Rethinking Canada's monetary policy framework

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Population dynamics

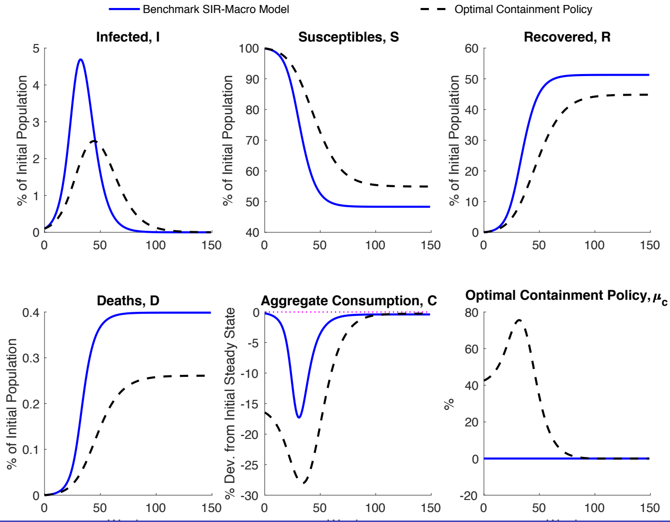
- People interact in goods and labor markets.
- New infections arise from three types of social interactions
  - Non-economic social interactions
  - Consumption-based activities
  - Work-related activities.
- Susceptible people can become infected.
- Infected people can recover or die.
- People react to the risk of becoming infected.

Model elements

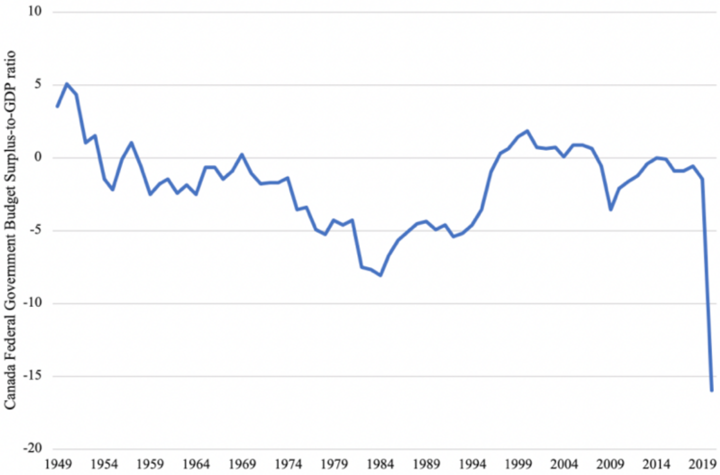
- Simple containment
  - 'Tax' consumption' activities in ways that doesn't differentiate people on basis of their health status.
- Details
  - Infection probabilities, risk aversion, constrains on the medical system, possible future arrival of vaccinations, treatments...
- ERTB (2020b): testing and quarantines.
- ERT (2020c) investment, nominal rigidities.

Simple containment: sharp trade-offs

Figure 7: Benchmark SIR-Macro Model (Vaccines, Treatment, Med. Preparedness)



Financing a bridge



Canada Federal Government Surplus-To-GDP Ratio
Source: Government of Canada

Not just in Canada

Taylor Rule Fed Funds Prescription Heatmap for 2020:Q3

Measure of r*	Measure of gap (consistent with Congressional Budget Office): Fed U-3 Gap	U-3	ZPOP	U-6	Emp-Pop	GDP
2%	-2.95	-2.72	-1.83	-2.32	-0.64	-0.42
FOMC Longer-run	-4.45	-4.22	-3.33	-3.82	-2.14	-1.92
HLW 2017 model	-4.42	-4.19	-3.30	-3.79	-2.10	-1.89
LW 2003 model	-4.11	-3.88	-2.99	-3.48	-1.80	-1.58
LM 2015 model	-5.44	-5.21	-4.32	-4.81	-3.12	-2.91

Inflation target: 2.0 percent
Inflation measure: Core PCE inflation, 4-quarter
Fed funds rate: Predicted effective fed funds rate rate assuming no change in target range (0.0857)
Weight on gap: 0.5
Interest rate smoothing: 0
Source: Atlanta Fed

FEDERAL RESERVE BANK of ATLANTA

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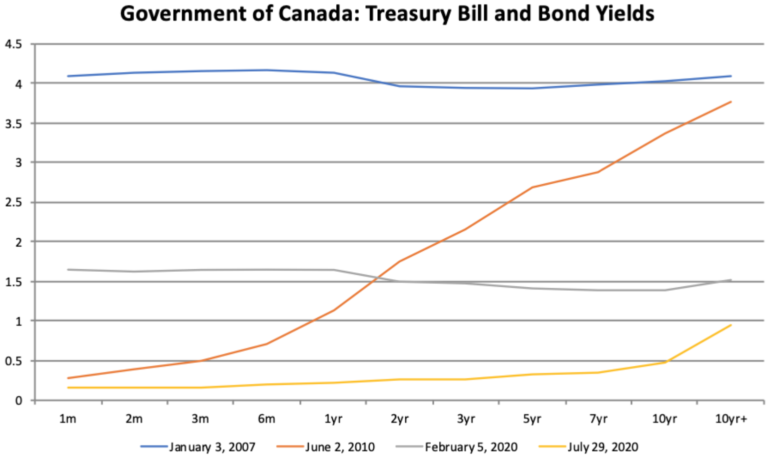
An even stronger empirical basis for 2017 arguments

Interest rates across the whole yield curve are much lower than after the financial crisis



Conclusion

- The Bank of Canada was a leader in developing inflation targeting.
- That strategy was close to perfect for a world in which monetary policy amounted to fine-tuning interest rates.
- The empirical pre-requisites for such a strategy are simply no longer with us.
  - Interest rates along the whole yield curve are too low and deficits are too high.
- So I will end by paraphrasing Keynes
  - When the facts change I change my framework. What do you do?