University of Cassino
Economics and Business
Academic Year 2019/2020

International Economics
International Trade
(Introduction and key facts)

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University of Cassino

Organization of the course

- International Economics consists of two parts:

  - Trade (prof. M. Pugno)

  - Finance (prof. F. D'Orlando)
- The text is the same: Gerber, J., *International Economics*, seventh global edition, 2018
- The exam is written and combines the two parts (6 cfu)

Organization of International Trade

- Lectures: Tuesday 3-5pm, classroom 0.04
- Chapters of Gerber, J.: 3-8,
- Other complementary but essential material is provided during the lectures, and then online
- Prof. Maurizio Pugno:

  - office hours: Tuesday 5-7pm, room 9.22 during the semester 24 Sept. 2019 – 3 Dec. 2019

  - email: m.pugno@unicas.it

  - url: http://mauriziopugno.com/en/didattica/

Topics of International Trade

- the gains from trade when countries differ in productivities or factor endowments;
- the consequences on wages and jobs;
- how the economies of scale makes timing important in trade;
- how transport costs make location of production important in trade;
- international regulation of trade;
- reasons and consequences of tariff and quota policies;
- the problem of standards in the international trade;
- Global Value Chains.

Introduction

- International trade arises from the opportunity to exchange market goods (and services) between residents of different countries.
- Advantages:

  - increase in variety of consumption,
  - access of key inputs for production,
  - lower prices of imported goods,
  - specialization in producing exports,
  - increase in productivity,
  - and hence economic growth.

Domestic Trade Vs. International Trade

FACTORS	DOMESTIC TRADE	INTERNATIONAL TRADE
Currency	Same	Different
Markets	Limited market due to limit in population	Broader markets
Language and Culture Barriers	Speaks and practice same culture	Communication challenges due to language and cultural barriers

FACTOR	DOMESTIC TRADE	INTERNATIONAL TRADE
Mobility in factors of production (land, labor, capital and entrepreneur)	Free to move from one state to another within the same country	Quite restricted

Charts on the stylized facts on International Trade

- Major focus on Goods
- Minor focus on Production Factors: capital and labour

How is international trade measured?

- The main measure of openness to trade of a country or groups of countries:

Trade to GDP ratio =

(Exports +Imports)/GDP

- Or: **Exports/GDP>0**

Imports/GDP>0

- While: Exports-Imports=net Exports

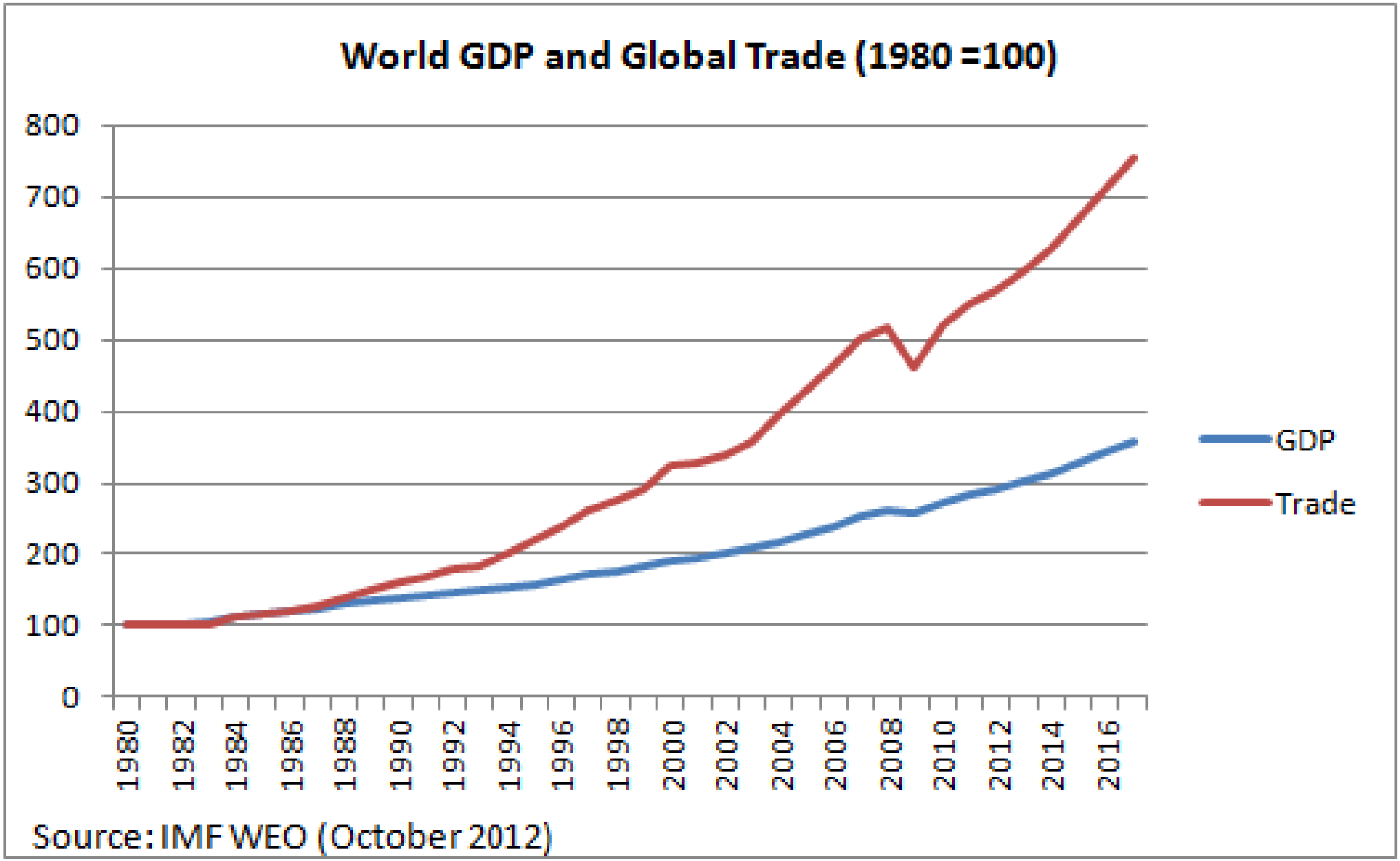
(either >0 or <0)

Globalization over 5 centuries (1500-2011)

Shown is the sum of world exports and imports as a share of world GDP (%)
The individual series are labeled with the source of the data

Our World in Data

Data sources: Klasing and Milionis (2014), Estavadeordal, Frantz and Taylor (2003) and the Penn World Tables Version 8.1
The interactive data visualization is available at OurWorldinData.org. There you find the raw data and more visualizations on this topic.

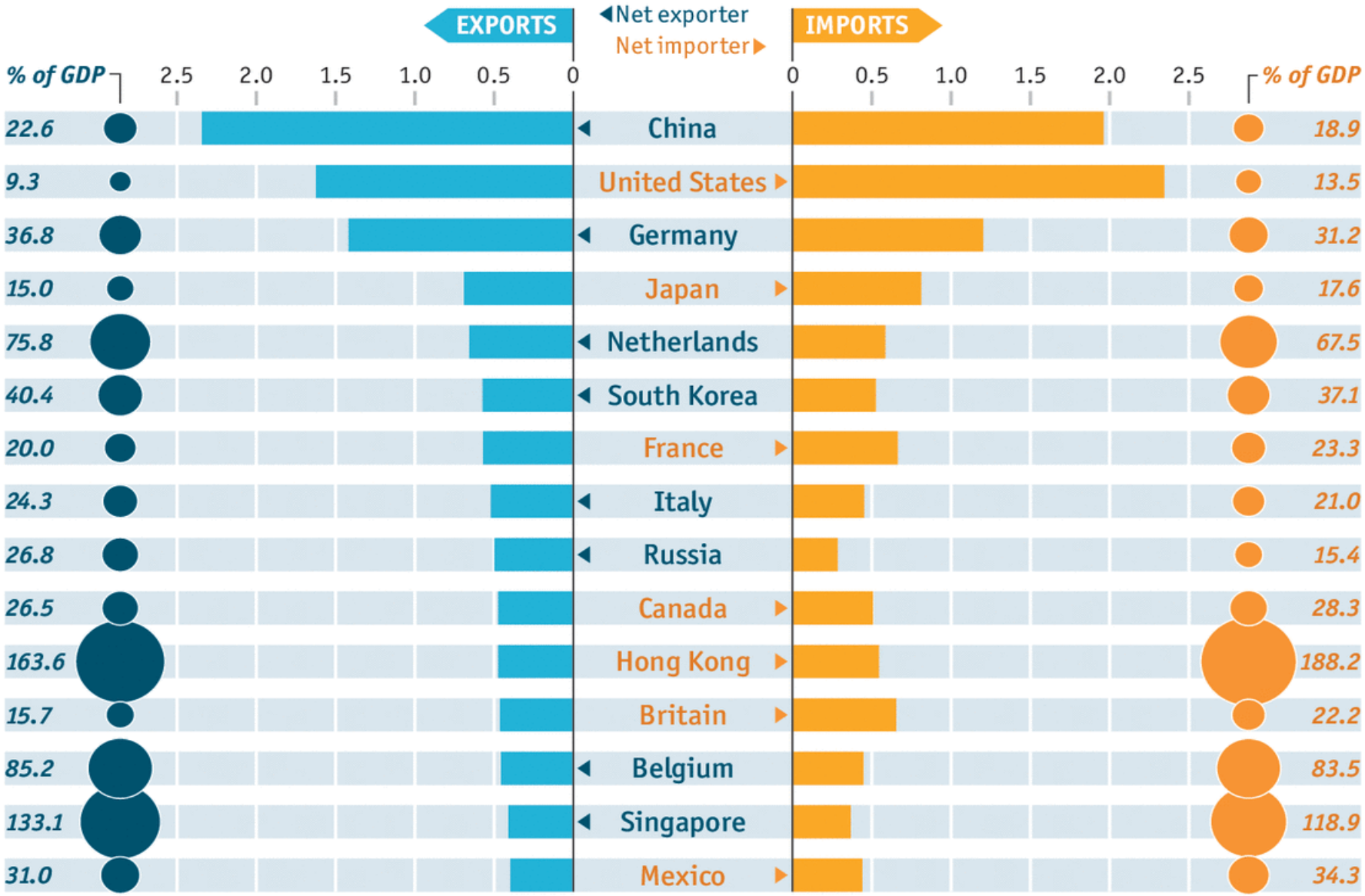

World GDP and Global Trade (1980 =100)
800
700
600
500
400
300
200
100
0
1980
1982
1984
1986
1988
1990
1992
1994
1996
1998
2000
2002
2004
2006
2008
2010
2012
2014
2016
GDP
Trade
Source: IMF WEO (October 2012)

Comments on the charts

- International trade is not a new phenomenon, but its *rapid increase* is.
- International trade may *reverse* toward countries' autarky
- International trade and GDP *grow together*
- International trade *increases more* than GDP (trade globalization).
- These two latter facts suggest that international trade positively affects GDP.

Trade flows

Largest global exporters, 2014, $trn

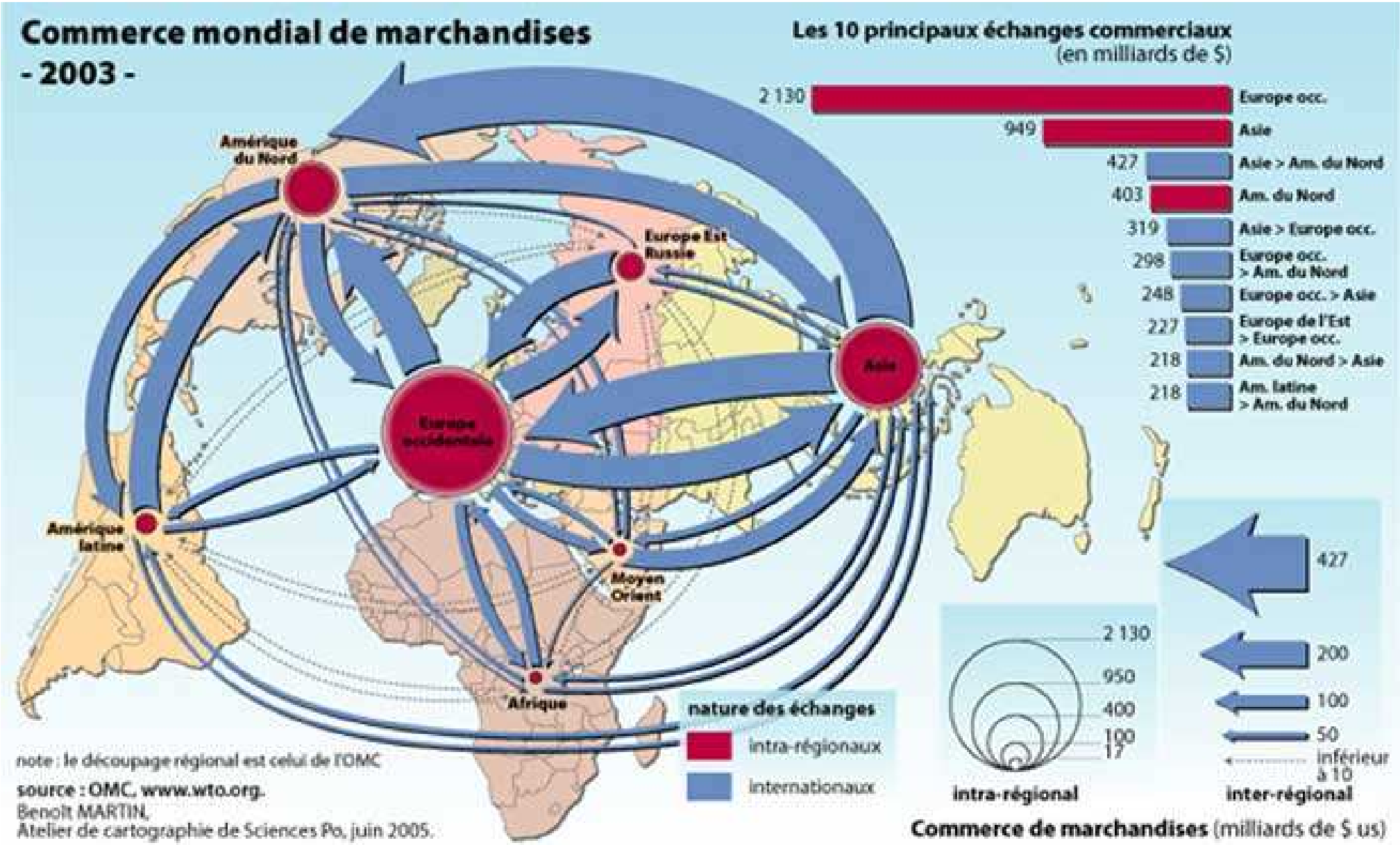


Source: IMF

Economist.com

Comments on the chart

- The bigger the country, the greater the *absolute* international trade
- The bigger the country, the smaller its international trade *relative* to its GDP
- The size of exports tendentially matches the size of imports

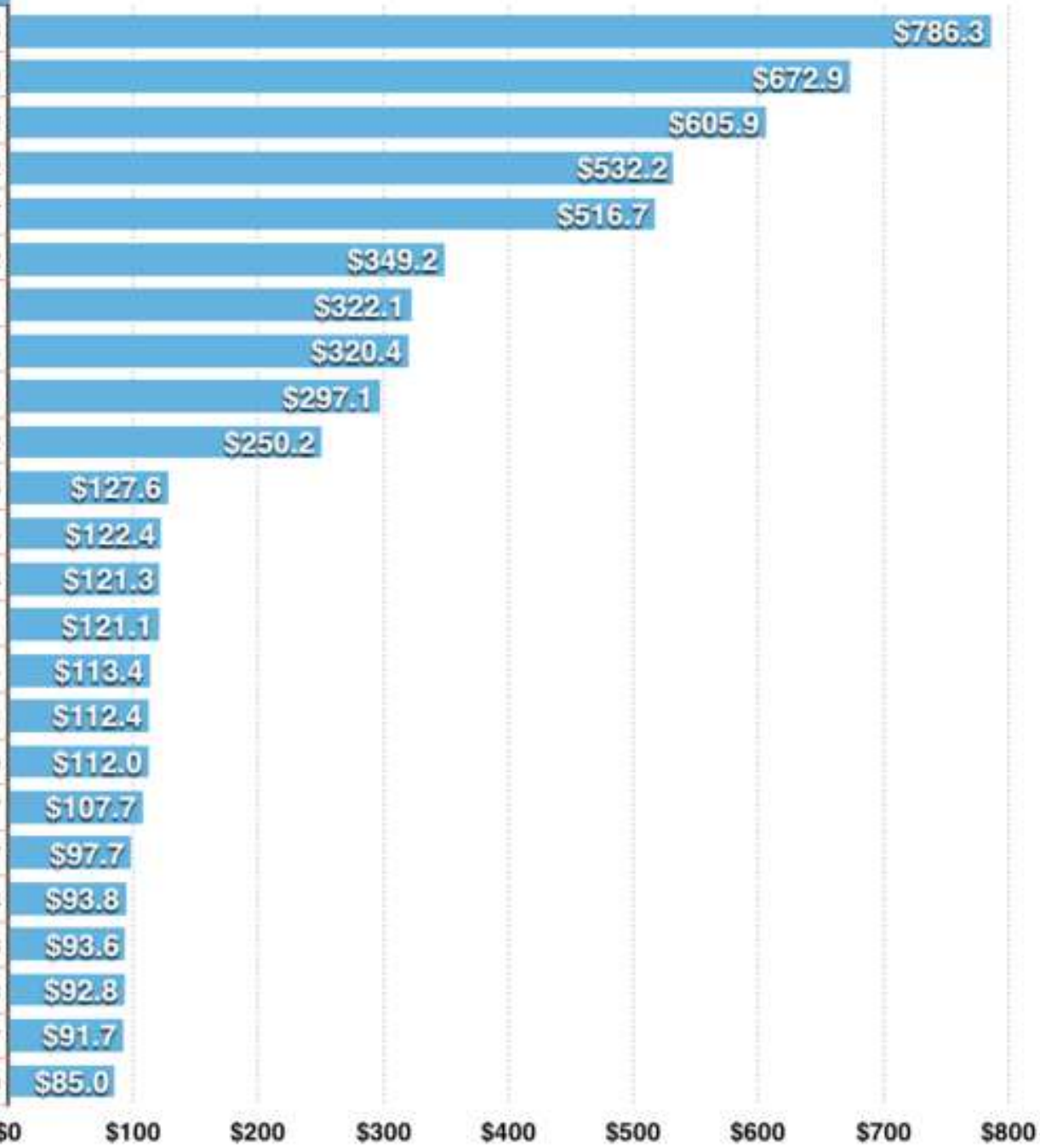

Commerce mondial de marchandises
- 2003 -
Les 10 principaux échanges commerciaux
(en milliards de $)
2 130 Europe occ.
949 Asie
427 Asie > Am. du Nord
403 Am. du Nord
319 Asie > Europe occ.
298 Europe occ. > Am. du Nord
248 Europe occ. > Asie
227 Europe de l'Est > Europe occ.
218 Am. du Nord > Asie
218 Am. latine > Am. du Nord
Amérique du Nord
Europe Est Russie
Asie
Europe occidentale
Amérique latine
Moyen Orient
Afrique
nature des échanges
intra-régionaux
internationaux
2 130
950
400
100
17
intra-régional
427
200
100
50
inférieur à 10
inter-régional
Commerce de marchandises (milliards de $ us)
note : le découpage régional est celui de l'OMC
source : OMC, www.wto.org.
Benoît MARTIN,
Atelier de cartographie de Sciences Po, juin 2005.

Comments on the chart

- West Europe, China and North America are the biggest international traders:
  - both between the three regions,
  - and within them
- East Europe+Russia, Latina America, and Africa are the smallest international traders

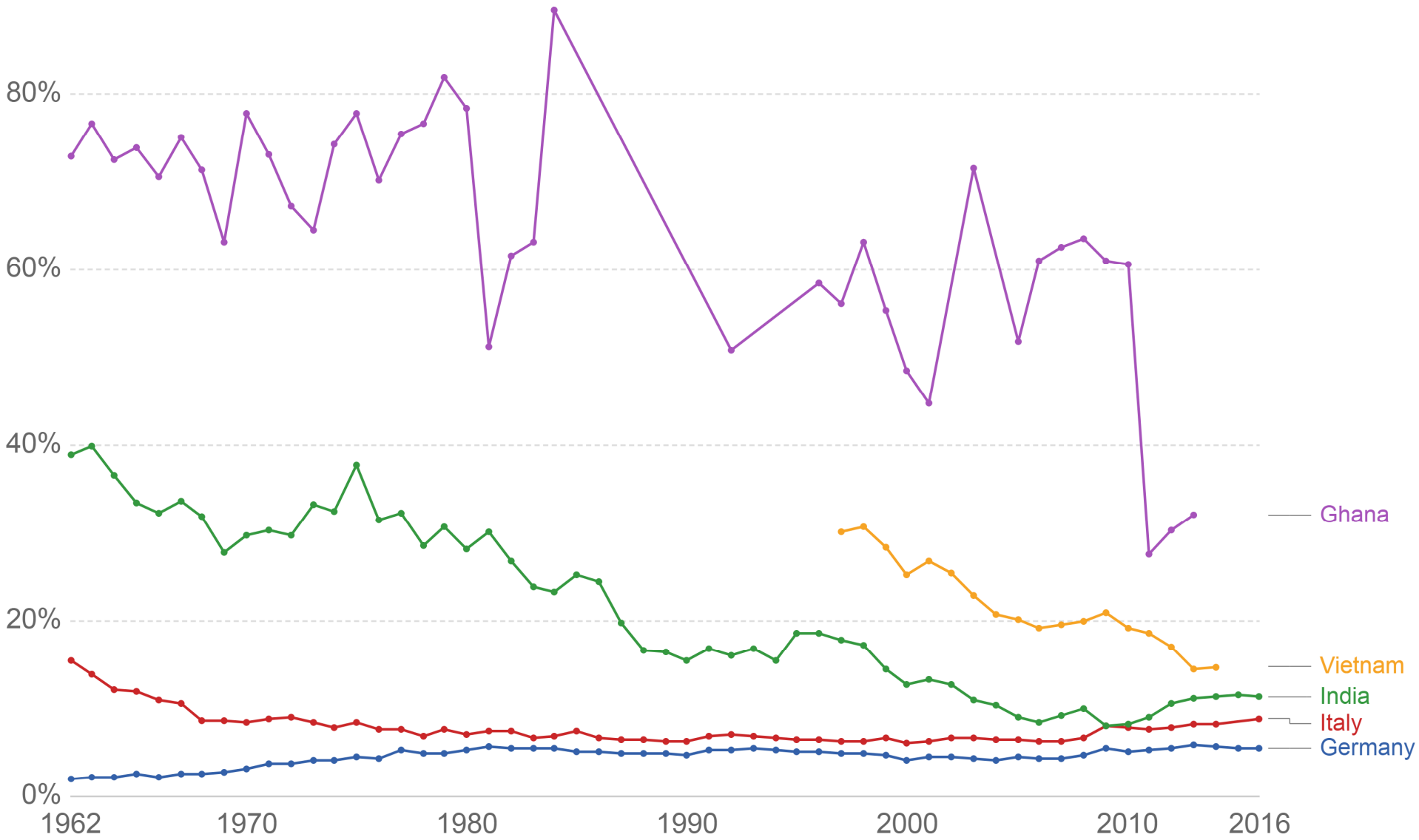
Global exports by product 2015 ($Billions)

Product Name	2015 Export Sales
Crude oil	$786.3
Cars	$672.9
Processed petroleum oils	$605.9
Phone system devices	$532.2
Integrated circuits/microaccemblies	$516.7
Automobile parts/accessories	$349.2
Medication mixes in dosage	$322.1
Computer, optical readers	$320.4
Gold (unwrought)	$297.1
Petroleum gases	$250.2
Blood fractions (including antisera)	$127.6
Aircraft, spacecraft	$122.4
Computer parts, accessories	$121.3
Diamonds	$121.1
Trucks	$113.4
Insulated wire/cable	$112.4
Solar power diodes/semi-conductors	$112.0
Electro-medical equipment	$107.7
Jewelry	$97.7
Printing machinery	$93.8
Lower-voltage switches, fuses	$93.6
Tv receivers/monitors/projectors	$92.8
Electrical converters/ power units	$91.7
Liquid crystal/laser/optical tools	$85.0



Share of food in total merchandise exports

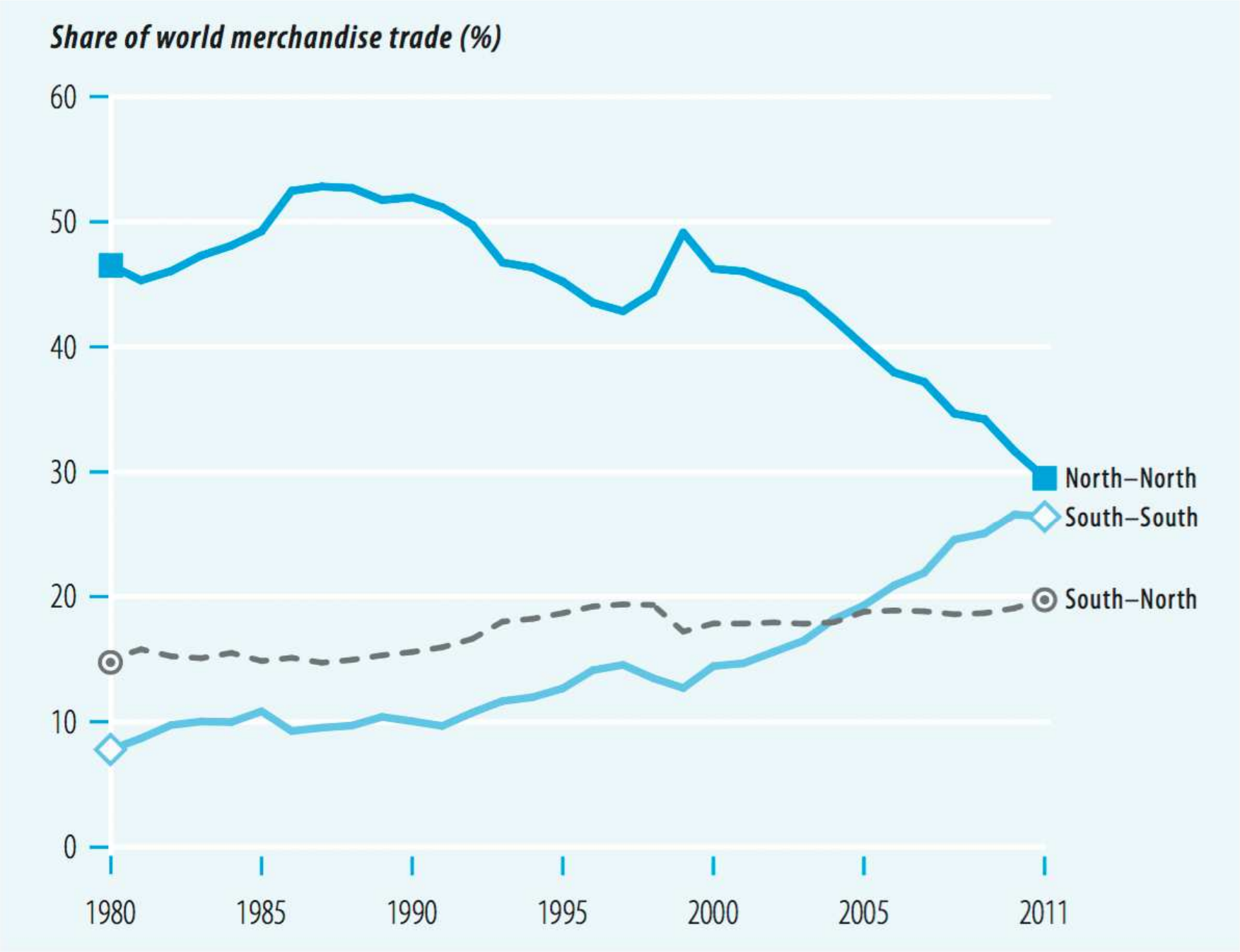
Food exports (% of merchandise exports), as per Standard International Trade Classification of products.



Source: World Bank – WDI

Comments on the charts

- International trade mainly consists of natural goods (commodities) and manufactured goods, rather than agricultural products.
- In the past, however, international trade mainly consisted of food
- Advanced countries mainly trade commodities and manufactured goods. Less developed countries mainly trade food
- More recent is country's age of industrialization, the smaller the size of manufactured goods.



Note: North in 1980 refers to Australia, Canada, Japan, New Zealand, the United States and Western Europe.
Source: HDRO calculations based on UNSD (2012).

Comments on the chart

- Advanced countries = North
  Less Developed Countries = South
- International trade between South countries increased more than International trade between North countries
- Strangely enough, international trade between North and South countries grows more slowly

Int. trade and production factors

- The study of international trade also includes international movements of production factors: *capital* and *labor*.
- Memo:
  Production function:
  $Y = F(K, L, N)$, $F' > 0$, $F'' < 0$
  Y = production
  K = real capital
  L = labor
  N = natural resources

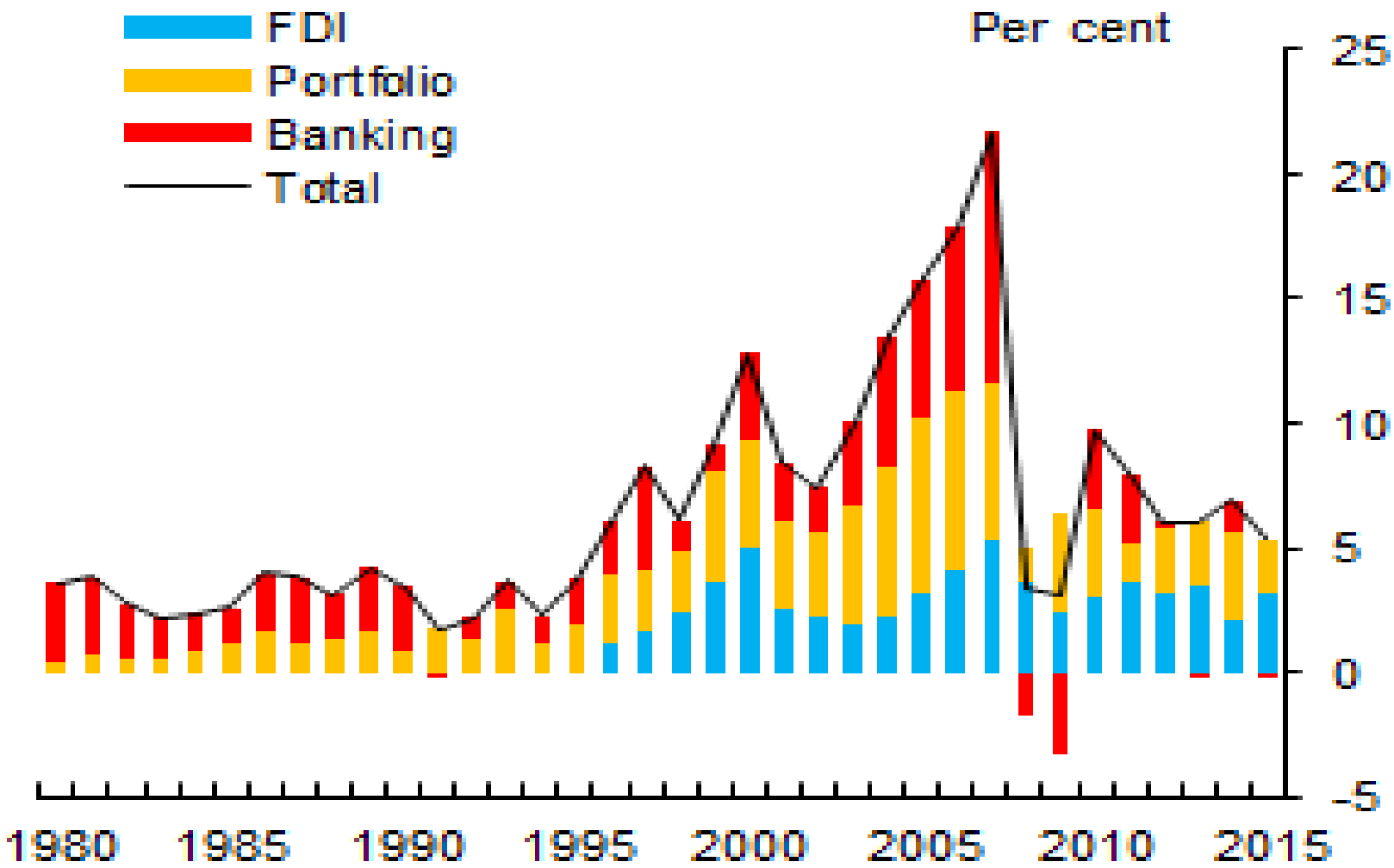
Capital Mobility

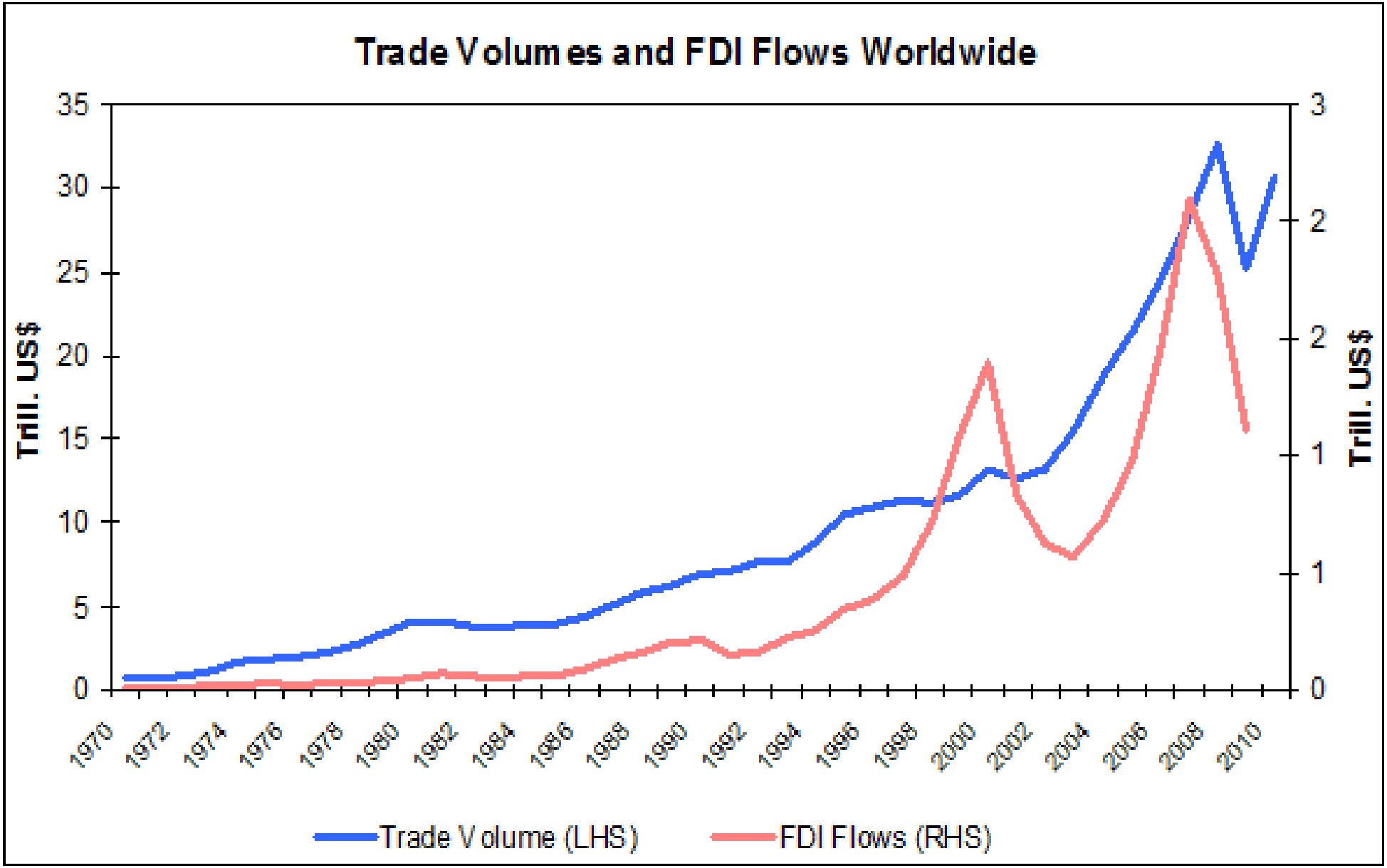
Two types of capital flows:

- flows of **financial capital** representing portfolio assets (such as stocks, bonds, currencies), and bank accounts, and
- flows of capital representing physical assets such as real estate, factories, and businesses - **Foreign Direct Investment.**

  - Firms' FDI usually intends to establish control on production.

Capital flows (% of world GDP)




Trade Volumes and FDI Flows Worldwide
Trill. US$
35
30
25
20
15
10
5
0
3
2
2
1
1
0
Trill. US$
1970
1972
1974
1976
1978
1980
1982
1984
1986
1988
1990
1992
1994
1996
1998
2000
2002
2004
2006
2008
2010
Trade Volume (LHS)
FDI Flows (RHS)

Comments on the charts

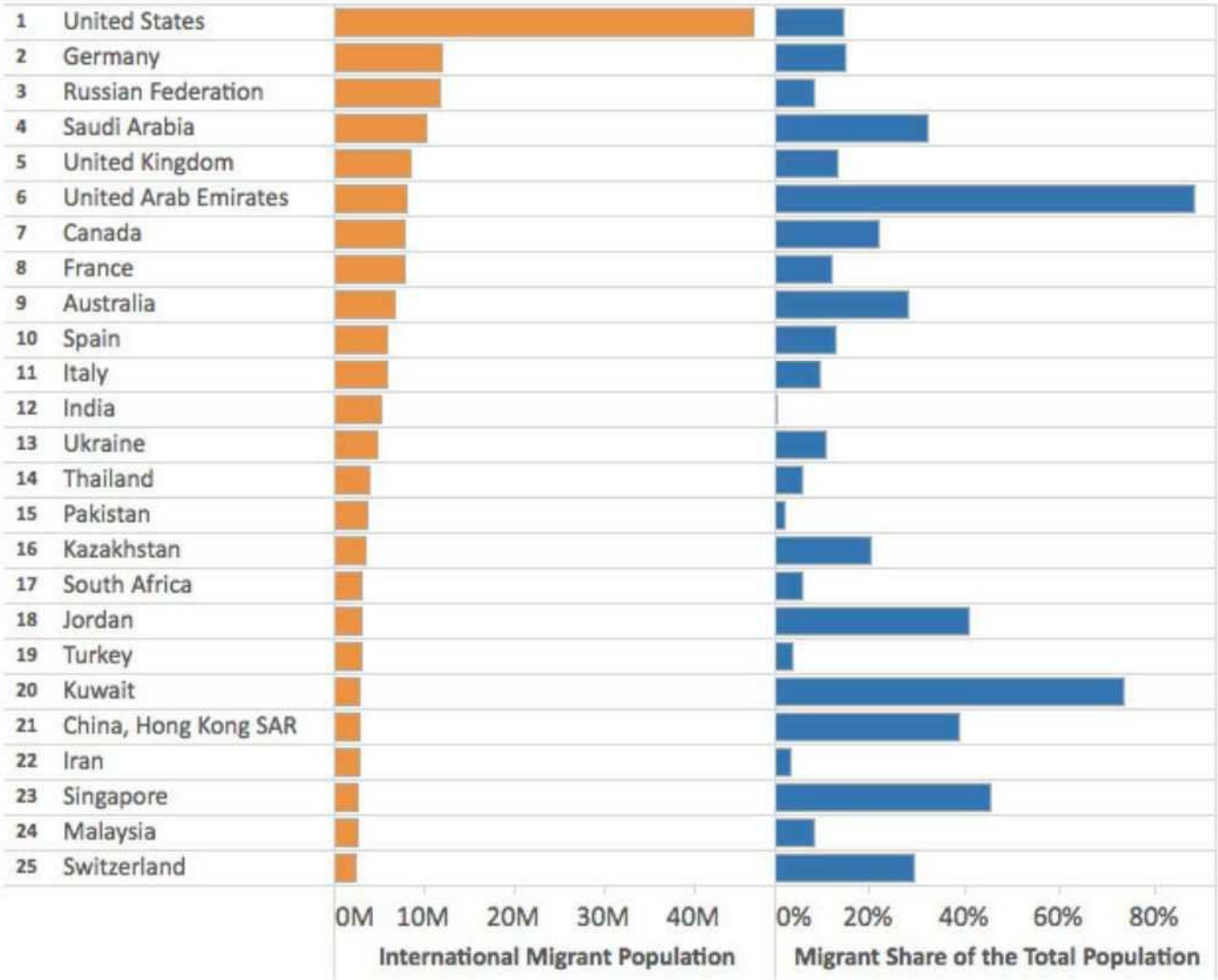
- International capital flows are more volatile than merchandise trade (and they may magnify economic instability).
- Int. capital flows have increased rapidly after the 1990s, collapsed in the great recession, and then slightly recovered.
- Foreign direct investment has increased almost like merchandise trade

Labor Mobility

- Labor mobility for economic reasons is a subset of migration.
- It has been a widespread phenomenon, and it dates back in history of human species.
- This is a complex phenomenon.

Figure 8: Top 25 Destination Countries for International Migration, 2015

Note: M = million
Source: Migration Policy Institute, n.d.



Comments on the chart

- The US is the biggest host country in absolute terms.
- West Europe, Russia, and Australia follow.
- Oil exporting countries are the biggest host countries in % of the population.

End of the first lecture
of
International Trade
M. Pugno