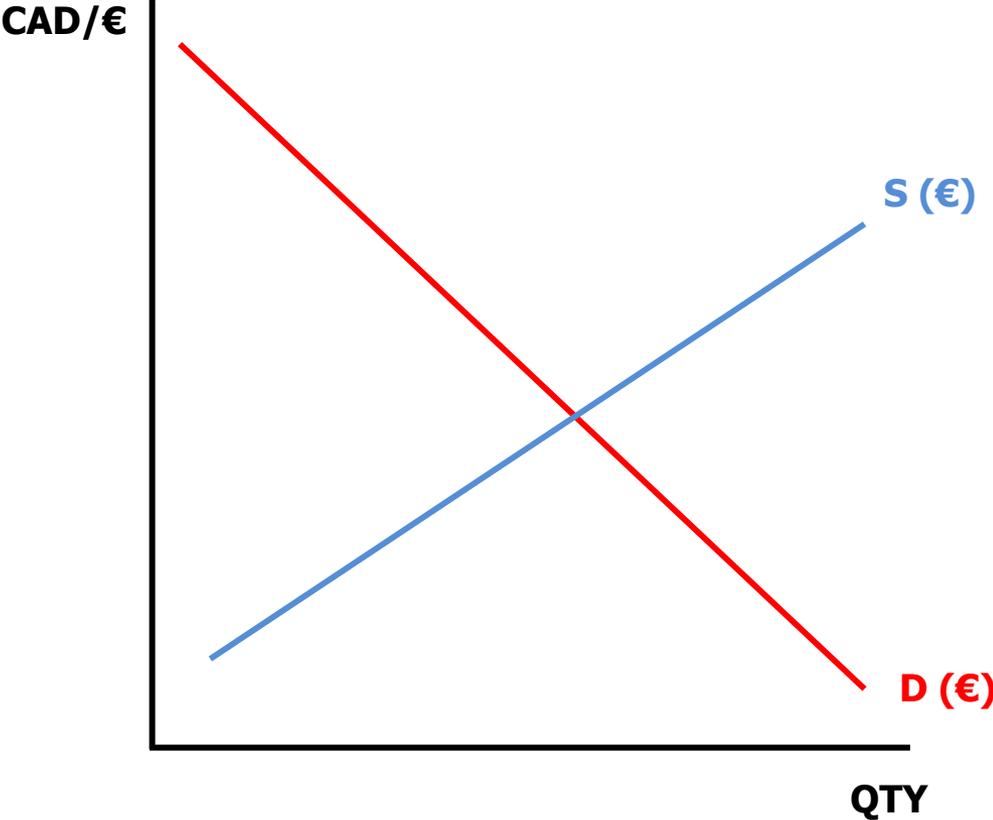


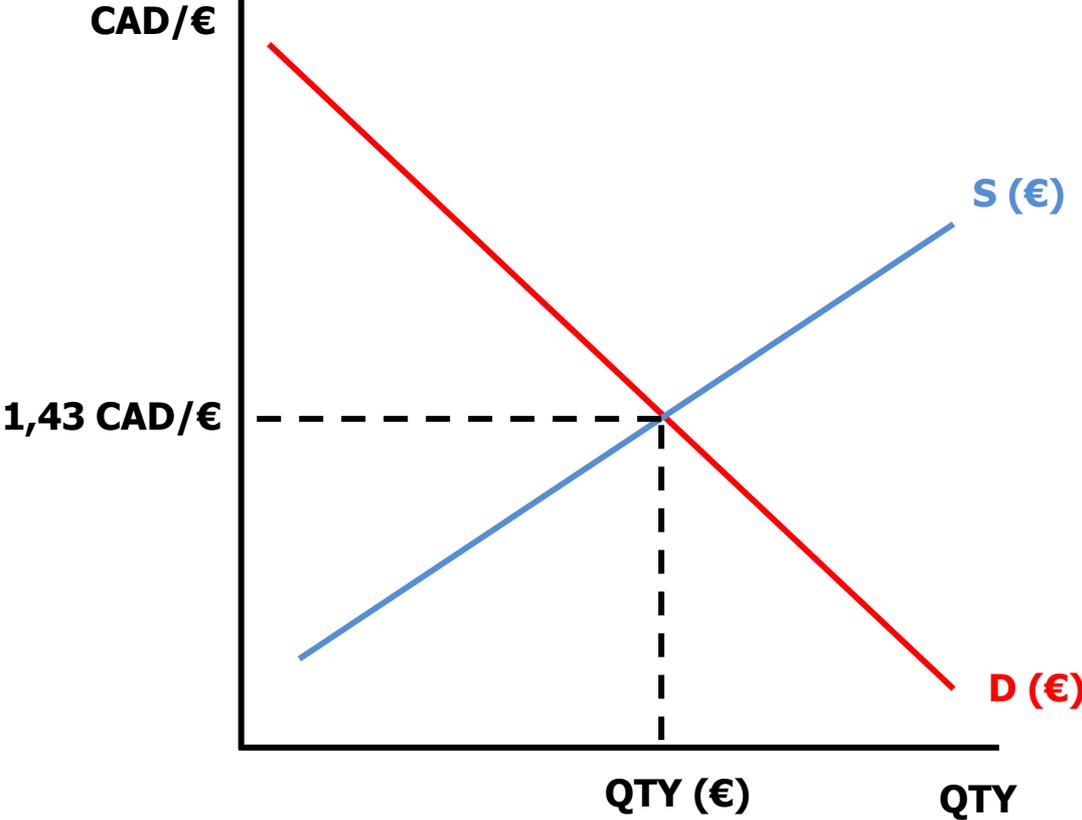
# Introduction to Foreign Exchange Markets



# Foreign Exchange Markets: The Market for Euros in Canada

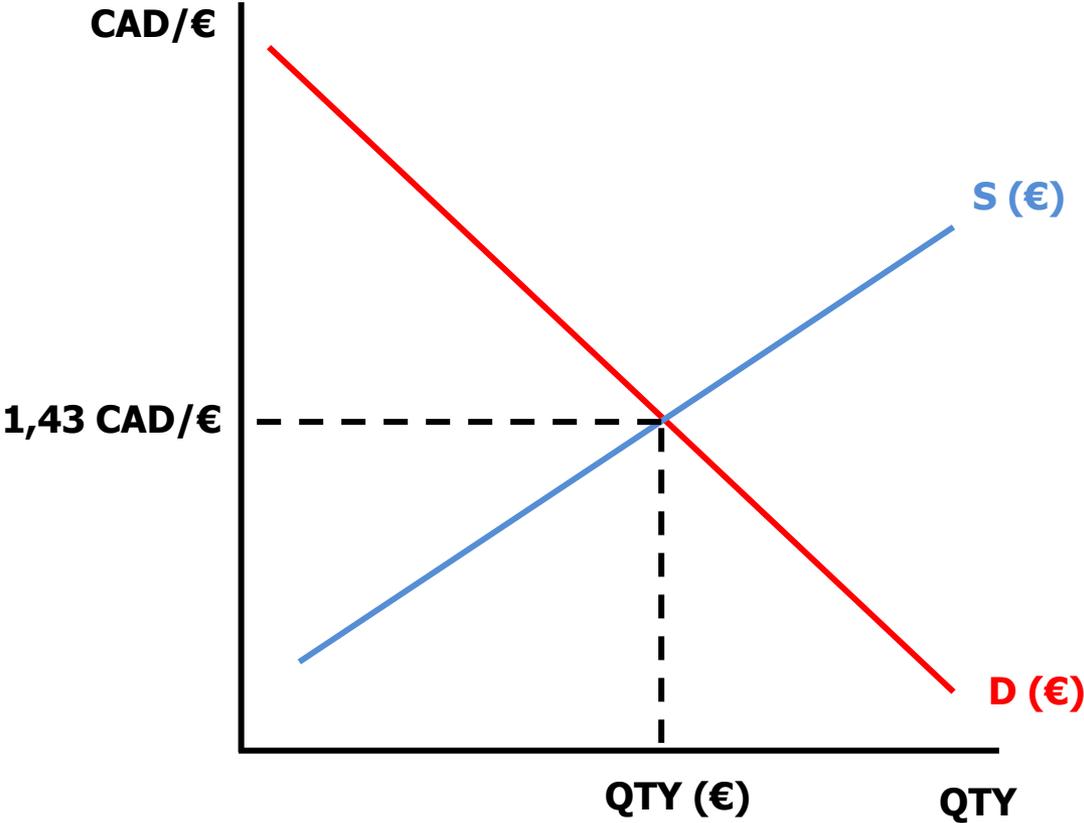


# Foreign Exchange Markets: The Market for Euros in Canada



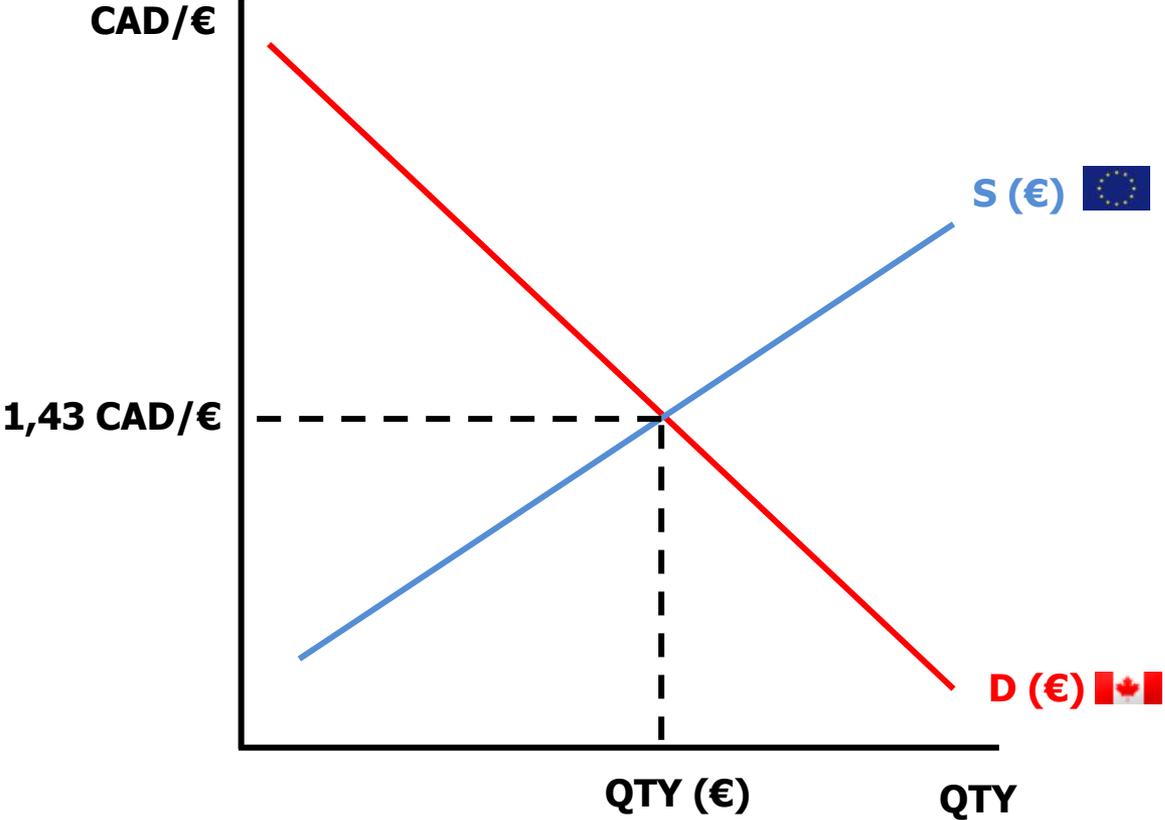
D (€) = demand for Euros , represented by individuals who are willing to buy European goods and services, for which they have to give up Canadian dollars.

# Foreign Exchange Markets: The Market for Euros in Canada

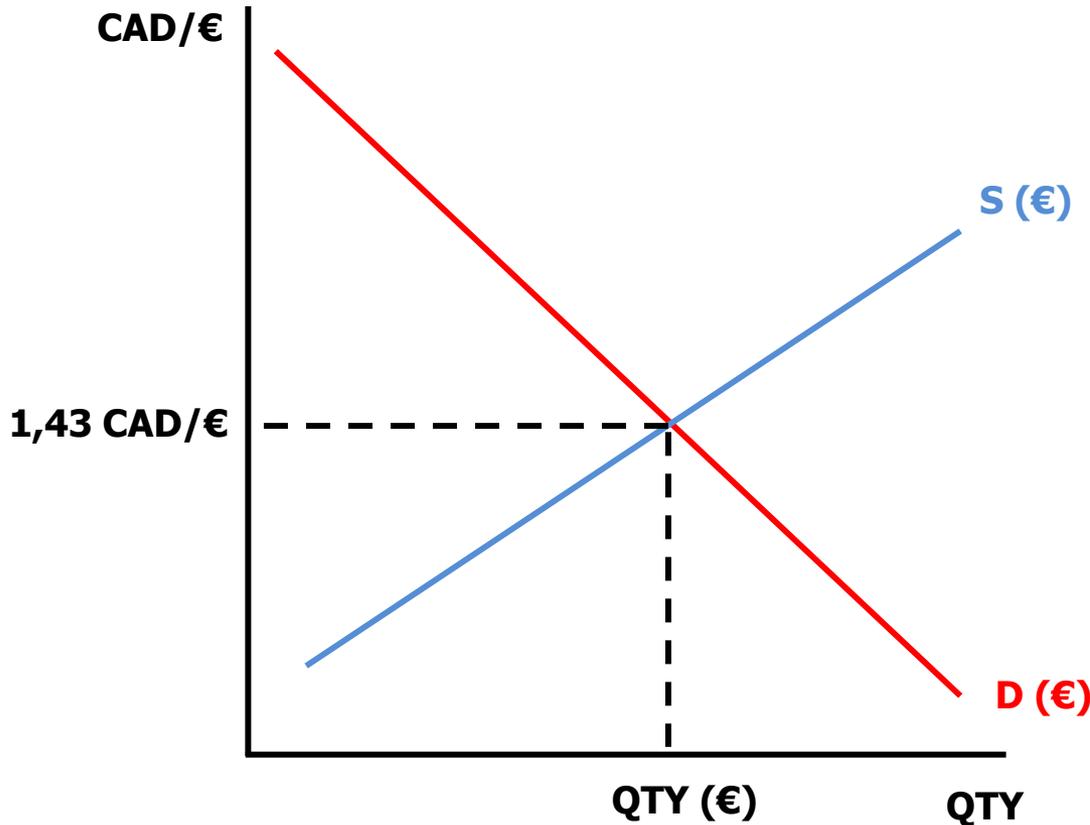


S (€) = supply of Euros , represented by individuals who are willing to buy Canadian goods and services, for which they have to give up Euros.

# Foreign Exchange Markets: The Market for Euros in Canada

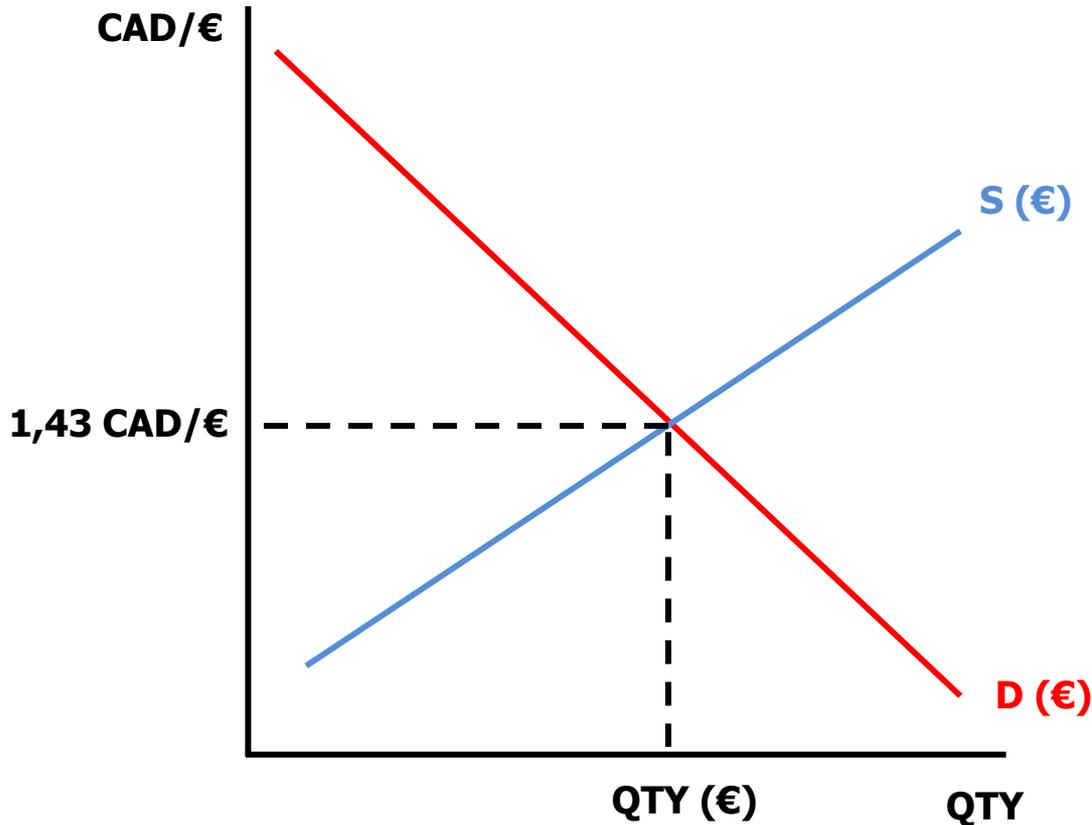


# Foreign Exchange Markets: The Market for Euros in Canada



Example (1): a tourist from the Netherlands buys a C\$ 20 ticket to see the Toronto Blue Jays and the Chicago White Sox face off at Rogers Centre. Since the tourist has an account with a European bank his bank will charge him not C\$ 20, but roughly € 14,20 at the current exchange rate.

# Foreign Exchange Markets: The Market for Euros in Canada



Example (2): the city of Toronto imports tulips from the Netherlands for Queen's Park. The invoice of €1,200 is paid in Euros, but ends up in the city's budget as a cost of C\$ 1,716.

# Foreign Exchange Markets: The Market for Euros in Canada



The CAD/€ exchange rate is **floating**, as opposed to **fixed**, which means that the price of a Euro in C\$ can go up or down depending on developments in the supply and/or demand on the market for Euros in Canada. In the past ten years the CAD/€ exchange rate has been floating between C\$ 1,71 (high) and C\$ 1,21 (low).

# Foreign Exchange Markets: The Market for Euros in Canada



Practically speaking, the development in the CAD/€ exchange rate implies that the real price of a C\$ 20 ticket for a Toronto Blue Jays game for European tourists has fluctuated between roughly €11.70 and €16.50.

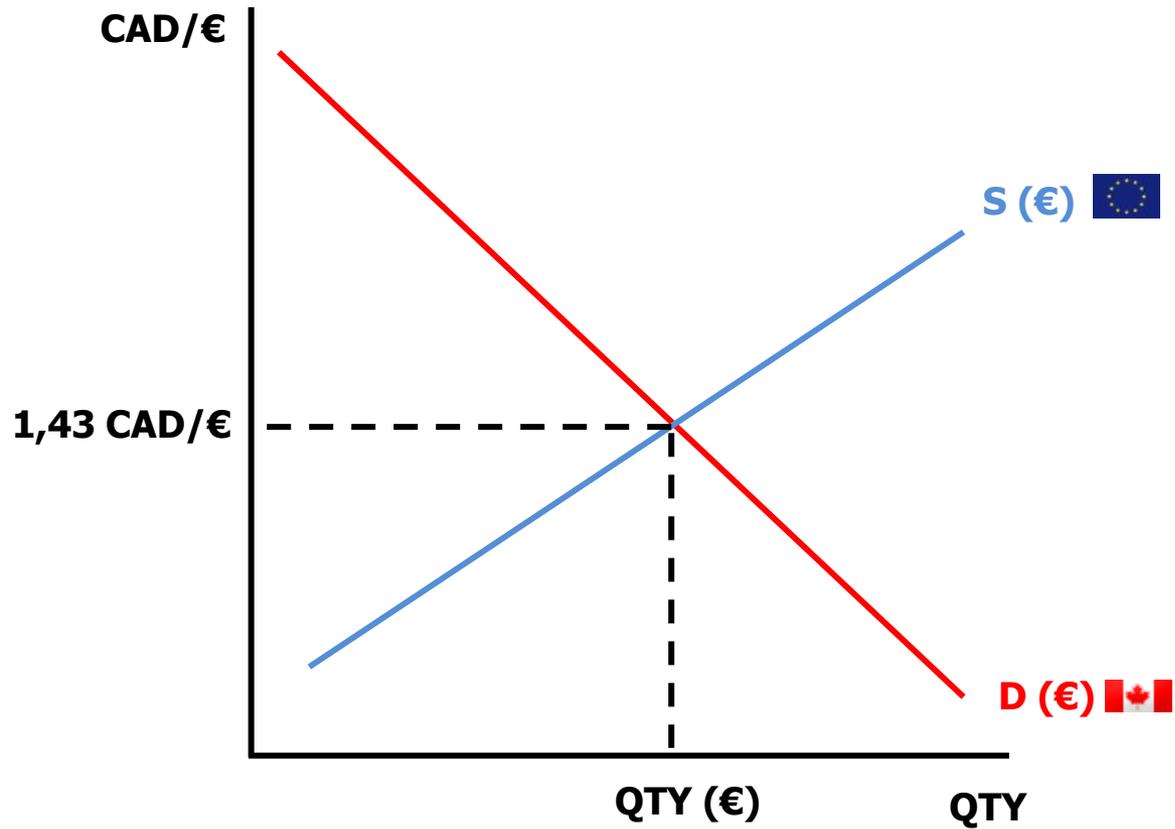
# Foreign Exchange Markets: The Market for Euros in Canada



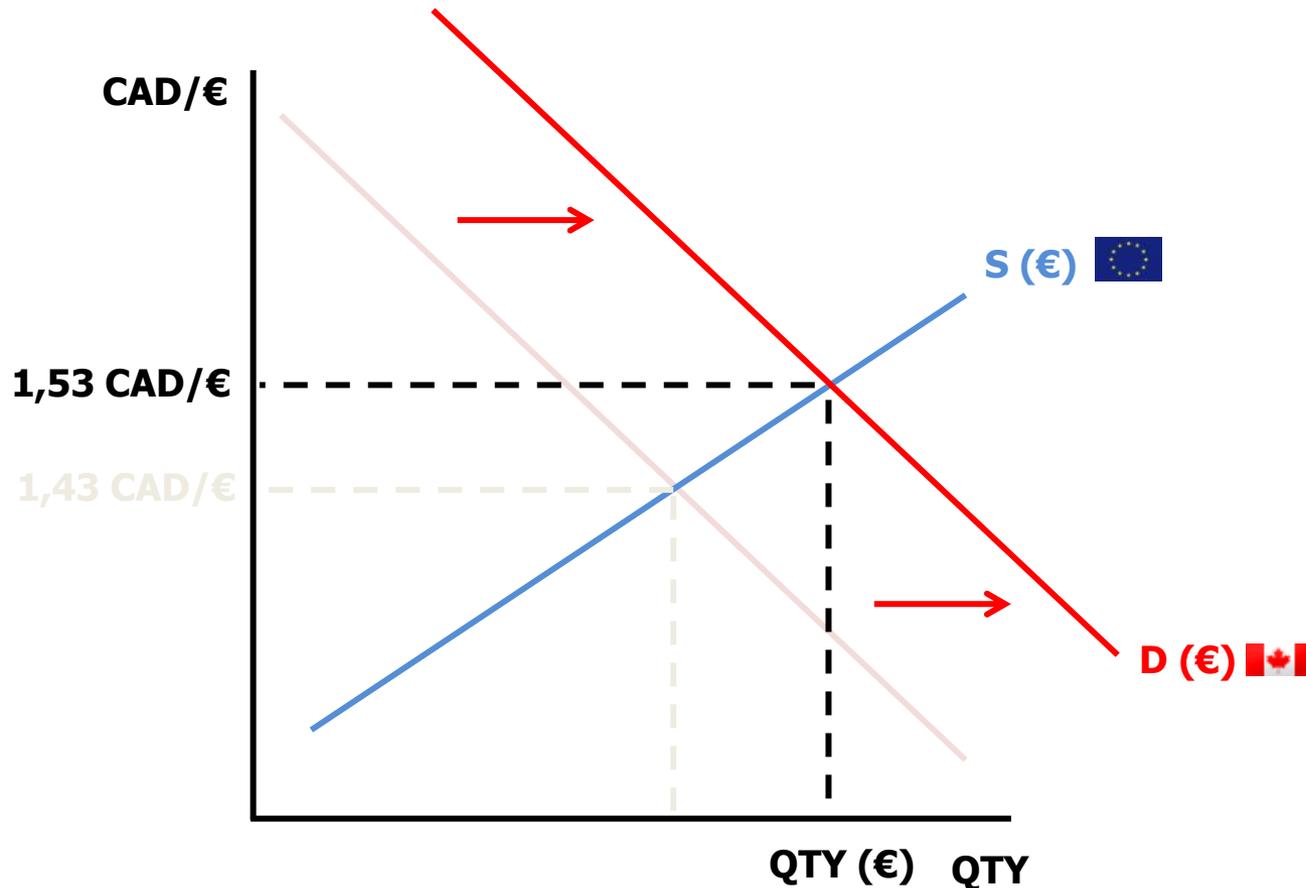
...or that the invoice from the Dutch tulip exporter to the city of Toronto could have been as expensive as C\$ 2052 or as cheap as C\$ 1452.



# Foreign Exchange Markets: Developments (1)

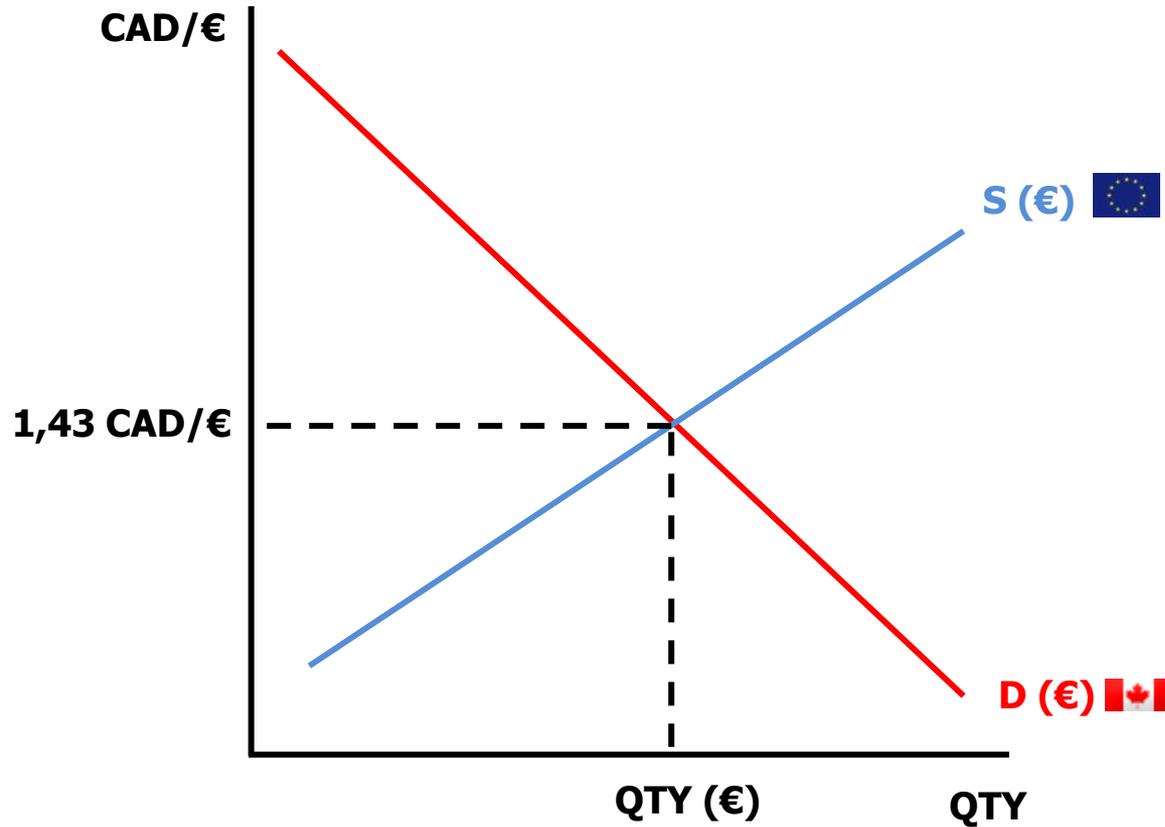


# Foreign Exchange Markets: Developments (1)

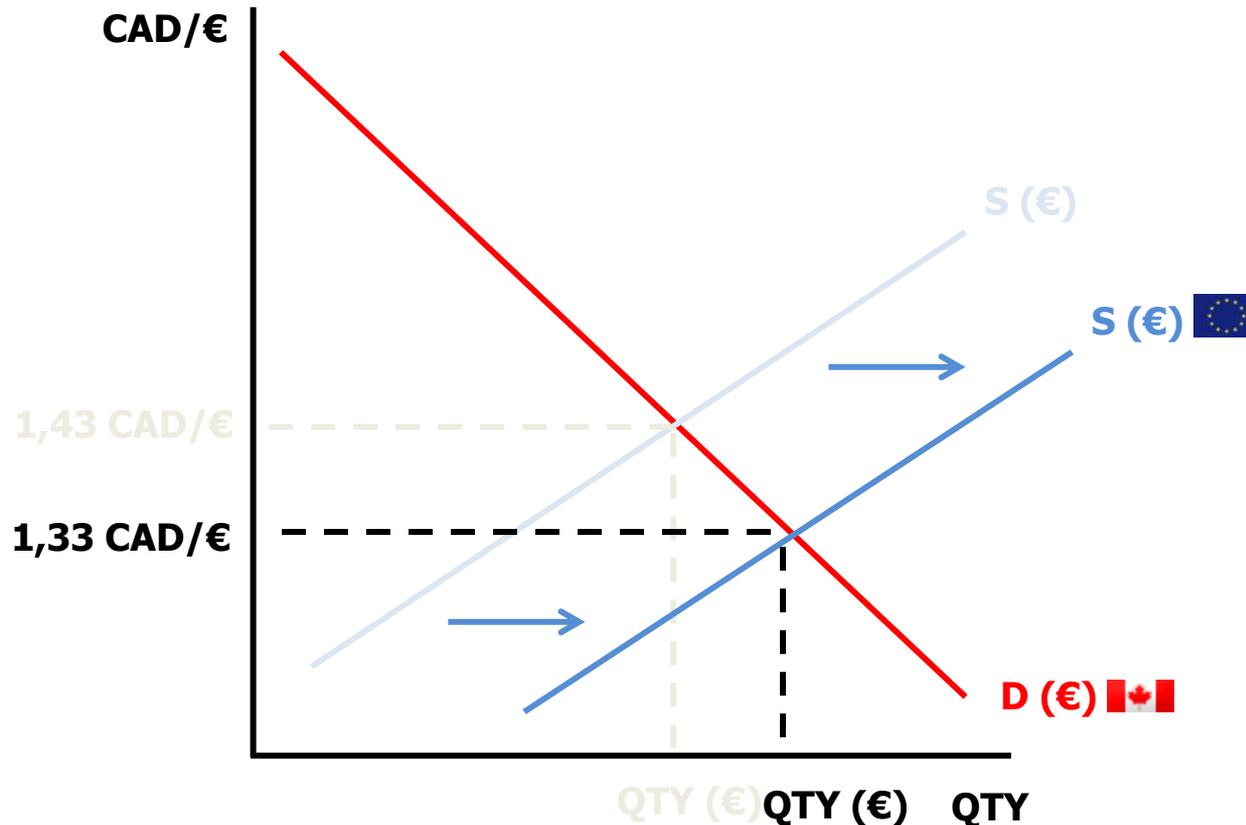


Fluctuations in the demand for Euros on the market influences the CAD/€ exchange rate. In this example the demand for Euros increases, which weakens the CAD and strengthens the €. The tourist now has to pay less to see the Toronto Blue Jays play (€13.07) while the city of Toronto pays more for the tulips (C\$ 1,836).

## Foreign Exchange Markets: Developments (2)

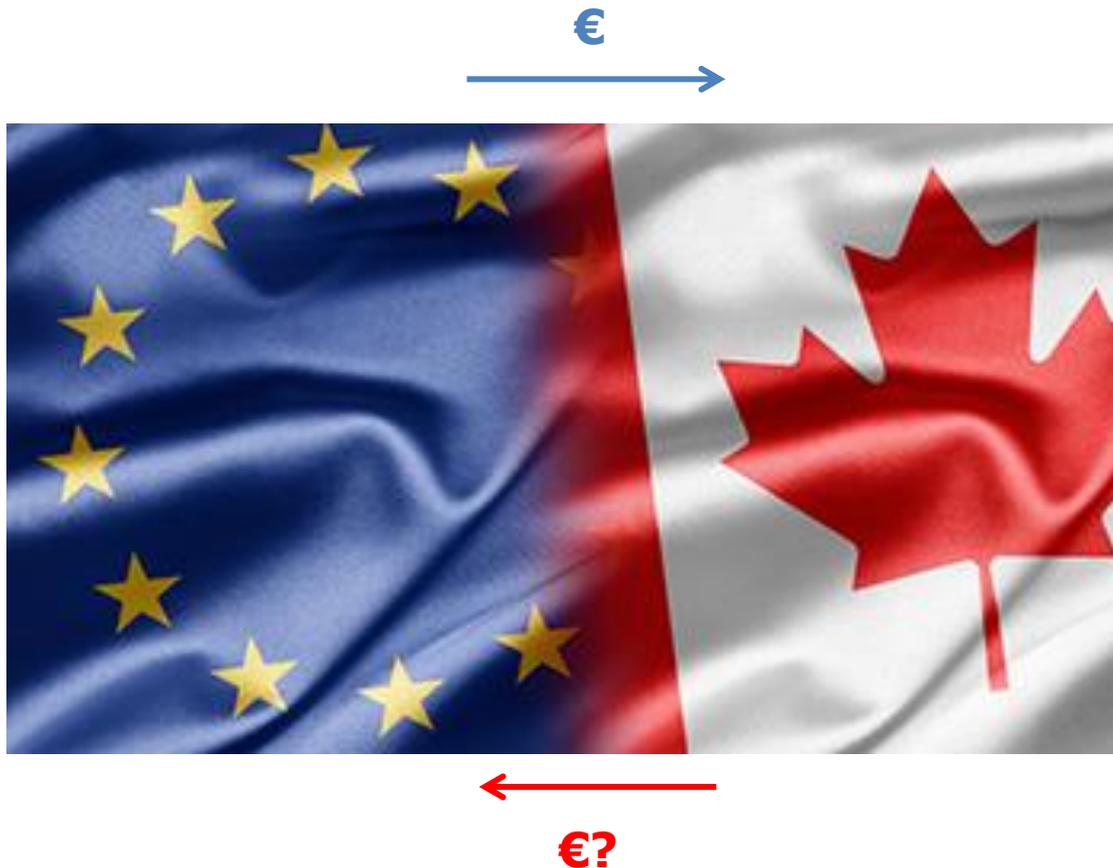


## Foreign Exchange Markets: Developments (2)



Fluctuations in the supply of Euros on the market influences the CAD/€ exchange rate. In this example the supply of Euros increases, which weakens the € and strengthens the CAD. The tourist now has to pay more to see the Toronto Blue Jays play (€15.04) while the city of Toronto pays less for the tulips (C\$ 1,596).

# Foreign Exchange Markets: Determinants of Supply and Demand



Determinants of supply and demand on foreign exchange markets include:

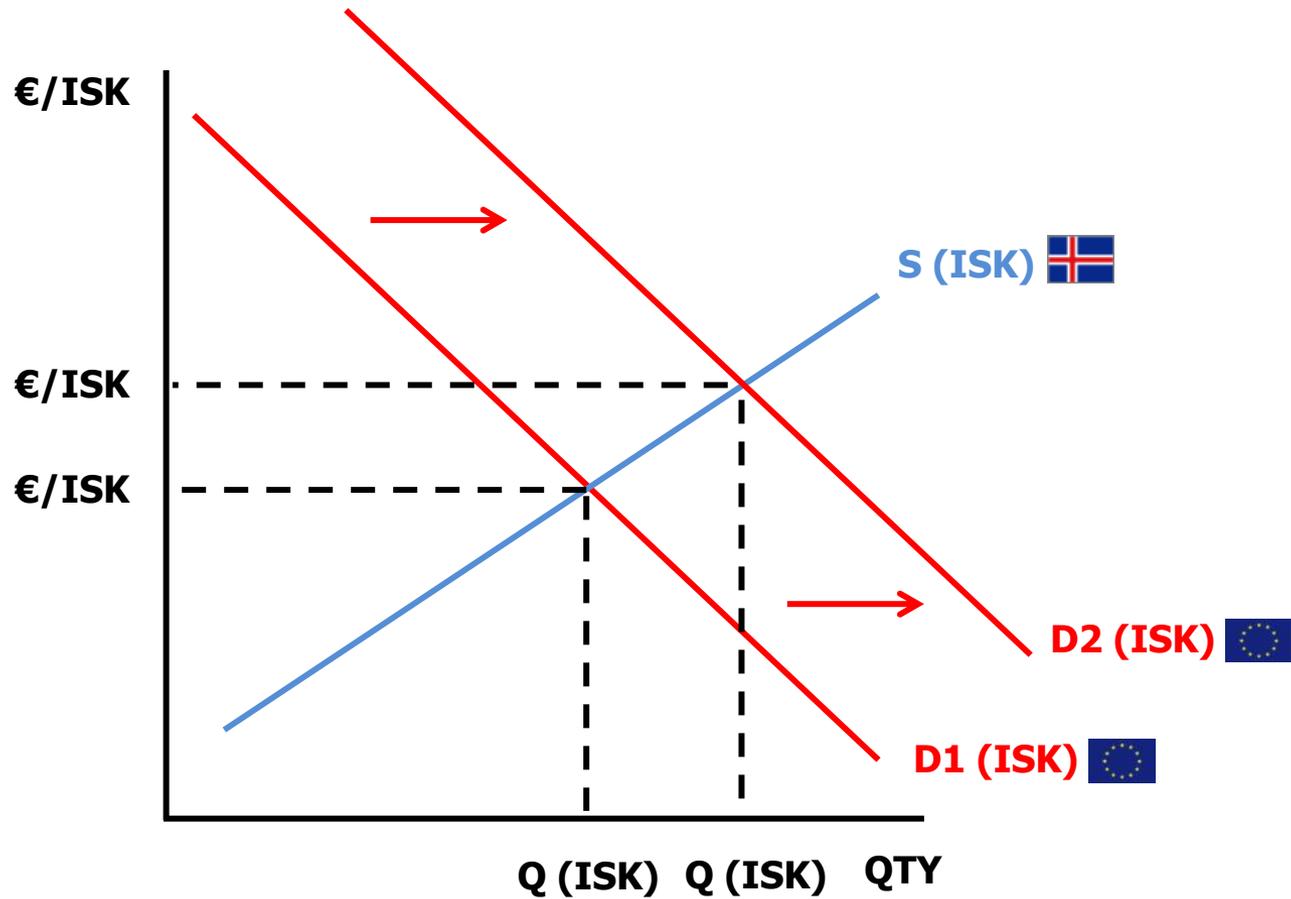
- (1) Trade: import and export
- (2) Inflation
- (3) Interest rates
- (4) Foreign Direct Investment (FDI)
- (5) Investments on capital markets

## Foreign Exchange Markets: Case study (1): EUR/ISK



**Q:** What happens to the value of the Euro (EUR) in Icelandic Kronas (ISK) if Dutch savers, who are looking for a high interest rate, start opening saving accounts with the former Icelandic internet bank Ice Save? Would Dutch exporters be happy with this development or not? Account for your answer by using the market model for exchange rates. Use the market for ISK in Europe.

# Foreign Exchange Markets: Case study (1)

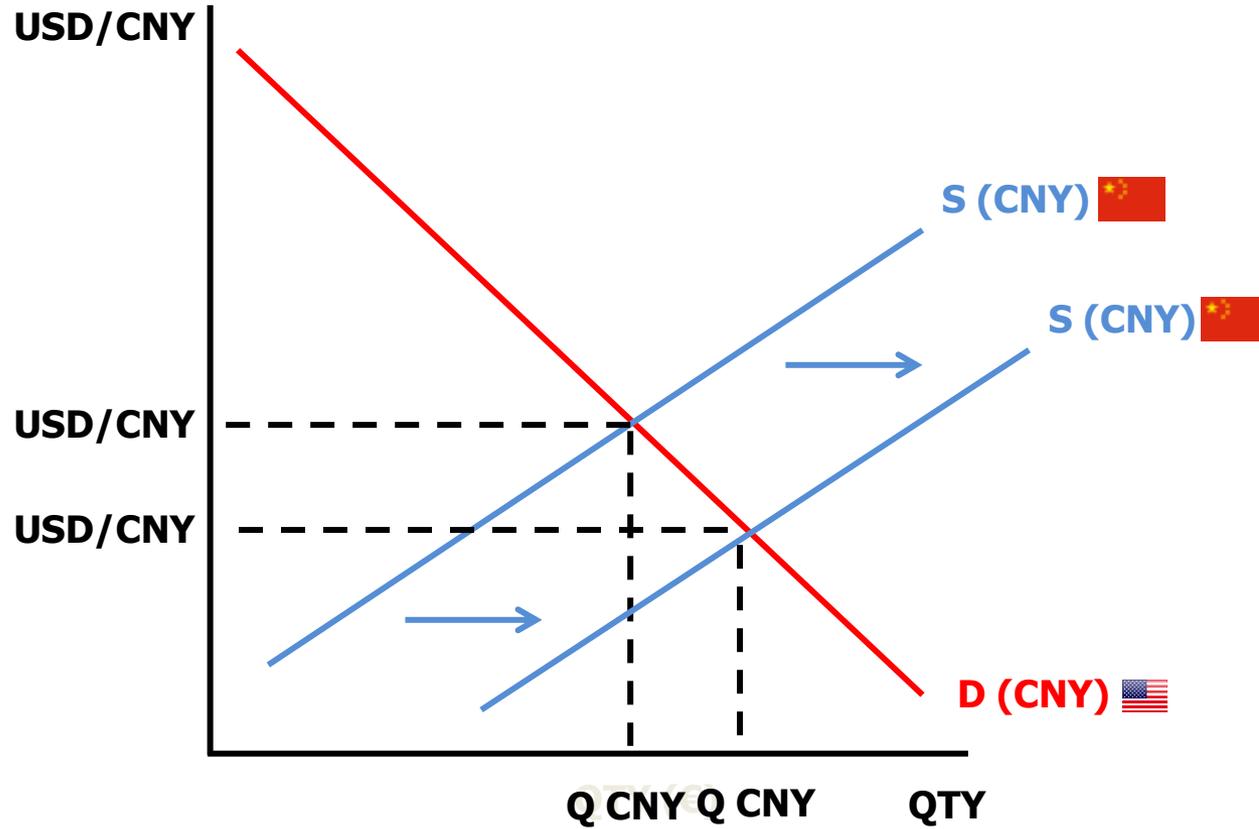


## Foreign Exchange Markets: Case study (2): USD/CNY



**Q:** China has been criticized by the United States for keeping the value of its currency (CNY) artificially low by aggressively buying US government bonds (T-bills). How does buying US T-bills keep the value of the CNY with respect to the USD low? Why would the Chinese government do that? Use the market model for foreign exchange markets to account for your answer, use the market for CNY in the US.

# Foreign Exchange Markets: Case study (2)



## Foreign Exchange Markets: Case study (3): DM/NLG



**Q:** The post World War II hyperinflation in Germany is a well documented phenomenon. With prices peaking, many Germans crossed the border with the Netherlands to purchase groceries. Illustrate in the market for Dutch Guilders (NLG) in Germany what happened to the value of the Deutsch Mark (DM) during this time.

# Foreign Exchange Markets: Case study (3)

