should begin shifting more constructively.

**On Our Radar**
- **Structural Factors:** Changing global demographic dynamics, weakening globalisation impulses as well as ongoing deleveraging have been constraining forces on growth. Collectively, the net impact on growth rate and inflation has also been negative.
- **Disruptive Technology:** The development and adoption of new revolutionary technological is occurring at an unprecedented pace. The economic ramifications of these disruption technologies are profound as they have the potential to transform the economic landscape in meaningful ways.

**Geopolitics:**
- **The Global geopolitical risk level remains elevated, even though the worst fears of a protectionist pivot under the Trump Administration have receded. Nevertheless, the risk of a confrontation between the U.S. and China has not diminished.

**Global Economic & Market Update**

**Risk Monitor**

<table>
<thead>
<tr>
<th>KEY GLOBAL MACRO RISK DIAL</th>
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</thead>
<tbody>
<tr>
<td><strong>1. U.S. encounters an economic recession over the next 12 months</strong></td>
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<tr>
<td><strong>2. The Canadian economy enters a recession in the next 12 months</strong></td>
</tr>
<tr>
<td><strong>3. China experiences severe economic and financial dislocations over the next 12 months</strong></td>
</tr>
<tr>
<td><strong>4. Global geopolitical tensions rise to observable conflict and destabilization</strong></td>
</tr>
</tbody>
</table>

**Central Bank Policy:**
There is increased confidence among EM policymakers about improving the economy’s resilience and reduced concern about moving away from the current emergency policy settings. The monetary pendulum is beginning to swing from synchronized global easing, to the cusp of synchronized, albeit gradual, global tightening – a major post-crisis inflection point.

**EQUITIES:**
Equities are largely fully priced for our base-case economic outlook. Even a relatively constructive expansion of the corporate fundamentals is not overly concerned about a material decline in stock markets in the near term.

**Fixed Income:**
The cyclical improvement in the economic backdrop along with the existing central bank policy bias towards tightening will more than compensate for any structural headwinds as yields over the medium-term. However, with long-run equilibrium rates lower than previous cycles, long duration assets remain attractive from a strategic perspective.

**Utility:**
A final rally is still possible in the event of a positive U.S. policy shock. We are divided inside the USD, seeing a more advanced business and credit cycle relative to major Developed Markets, raising the likelihood of modest tightening that the market expectations from the end of 2018.

**Credit:**
Cyclically, the credit spread looks broadly rich as spreads continue to tighten. While the overall compression dynamics may still have leg, the risk/reward payoffs do not look particularly compelling.

**Commodities:**
Firming global demand should provide a favourable backdrop for commodity prices going forward, and even though excess capacity remains in a number of key commodities (such as energy), the supply-demand dynamics should begin shifting more constructively.

**On Our Radar:**
- **Structural Factors:** Changing global demographic dynamics, weakening globalisation impulses and ongoing deleveraging have been constraining forces on growth. Collectively, the net impact on growth rate and inflation has also been negative.
- **Disruptive Technology:** The development and adoption of new revolutionary technologies is occurring at an unprecedented pace. The economic ramifications of these disruption technologies are profound as they have the potential to transform the economic landscape in meaningful ways.
- **Geopolitics:** The geopolitical risk level remains elevated, even though the worst fears of a protectionist pivot under the Trump Administration have receded. Nevertheless, the risk of a confrontation between the U.S. and China has not diminished.

**Outlook:**
- **Neutral**
- **Slightly Bullish**
- **Slightly Bearish**

**Notwithstanding a sustained period of slack-absorbing growth across an increasing number of economies, the global inflation backdrop remains disconcertingly weak. The synchronized global economic recovery is being sustained. The upswing in growth momentum has been supported across a broad swathe of countries, reinforcing positive growth dynamics.**

**Central Bank Confidence**
The encouraging global growth backdrop has been supported by curbed demand across a broad swathe of countries, reinforcing positive growth dynamics.

**Developed Markets:**
Sustained and Synchronized, Above-Trend Growth
Cyclical conditions are gaining momentum and broadening globally. Our expectation is for the shift from “nudge-thru” to a more synchronized above-trend growth to be sustained over the medium-term, more than compensating for the lingering structural headwinds.

**Inflation to Remain Tepid, Drift Modestly Higher:**
Despite strong above-trend growth, the inflation picture remains tepid with the secular forces continue to constrain price pressures. Nevertheless, we view above-trend growth conditions as training inflation higher, but we are not on the threshold yet where wages accelerate meaningfully.

**Fed Leads Gradual Hiking Cycle:**
As the Fed walks the way on higher rates, we expect yields to drift modestly higher. However, the gradual pace of policy tightening should temper any risk of a disorderly adjustment higher, ensuring relatively favourable global financial conditions.

**EMERGING MARKETS:**
Most EMs are in the early days of a cyclical upturn that we expect to strengthen over the next two years, having an unprecedented external shock. Three key forces are aligning in EMs favor – seeing global USD funding conditions, a healing global trade cycle and sustained short-term China dividend. This should pave the way for a continued steady capital inflow back into EMs following recent years’ retrenchment.

**Fixed Income:**

- **U.S. Dollar:** Fairly Priced for a Firm Global Demand to Support Prices
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**On Our Radar:**
- **Structural Factors:** Changing global demographic dynamics, weakening globalisation impulses and ongoing deleveraging have been constraining forces on growth. Collectively, the net impact on growth rate and inflation has also been negative.
- **Disruptive Technology:** The development and adoption of new revolutionary technologies is occurring at an unprecedented pace. The economic ramifications of these disruption technologies are profound as they have the potential to transform the economic landscape in meaningful ways.
- **Geopolitics:** The geopolitical risk level remains elevated, even though the worst fears of a protectionist pivot under the Trump Administration have receded. Nevertheless, the risk of a confrontation between the U.S. and China has not diminished.

**Outlook:**
- **Neutral**
- **Slightly Bullish**
- **Slightly Bearish**
The scorecard reviews the directional impact of economic indicators ranging from structural trends like geopolitics and the regulatory backdrop to cyclical dynamics and global adjusting forces on the three key primitives – growth, inflation and interest rates. This is compared to our assessment of what the market is pricing in for these factors. The scorecard is designed to be a snapshot of the economic landscape at a given point in time and to help provide a framework for understanding the drivers of economic and market performance globally.

**Growth Drivers**
- Structural Trends
- Cyclical Dynamics
- Global Adjusting Forces

**Inflation Drivers**
- Structural Trends
- Cyclical Dynamics
- Global Adjusting Forces

**Discount Rate Drivers**
- Structural Trends
- Cyclical Dynamics
- Global Adjusting Forces

**Market Assessment and Outlook**

**The Investment Outlook**

- Financial Market Outlook
- Global Macro Risk Monitor
- Global Scorecard

**THE ONTARIO TEACHERS’ TRI-CYCLE**

1. **Structural Trends**
   - The long-term trends or secular regimes that define the investment environment, and influence the decision-making processes of firms, households and non-market actors at both the individual and aggregate level.

2. **Cyclical Dynamics**
   - Forces related to fluctuations in the economy, policy and credit regimes that are driving forces behind economic and asset market performance.

3. **Global Adjusting Forces**
   - These forces define the avenues for spillovers across economies and regions. In particular, they form the mechanisms through which DM and EM economies and financial markets become integrated through trade and capital inflow.

**Global Adjusting Forces**

- Geopolitical Trends
- Regulatory Backdrop
- Secular Growth Drivers
- Credit Cycle
- Business Cycle
- Trade Cycle
- Capital Flow Cycle
- Ontario Teachers’ Bias Relative to Market

**Market Assessment and Outlook**

**The Competitive Edge**

- Portfolio companies
- Hedge fund partners
- Research community

**Unique Information Gateway**

- The Ontario Teachers’ Global Macroeconomic Framework

**The three key pillars of the economic infrastructure**

- Structural trends
- Cyclical dynamics
- Global adjusting forces

**The economic landscape is shaped by these three key pillars**

**THE ONTARIO TEACHERS’ PENION PLAN**

For questions and comments on this report, please contact:

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  Chief Investment Officer
  hiban.mullahee@otpp.com
  (416) 768-4502

**PHILOSOPHY**

**The Ontario Teachers’ Tri-Cycle**

1. **Structural Trends**
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2. **Cyclical Dynamics**
   - Forces related to fluctuations in the economy, policy and credit regimes that are driving forces behind economic and asset market performance.

3. **Global Adjusting Forces**
   - These forces define the avenues for spillovers across economies and regions. In particular, they form the mechanisms through which DM and EM economies and financial markets become integrated through trade and capital inflow.
Synchronized global growth

The synchronized global economic recovery is being sustained. The upswing in growth momentum has been driven across a broad swathe of countries, reinforcing positive growth dynamics.

Central bank confidence

The ongoing global growth bias has led central banks to pursue an environment conducive to developing market central banks, providing justification for the start of a pivot from synchronized easing to synchronized tightening. Along with the ECB and the BoJ, the BoE appears to be on the verge of taking the first step towards stimulus withdrawal. The ECB and BoJ are also expected to eventually shift away from their easing bias.

Emerging markets: Favorable global environment to drive steady cyclical uptick

Most EMs are in the early days of a cyclical upturn that we expect to strengthen over the next few years, barring an unexpected external shock. Three key forces are aligning in EM favor—several synchronized above-trend growth conditions, favorable global USD funding conditions, a healing global trade cycle and contained short-term regional China downside risks. This should provide a headwind for most EMs going forward, and even though excess capacity remains in a number of key commodities (such as energy), the supply-demand dynamics should begin shifting in meaningful ways.

Key GLOBAL MACRO outburst

1. U.S. encounters an economic recession over the next 12 months
2. The European economy enters a recession in the next 12 months
3. China experiences severe macroeconomic and financial dislocations over the next 12 months
4. Global geopolitical tensions increase to战 for competitive devaluation and protectionism

RISK DIAL

NEUTRAL

Bullish

Slightly

Outlook: Neutral

Slightly

Outlook: Bullish

Outlook: Neutral

Outlook: Slightly Bullish

Amid strong above-trend growth, the inflation picture remains tepid and the secular forces continue to constrain price pressures. Nevertheless, we view cyclical conditions as driving inflation higher, but we may not see the threshold for wages emerging across developed and emerging market economies. We are optimistic about the near-term outlook for financial markets. Nevertheless, we remain mindful of a number of key risks that could derail this outlook. These include, interalia, excessive DM central bank tightening, a hard landing in China, or a major global geopolitical risk event.

Fixed income

Slight upside bias to yield

The expected improvement in the economic backdrop along with the existing central bank policy bias towards tightening will more than compensate for any structural headwinds to yields over the medium term. However, with long-run equilibrium rates lower than previous cycles, long-duration assets remain attractive from a strategic perspective.

U.S. dollar

One Microlog to go?

A final rally is still possible in the event of a positive U.S. policy shock. We remain upside risks for the USD, owing to a more advanced business and credit cycle relative to other major Developed Markets, raising the likelihood of more Fed tightening than the market expects through the end of 2018.

Commodities

Firm global demand should provide a favourable backdrop for commodity prices going forward, and even though excess capacity remains in a number of key commodities (such as energy), the supply-demand dynamics should begin shifting in meaningful ways.

EQUITIES

Fairly priced for benign outlook

Equities are largely fully priced for our base-case economic outlook. Given a relatively attractive valuations and a healthy corporate fundamentals, we are not overly concerned about a material decline in stock markets in the near term.

On our radar

Structural factors:

Changing global demographic dynamics, weakening globalization impulses as well as ongoing deleveraging have been constraining forces on growth. Collectively, the net impact on growth rate and inflation has also been negative.

Disruptive technology

The development and adoption of new revolutionary technologies is occurring at an unprecedented pace. The economic verification of these disruption technologies are profound as they have the potential to transform the economic landscape in meaningful ways.

Central bank policy:

There is increased confidence among EM policymakers about the sustainability of the economic rebound and increased conviction about moving away from the current emergency policy settings. The monetary pendulum is beginning to swing back towards synchronized global easing, with the cap of synchronized, albeit gradual, global tightening—a major post-crisis reflection point.

Geopolitics:

The geopolitical risk level remained elevated, even though the worst fears of a protectionist pendulum under the Trump Administration have receded. Nevertheless, the risk of a confrontation between the U.S. and China is a non-trivial risk as tensions with North Korea rise.

Risk dial

Slight upside bias

Slight downside bias

Slight upside bias
GLOBAL ECONOMIC & MARKET UPDATE

Global Macroeconomic Outlook

**SUSTAINED AND SYNCHRONIZED, ABOVE-TREND GROWTH**

**Cyclical conditions are gaining momentum and broadening globally.** Our expectation is for this shift from “muddle-through” to a more synchronized above-trend growth to be sustained over the medium-term, more than compensating for the lingering structural headwinds. The synchronized global economic recovery is being sustained. The upswing in growth momentum has been driven across a broad swath of countries, reinforcing positive growth dynamics.

**EMERGING MARKETS:**

- Most EMs are in the early days of a cyclical upturn that we expect to strengthen over the next 12 months.
- Inflation in emerging markets has been subdued, providing a potential tailwind for growth.
- Despite some regional vulnerabilities, the overall EM recovery remains robust.

**DEVELOPED MARKETS:**

- Sustained and synchronized, growth in major Developed Markets has been strong, supported by ongoing support from central banks.
- Cyclical conditions are broadening, with growth momentum gaining momentum in the major economies.
- However, structural headwinds remain, including high debt levels and low long-term interest rates.

**INFLATION TO REMAIN TIDAL, DRIFT MODERATELY HIGHER**

- Despite strong above-trend growth, the inflation picture remains tepid as the secular forces continue to constrain price pressures. Nevertheless, we remain vigilant as inflation has ticked higher, but we are not at the threshold yet where wages accelerate meaningfully.

**FEED LEADS GRADUAL HIKING CYCLE**

- As the Fed walks the way on higher rates, we expect yields to drift modestly higher. However, the gradual pace of policy tightening should temper any risks of a disorderly adjustment higher, ensuring relatively favourable global financial conditions.

**FINANCIAL MARKET OUTLOOK**

- The Fed's neutral rate policy is expected to remain neutral over the medium-term. The current pace of monetary normalization is viewed as prudent, balancing the risks of a disorderly adjustment higher.
- The market expects through the end of 2018.

**RISK REVIEW**

- We maintain a constructive view on the medium-term outlook for the global economy. However, we remain mindful of a number of key risks that could derail this outlook. These include, inter alia, economic risks, central bank tightening, a hard landing in China, or a major geopolitical risk event.

**OUTLOOK:**

- **Neutral**
- **Slightly Bullish**
- **Slightly Bearish**
- **Outlook:**
  - **Neutral**
  - **Outlook:**
    - **Neutral**
    - **Outlook:**
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The scorecard reviews the directional impact of economic indicators ranging from structural trends like geopolitics and the regulatory backdrop to cyclical dynamics and global adjusting forces on the three key primitives – growth, inflation and interest rates. This is compared to our assessment of what the market is pricing in for these factors.

### Global Medium-term Scorecard

**Scorecard Overview**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Growth</th>
<th>Inflation</th>
<th>Discount Rate</th>
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<tbody>
<tr>
<td>Geo-Political Trends</td>
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<td>Regulatory Backdrop</td>
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<td>Secular Growth Drivers</td>
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<tr>
<td>Credit Cycle</td>
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<tr>
<td>Business Cycle</td>
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### Market Assessment and Outlook

**The Investment Outlook**

- **Financial Market Outlook**
- **Global Macroeconomic Risk Monitor**
- **Global Scorecard**

### The Analytical Framework

**The Ontario Teachers’ Tri-Cycle**

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### Market Outlook

- **Global Growth**
- **Inflation**
- **Discount Rate**

### Unique Information Gateway

- **The Competitive Edge**
  - Portfolio companies
  - Hedge fund partners
  - Research community

### The Ontario Teachers’ Global Macroeconomic Framework

- **Eyes on the World**
  - Q4 2017

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