

# Tools for the analysis of international economic relations

*Balance of Payments and external imbalances*

International Economics

Facultat d'Economia i Empresa

Universitat Autònoma de Barcelona

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## **Bibliografía:**

- Serrano Pérez (2009). *Entorno Económico: Instrumentos para su análisis*. Editorial Pirámide.  
Chapter 3
- Krugman, Obstfeld, & Melitz (2018). *International Economics: Theory and Policy*. Pearson.  
Chapters 13, 18

# Topics

Measuring foreign flows

Balanza de Pagos y Desequilibrios Externos

# What do we measure?

Measurement of transaction value **between residents and non-residents**, considering:

- Nature of agents

## **Residents:**

national and foreign agents who **regularly carry out their activity** in the reference country

→ includes: diplomats, military, nationals with defined contracts abroad

## **Non-residents:**

national and foreign agents who usually carry out their activity abroad

→ includes: seasonal or cross-border workers

- Nature of transactions

current, capital and financial operations

initial valuation in national currency (i.e., Euros)

→ applies the **exchange rate at the time of the transaction**

- Complexity of valuation

some of the information results from **estimates**

→ adjustment process prolonged for months

# Sources of information

There are two direct sources of information

- National Accounting

Accounts for current and financial operations with the Rest of the World

Part of the aggregate accounts of the economy

 In Spain:

- **Done** by the National Institute of Statistics (INE)
- Follows **criteria** of the European System of National Accounts

- Balance of Payments

Current, capital and financial flows with the Rest of the World

Monthly information, and prior to that of National Accounts

**Sources:** mandatory declarations for international transactions (over certain thresholds), banking entities (act as intermediaries), customs records, transport statistics, investment surveys, tax collections

 In Spain:

- **Done** by the Bank of Spain (BdE)
- Follow **criteria** of the International Monetary Fund

# Structure

🇪🇸 Adaptation of Spain to international criteria:

- **Current Account Balance (CAB)**

Transactions directly related to the real activity of the economy

- **Capital Balance (KB)**

Capital transfers and operations related to the purchase and sale of land and intangibles

- **Financial Balance (FB)**

Flows of acquisition, sale, and amortization of financial instruments

- **Movement of Reserves (MRE)**

Net changes in reserves

# Current Account Balance (CAB)

## Current Account Balance (CAB)

It includes transactions **directly related** to the **real activity** of the economy (i.e., goods and services, property income from productive factors, current transfers without counterpart).

Structure:

- **Trade Balance (TB)**

Records value of exports and imports of merchandise, including supplies to means of transportation (e.g., fuel).

→ Registered values FOB (*free on board*)

⇒ the cost of insurance and freight must be deducted from CIF imports (*cost, insurance and freight*)

- **Services Balance (SB)**

Records value of exports and imports related to the provision of services.

- Tourism and travel

*i.e., for tourism, business, or studies*

- Freight, tickets, and other transportation

*i.e., air, sea, or land*

- Insurance

*e.g., premiums and compensation, pension funds*

*does not include: export credit insurance (considered as a financial service)*

- Financial Services

*e.g., commissions, issuance, placement, and amortization expenses*

*does not include: dividends, interest (recorded in income balance)*

- IT services

*e.g., advice, configuration, maintenance of computer equipment*

*does not include: software packages (recorded in balance of trade)*

- Business services

*e.g., intermediation in foreign trade operations, equipment leasing, advertising, market studies, consulting*

- Other services

*e.g., audiovisual services, derived from the use of technology*



- **Primary Income Balance (PIRoW)**

Records the value of income from the ownership of factors of production.

→ Labor income

*i.e., wages, other labor income (remittances from seasonal migrants, cross-border workers)*

→ Capital income

*i.e., profits, dividends, real estate rents, interest on commercial/financial credits*

- **Current Transfer Balance (CTRoW)**

Records value of transactions of goods and services without counterpart.

*e.g., government aid, contributions to the budget of international organizations, pensions, taxes, remittances from permanent emigrants, inheritances*

## Accounts from the Rest of the World

The National Accounts consider the Rest of the World as another institutional sector. Such information is necessary to be able to balance the National Accounts and obtain the macromagnitudes of the economy as a whole.

National Accounts follow a common logic:

Uses (-)		Resources (+)	
€ XX:	Use A	Resource B	€ XX:
€ XX:	<b>Balance C</b>		

Uses (-)		Resources (+)	
€ XX:	Use D	<b>Balance C</b>	€ XX:
€ XX:	<b>Balance F</b>	Resource E	€ XX:

The **interpretation is counterintuitive**. RoW resources are uses in the national economy, and vice versa. Consequently, the **resulting balances are opposite** in all cases.

### *Account for foreign exchange of goods and services*

Uses (-)		Resources (+)	
X	Exports	Imports	M
<b>NFB</b>	<b>Net Foreign Balance</b>		

$$NFB = X - M$$

### Rest of the World Accounts reminder

The balances resulting from the Rest of the World Accounts are opposite to those of the national economy.

The definition for the national economy is detailed in the definition of  $NFB = X - M$ .

The result of the Rest of the World account is  $NFB = -(X - M) = M - X$

**All the following definitions follow the same logic.**

## Example: Account for foreign exchange of goods and services

- Export of Pharmaceuticals to Portugal for € 10:
- Export of Ham to France € 40:
- Income from German tourists in Mallorca € 20:
- Import of crude oil from Saudi Arabia € 60:
- Import of Meat from Argentina € 5:
- Resident expenses on American electronic platforms € 20:

Uses (-)		Resources (+)	
€70:	Exports of goods and services	Imports of goods and services	€85:
<b>€ 15:</b>	<b>Net Foreign Balance</b>		

*Foreign account of primary income and current transfers*

Uses (-)		Resources (+)	
		<b>Foreign Net Balance</b>	<b>FNB</b>
LI	Labor Income paid to residents	Labor Income paid to non-residents	LI
PI	Property Income to receive	Property Income to pay	PI
CT	Current Transfers to receive	Current Transfers to pay	CT
<b>CAB</b>	<b>Current Account Balance</b>		

$$CAB = FNB \pm PIRoW \pm CTRoW$$

## Example: Foreign account of primary income and current transfers

- Net Foreign Balance for - € 15:
- Salaries of Spanish residents in Andorra per €5:
- Zara benefits in Italy for €10:
- Inheritances to Spanish residents from France € 1:
- Salaries of Portuguese residents in Galicia for € 3:
- Zara dividends paid to residents of Colombia € 2:
- Spain's contribution to the EU budget € 1:

Jobs (-)		Resources (+)	
		<b>Net Foreign Balance</b>	€ 15:
€ 5:	Labor Income to residents	Labor Income to non-residents	€ 3:
€ 10:	Property Income to receive	Property Income to pay	€ 2:
€ 1:	Current Transfers to receive	Current Transfers to pay	€ 1:
€ 5:	<b>Current Account Balance</b>		