#### External sector II

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- 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 (Cardenas 2020, chap. 5)



Explain the composition and determinants of Colombian foreign trade



The concept of comparative advantage

- Absolute advantage: the ability of a party (individual, company, country) to produce a product more efficiently than any other party
  - A party should concentrate in producing a good in which it has an absolute advantage
  - ¿What happend when you don't have an absolute advantage?
- Comparative advantage: the ability of a party (individual, company, country) to produce a product at a lower relative opportunity cost
  - Under certain conditions, even if a party doesn't have an absolute advantage, trade with other agent can be benefical for both of them



- Example of gains of trade using the concept of comparative advantage (Ridley 2010)
  - **Agent 1** produce 1 spear in 4 hours and 1 axe in 3 hours.
    - To produce both products agent 1 will need to allocate 7 hours
  - Agent 2 produce 1 spear in 1 hour and 1 axe in 2 hours.
    - Agent 2 has the absolute advantage in the prodution of spears and axes.
    - To produce both products agent 2 will need to allocate 3 hours
  - ¿It will be benefical for agent 1 and 2 to trade? Yes!!! **Agent 1** can produce 2 axes in 6 hours and **agent 2** 2 spears in 2 hours. Then they can trade 1 spear for 1 axe.
    - Agent 1 has now 1 spear and 1 axe only working 6 hours.
    - Furthermore agent 2 has now 1 spear and 1 axe only working 2 hours.
    - Each of them saves 1 hour of work in contrast with a situation in which they don't trade and produce themselves both products.



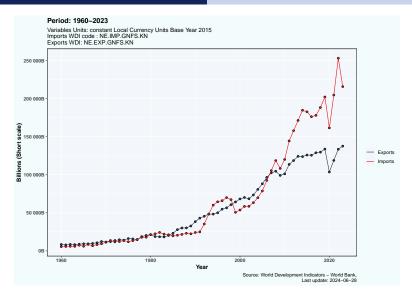


Figure 1: Colombia imports and exports



- The Harmonized System (HS) is a standardized numerical method of classifying traded goods that is internationally accepted and maintained by the World Customs Organization (WCO)
- The HS code consists of 6-digits that are the same independent of the country:
  - First 2 digits designate the **HS** chapter
  - Second 2 digits designate the HS heading
  - Third 2 digits designate the HS subheading
- Example of **HS** code: 090111 (Coffee, not roasted, not decaffeinated)
  - Chapter **09**: Cofee, tea, mate and spices
  - Heading 01: Coffee, whether or not roasted or decaffeinated; coffee husks and skins; coffee substitutes containing coffee in any proportion
  - Subheading 11: Coffee, not roasted, not decaffeinated



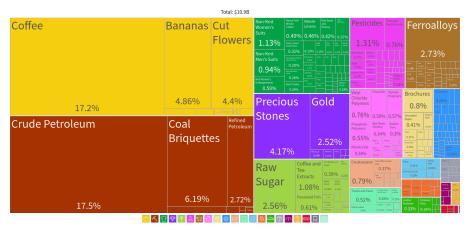


Figure 2: Colombian good exports HS 4 digits (HS92) edition year 1995 (OEC 2022)



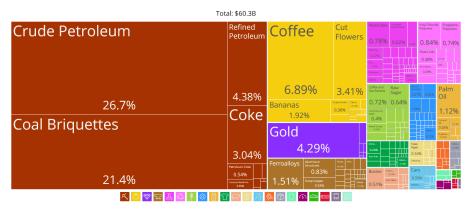
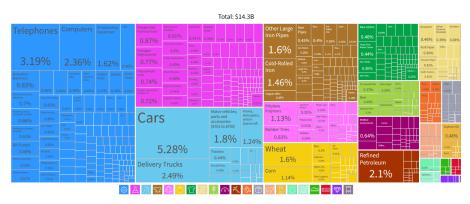


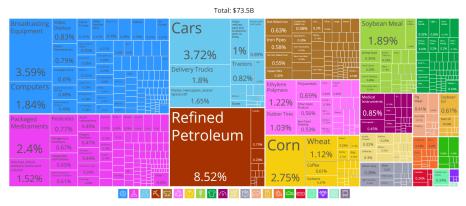
Figure 3: Colombian good exports HS 4 digits (HS92) edition year 2022 (OEC 2022)





**Figure 4:** Colombian goods imports **HS 4 digits (HS92) edition** year 1995 (OEC 2022)





**Figure 5:** Colombian goods imports **HS 4 digits (HS92) edition** year 2022 (OEC 2022)

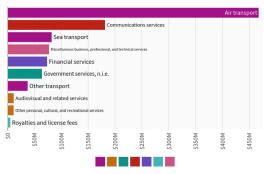


- The EBOPS classification provides a breakdown of the Balance of Payments Trade in Services by types of services.
- The classification thereby meets a number of user requirements, including the provision of more detailed information on Trade in services
  - EBOPS 2002
  - EBOPS 2010
- For more information check out
  - (Nationen and Kommission 2002)
  - (Nations 2012)





Total: \$1.01B



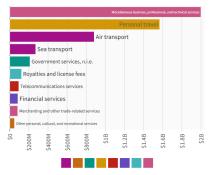
oec.world/en/visualize/tree\_map/hs92/export/aus/all/show/2020/

**Figure 6:** Colombian services exports **(EBOPS Version 2002)** year 2000 (OEC 2022)





Total: \$5.37B



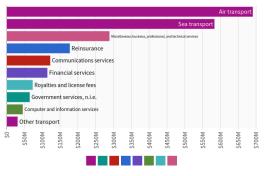
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Figure 7: Colombian services exports (EBOPS Version 2002) year 2020 (OEC 2022)





Total: \$2.2B



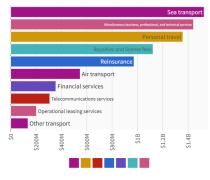
oec.world/en/visualize/tree\_map/hs92/export/aus/all/show/2020/

Figure 8: Colombian services imports (EBOPS Version 2002) year 2000 (OEC 2022)





Total: \$7.97B



app-jaguar.oec.world/

Figure 9: Colombian services imports (EBOPS Version 2002) year 2020 (OEC 2022)



- "The Observatory of Economic Complexity (OEC) is an online data visualization and distribution platform focused on the geography and dynamics of economic activities" (OEC 2022)
- "The OEC is currently designed and developed by Datawheel, but it began as a research project at MIT's Collective Learning group (former Macro Connections Group)" (OEC 2022)



- Tree map
  - https://oec.world/ > TOOLS > Tree map
    - Country
    - Product
    - Bilateral
- Profiles
  - https://oec.world/ > PROFILES > Countries > Colombia



- To my family that supports me
- To the taxpayers of Colombia and the UMNG students who pay my salary
- To the Business Science and R4DS Online Learning communities where I learn R and  $\pi$ -thon
- To the R Core Team, the creators of RStudio IDE, Quarto and the authors and maintainers of the packages tidyverse, wbstats, tidyquant, knitr, and tinytex for allowing me to access these tools without paying for a license
- To the Linux kernel community for allowing me the possibility to use some Linux distributions as my main OS without paying for a license



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