

Andrew Spence

Independent Economics & Investment Consultant.

Andrew is an independent consultant specializing in economic analysis, investment strategy and risk.

Recently he has advised two alternative funds on strategy and design, and a pension plan on regulatory issues.

Andrew has diverse experience and skill, ranging from top-down macro-economic analysis to setting asset allocation at the Ontario Teachers' Pension Plan.

Andrew also managed the risk overlay portfolio at OTPP and has managed global macro, emerging markets, liquid alternative, and quantitative investment portfolios and has advised on risk-budgeting implementation for performance enhancement.

Andrew has extensive sell-side experience as an economist, strategist, and research director. He was Global Head of Rates and FX Research at TD Securities, and Chief Economist for Canada at Deutsche Bank.

During 2002 and 2003 Andrew was seconded to the Bank of Canada as Special Adviser to the Governor, and was a member of the Monetary Policy Review Committee.

Andrew is Chair of the Toronto Foundation investment committee, which administers over \$400MM in assets dedicated to city building.

He is a Senior Fellow at the C.D. Howe Institute, and an ad hoc lecturer at the University of Toronto, at the Munk School of Global Affairs.

Andrew started his career at H.M. Treasury in London in macro-policy analysis. He holds an M.Phil in Economics from the University of Bath, England.

Economics: Full Recovery Five Years Away

Businesses: Adopt New Operational Models

Policy: Monetary & Fiscal Have Converged

Inflation: Moving to 3.0% Plus

Economics: Full Recovery Five Years Away

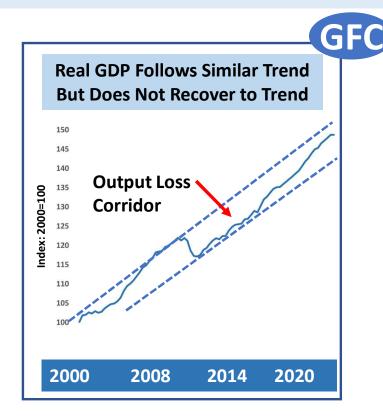
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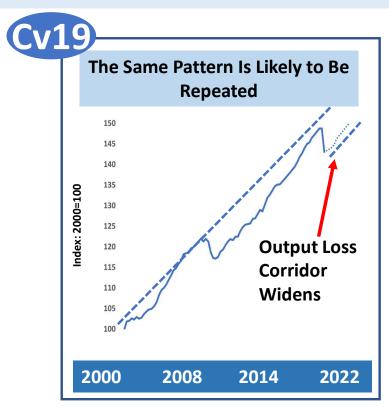
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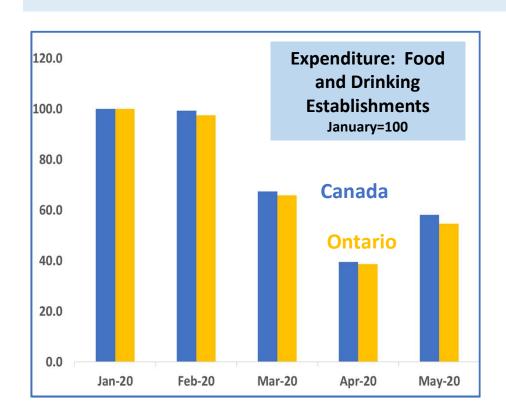
Biggest Recession in Recorded History Return to Pre COVID Peak Will Not Be Quick

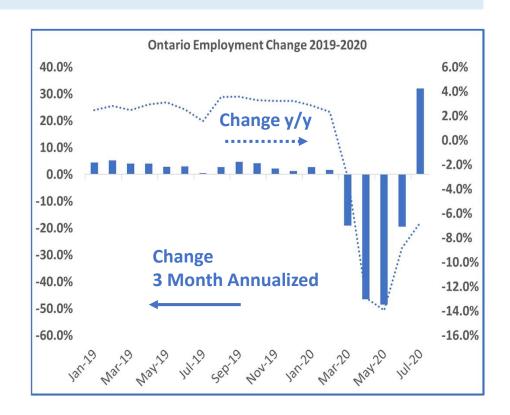




Return to trend requires disease management and sustained subsidies

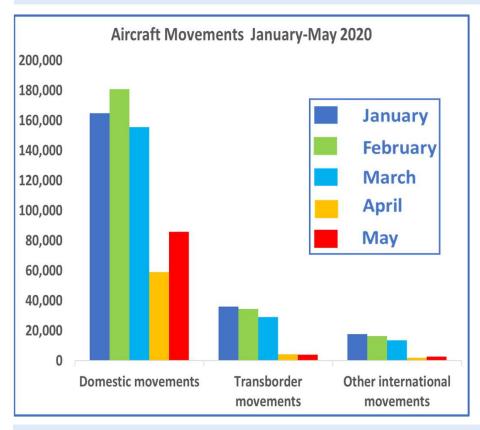
Ontario and Canada Trends are Almost Identical

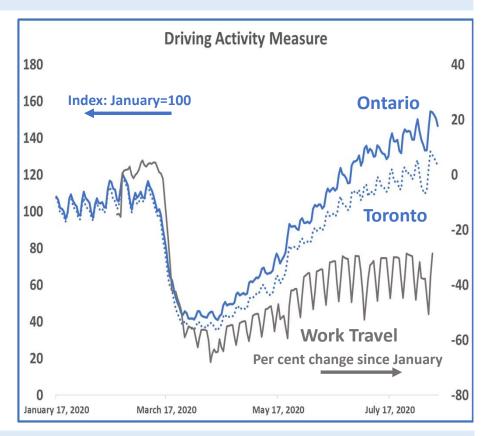




Recovery not yet complete but better than expected

Air Travel at a Standstill But Drivers Are Back on the Road





But are they driving to work?

Economic Tracker: Missouri Shows Health and Economics Cannot be Separated

Key Dates.

Mar 20: Schools close

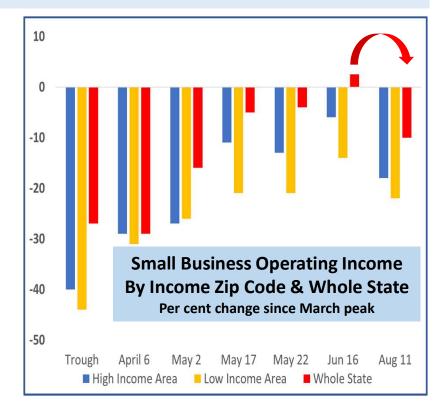
April 6: Stay at home order issued

May 3: Partial lifting of stay at home order

May 18: Full lifting of stay at home order

May 22: Ozark Lakes gathering

June 16: Post shutdown high



Aborted recovery observed in all states that opened prematurely

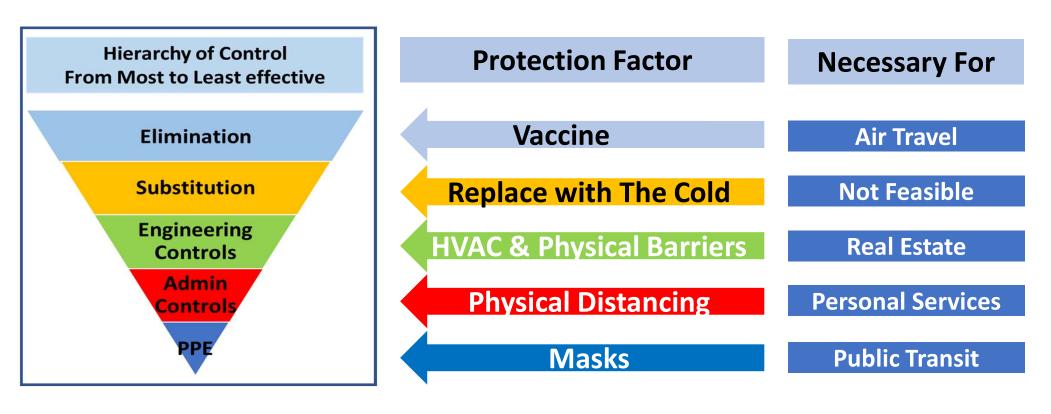
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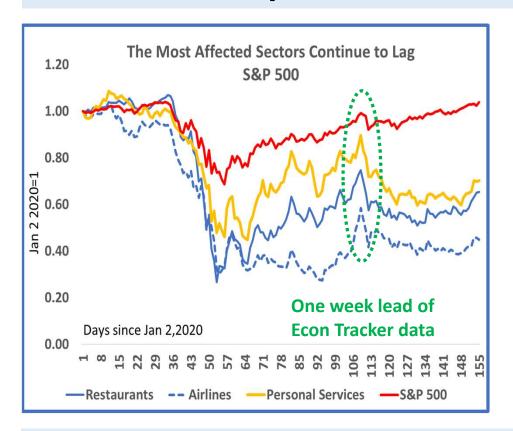
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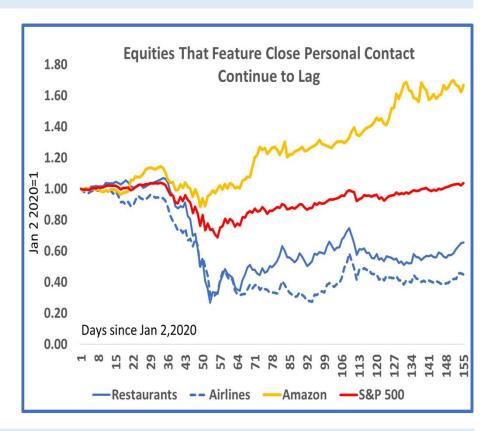
Governments Manage Macro Transmission Rates Businesses Manage Micro Transmission Rates



Reduce client perception of health risk to restore business

Equities Continue to Price No Near-Term Recovery in Social Consumption Consistent With Econ Tracker





Many businesses have yet to grapple with business model change

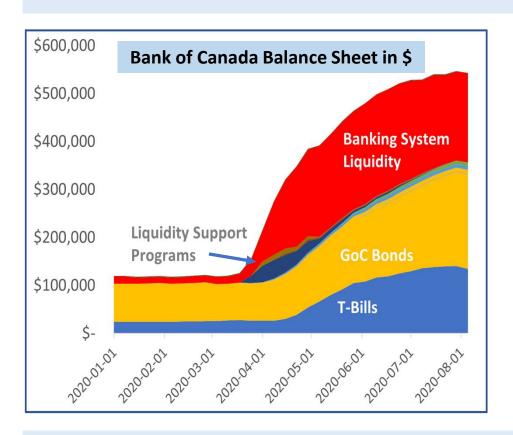
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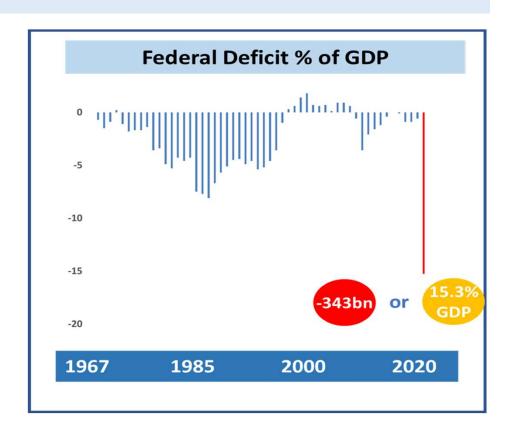
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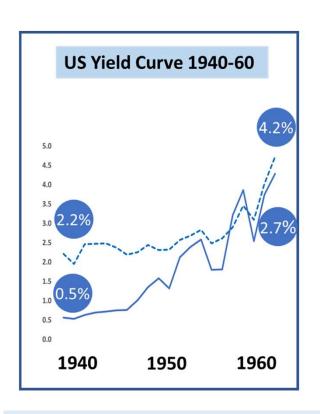
Monetary & Fiscal Policy Have Converged Central Banks Could Be the Junior Partner



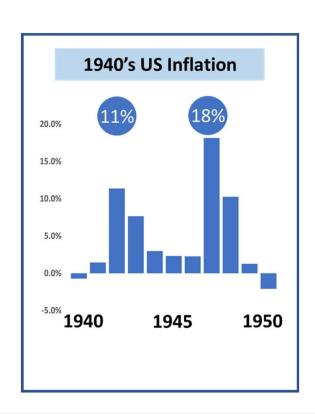


Bank of Canada funds most of this year's deficit

Crises Make Central Banks the Junior Partner to Finance If Prolonged This Can Be Inflationary







Interest rates either provide cheap finance or low inflation: not both

Economics: Full Recovery Five Years Away

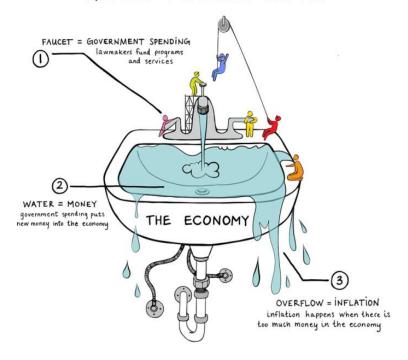
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Hyperinflation Needs More Than Money Financing It Also Needs a Failed State

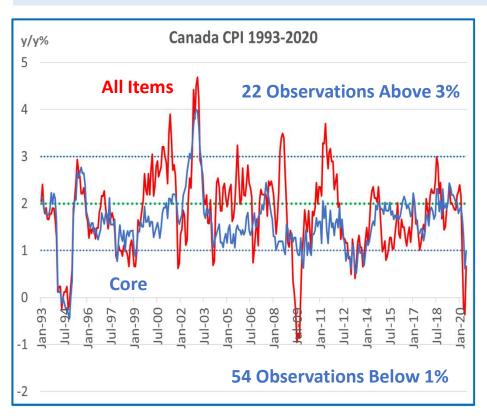


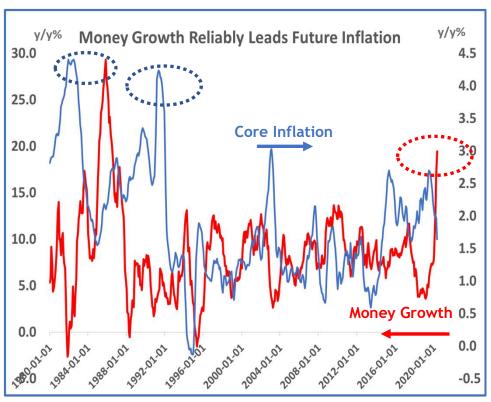




How much money is too much? When inflation is noticeable

BoC Has Been Below Target More Than Above M2 Money Growth Leads Inflation So Watch Closely





Bias to be below target will swing to be above target

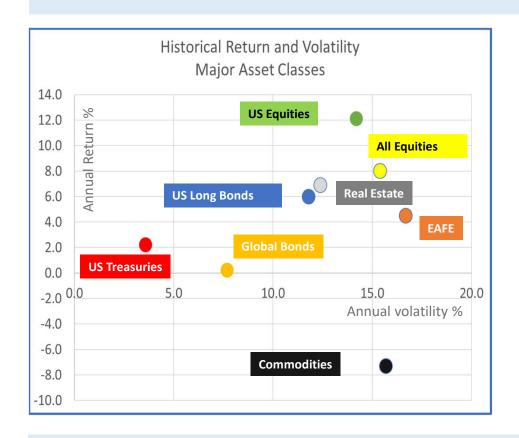
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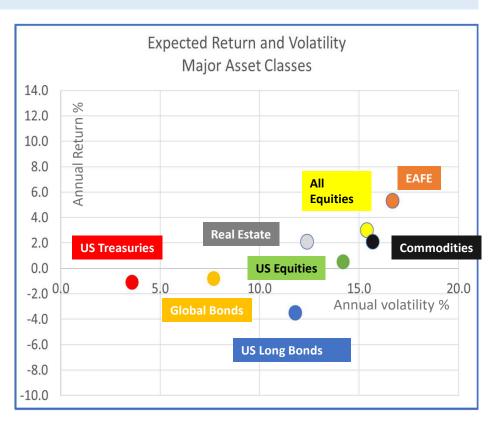
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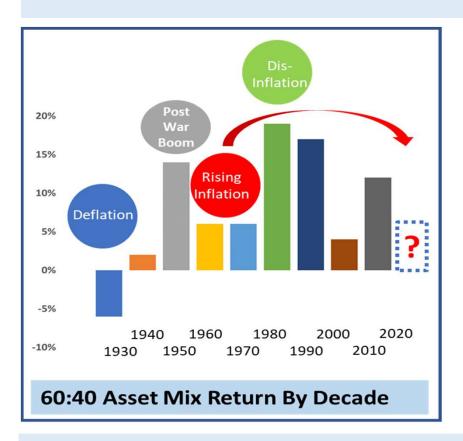
Expected Returns are Dismal For the Expected Volatility

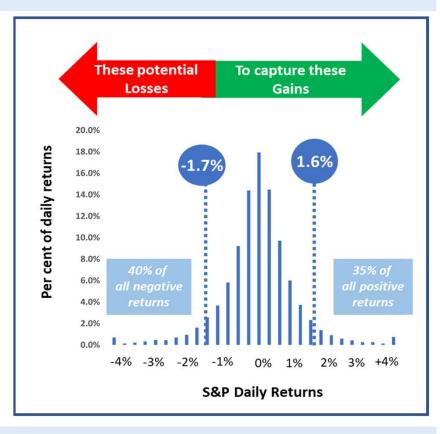




Value drives the forecast – less return for the same volatility

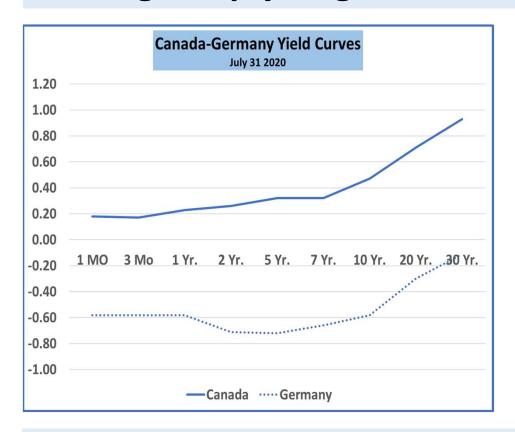
Regime Change and The Dangers Of Equity Risk

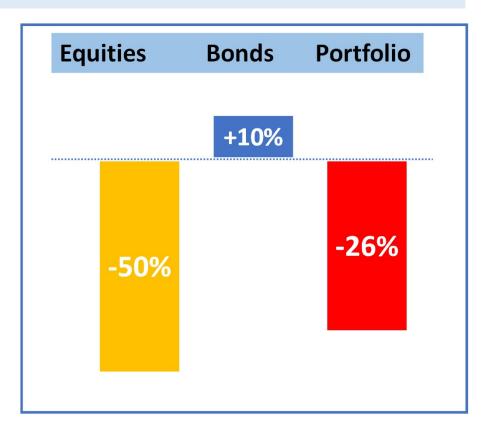




Higher inflation means lower portfolio returns relative to history for more risk

Holding Bonds to Balance Risk Relies on Canadian Yields Moving Deeply Negative





Bonds alone will not hedge a 60:40 portfolio

Solutions in the Face of Return Shortfalls Raise Prices or Risk Insolvency

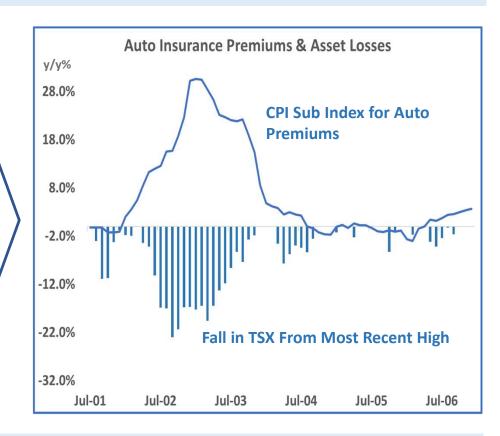
Many financial service products are sensitive to expected asset returns

Lower benefits or contributions are the residual to pension return shortfalls

Active management cannot make up the shortfall in a low return high-risk world

Financial service products and services are a potential driver of inflation

Premium prices adjust for expected return shortfalls



Post 9/11 equity losses and rising cost of claims drove auto premiums up

The Exchange Rate and External Imbalances

Policy Matters for Foreign Exchange As Well

Confidence in US Institutions is Waning

Exerts Upward Pressure on Small Currencies

Canada's Competitiveness is Already Weak

C\$ Train's Engines Pulling Against Each Other

Canada Still Pays Its Way In The World Chopping Down Trees - Crushing Rocks – Pumping Oil & Gas

Commodities make up 37% of exports...

But make up *all* of the positive trade balance

Canada runs a deficit in manufactured and consumer goods

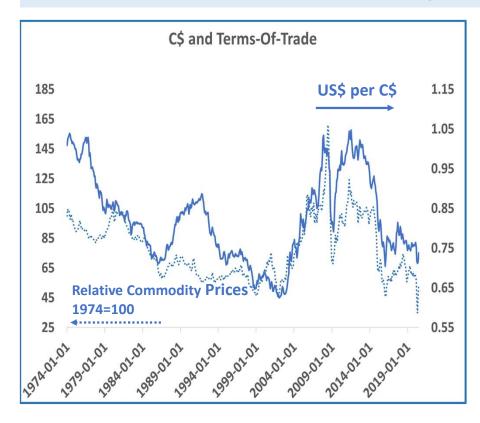
Commodity exports pay Canada's way in the world

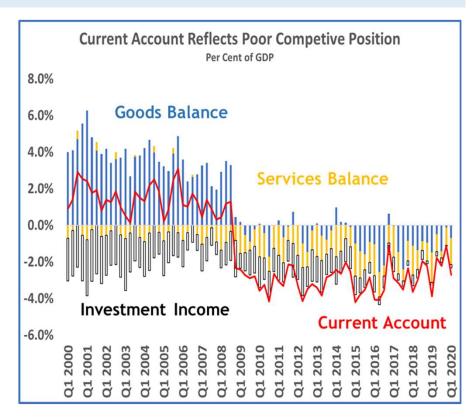
The compression in commodity prices reduces earnings and pushes C\$ down



The C\$ is driven by commodity price trends

The C\$ Will Remain a Commodity Currency So Long as the World Needs Commodity Inputs





The C\$ should be much lower as current account imbalance shows

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