

ECO 209Y

MACROECONOMIC THEORY

AND POLICY

LECTURE 1:

INTRODUCTION

BRANCHES OF ECONOMICS

- ***Microeconomics*** is concerned with the study of the choice problem faced by the economic agents: households and firms
 - e.g., how the equilibrium price for a particular commodity is determined
- ***Macroeconomics*** is concerned with the study of the economy as a whole
 - e.g., how the general level of prices is determined (and not the price of any particular commodity)

THE OBJECT OF MACROECONOMICS

- What determines a country's level of aggregate output or GDP?
- What determines the general level of prices?
- What determines the percentage of the labour force that is unemployed?
- What determines the level of interest rates?
- What determines the foreign exchange rate?
- What determines a country's balance of payments with the rest of the world?

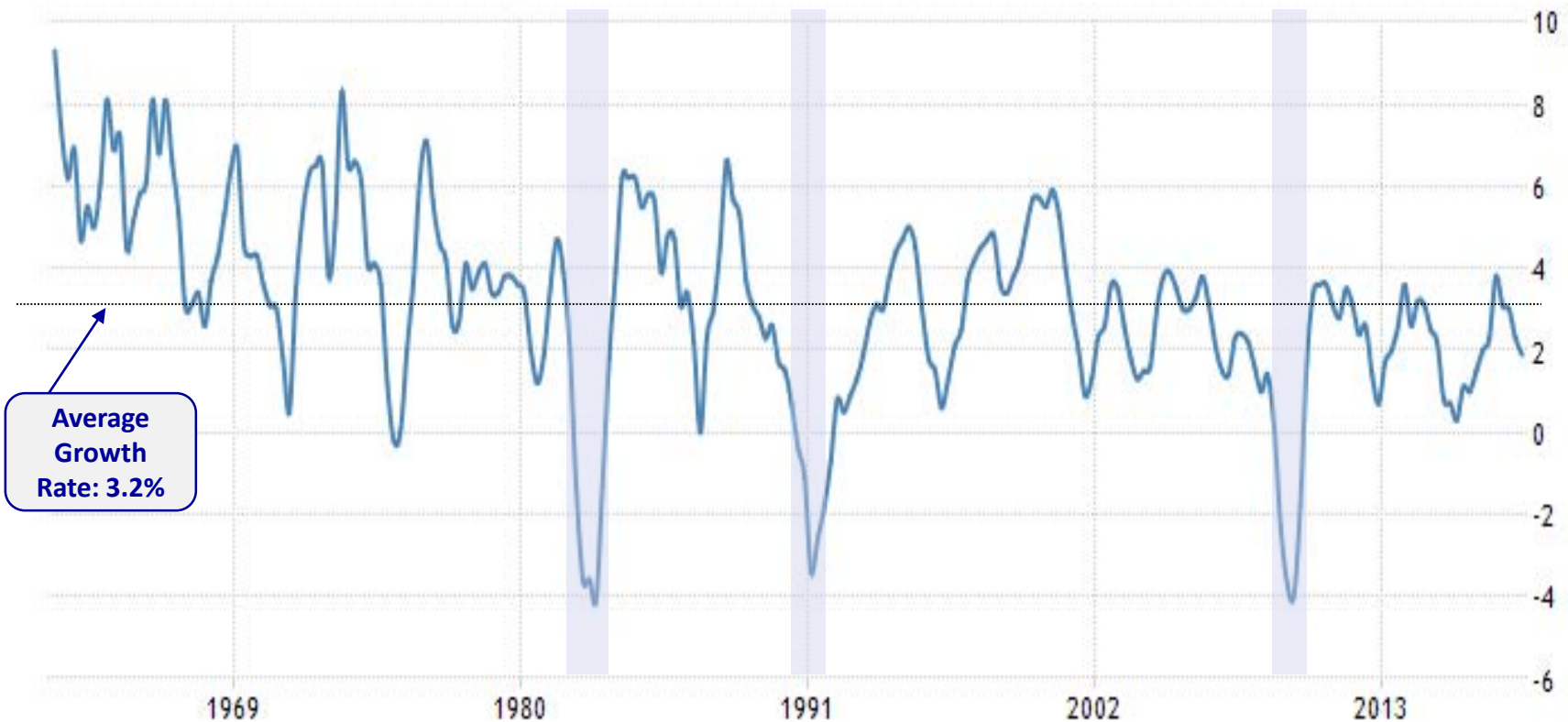
AGGREGATE OUTPUT (GDP)

Gross Domestic Product (**GDP**) is the value of all *final* goods and services produced in the economy during a given period of time

- **Nominal GDP** measures the value of output at the prices prevailing in the period the output is produced
- **Real GDP** measures the output at the prices of some base year

CANADA: REAL GDP GROWTH RATE

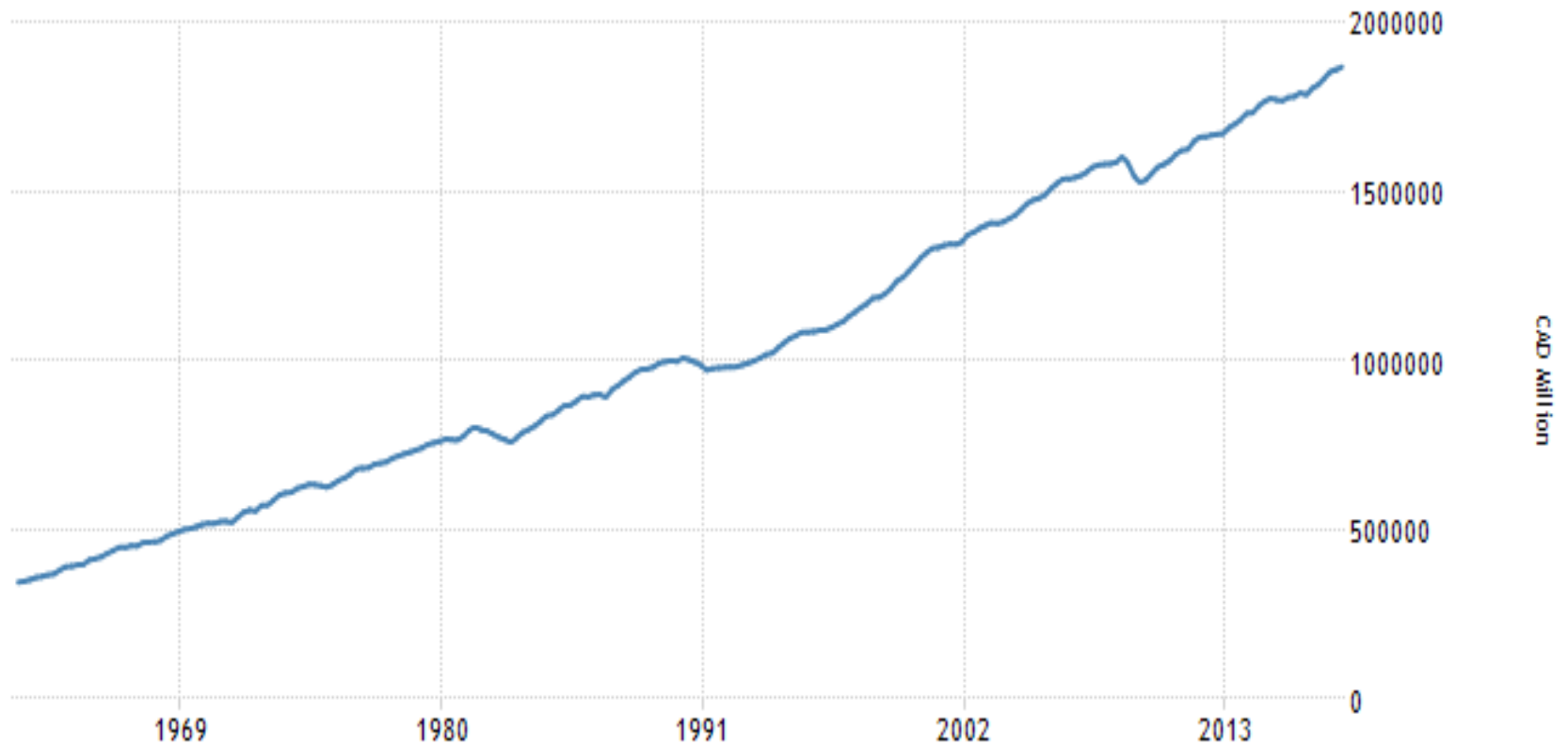
JANUARY 1962 TO SEPTEMBER 2018



Source: Trading Economics / Statistics Canada.

CANADA: REAL GDP

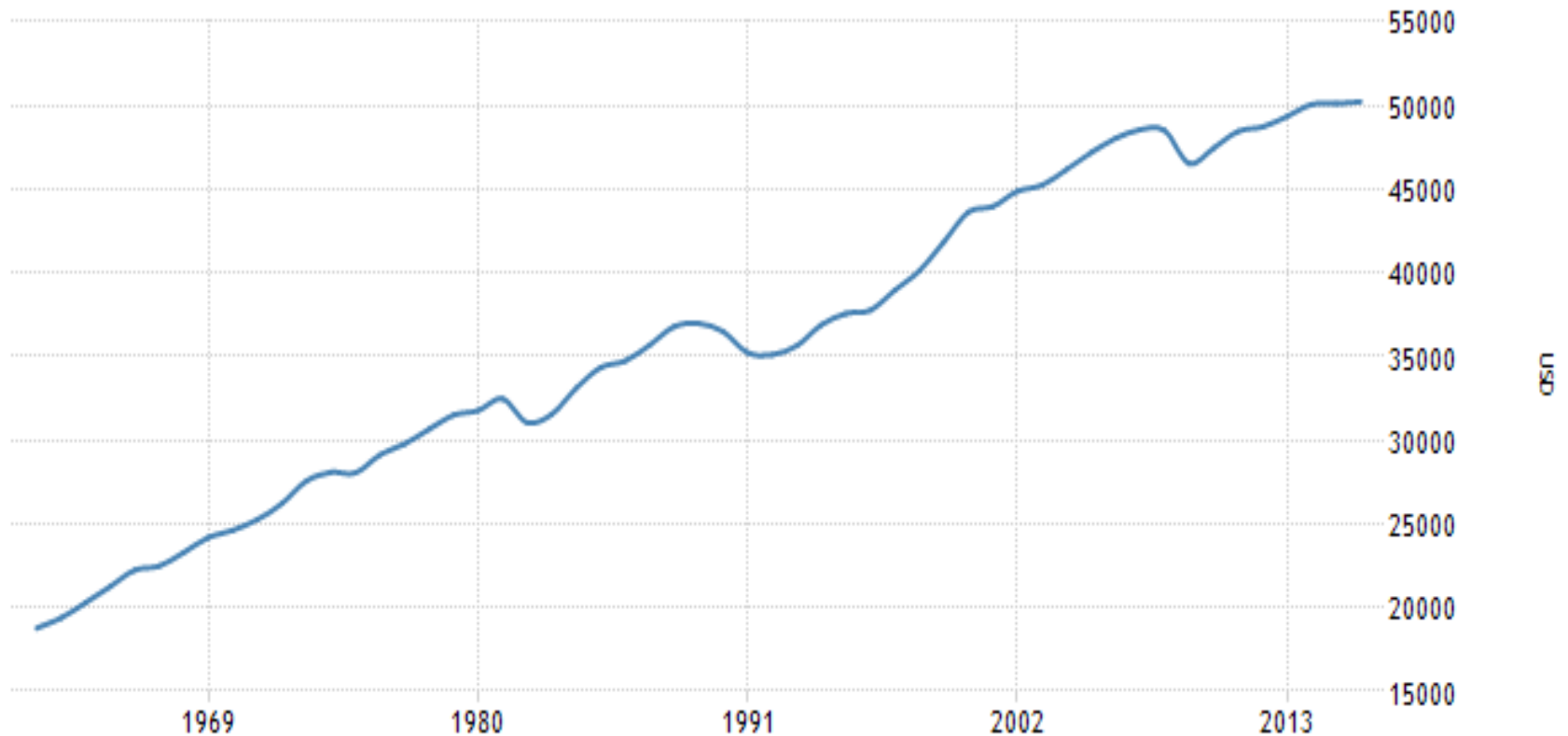
JANUARY 1962 TO SEPTEMBER 2018



Source: Trading Economics / Statistics Canada.

CANADA: REAL GDP PER CAPITA (US\$)

JANUARY 1962 TO SEPTEMBER 2018



Source: Trading Economics / Statistics Canada.

THE RATE OF INFLATION

The inflation rate (π) is the percentage increase in the level of prices during a given period:

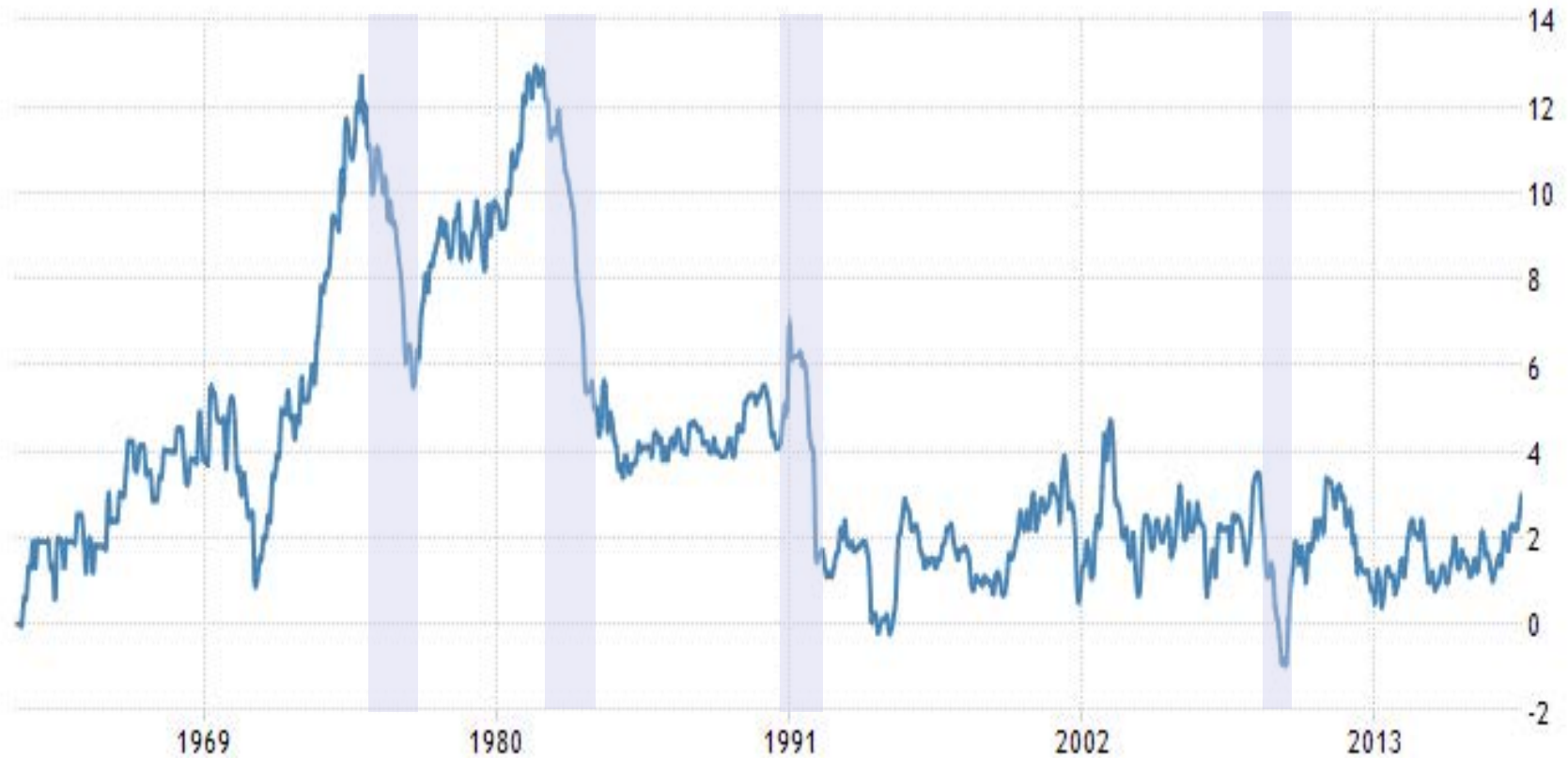
$$\pi = \frac{P - P_{-1}}{P_{-1}}$$

where P is the current price level and P_{-1} is the price level at the end of the previous period.

For instance, P could be the value of the **CPI** in the current period.

CANADA: INFLATION AND DEFLATION

JANUARY 1962 TO AUGUST 2018



Source: Trading Economics / Statistics Canada.

THE RATE OF UNEMPLOYMENT

The unemployment rate is the fraction of the labour force that cannot find jobs:

$$u = \frac{LF - N}{LF}$$

where **LF** is the size of the labour force and **N** is the number of employed workers

CANADA: UNEMPLOYMENT RATE

JANUARY 1962 TO JULY 2018



Source: Trading Economics / Statistics Canada.

THE RATE OF INTEREST

- The *nominal* rate of interest (**i**) is the actual money interest charged on a loan
- The *real* rate of interest (**r**) is the purchasing value of the interest charged on that loan, that is, the real interest rate is the nominal rate (**i**) minus the rate of inflation (**π**):

$$r = i - \pi$$

CANADA: PRIME RATE OF INTEREST

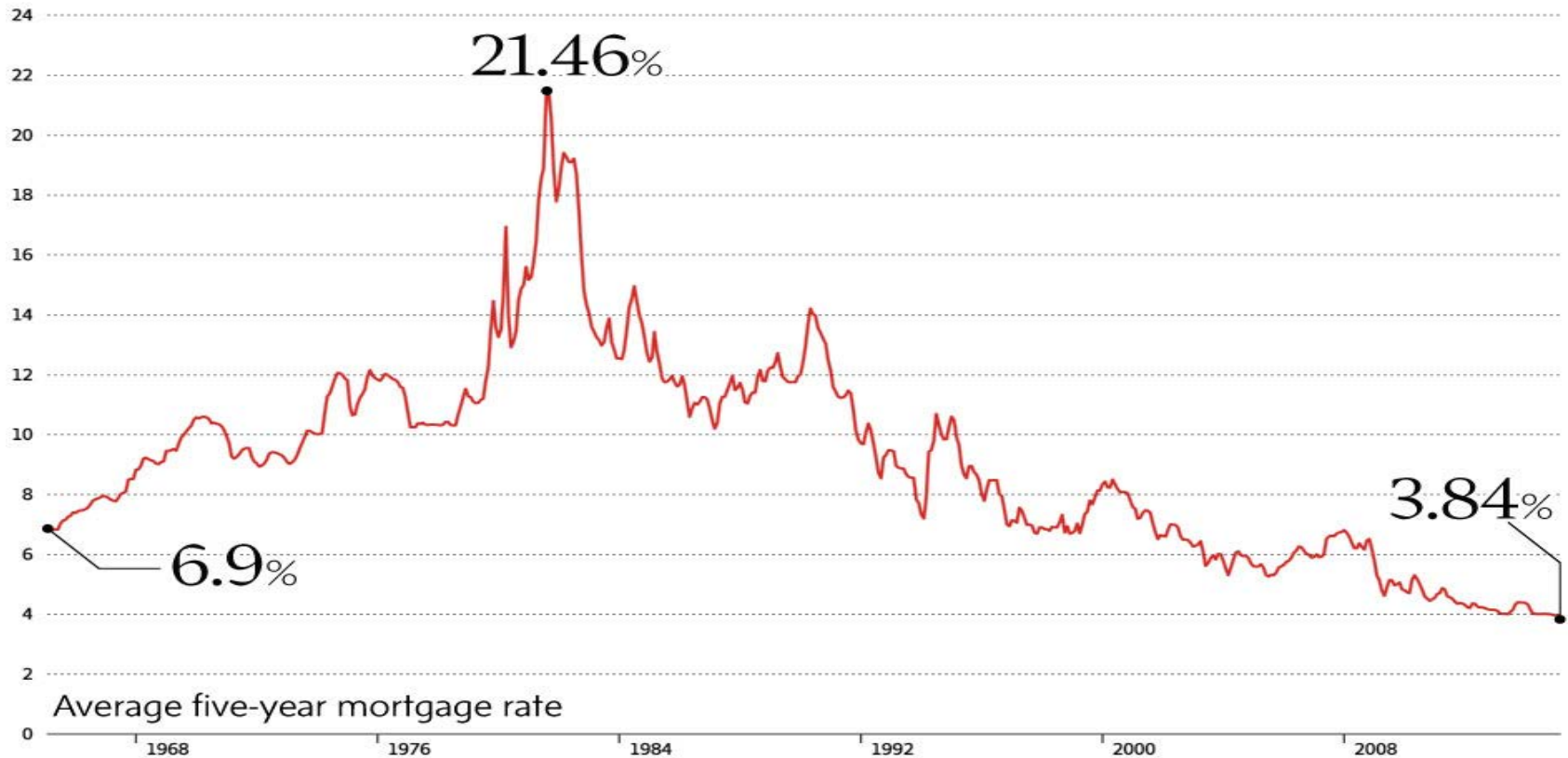
JANUARY 1970 TO SEPTEMBER 2018



Source: Trading Economics / Bank of Canada.

CANADA: MORTGAGE RATE OF INTEREST

JANUARY 1965 TO JANUARY 2015



Source: The Globe and Mail, 14 May 2015.

CANADA: OVERNIGHT RATE OF INTEREST

JANUARY 2000 TO SEPTEMBER 2018

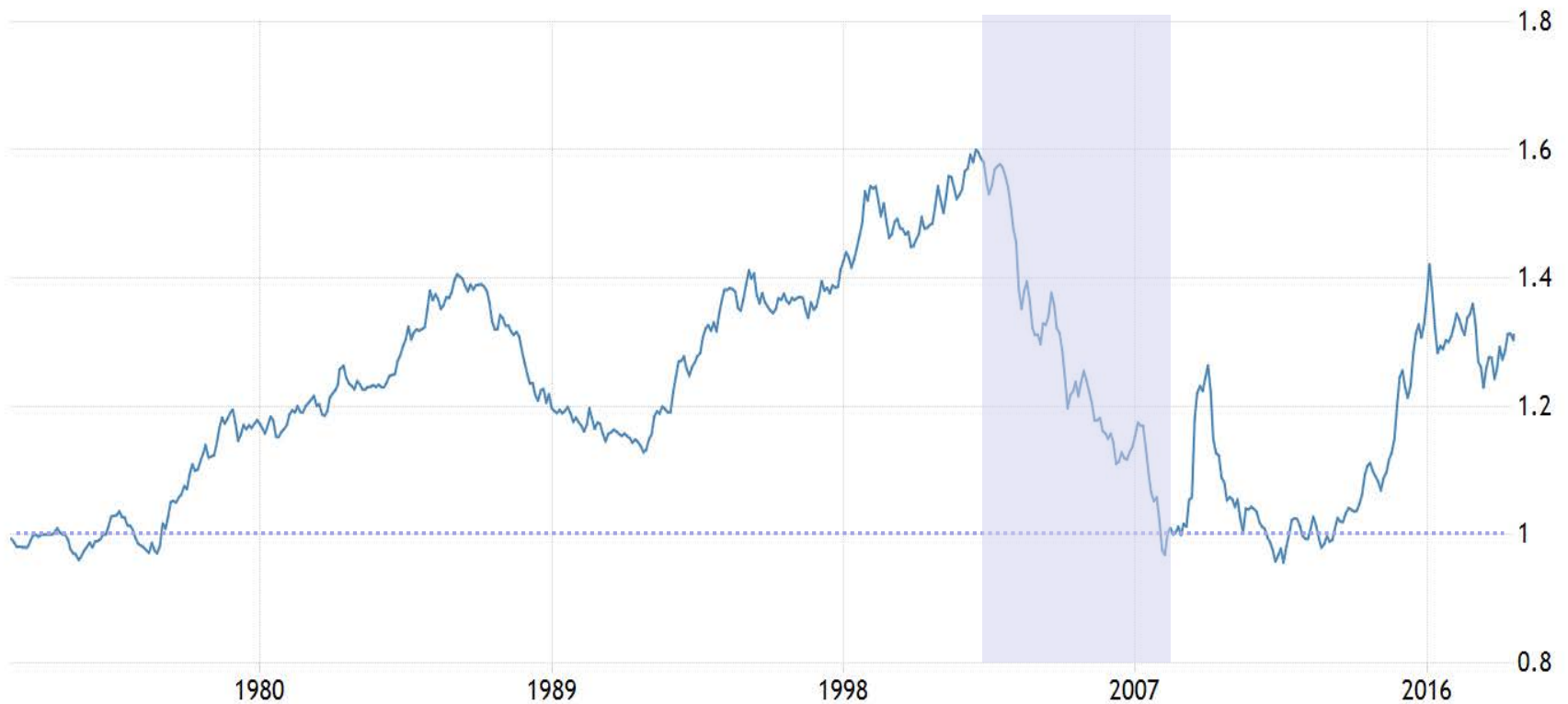


Source: Trading Economics / Bank of Canada.

THE EXCHANGE RATE

- The *exchange rate* (e) is the relative value between two currencies
- We'll define e as the value of one unit of *foreign currency* in terms of *domestic currency*
 - The exchange rate for US\$ is today approximately $e = 1.32$
 - Therefore, the value of one Canadian dollar is approximately $1/e = 0.76$ (i.e., **CAD\$1 = USD\$0.76**)
- The level of e could be set by the *central bank* or by *market forces*
 - If the *central bank* sets the value of e , then
→ *fixed* exchange rate system
 - If *market forces* determine the value of e , then
→ *flexible* or *floating* exchange rate system
 - If *central bank* only intervenes to avoid sudden jumps, then
→ *managed* or *dirty floating* exchange rate system

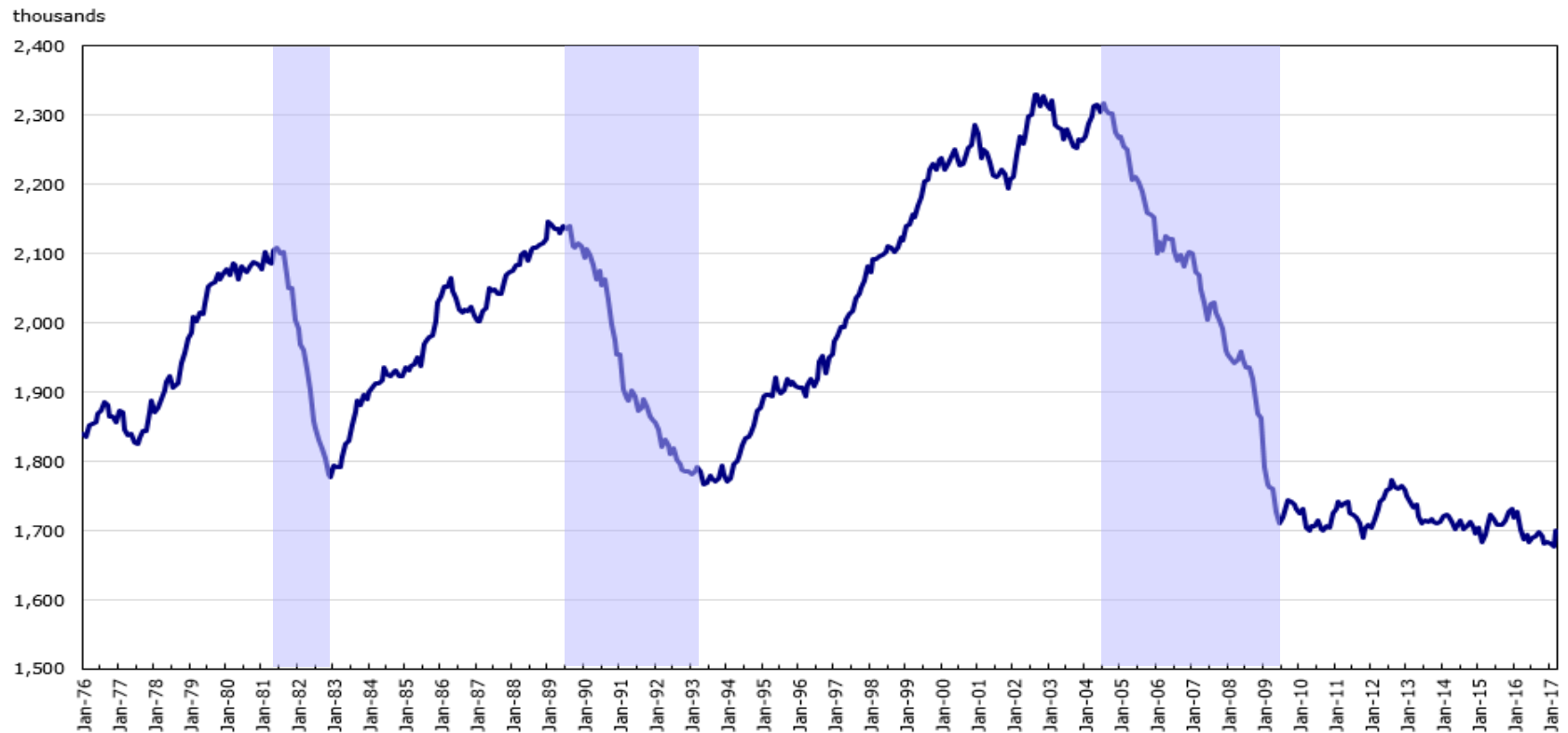
THE EXCHANGE RATE BETWEEN THE CANADIAN DOLLAR AND THE U.S. DOLLAR JANUARY 1970 TO SEPTEMBER 2018



Source: Trading Economics.

CANADA: CHANGES IN EMPLOYMENT IN THE MANUFACTURING SECTOR

January 1976 to January 2017



Source: Statistics Canada.

THE BALANCE OF PAYMENTS

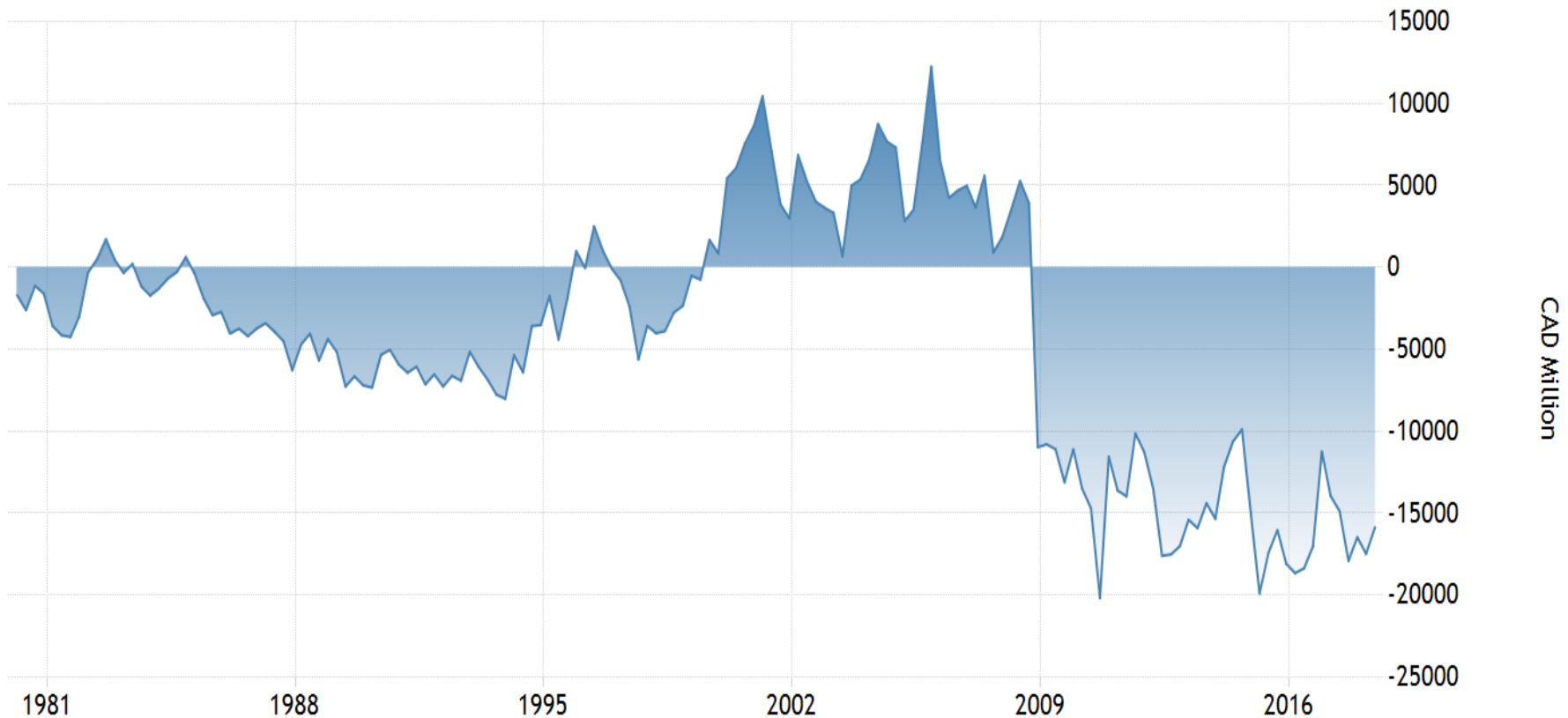
- The ***balance of payments*** is the record of all transactions of the economy with the rest of the world
- The overall balance of payments is the summation of the balance in two accounts: the ***current account*** and the ***capital account***
 - The ***current account*** records all the imports and exports of goods and services, investment income, and transfer payments
 - The ***capital account*** records the capital flows, that is, investment and borrowing/lending

CANADA'S BALANCE OF PAYMENTS (2010)

	Receipt	Payment	Balance
Current account	547,141	598,005	-50,864
Goods and services	476,086	507,844	-31,757
Investment income	61,794	78,230	-16,436
Transfers	9,261	11,932	-2,671
Capital account	156,883	107,176	49,707
Statistical discrepancy			1,157

CANADA'S CURRENT ACCOUNT BALANCE AS PERCENT OF GDP

JANUARY 1980 TO SEPTEMBER 2018



Source: Trading Economics / Statistics Canada.

ECONOMIC POLICY

- Policy makers use mainly two types of policies to affect the state of the economy: *fiscal* and *monetary* policies
- The government (Parliament) controls *fiscal policy*, while the Bank of Canada controls *monetary policy*
 - The instruments of *fiscal policy* are tax rates and government spending
 - The main instruments of *monetary policy* are changes in either the stock of money or the bank rate