FACTORS IMPACTING THE DEMAND FOR TIMBER

Jean-Christophe Claudon

Timber by use

Charcoal

Pellets

Firewood

WOOD FOREST PRODUCTS ROUNDWOOD

Sawnwood

Panels and agglomerates

Paper

Wood fuel (energy)

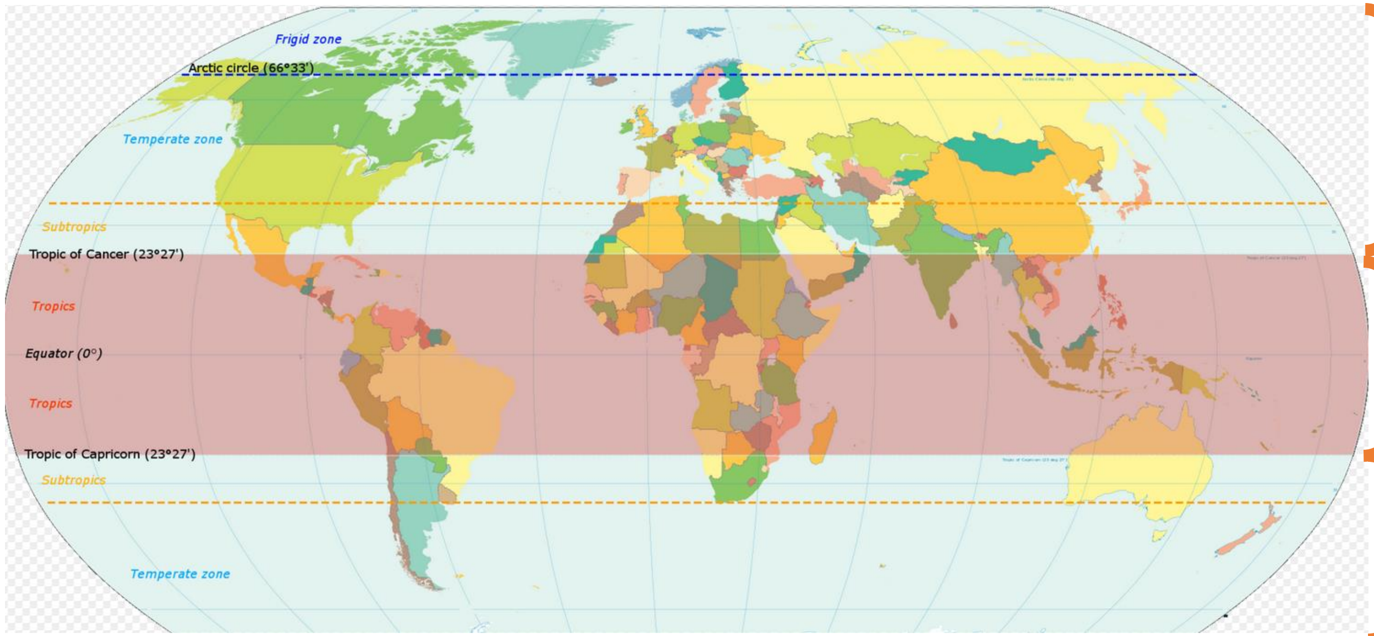
50% WORLDWIDE
90% AFRICA
30% JAPAN

Industrial Roudwood

50% WORLDWIDE
10% AFRICA
70% JAPAN

Wood production

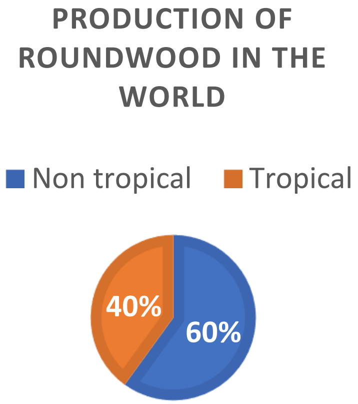
World TOTAL:
4 billion m3 of roundwood is produced
- 1.3 billion m3 coniferous (32%)
- 2.7 billion m3 non-coniferous (67.5%)
  - of which 1.6 billion m3 trop. (40%)

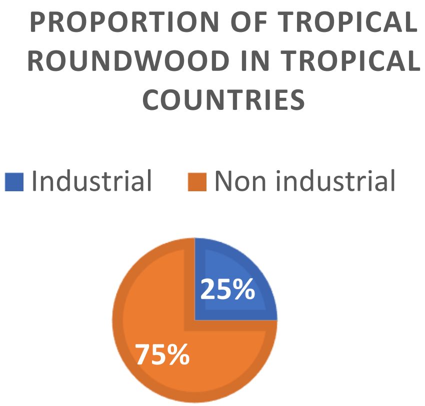


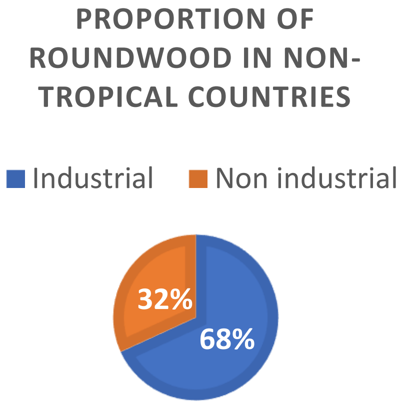
2 billion m3 of roundwood
- 1 billion m3 coniferous (50%)
- 1 billion m3 non-coniferous (50%)

1.8 billion m3 of roundwood
- 200 million m3 coniferous (11%)
- 1.6 billion m3 tropical (89%)

200 million m3 of roundwood
- 100 million m3 coniferous (50%)
- 100 million m3 non-coniferous (50%)







The biggest consumers of tropical timber are the tropical countries themselves as they mainly consume it for energy purposes.

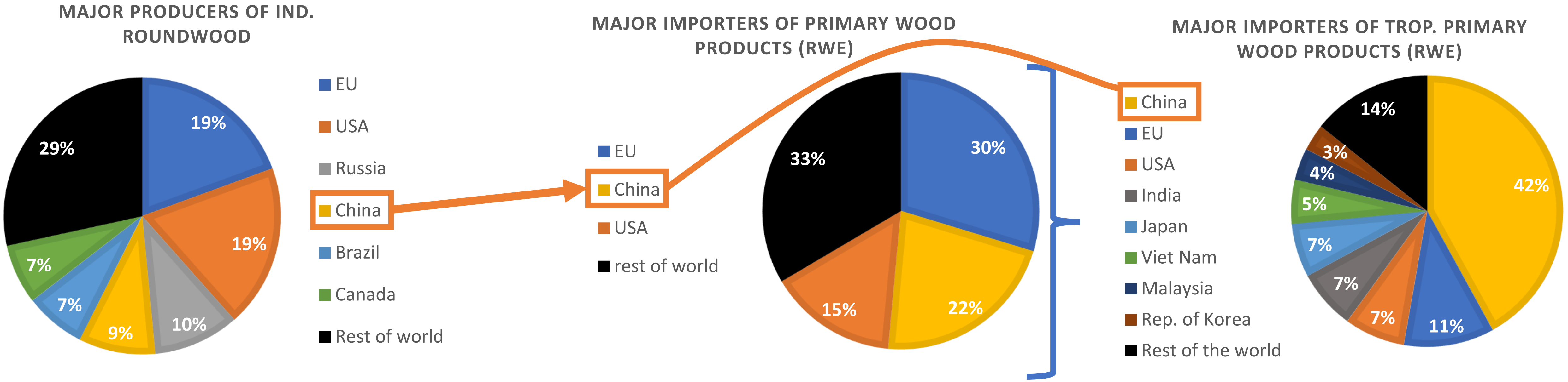
Roughly 1/3 of the industrial tropical timber is exported under logs, sawnwood, plywood or paper form.

Ind. Trop roundwood consumption and trade by regions

	ASIA-PACIFIC	AFRICA	LAC
Production	220 million	56 million	39.2 million
Exports	5.2 million	3.6 million	3.6 million
Exports outside the region	0.3 million	3.2 million	2.8 million
Imports from outside the region	6.0 million	0.2 million	0.03 million
~Consumption	225.7 million	53 million	36.43 million

Asia-Pacific remains a region dependent from the other region to meet its demand for primary wood products. The deficit comes from China which does not produce enough timber to “feed” its demand.

Biggest producers and importers of Ind. roundwood



Global demand for timber is concentrated on a few countries. International trade and demand are therefore and before all dependent on the economic situation of these consumer countries.

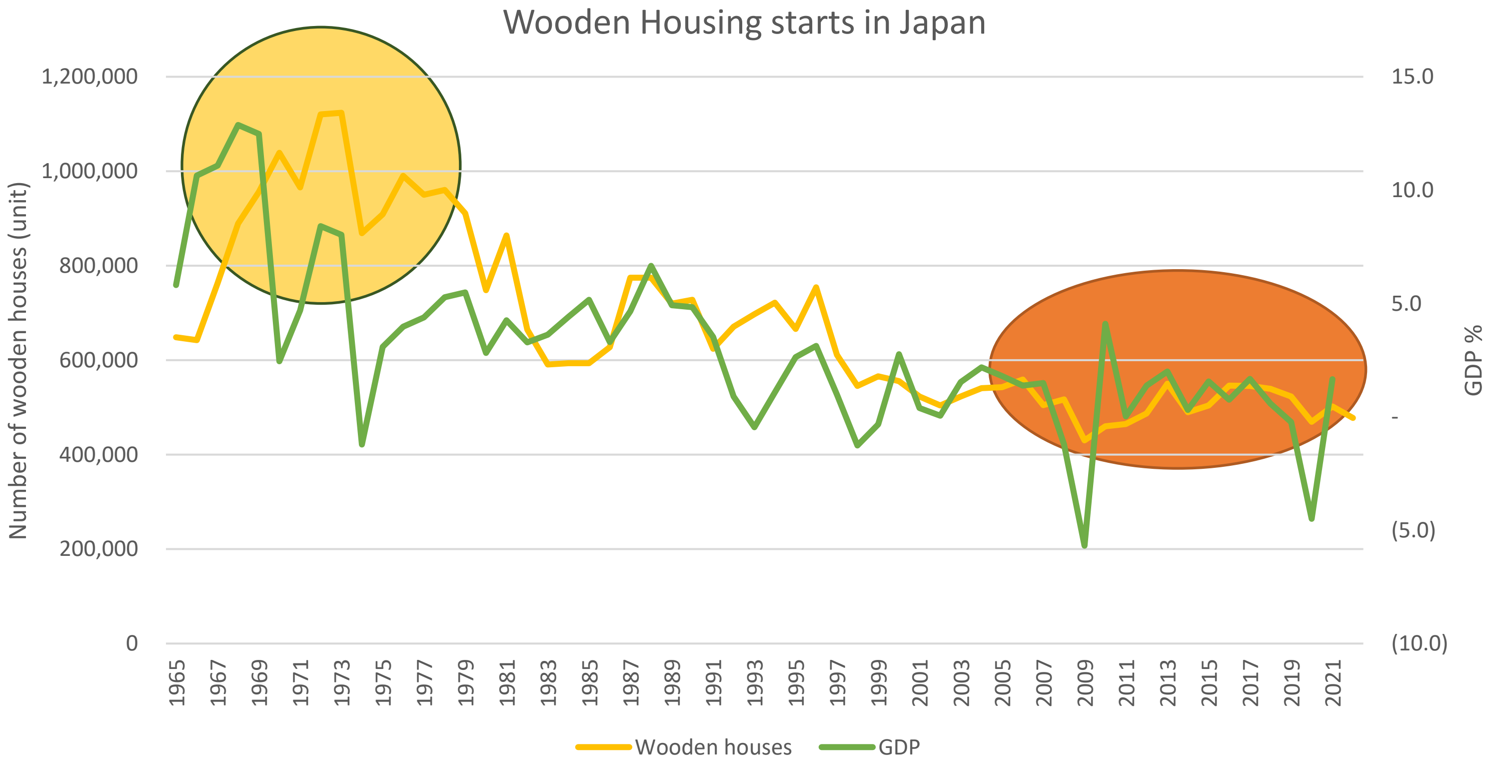
Case: China. Major prod of roundwood but still imports more than 22% of the timber in the world. Dependence is even stronger on tropical primary products.

Factors impacting global wood demand

- Economic development, housing -> case of Japan, US and China
- Economic specialization and foreign investments-> Indonesia, China, Viet Nam
- Trade restrictions -> Viet Nam/US, China/US

Main driver for wood demand: housing

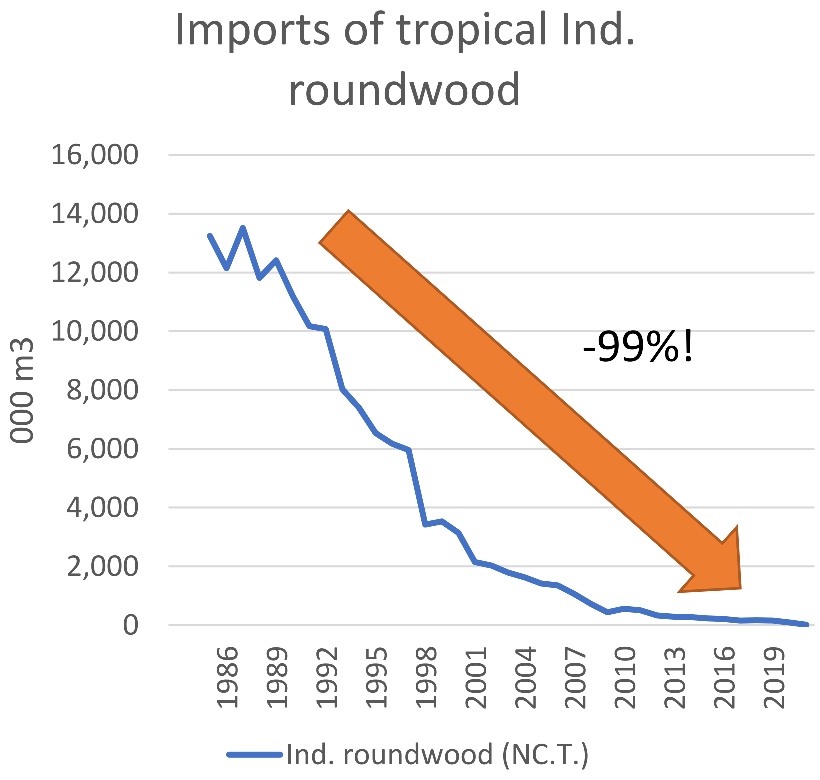
Demand for timber in Japan is closely linked to construction activity which consumes roughly 80% of industrial timber. The construction sector depends on GDP but also contributes to it. Usually the higher the GDP growth, the higher housing starts will be which will in turn contribute to a higher GDP.



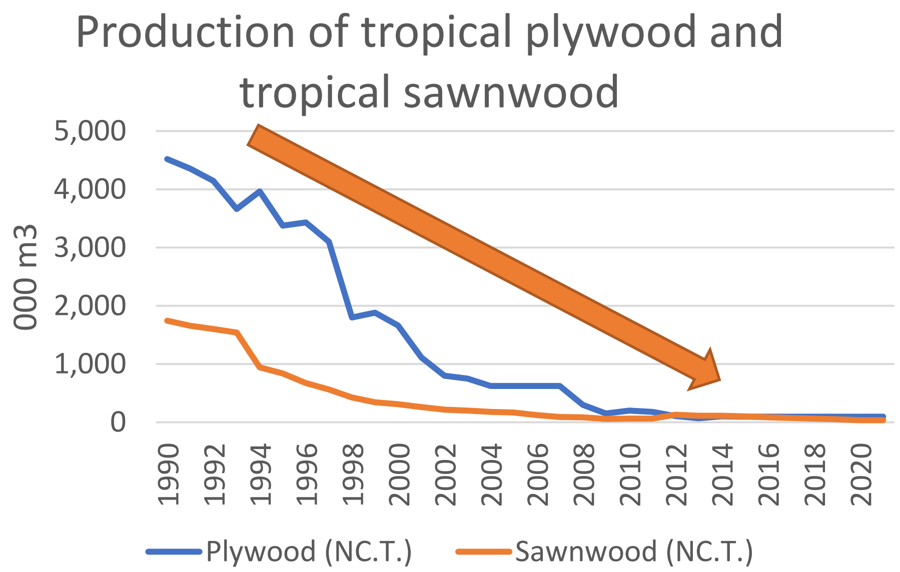
Japan economy boomed in the 60s-70s boosting the construction of wooden housing and in turn the demand for wood. There was a peak of timber demand in those years.

In contrast, Japan's economic growth has been flat over the last 30 years and therefore the construction of wooden houses has been relatively stable but wooden housing starts are now three times lower than during the 70s.

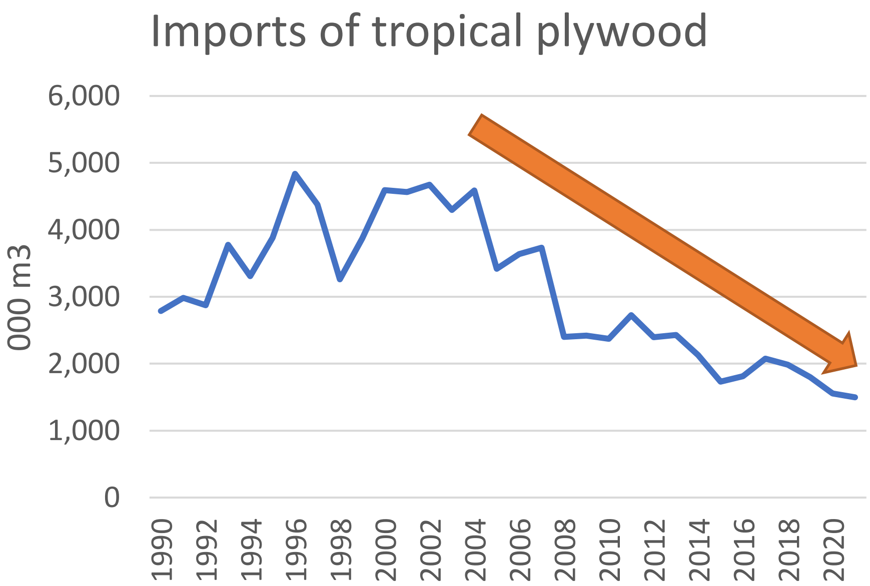
Japan demand for timber



In 2021, Japan imported just 13 000 m3 of trop. ind. roundwood, far less than what it imported in the 70s. In 30 years, the volume decreased by 99%

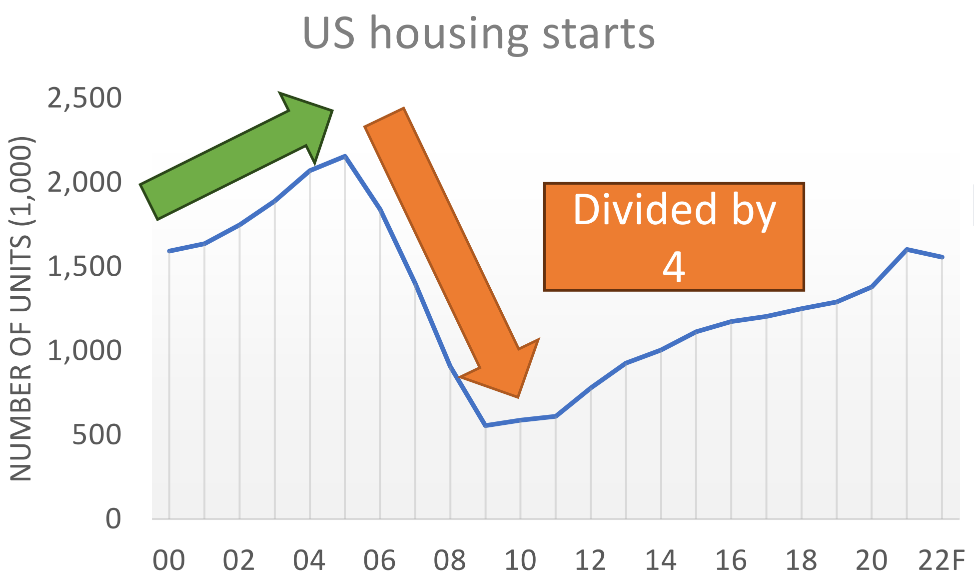


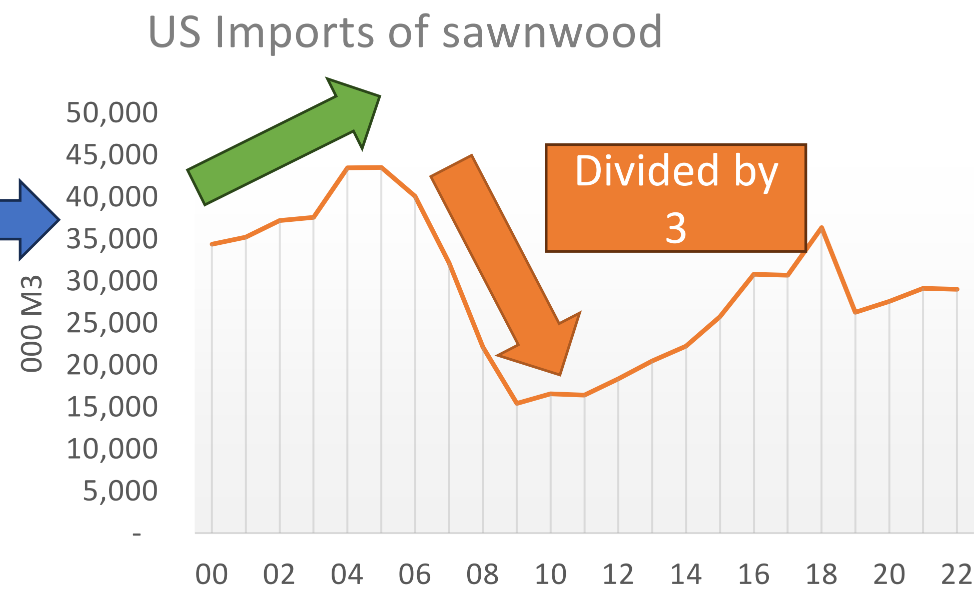
The fall in imports of trop. ind. roundwood necessarily generated a strong fall of the production of trop. sawnwood and trop. plywood (NO TROP. LOGS TO PROCESS).

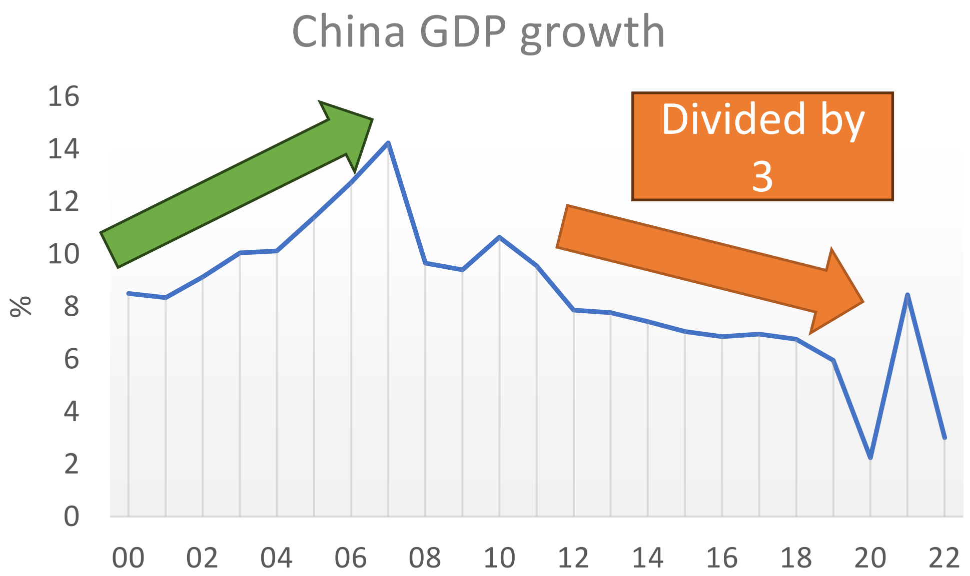


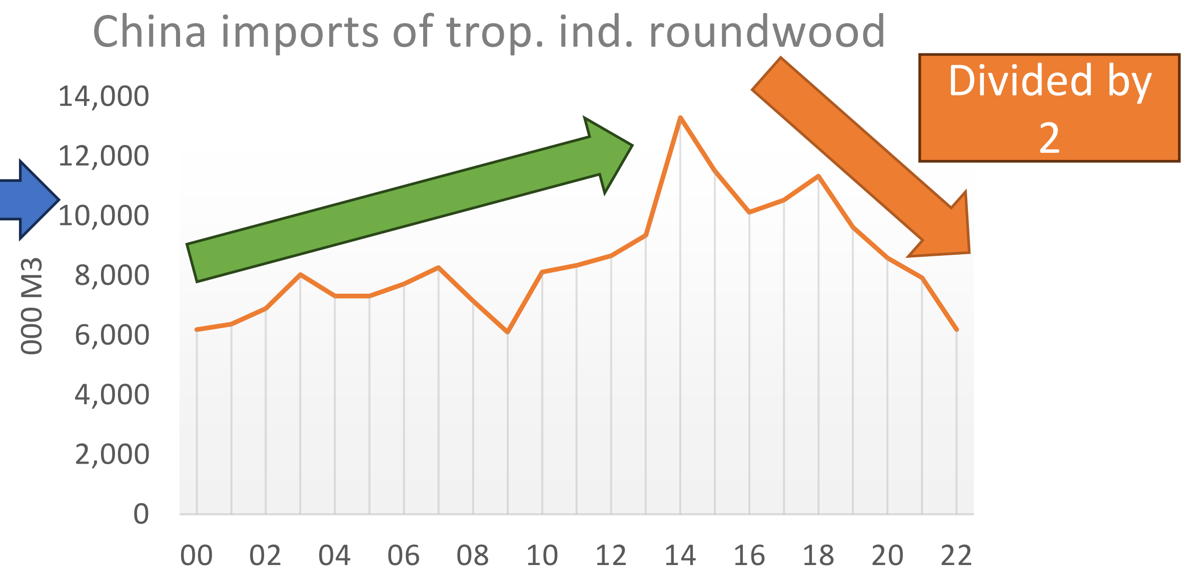
Imports of tropical plywood has also declined. Japan now imports a third of what it imported in 2000.

US/China demand for timber





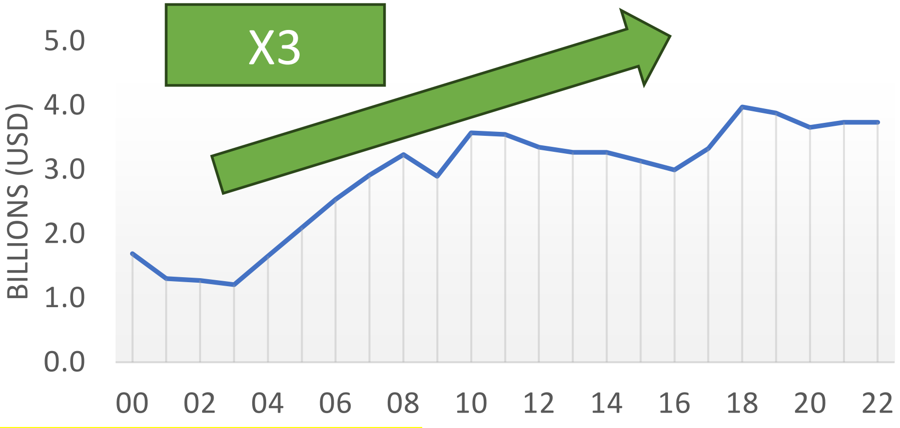




Specialization: Indonesian paper

Indonesia Wood pulp production

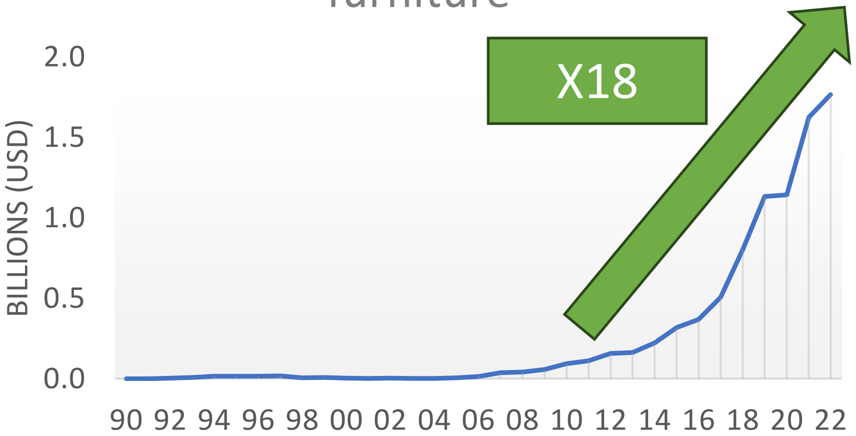
Indonesia exports of paper and paperboard



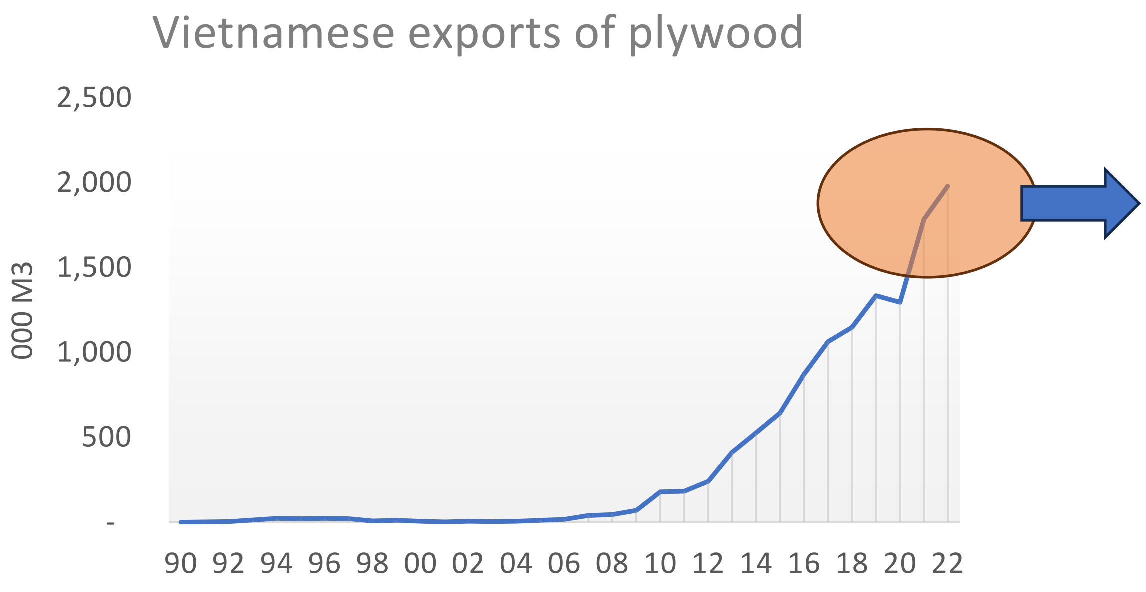
Specialization: Chinese/Vietnamese furniture

Chinese exports of wooden furniture

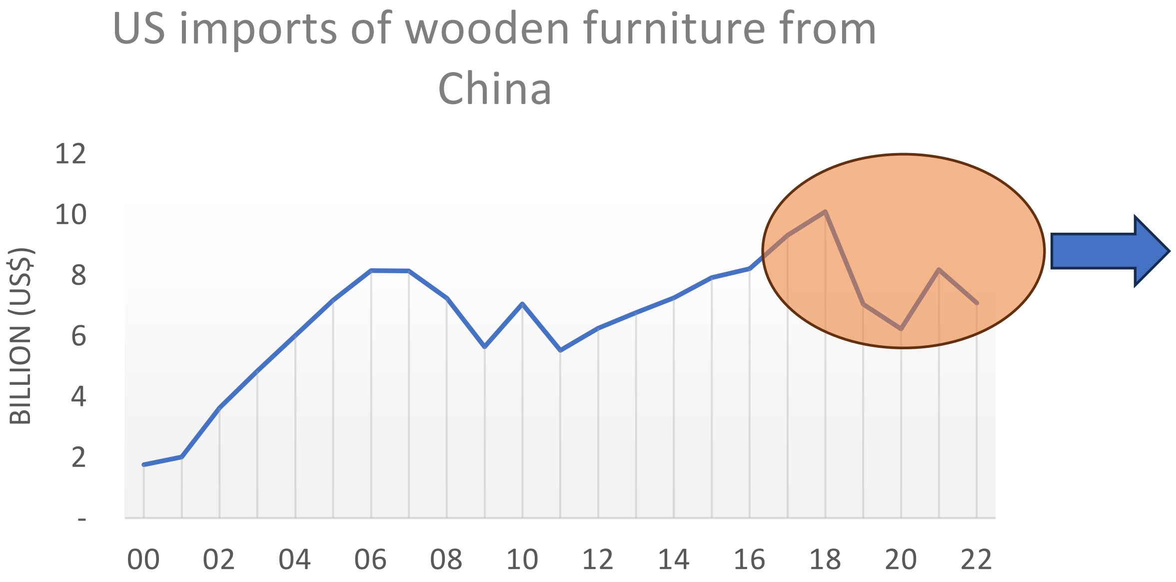
Vietnam exports of wooden furniture



Potential trade restrictions

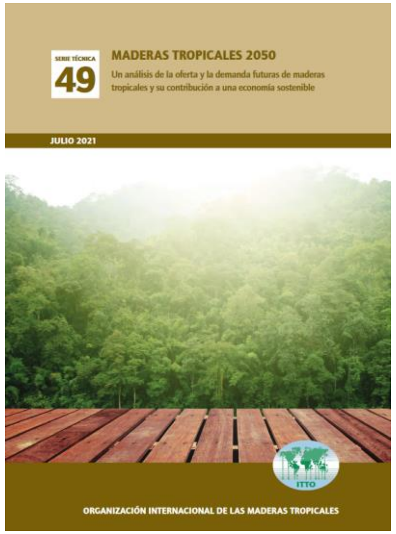


In 2020, the Republic of Korea imposed anti-dumping duties of 0.18 to 10.65 percent on plywood imported from Viet Nam for a period of five years, claiming damage to Korean producers. In July 2022, the U.S. Ministry of Trade announced a preliminary decision in the investigation of the origin of hardwood plywood products from Viet Nam, stating that if plywood products imported from Vietnam into the United States have cores using materials imported from China they will be subject to anti-dumping and anti-subsidy duties as applied to plywood from China.



The United States has been China's dominant market but exports to the United States plunged between 2018 and 2020, from a peak of $10.1 billion in 2018 to $6.2 billion in 2020. In 2019 and 2020, exports had been affected by retaliatory tariffs on Chinese furniture imports (among other products) imposed by the United States. The duties resulted in a continuing trend of relocation of some manufacturers, particularly foreign-owned enterprises operating in China, to Viet Nam.

Future demand for timber



Region	Production (m³, RWE)			
	IRW		Woodfuel	
	2015	2050	2015	2050
Sub-Saharan Africa	65 442 700	78 049 330	589 613 500	351 641 817
Latin America and Caribbean	226 641 900	282 664 100	262 105 900	240 440 300
Southeast Asia	136 945 700	173 205 698	154 202 200	126 730 200
Subtotal (tropical regions)	**429 030 300**	**533 919 128**	**1 005 921 600**	**718 812 317**
China	268 066 600	327 863 100	174 309 100	163 582 100
Europe	568 543 500	918 743 200	146 345 500	153 780 000
North America	511 471 000	786 943 500	47 322 800	49 573 600
India	46 842 600	97 331 200	303 968 200	236 986 700
Rest of South Asia	9 582 500	11 212 155	79 182 500	50 147 962
Rest of world	111 118 600	152 821 600	78 708 400	67 286 218
Total (world)	**1 944 655 100**	**2 828 833 883**	**1 835 758 100**	**1 440 168 897**

Industrial roundwood consumption, 2050

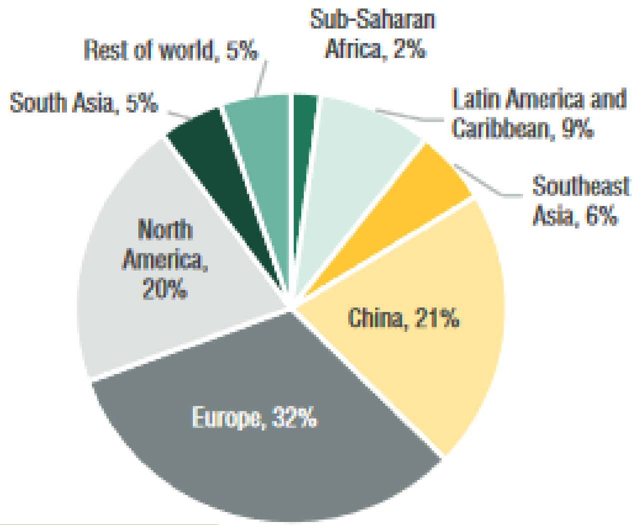


Figure 8: Per-capita consumption of industrial roundwood and woodfuel in 2015 and 2050, by selected world region

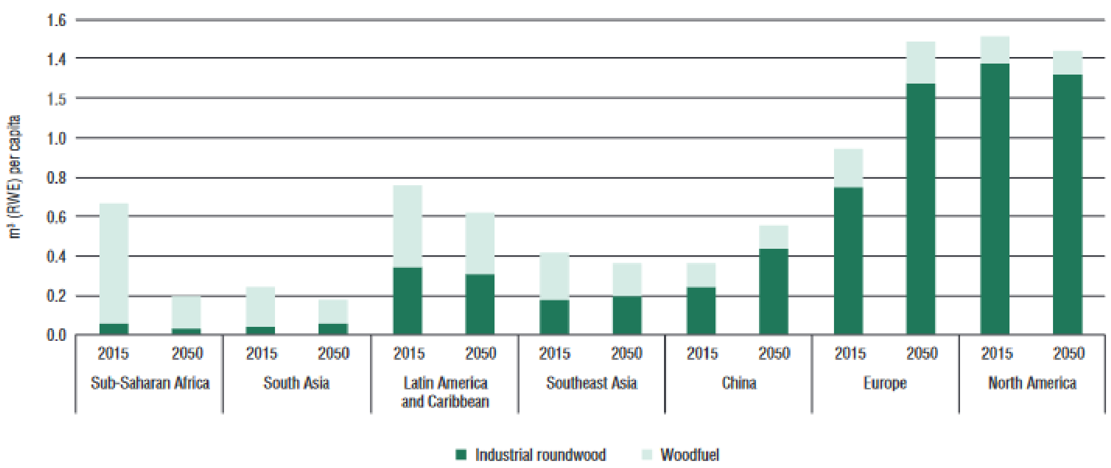


Figure 9: Trade balance of industrial roundwood in 2050, by selected world region