

Chapter 29

Monetary Policy in Canada

How Does BOC Implement Monetary Policy?

e.g. BOC wants interest rate to fall to i_1 .

Can increase MS to M_1 , i falls to i_1 .

May be difficult to hit exact i by adjusting MS.

Or,

May set i .

This is easier –

BOC sets new i ,

MD curve sets demand for money at new i

Bank uses open market operations

to supply that qty of money.

Setting i best approach:

BOC cannot directly control MS –

- influences it by altering bank reserves
- cannot influence deposit expansion
- unsure of slope of MD
- cannot predict position & changes in MD

BOC cannot accurately predict MD.

But, BOC can act to **set its target i** –

uses open mkt. operations

adjusts MS until target i is hit.

MS is endogenous –

not controlled by BOC, but by decisions of households, firms, and banks.

Why?

Interest rate results from $MD = MS$.

BOC cannot control MD,

so it adjusts MS to whatever is necessary to create interest rate it wants.

Bank sets interest rates:

Bank announces its target for **overnight interest rate** at 8 specified dates throughout year.

Overnight interest rate –

the rate of interest banks charge each other for short term loans (e.g. overnight).
This influences most other interest rates.

This automatically sets **Bank rate**–

the interest rate the BOC charges banks on overnight loans.

Bank rate is 0.25 % above BOC's desired overnight interest rate.

And, BOC pays **Bank rate minus 0.50 % interest** on bank deposits (reserves) in BOC.

Thus, overnight loans rate must lie between
Bank rate (upper limit)
and Bank rate minus 0.5 % (lower limit)
which is the banker's deposit rate.

BOC's policy instrument is overnight interest rate.

How to set MS

How does BOC control MS?

Recall – most money is deposit money (bank accounts):
bank accounts are 65% of M1, and 90% of M2.

BOC controls deposit money by controlling reserves.

Uses several tools.

Main one is open market operations.

Open-Market Operations

BOC **purchases** securities (bonds) on the open market (from the public).

BOC pays by depositing money in sellers' bank accounts,
and bank reserves increase.

banks can then expand deposits, increase money supply

e.g.

1. BOC announces reduction in overnight interest rate.
2. banks lower interest rates -
get greater demand for loans.
3. banks seek to get greater funds for loans by selling bonds.
4. BOC provides more funds for banks by buying government bonds from them,
bank reserves increase,
banks have more to lend.
MS increases.

Called **open market purchase** of government bonds.

The reserves of the commercial bank have increased by \$100,000.

With additional reserves,
bank can expand loans –
deposits increase.

Since deposits are part of the money supply,
the money supply increases.

MONEY HAS BEEN CREATED!

Or,
banks have excess reserves,
shortage of good borrowers,
so BOC sells bonds to the banks.

This reduces bank reserves and MS.

Called an **open market sale** of government bonds.

MONEY HAS DISAPPEARED!

Expansionary monetary policy:

BOC increases M_S ,
lowers interest rate (i).

Contractionary monetary policy:

BOC may reduce M_S -
interest rate increases.

or

BOC increases M_S more slowly than increase in M_D -
interest rate still increases.

Why?

Demand for money grows as GDP increases.

If GDP up by 5% and M_S up by 2%,
have excess demand for money,
interest rate rises.

Government Deposit Shifting

Targeting Inflation

BOC's **monetary policy target**: inflation.

Why?

1. Inflation causes uncertainty, is damaging to the economy. How?

Harms those not protected by indexed incomes.

Reallocates incomes between workers and firms,
between borrowers and lenders.

Undermines price signals to economy, e.g.
did prices rise because of shortage or inflation?

2. Most central banks believe monetary policy is most important determinant of sustained inflation.

Effects of inflation differ in short run and long run.

In short run, monetary policy can effect real variables – employment, GDP, etc.

But in long run, economy returns to Y^* ,
and monetary policy primarily affects inflation rate.

Role of Output Gap

BOC monitors output gap, as monetary policy can affect gap in short run.

e.g. if $Y > Y^*$ (inflationary gap)

wages rise,

AS decreases

price level rises.

Opposite if $Y < Y^*$ (recessionary gap).

Gaps create pressure for inflation to change.

To keep inflation at 2 %

BOC pays attention to gap,

tries to keep $Y = Y^*$.

Inflation targeting can be a **stabilization** policy:

If GDP rises above Y^* ,
pressure for prices to rise,
BOC adopts contractionary policy (i rises).

If GDP falls below Y^*
price increases will be small,
BOC adopts expansionary policy (i falls).

Complications in Inflation Targeting

Volatile Food and Energy Prices

These prices often set abroad,
do not reflect output gaps in Canada.

e.g. increase in oil prices raises CPI,
but does not indicate inflationary output gap.

BOC relies on measure of core inflation –
ignores prices of food, energy and sales taxes.
Better indicator of state of any output gaps.

Exchange Rate

Canada is a heavy trading nation,
exchange rate matters, and it can change.

BOC watches exchange rate,
but it may be a confusing signal.

Two examples (assume GDP at potential):

Example 1.

Suppose world price of Canada's exports increases, so exports boom, GDP increases and \$C rises.

Now have inflationary gap.

BOC wants contractionary monetary policy - reduces money supply and raises interest rates.

Example 2.

World demand for Canadian assets (stocks or bonds) rises,
Foreigners buy more \$C to buy Canadian assets,
\$C rises,
net exports fall.

Now have recessionary gap,
BOC wants to lower interest rates to raise AD.

In both cases, exchange rate increased (\$C rose), but for different reasons.

(Example 1 – increase in price for Canadian exports.

Example 2 – increased demand for Canadian assets.)

In Example 1: GDP went up –
want a contractionary policy.

In Example 2: GDP went down -
want an expansionary policy.

BOC must take care to understand reason for exchange rate change.

Time lags can make monetary policy very difficult -
BOC estimates 9 – 12 months for policy to effect GDP,
another 9 – 12 months to effect price level.

Therefore, BOC policy must be forward-looking.

This can be politically difficult, e.g. –

BOC may forecast higher inflation,
need to raise i now
even though the current rate of inflation is low.