

International financial markets

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Please Read Me

- Check the message **Welcome greeting** published in the News Bulletin Board.
- Dear student please edit your profile uploading a photo where your face is clearly visible.
- The purpose of the virtual meetings is to answer questions and not to make a summary of the study material.
- This presentation is based on (Wild and Wild 2020, chap. 9)

Purpose

Explain and describe the importance of the international capital market and its main components

Exchange regime in Colombia

- The **exchange regime** is the set of rules that regulate aspects of the foreign exchange market (DIAN 2020)
- In the exchange regime in Colombia there are 2 markets:
 - Free market (“Mercado libre” in spanish)
 - Regulated or exchange market (“Mercado regulado o cambiario” in spanish)
 - The regulated or exchange market is made up of all the currencies that must be **channeled** through the **Exchange Market Intermediaries (EMI) (Intermediarios del Mercado Cambiario (IMC)** in spanish) authorized for that purpose or through the compensation mechanisms (clearing accounts) (DIAN 2020)
 - **Channeled** means sell, buy or transfer currencies through the **EMI**

Exchange regime in Colombia

- The operations that must be channeled through the regulated market or exchange market are (DIAN 2020):
 - **Import and export of goods**
 - **Securities and guarantees in foreign currency**
 - **Derivatives operations**
 - External debt operations carried out by residents of the country, as well as the financial costs inherent to them.
 - Foreign capital investments in the country, as well as the returns associated with them
 - Colombian capital investments abroad, as well as the returns associated with them
 - Financial investments in securities issued and in assets located abroad, as well as the returns associated with them

Exchange regime in Colombia

- EMI ((IMC) in spanish) in Colombia (Banrep 2021)

NIT	Name
8600029644	BANCO DE BOGOTA
8600077389	BANCO POPULAR
8909039370	ITAÚ CORPBANCA COLOMBIA S.A.
8909039388	BANCOLOMBIA S.A.
8600511354	BANCO CITIBANK
8600507501	BANCO GNB SUDAMERIS
8600030201	BBVA COLOMBIA
8600345941	SCOTIABANK COLPATRIA S.A.
8903002794	BANCO DE OCCIDENTE
8001499236	BANCO DE COMERCIO EXTERIOR BANCOLDEX
8600073354	BANCO CAJA SOCIAL
8000378008	BANCO AGRARIO DE COLOMBIA S.A.- BANAGRARIO
8600343137	BANCO DAVIVIENDA
8600358275	BANCO COMERCIAL AV VILLAS
9002009609	BANCO CREDIFINANCIERA S.A.
9003782122	BANCO W S.A.
9000479818	BANCO FALABELLA S.A.
9006281103	BANCO SANTANDER DE NEGOCIOS COLOMBIA S.A.
8903006536	CORPORACION FINANCIERA COLOMBIANA S.A.
8600431866	BANCO SERFINANZA S.A.
8605090229	FINANCIERA DE DESARROLLO NACIONAL S.A.
9001143468	BANCO J.P. MORGAN COLOMBIA S.A.

¹ Source: Sistema Estadístico Cambiario - SEC

² Lat update: 2022-12-02

Exchange regime in Colombia

• EMI ((IMC) in spanish) in Colombia (Banrep 2021)

NIT	Name
8000963291	FINANCIERA DE DESARROLLO TERRITORIAL S.A. FINDETER
8909270349	COLTEFINANCIERA S.A. COMPAÑÍA DE FINANCIAMIENTO
8902007567	BANCO PICHINCHA
8600067979	GIROS Y FINANZAS COMPAÑÍA DE FINANCIAMIENTO S.A.
9004085370	BNP PARIBAS COLOMBIA CORPORACIÓN FINANCIERA S.A.
9004064721	CREDIFAMILIA CF
8909813951	CONFIAR - COOPERATIVA FINANCIERA
8600681825	CREDICORP CAPITAL COLOMBIA S.A.
9001823894	CÁMARA DE RIESGO CENTRAL DE CONTRAPARTE COLOMBIA
8600791743	CORREDORES DAVIVIENDA S.A. COMISIONISTA DE BOLSA
8600715621	ACCIONES Y VALORES S.A. COMISIONISTA DE BOLSA
8600001854	ALIANZA VALORES - COMISIONISTA DE BOLSA S.A.
8001287358	VALORES BANCOLOMBIA S.A. COMISIONISTA DE BOLSA
8909071570	BTG PACTUAL COLOMBIA S.A. COMISIONISTA DE BOLSA
8002031865	CASA DE BOLSA S.A. SOCIEDAD COMISIONISTA DE BOLSA
8300352173	ITAÚ COMISIONISTA DE BOLSA COLOMBIA S.A.
9005771404	LARRAÍN VIAL COLOMBIA S.A. COMISIONISTA DE BOLSA
8301181205	SERVIVALORES GNB SUDAMERIS S.A.
9010779526	MOVII S.A.
9010774113	PAGOS GDE S.A.
9014292728	GLOBAL COLOMBIA 81 S.A.

¹ Source: Sistema Estadístico Cambiario - SEC

² Lat update: 2022-02-12

Exchange rates

- ISO 4217 Currency Codes: standard that establishes internationally recognized codes for the representation of currencies that enable clarity and reduce errors
 - Some examples:
 - **COP**: Colombian peso
 - **USD**: United States dollar
 - **EUR**: Euro
 - **GBP**: Pound sterling
 - Some examples of exchange rates using **COP** as a quoted currency and **USD**, **EUR** and **GBP** as base currencies:
 - **COP/USD**
 - **COP/EUR**
 - **COP/GBP**

Exchange rates

Daily exchange rate: COP/USD

Variable code Yahoo Finance: COP=X

Highest price of each day used to make the plot: high column in Yahoo Finance



Source: Yahoo Finance
Last update date: 2022-02-12

Exchange rates

Daily exchange rate: COP/EUR

Variable code Yahoo Finance: EURCOP=X

Highest prices of each day used to make the plot: high column in Yahoo Finance



Source: Yahoo Finance
Last update date: 2022-02-12

Exchange rates

Daily exchange rate: COP/GBP

Variable code Yahoo Finance: GBPCOP=X

Highest prices of each day used to make the plot: high column in Yahoo Finance



Source: Yahoo Finance
Last update date: 2022-02-12

Exchange rates

- **Spot rates**

- Exchange rates that require delivery of the traded currency within 2 business days

- **Forward rates**

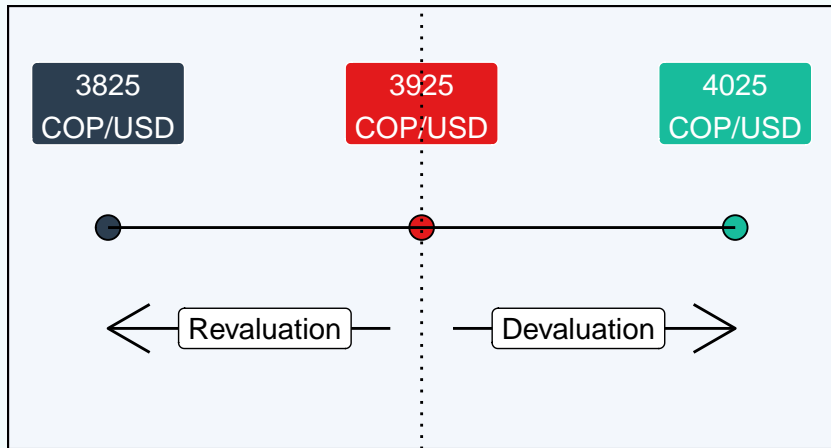
- A exchange rate at which 2 parties agree to exchange currencies on a specifies future date

Foreign exchange hedges

- A foreign exchange hedge (“Cobertura cambiaria” in spanish) is a financial instrument used to eliminate the risk resulting from transactions in foreign currencies by transferring this risk to another agent which is usually a financial institution
- Foreign exchange hedges most used in Colombia (Bancoldex 2014):
 - Forward exchange rate
 - Delivery
 - Foreign exchange option
 - Put
 - Call

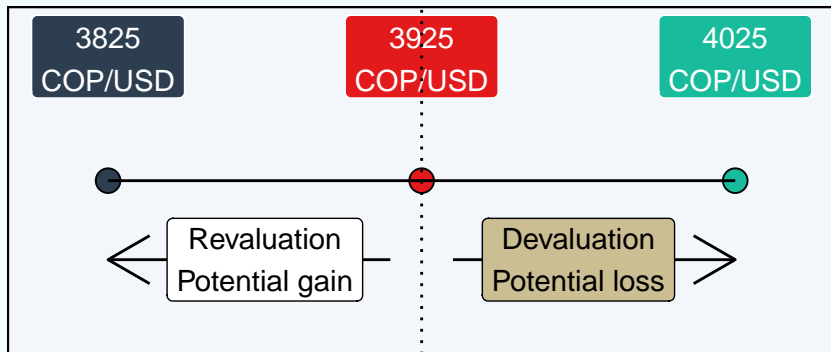
Foreign exchange hedges

- Foreign exchange risk (Bancoldex 2014, p 8-9)



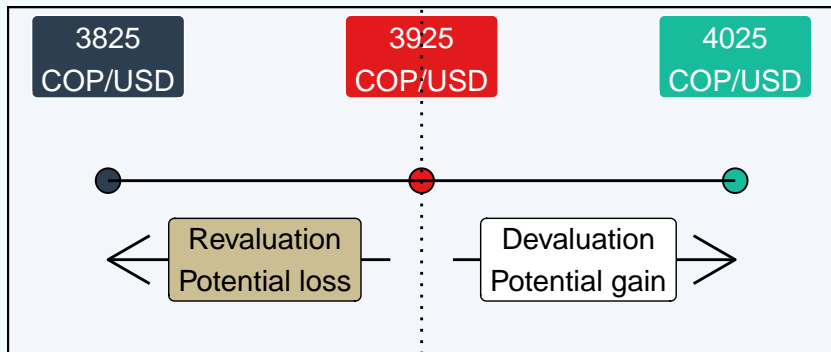
Foreign exchange hedges

- Foreign exchange risk (Bancoldex 2014, p 8-9)
 - A **importer** is not in the business of currency speculation



Foreign exchange hedges

- Foreign exchange risk (Bancoldex 2014, p 8-9)
 - A **exporter** is not in the business of currency speculation



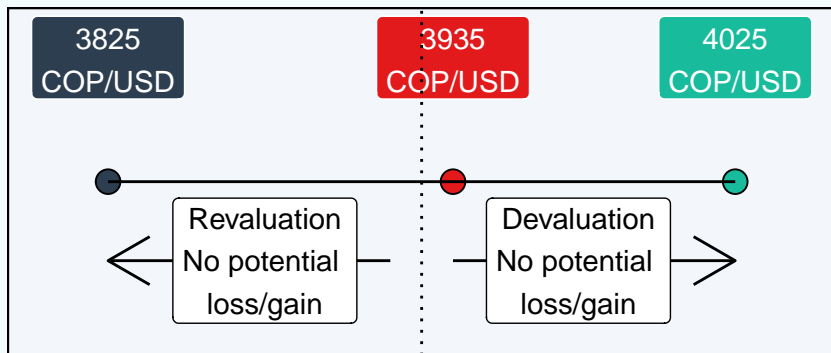
Foreign exchange hedges

- **Forward exchange rate (Delivery):** Upon expiration of the contract there is a transfer of the currency amount negotiated between the parties at an exchange rate agreed previously
 - **Parties:**
 - Importer or exporter
 - Financial institution
 - **Due date (“Fecha de vencimiento/plazo” in spanish)**
 - **Amount (“Monto” in spanish):** amount of currency that the financial institution agrees to buy or sell to the importer or exporter
 - **Forward rate:** rate agreed previously at which currencies will be bought or sold on the due date which is equal to **Spot price + Implicit devaluation**¹
 - **Spot price:** currency price at the time of negotiating this type of forward

¹In (Wild and Wild 2020, chap. 10) we will examine a way to calculate it

Foreign exchange hedges

- **Forward exchange rate (Delivery):** example with a positive implicit devaluation of 10, a spot price of 3925 and a forward rate of 3935

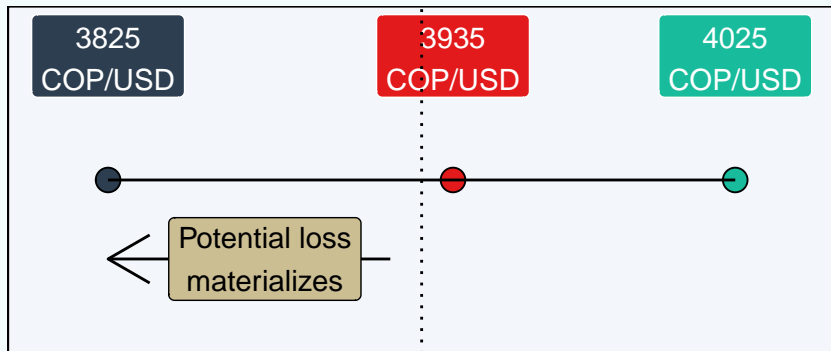


Foreign exchange hedges

- **Put option (Exporter):** The exporter acquires the right to sell foreign currency at a price established on a certain future date, but is not obliged to carry out the operation if it does not favor him
 - **Parties:**
 - Exporter
 - Financial institution
 - **Due date (“Fecha de vencimiento/plazo” in spanish)**
 - **Amount (“Monto” in spanish):** amount of currency that the financial institution agrees to buy or sell to the importer or exporter
 - **Forward rate:** rate agreed previously at which currencies will be bought or sold on the due date where it is equal to **Spot price + Implicit devaluation**
 - **Spot price:** currency price at the time of negotiating this type of forward
 - **Premium value (“valor de la prima” in spanish)**

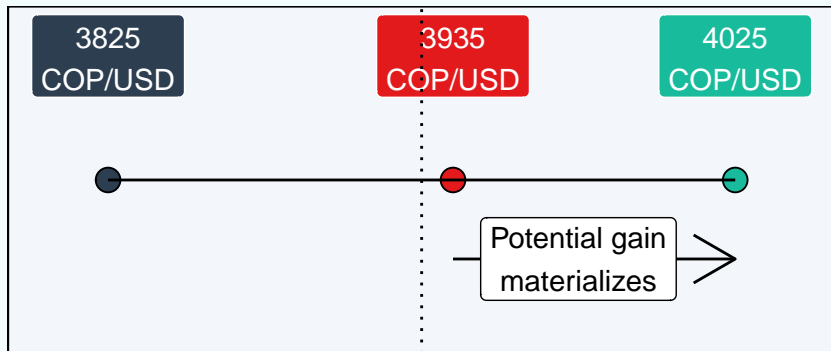
Foreign exchange hedges

- **Put option (Exporter)**: an example where the potential loss materializes, the implicit devaluation is 10, the spot price is 3925, the forward rate is 3935 and the exporter pays a premium value of 5 **COP** per **USD**
 - In this case the exporter **opts** for the option



Foreign exchange hedges

- **Put option (Exporter)**: an example where the potential gain materializes, the implicit devaluation is 10, the spot price is 3925, the forward rate is 3935 and the exporter pays a premium value of 5 **COP** per **USD**
 - In this case the exporter **doesn't opt** for the option

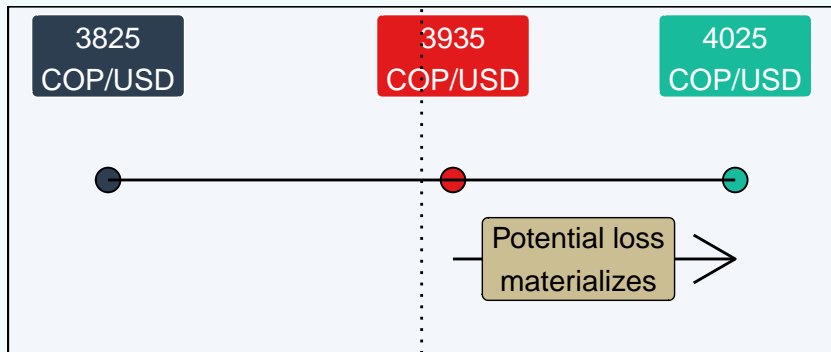


Foreign exchange hedges

- **Call option (Importer):** The importer acquires the right to buy foreign currency at a price established on a certain future date, but is not obliged to carry out the operation if it does not favor him
 - **Parties:**
 - Importer
 - Financial institution
 - **Due date (“Fecha de vencimiento/plazo” in spanish)**
 - **Amount (“Monto” in spanish):** amount of currency that the financial institution agrees to buy or sell to the importer or exporter
 - **Forward rate:** rate agreed previously at which currencies will be bought or sold on the due date where it is equal to **Spot price + Implicit devaluation**
 - **Spot price:** currency price at the time of negotiating this type of forward
 - **Premium value (“valor de la prima” in spanish)**

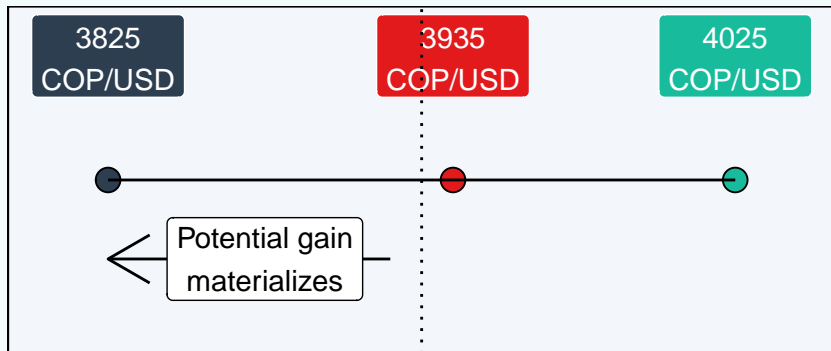
Foreign exchange hedges

- **Call option (Importer):** an example where the potential loss materializes, the implicit devaluation is 10, the spot price is 3925, the forward rate is 3935 and the importer pays a premium value of 5 **COP** per **USD**
 - In this case the importer **opts** for the option



Foreign exchange hedges

- **Call option (Importer):** an example where the potential gain materializes, the implicit devaluation is 10, the spot price is 3925, the forward rate is 3935 and the importer pays a premium value of 5 **COP** per **USD**
 - In this case the importer **doesn't opt** for the option



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References

- Bancoldex. 2014. "Coberturas Cambiarias: Proteja Su Rentabilidad." https://issuu.com/bancoldex/docs/130812_cartilla_coberturas_cambiari.
- Banrep. 2021. "Banco de La República, Operaciones y Procedimientos Cambiarios, Procedimientos Cambiarios." <https://quimbaya.banrep.gov.co/secinternet/co.gov.banrep.cambios.internet.SecInternet?modulo=sde&operacion=servicios&funcion=consultaIntermediarios&servicio=998&retorno=operaciones.jsp>.
- DIAN. 2020. "Preguntas Frecuentes Sobre Control Cambiario." <https://www.dian.gov.co/atencionciudadano/infoconsulta/Paginas/ControlCambiario.aspx>.
- Wild, John J, and Kenneth L Wild. 2020. *International Business: The Challenges of Globalization*. Harlow: Pearson.