

Report

Timber trade flows and investments between China and six Voluntary Partnership Agreement signatory countries

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Abbreviations

AEO	African Economic Outlook
CAF	Chinese Academy of Forestry
CAR	The Central African Republic
CBRC	China Banking Regulatory Commission
EFI	European Forest Institute
EU	European Union
EUTR	European Union Timber Regulations
FDI	Foreign Direct Investment
FLEGT	Forest Law Enforcement, Governance and Trade
FV	Forest Venture Inc.
HS	Harmonized System
ICC	International Consulting Capital
IFF	Illicit Financial Flows
IFDI	Inward Foreign Direct Investment
IIED	International Institute for Environment and Development
ITTO	International Tropical Timber Organization
MofCOM	Ministry of Commerce (China)
OFDI	Outward Foreign Direct Investment
SAIC	State Administration for Industry and Commerce (China)
SFA	State Forestry Administration
TLAS	Timber Legality Assurance System
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
US	United States
VPA	Voluntary Partnership Agreement

Introduction

This report examines trade flows and investments between China and six Voluntary Partnership Agreement (VPA) signatory countries:

1. Cameroon
2. The Central African Republic (CAR)
3. Ghana
4. Liberia
5. The Republic of the Congo (Congo)
6. Indonesia

The report is unique in that it combines two perspectives: one is the view from China as an importer and investor, written by the Chinese Academy of Forestry (CAF); and the second is from the perspective of six VPA countries, written by the European Forest Institute (EFI). Both perspectives presented different information and this report is a synthesis of both them.

There are three main chapters:

1. Chapter 2 is on log and sawnwood trade between China and the VPA countries
2. Chapter 3 is on the effects of investments and industry development
3. Chapter 4 is on Chinese investments in the VPA countries' forest sectors

Chapter 5 is the conclusion, including recommendations to the public and private sectors in China on how better to address legality in forest product trade, and how to maintain healthy investments within the timber sectors of foreign countries. Each chapter contains a list of references used by EFI. The references used in the Chinese report appear in Chapter 6.

An annex in Chapter 7 provides detailed graphs and some analysis of the trade of species and other information developed during the course of this study.

Note that the text and graphics from EFI are designated as [EFI report]. Text and graphics from CAF are designated as [CAF report].

The European Union (EU) Forest Law Enforcement, Governance and Trade (FLEGT) Asia Regional Support Programme contracted this report under the work item of Engagement in FLEGT dialogue with China, contract 03/5133/2015.

1. Roundwood and sawnwood trade between China and the VPA countries

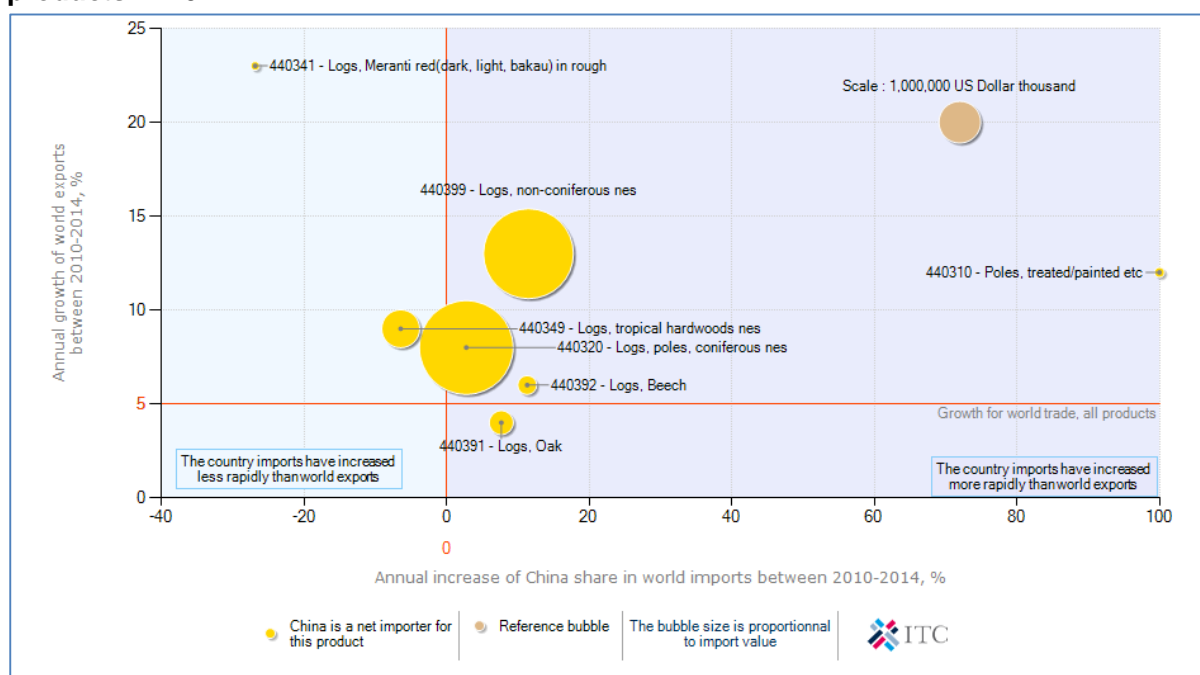
Introduction and overview

Roundwood

Global perspective

China is a net importer of roundwood commodities, the largest being the Harmonized System (HS) code 440320 for logs, poles, coniferous not elsewhere specified (nes) (Figure 1) (see also Annex Figure 21) and HS 440399 logs, non-coniferous nes (see also Annex Figure 24). China's imports have been increasing more rapidly than world exports for all but one of the roundwood commodities, adding to the pressure on the supply from increasing global demand. The imports of only HS 440349 logs, tropical hardwoods nes, has been increasing less rapidly than world exports.

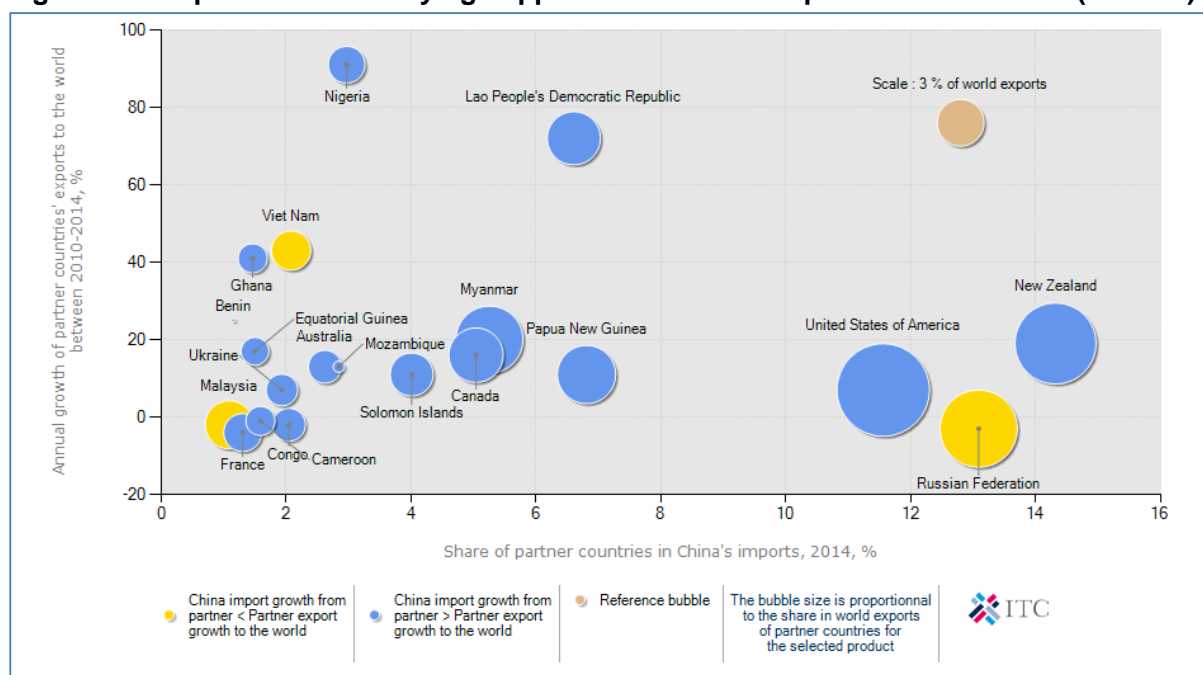
Figure 1. Growth of China's demand for and the international supply of roundwood products in 2014



Source: International Trade Centre (ITC) based on COMTRADE, 2015

Most of China's roundwood imports in 2014 came from New Zealand, Russia and the United States (US), as shown in Figure 2. Figure 2 also shows that the growth in China's imports from most of its significant partner countries was larger than the growth of those countries' exports to the world, which indicates altered pressure on the market, the resource base or both.

Figure 2. Prospects for diversifying suppliers for China's imports of roundwood (HS4403)

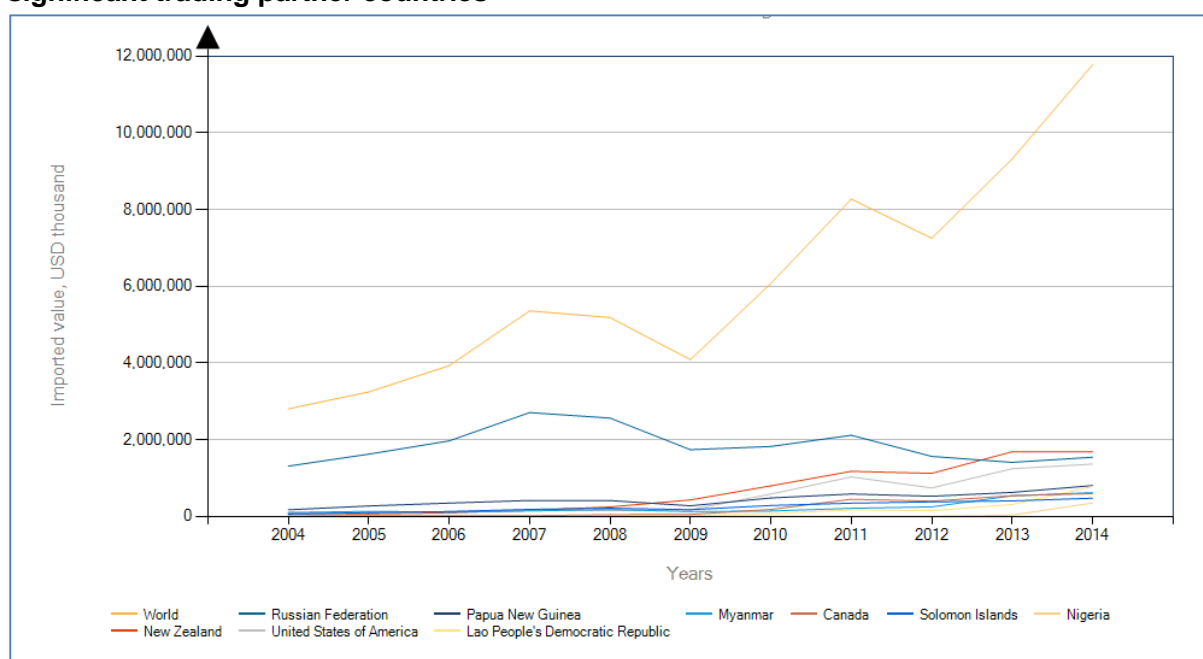


Source: ITC based on COMTRADE, 2015

Figure 3 shows China's 10 most significant countries for importing roundwood. The graph illustrates the steep increase in the value of roundwood imported by China from the world. The value of the trade went up by slightly more than USD 9 billion from 2004 to 2014. VPA countries are not among this top 10 list.

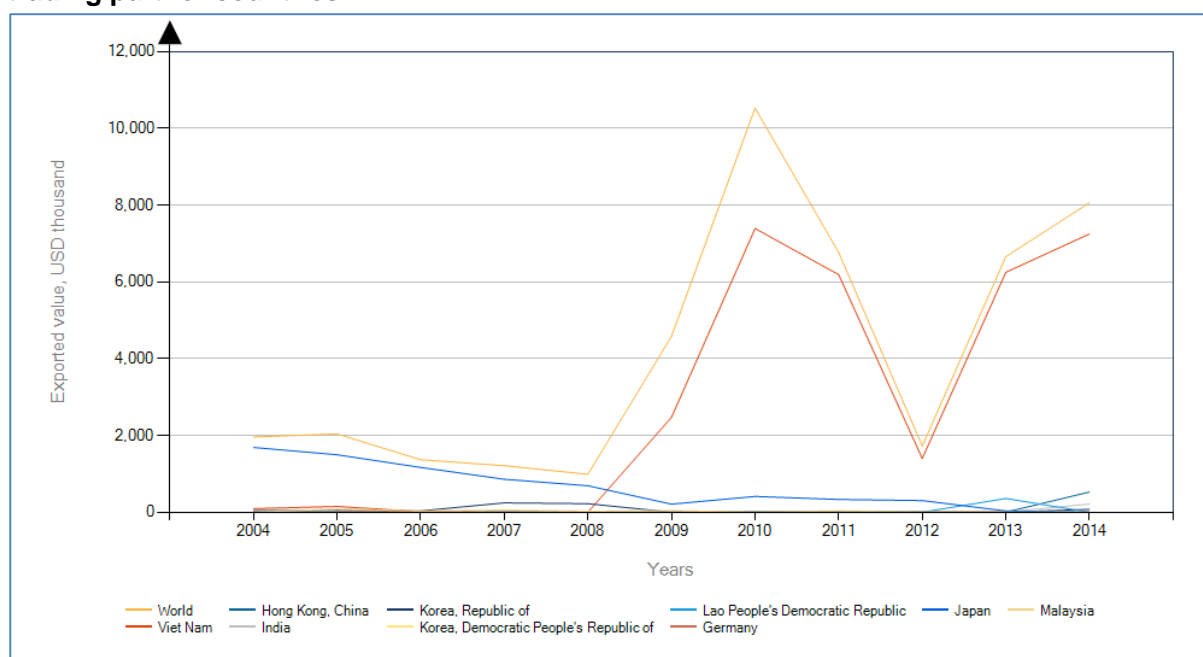
China's exports of roundwood are insignificant when compared to its imports. Figure 4 shows that the global value of exports in 2014 was more than 1 000 times smaller than the global value imports, with the main (and volatile) trading partner being neighbouring Vietnam.

Figure 3. China's imports of roundwood (HS4403) from the world, and from its 10 most significant trading partner countries



Source: ITC based on COMTRADE, 2015

Figure 4. China's exports of roundwood (HS4403) to the world and its 10 most significant trading partner countries

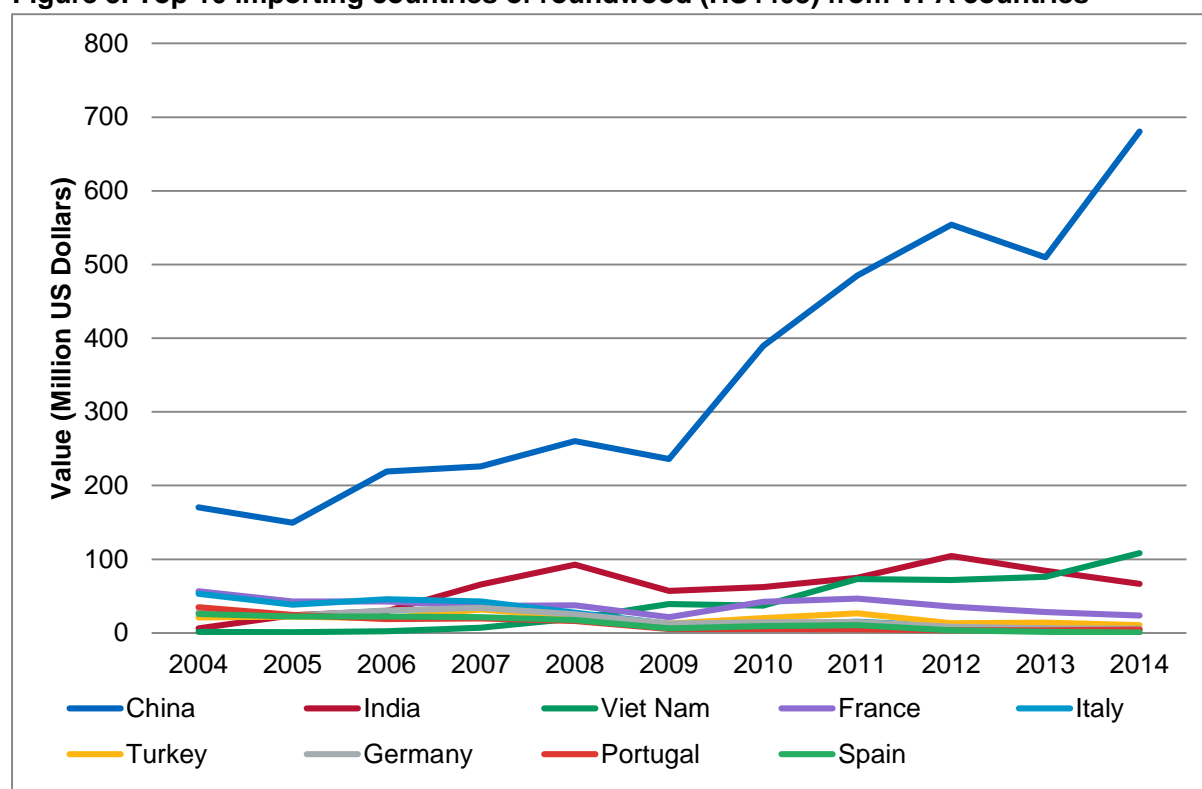


Source: ITC based on COMTRADE, 2015

VPA country focus

Figure 5 shows the top 10 countries that import roundwood from the six VPA countries. In line with the increase in global demand for roundwood, China has more than tripled its value of imports. India and France, the second and third most important importers of roundwood from the VPA countries, have much more modest and stable trade relations, which are valued respectively at less than USD 100 million and less than USD 50 million.

Figure 5. Top 10 importing countries of roundwood (HS4403) from VPA countries

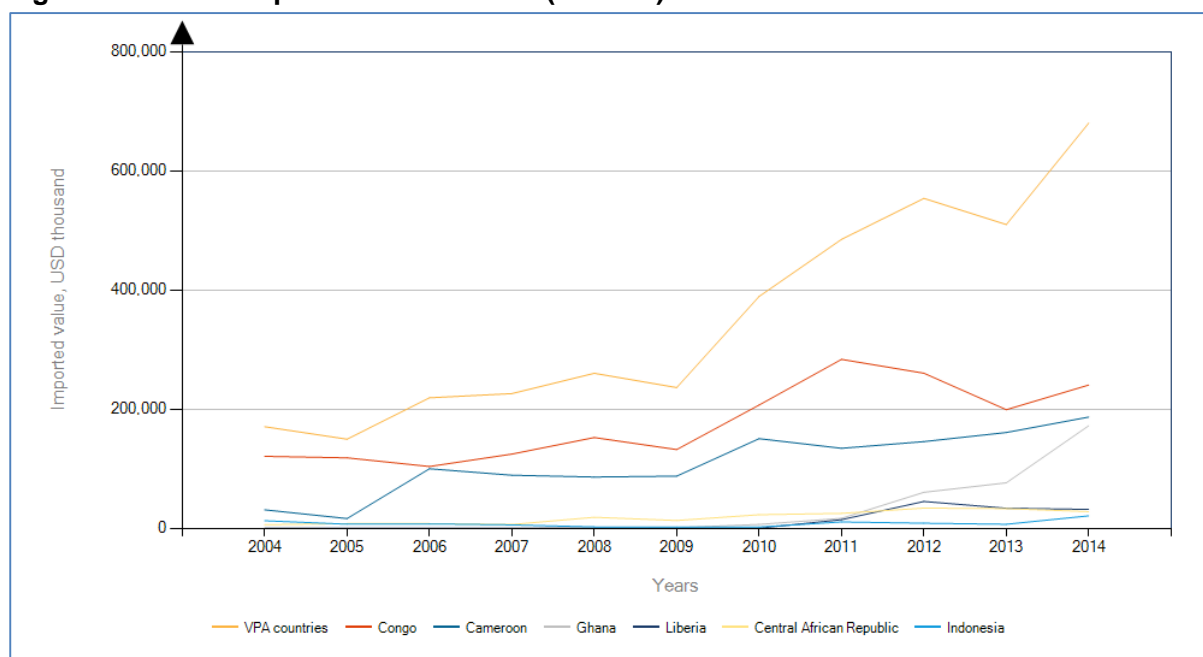


Source: ITC based on COMTRADE, 2015

The top (yellow) lines in Figure 5 and Figure 6 both represent the same total imports by China of roundwood from VPA countries. Figure 6 shows that Congo, Ghana and Cameroon are the most significant suppliers, with trade from Ghana skyrocketing from close to nothing in 2010 to just under USD 200 million in 2014.

Congo is the most important source of “Logs, tropical hardwoods nes” (HS code 440349) (see Annex Figure 21) while Ghana and Cameroon are the most important sources of “Logs, non-coniferous nes” (HS code 440399) (see Annex Figure 24).

Figure 6. China's imports of roundwood (HS4403) from VPA countries

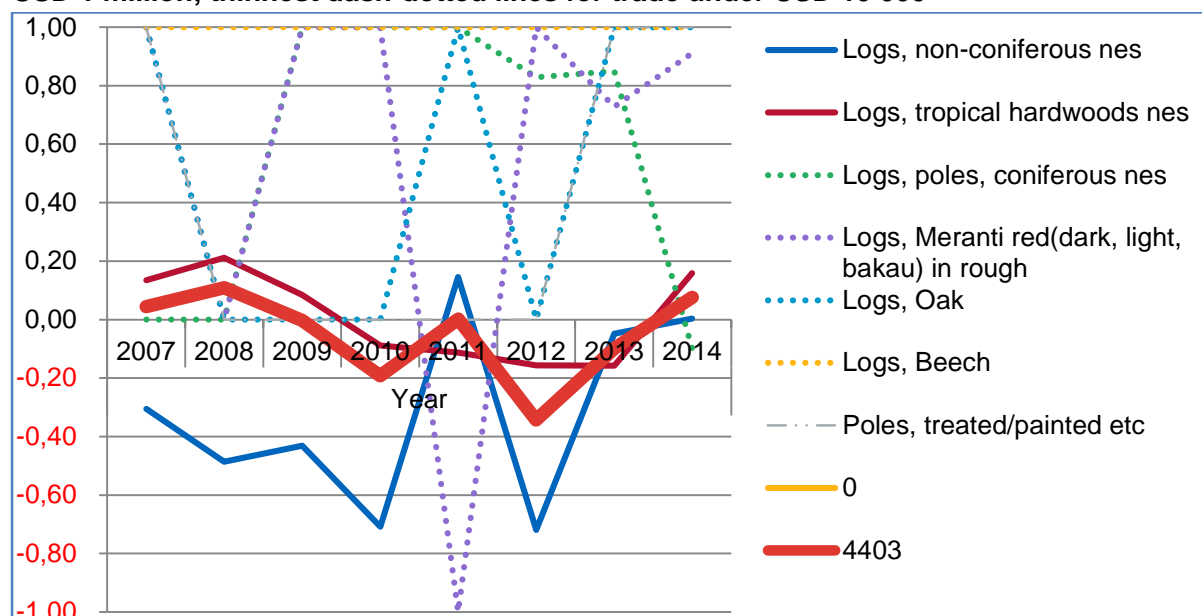


Source: ITC based on COMTRADE, 2015

Discrepancy analysis

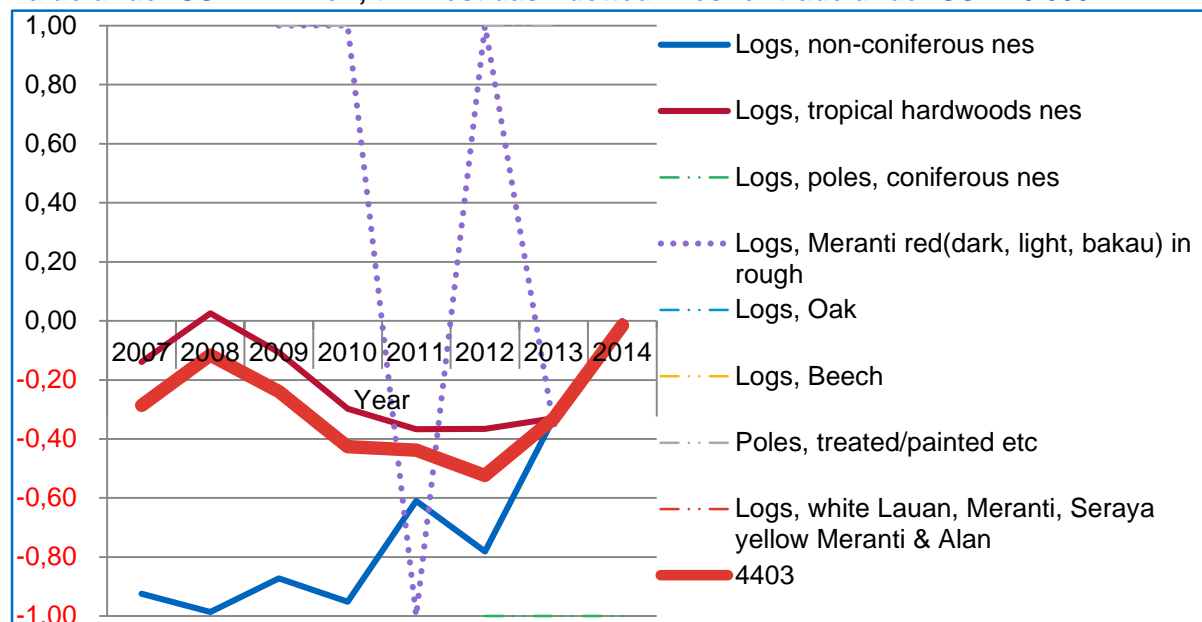
There is a discrepancy in reporting differences between importers and exporters on the trade of roundwood (HS 4403) and for the commodities at the 6-digit HS code level. A discrepancy index indicates the magnitude of the differences (Figure 7). The closer the index value is to zero, the closer the match is between importers' and exporters' reports on the same trade flow. Figure 7 demonstrates that reporting on the trade of roundwood between VPA countries and the rest of the world are relatively comparable. The index fluctuates around zero. However, when comparing reporting on the trade between China and the VPA countries (Figure 8), VPA country export reports are consistently lower than the imports that China reports from these same countries. Between 2007 and 2014, VPA countries reported roundwood trade for only 57 % of the value as China reports imports from those countries. Figures 40–46 in the annex also show discrepancies between China's import reports for roundwood and sawnwood versus the VPA countries reports for exports to China. Figures 45 and 46 show the discrepancies between Indonesia's reports of imports of sawnwood from China versus China's reports of exports to Indonesia.

Figure 7. Reporting differences on the trade of roundwood (HS 4403) between global importers and VPA country exporters: $[\text{exports} - \text{imports}] / [\text{exports} + \text{imports}]$; thick red line for the total trade value; full lines for 2014 trade value over USD 10 million; dashed lines for 2014 value between USD 1 and 10 million; dotted lines for 2014 trade value under USD 1 million; thinnest dash-dotted lines for trade under USD 10 000



Source: ITC based on COMTRADE, 2015

Figure 8. Reporting differences on the trade of roundwood (HS 4403) between China's imports and exports from VPA countries: $[\text{exports} - \text{imports}] / [\text{exports} + \text{imports}]$; thick red line for the total trade value; full lines for 2014 trade value over USD 10 million; dashed lines for 2014 value between USD 1 and 10 million; dotted lines for 2014 trade value under USD 1 million; thinnest dash-dotted lines for trade under USD 10 000



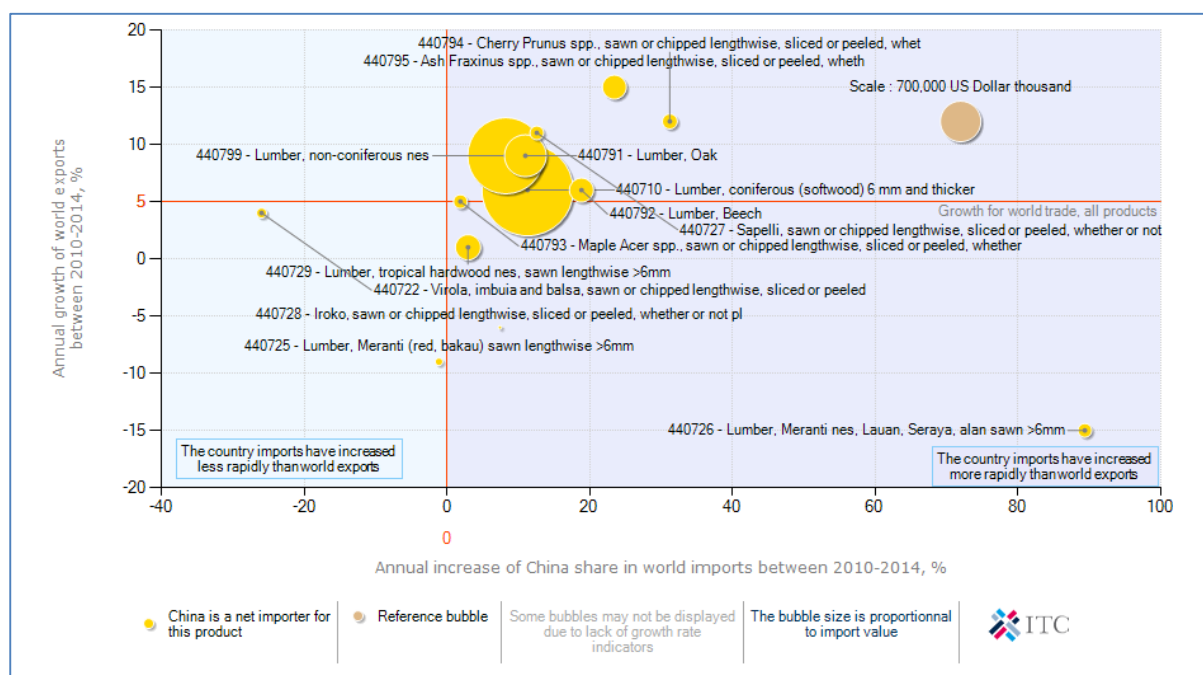
Source: ITC based on COMTRADE, 2015

Sawnwood

Global perspective

China is a net importer for all of the sawnwood products listed under HS code 4407. The country's imports have increased more rapidly (for some commodities it has more than doubled) than the world's exports over the five-year period between 2010 and 2014 (Figure 9). The largest sawnwood commodity (in value) is "Lumber, coniferous (softwood) 6 mm and thicker" (HS code 440710). The second most important is "Lumber, non-coniferous nes" (HS code 440799), followed by "Lumber, oak" (440791).

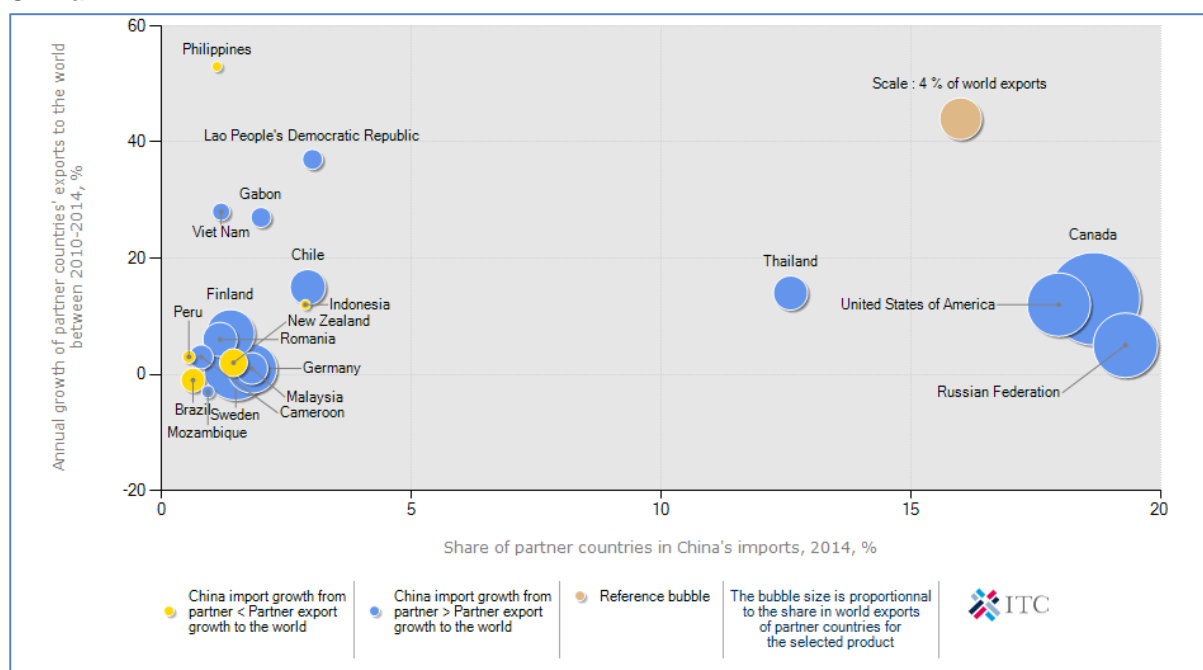
Figure 9. Growth of China's demand and the international supply for Sawnwood products in 2014



Source: ITC based on COMTRADE, 2015

China's import growth for sawnwood is also larger than the partner countries' export growth to the world. The most significant countries that China imported from (in 2014) were Russia, Canada and the US, each with approximately 18 % of the trade value, followed by Thailand from which China imports about 13 % (in value) of its sawnwood. Figure 10 suggests that China could increase its imports from countries like Brazil and New Zealand, the latter of which already supplies China with significant quantities of roundwood.

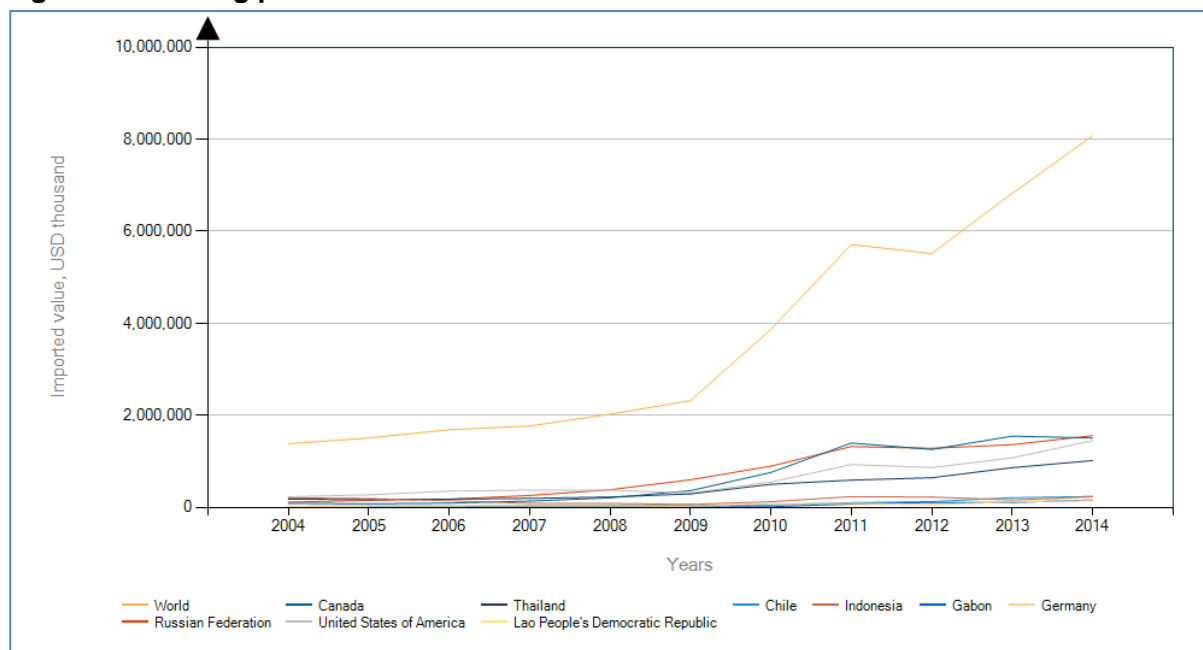
Figure 10. Prospects for diversifying the international suppliers of sawnwood (HS4407) to China



Source: ITC based on COMTRADE, 2015

Figure 11 illustrates China's near four-fold increase in the value of global imports of sawnwood since 2009, up to a total value of USD 8 billion. Currently, the four lead suppliers are also the main contributors to the growth of sawnwood products imports. Of the six VPA countries in this study, only Indonesia ranks in the top 10 import sources.

Figure 11. China's imports of sawnwood (HS4407) from the world and from the 10 most significant trading partner countries

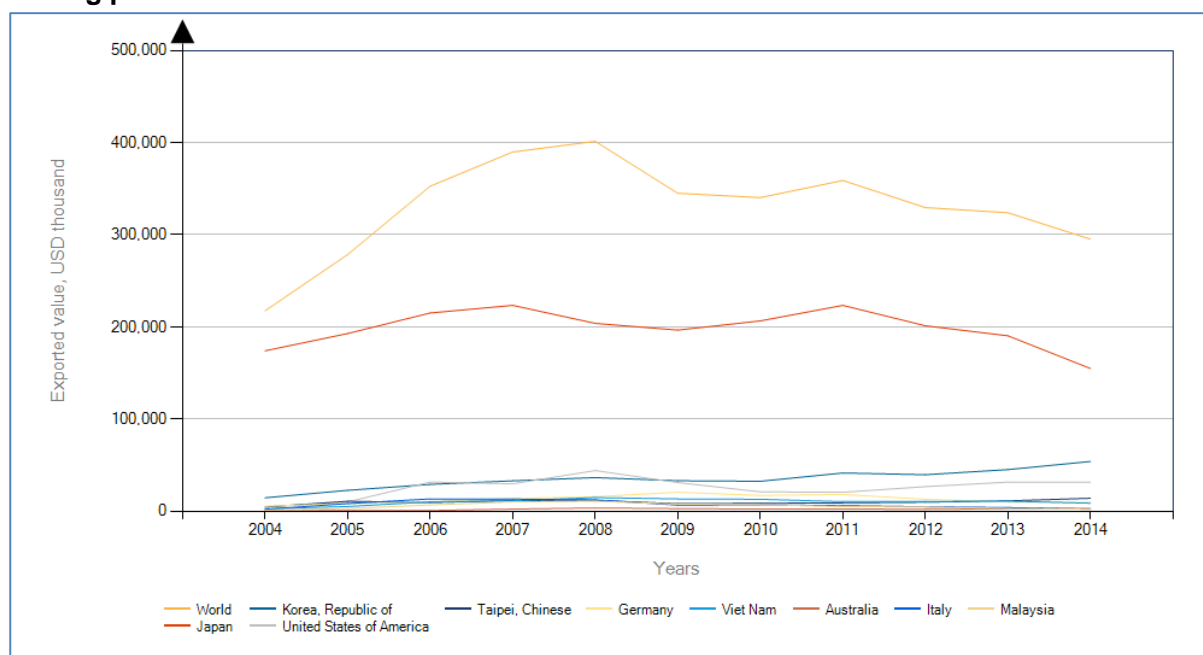


Source: ITC based on COMTRADE, 2015

Figure 12 shows China's global exports of sawnwood. The trade increased until the global economic and financial crisis in 2008, and has been declining ever since. In 2014, the total export value was about USD 300 million, which is just less than 4 % of the value of China's total

imports. The most important export destination is Japan (around USD 150 million), followed by Korea (approximately USD 60 million) and the US (approximately USD 40 million).

Figure 12. China's global exports of sawnwood (HS4407) and the 10 most significant trading partner countries



Source: ITC based on COMTRADE, 2015

VPA country focus

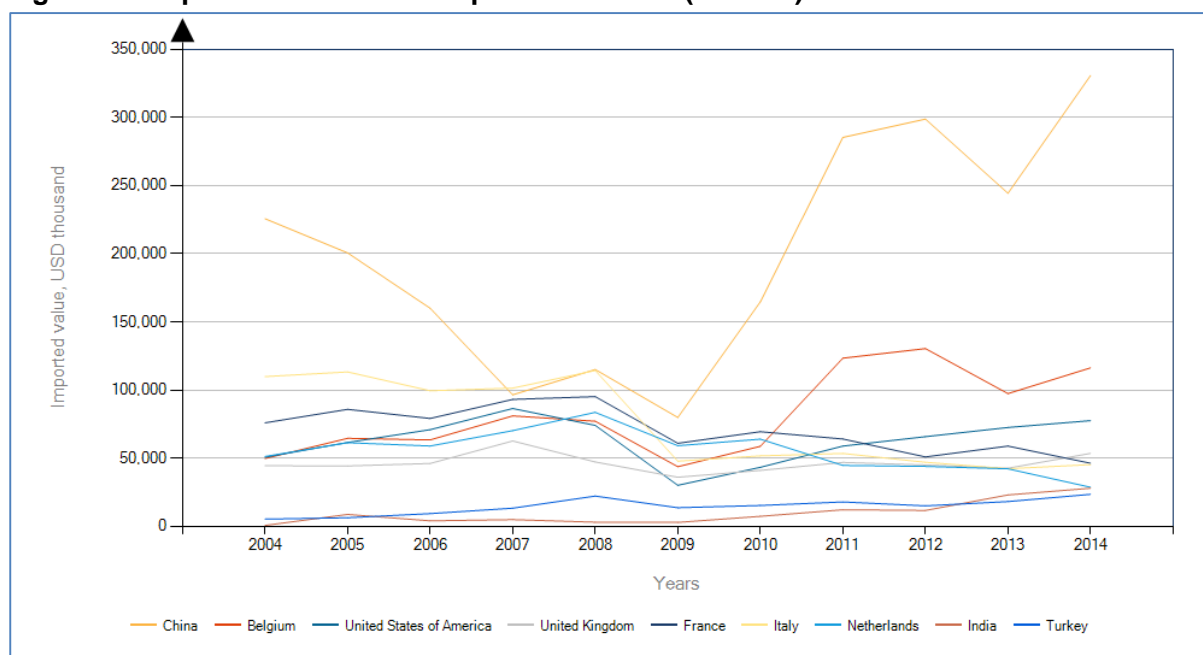
The top (yellow) lines in Figure 13 and Figure 14 display the same total value of China's imports of sawnwood from the six VPA countries. China's imports of sawnwood from VPA countries (for more than USD 330 million) are three times the value of imports by Belgium, which is the next largest importer. Five of the top 10 importers are EU Member States. China has become the most significant trade partner for the sawnwood business in VPA countries, however, the total trade value represents only a fraction (just over 4 %) of the total sawnwood imports by China.

Indonesia is the biggest source of sawnwood, for a value of approximately USD 240 million, which is nearly four times larger than that of the second most important source amongst VPA countries, Cameroon at approximately USD 60 million.

When looking at the more detailed 6-digit HS code commodities, it appears there are three main commodities, as explained below in order of decreasing trade value:

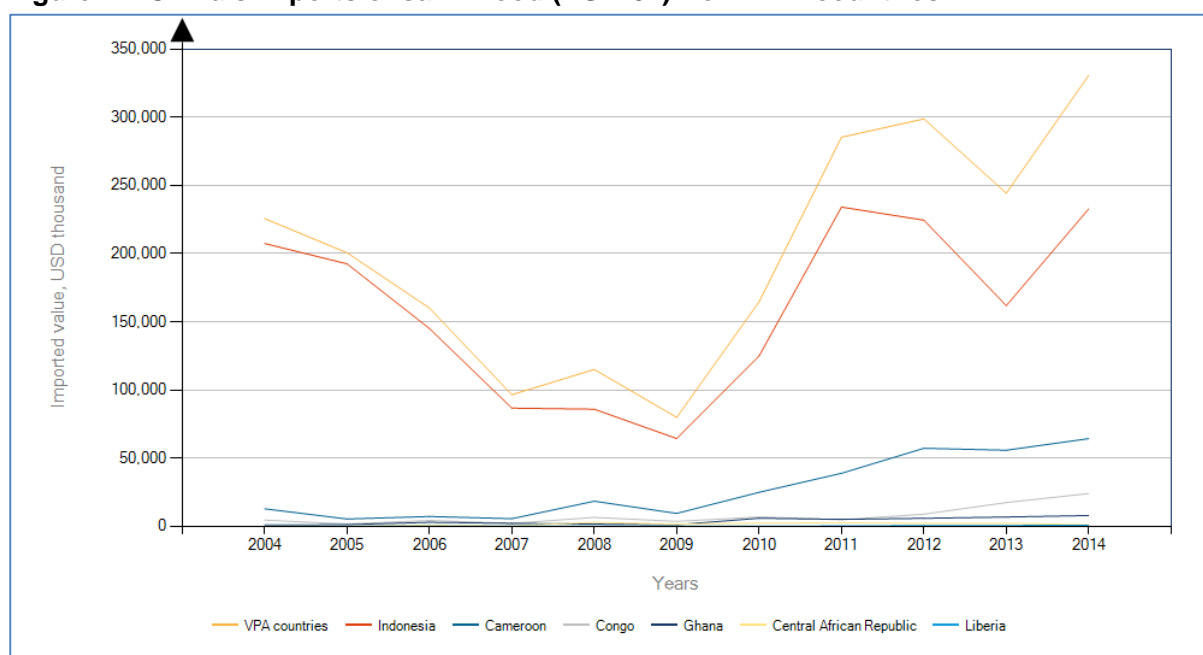
- For a total trading value of more than USD 170 million in 2014 (HS 440799) "Lumber, non-coniferous nes" is the leading sawnwood commodity, mostly from Indonesia (see Annex Figure 23).
- Indonesia is also by far the main source of (HS 440729) Lumber, tropical hardwood nes, sawn lengthwise >6mm. It is imported from VPA countries for a total trading value in 2014 of about USD 110 million (see Annex Figure 17).
- Cameroon and Congo are the main sources of (HS 440727) sapelli, sawn or chipped lengthwise, sliced or peeled (see Annex Figure 15), for a total value in 2014 of about USD 40 million.

Figure 13. Top 10 countries that import sawnwood (HS4407) from VPA countries



Source: ITC based on COMTRADE, 2015

Figure 14. China's imports of sawnwood (HS4407) from VPA countries

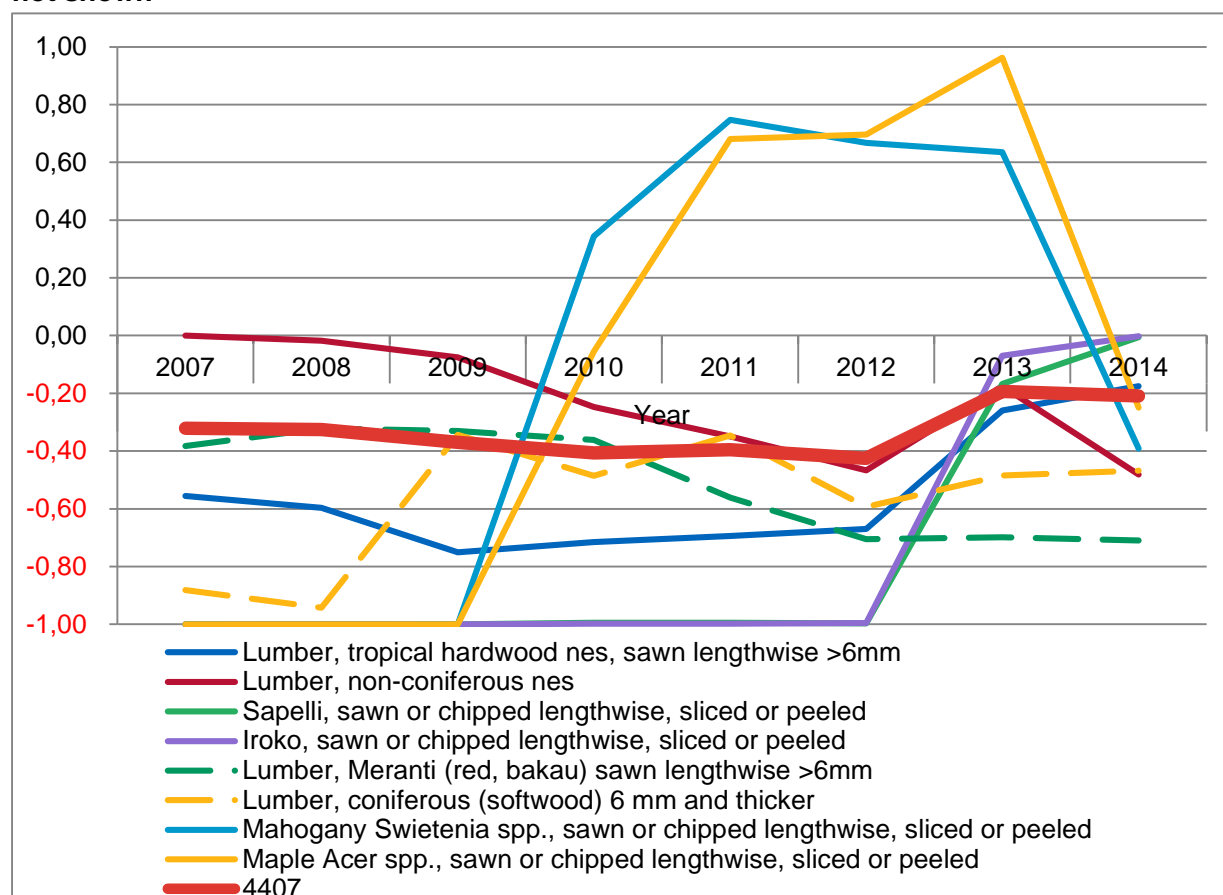


Source: ITC based on COMTRADE, 2015

Discrepancy analysis

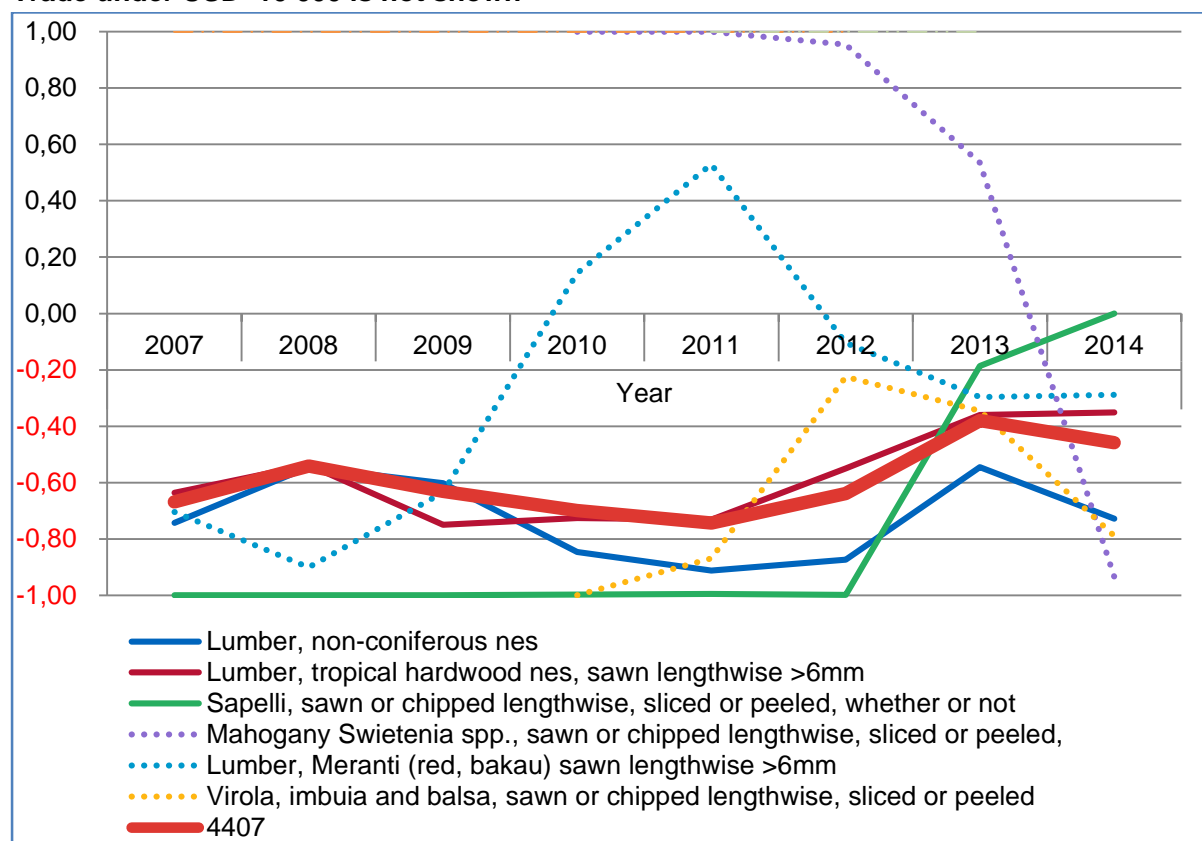
A comparison of sawnwood trade data reported by exporters and importers shows an overall under reporting by the exporting VPA countries. Figure 15 shows a discrepancy for reporting differences between world importers and VPA country exporters of sawnwood (HS 4407) and for commodities at the HS code 6-digit level. As Figure 15 illustrates, the discrepancy is significant, with China showing greater imports than VPA countries are showing as exports. Between 2007 and 2014, the exports that VPA countries reported amount to 27 % of the trade that China claims to have imported from these countries.

Figure 15. Reporting differences on the trade of sawnwood (HS 4407) between global importers and VPA country exporters: $[\text{exports} - \text{imports}] / [\text{exports} + \text{imports}]$; thick red line for the total trade value; full lines for 2014 trade value over USD 10 million; dashed lines for 2014 value between USD 1 and 10 million; and trade value under USD 1 million is not shown



Source: ITC based on COMTRADE, 2015

Figure 16. Reporting differences between China's imports of sawnwood (HS 4407) and exports from VPA countries: $[\text{exports} - \text{imports}] / [\text{exports} + \text{imports}]$; thick red line for the total trade value; full lines for 2014 trade value over USD 10 million; dashed lines for 2014 value between USD 1 and 10 million; dotted lines for 2014 trade value under USD 1 million. Trade under USD 10 000 is not shown



Source: ITC based on COMTRADE, 2015

VPA country-specific trade analysis

Indonesia

Logs

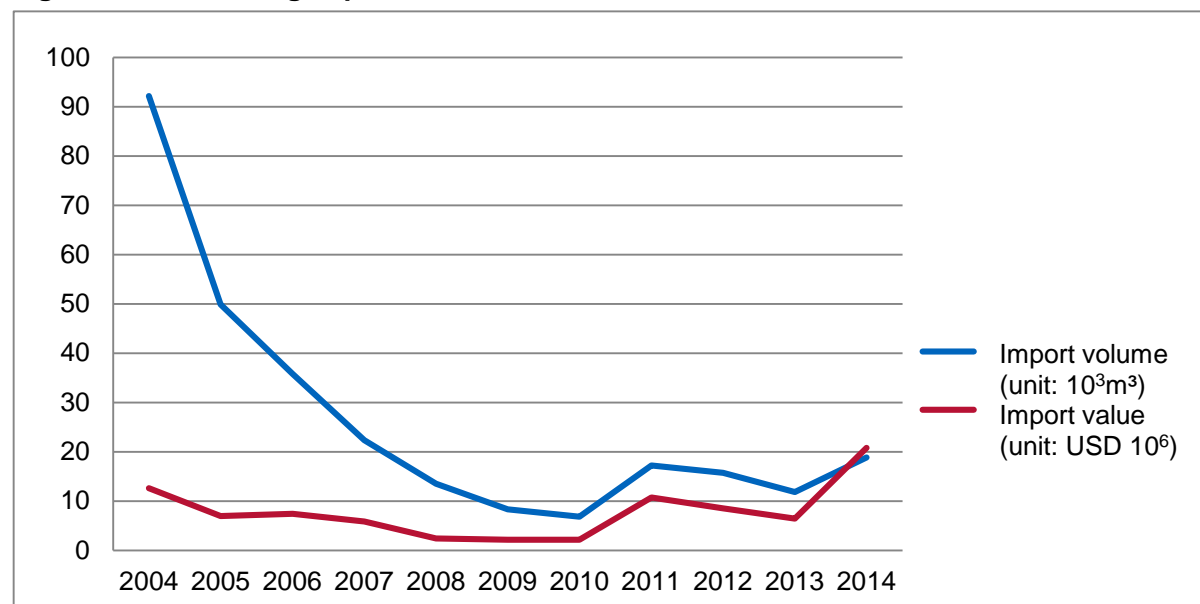
China's log imports from Indonesia declined dramatically over the period 2004–2014 (Figure 17). The volume of China's log imports fell from 100 000 m³ in 2004 to 7 000 m³ in 2010, a drop of more than 90 %. Imports then rebounded to 17 200 m³ in 2011, declined slightly in 2012 and 2013 respectively, increased slightly in 2014 and reached 18 900 m³.

The value of China's log imports followed the same pattern. The value dropped from 2004 reaching a new low of just over USD 2 million in 2009, rebounded to more than USD 10 million in 2011, fell slightly in 2012 and 2013 and then rebounded in 2014 to more than USD 20 million. From 2004 to 2014 the average unit price for imported logs climbed steeply, with a seven-fold increase in 2014 as compared to 2004.

According to the Harmonized Commodity Description and Coding System, logs (HS code: 4403) includes three categories: coniferous, tropical and other woods, among which, other woods include nanmu, camphor, rosewood and non-coniferous wood. By species of log, China's imports from Indonesia were predominantly other woods from 2004 to 2014. The volume of China's

imports of some tropical woods was more noticeable in certain years. For example, in 2004 imports of red meranti were approximately 36 000 m³. In 2004 and 2005 imports of *Koompassia* spp. were 30 000 m³ and 24 000 m³ respectively. In 2006 and 2007 imports of *Intsia* spp. were approximately 8 000 m³ and 7 000 m³ respectively. From 2004 imports of rosewood from Indonesia grew steadily, up 28 times by 2014.

Figure 17. China's log imports from Indonesia in volume and value from 2004 to 2014

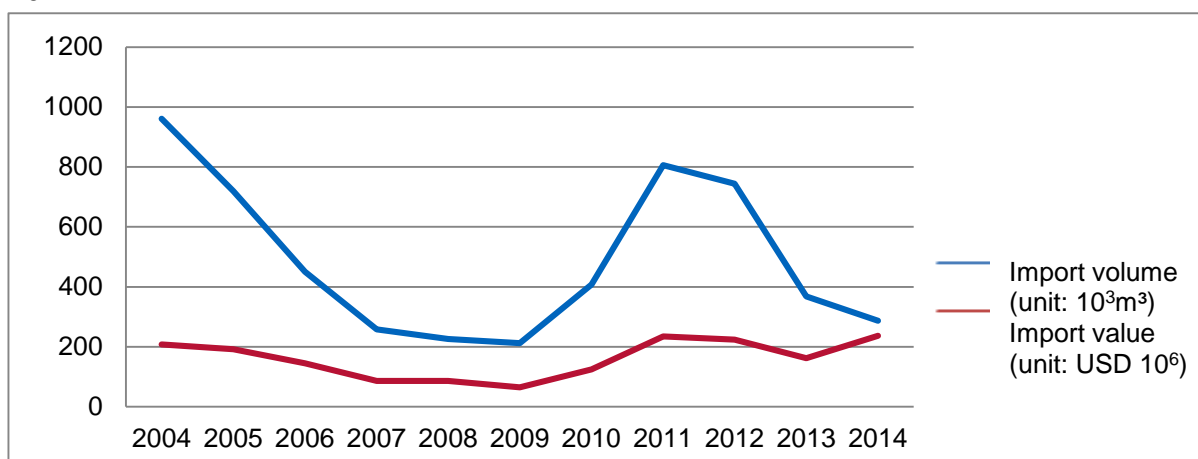


Source: Chinese customs statistics, 2015

Sawnwood

China's sawnwood imports from Indonesia fluctuated noticeably from 2004 to 2014 (Figure 18). The volume of China's sawnwood imports fell by nearly 80 % during the period 2004–2009, rebounded substantially in 2010 and 2012 when it exceeded 800 000 m³ and approached a historical high in 2004, dropped during the period 2012–2014 to a historic low in 2009. The value of China's sawnwood imports fluctuated upward during the period from 2004 to 2014. From 2004, it fell to USD 60 million in 2009, grew overall after 2009 and reached USD 236 million in 2014. The average unit price for imported sawnwood climbed steadily from 2004 to an almost three-fold increase by 2014.

Figure 18. China's sawnwood imports from Indonesia in volume and value from 2004 to 2014



Source: Chinese customs statistics, 2015

According to the Harmonized Commodity Description and Coding System, sawnwood (HS code 4407) includes three categories: coniferous, tropical and other woods, among which, other woods include oak, beech, maple, cherry, camphor, nanmu, rosewood, paulownia, North American hardwood, broadleaf wood, other temperate non-coniferous woods and other non-coniferous tree species. By species of sawnwoods, China's imports from Indonesia were predominantly tropical and other woods during the period 2004–2014. Among tropical woods, the import volume of merbau was the largest, an increase of three times in 2014 compared to 2004. Imports of teak wood remained steady, and reached a peak in 2011. Red meranti, yellow meranti and other tropical woods dropped significantly over the last decade, down about 90 % in 2014 compared to 2004. Though import volumes fell by half, other non-coniferous sawnwood still represented the largest proportion of other woods. The volumes of camphor, nanmu, rosewoods increased more than eight times, reaching more than 50 000 m³.

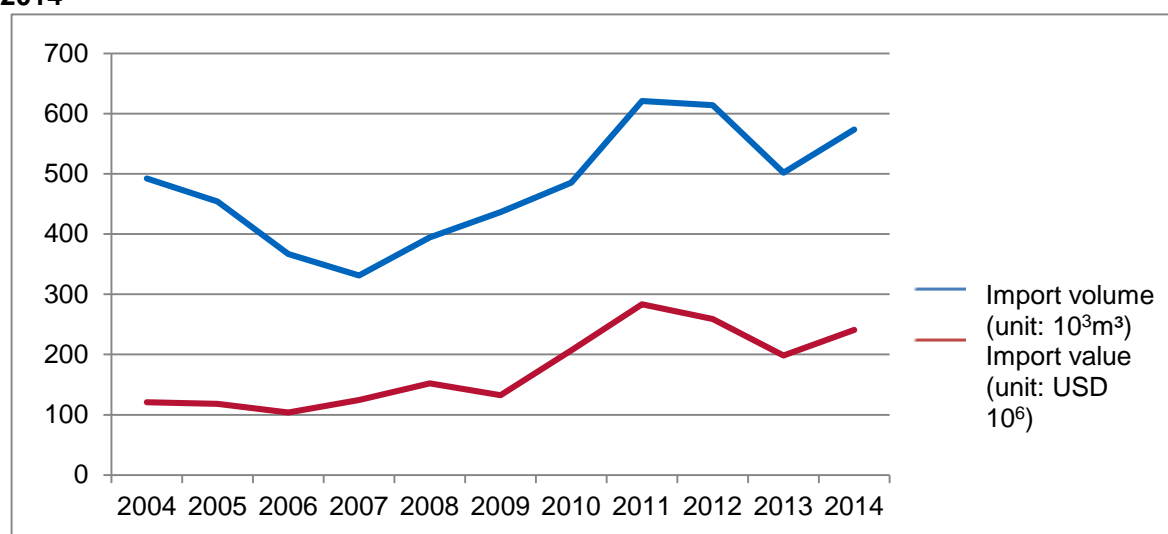
Republic of the Congo

Logs

China's log imports from Congo fluctuated over the period from 2004 to 2014 (Figure 19). The volume of China's log imports fell year by year to 331 400 m³ during the period from 2004 to 2007, then increased year by year to 621 000 m³ in 2011, fell for two consecutive years, and rebounded to 573 500 m³ in 2014.

The value of China's log imports followed a similar pattern. The value dropped to a historic low in 2006, climbed steadily to USD 2.833 billion in 2011, then fell, and then rebounded to USD 241 million in 2013. In terms of unit price, China's log imports from Congo followed a similar upward trend with fluctuations over the period from 2004 to 2014, an increase of more than 30 % in 2007 and 2010 respectively, fell 20 % in 2009, and increased 71.05 % in 2014 compared to that of 2004. Domestic market demand and stock were the many factors contributing to the changing price.

Figure 19. China's log imports from the Republic of the Congo in volume and value, 2004-2014



Source: Chinese customs statistics, 2015

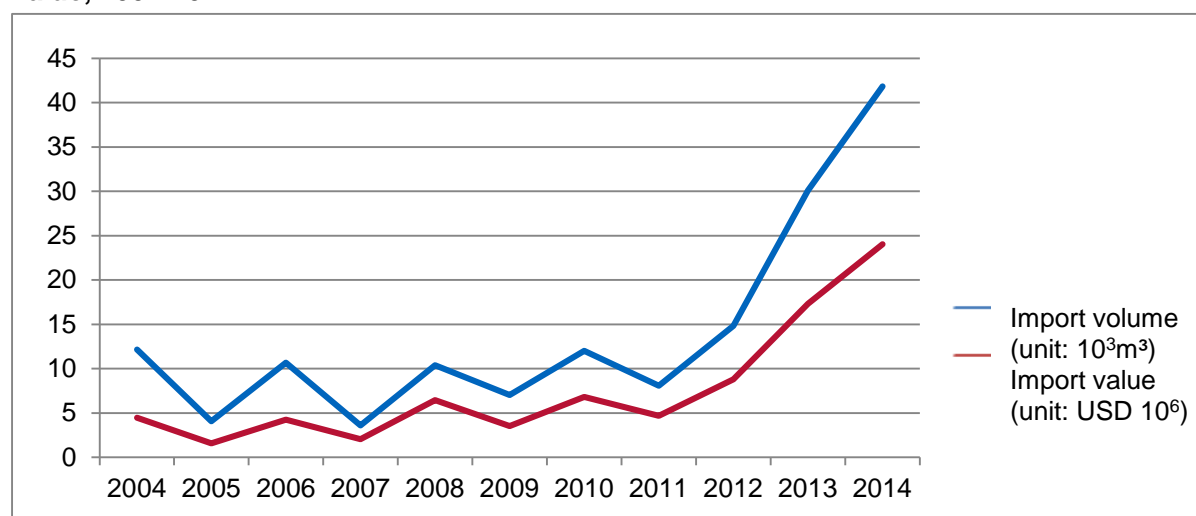
Tropical woods accounted for the majority of China's imports from Congo while coniferous woods accounted for only a small fraction. Driven by robust domestic demand for plywood and furniture, etc, China's import volume for the past ten years was around 400 000 m³ and consisted mostly of okoume wood. The import volume of non-listed tropical woods dropped then it rose again reaching around 80 000 m³ in 2014. Among other categories, imports of rosewood grew from zero, fluctuating around 10 000 m³ for the last three years. The import volume of non-listed non-coniferous woods grew rapidly and increased three times in 2014 compared to 2004.

Sawnwood

China's sawnwood imports from Congo grew dramatically over the period from 2004 to 2014 (Figure 20). The volume of China's sawnwood imports fluctuated to a low point over the period from 2004 to 2011, increased by 83.44 % in 2012 compared to 2011, doubled in 2013 compared to 2012, dropped to about 40 % in 2014, and reached an unprecedented high of more than 40 000 m³.

Similarly, the value of China's sawnwood imports grew dramatically after experiencing fluctuations during 2004–2011, and reached more than USD 24 million in 2014. The average unit price for sawnwood imported from Congo increased approximately 1.5 times in 2014 compared to 2004. It was up 40 % compared to 2007, and remained steady over the last two years.

Figure 20. China's sawnwood imports from the Republic of the Congo in volume and value, 2004-2014



Source: Chinese customs statistics, 2015

Tropical woods accounted for the majority of China's imports from Congo while coniferous woods were only a small fraction. Sapelli wood dominated the mix of China's tree species imports. With a growing acceptance of domestic plywood, wood doors and furniture, etc, made of sapelli wood, the import volume of sapelli was 15 times higher in 2014 compared to 2007, reaching 17 800 m³. The import volume of other tropical woods soared in the last two years, surpassing 10 000 m³ for each type. Other non-coniferous woods accounted for the majority of China's imports and they grew slightly to more than 9 000 m³ in 2014.

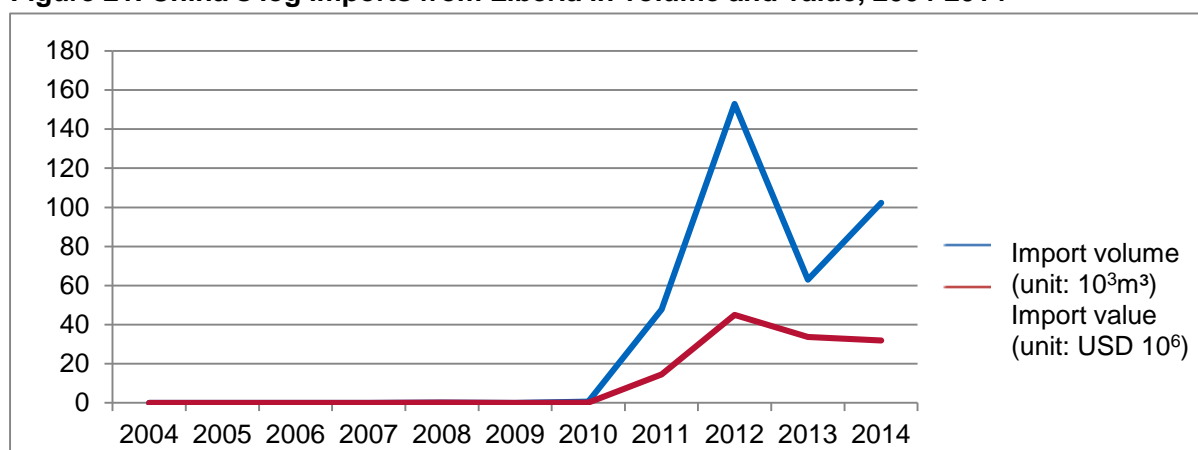
Liberia

Logs

The United Nations (UN) lifted its sanctions on Liberian timber exports in 2006. Since then, China's log imports from Liberia have grown rapidly (Figure 21). After three years of mild growth, China's log imports from Liberia showed explosive growth in 2011 and 2012 respectively, reaching a historic high of more than 150 000 m³, fell slightly in 2013, then rebounded to more than 100 000 m³ in 2014.

Changes in the value and volume of China's log imports from Liberia were mild. Since 2010, the import value grew rapidly and reached more than USD 45 million in 2012 and fell slightly to around USD 32 million in 2014. The average unit price for logs imported from Liberia fluctuated, reaching its lowest point in 2010 at less than USD 300/m³, and its highest point of more than USD 500/m³ in 2013.

Figure 21. China's log imports from Liberia in volume and value, 2004-2014



Source: Chinese customs statistics, 2015

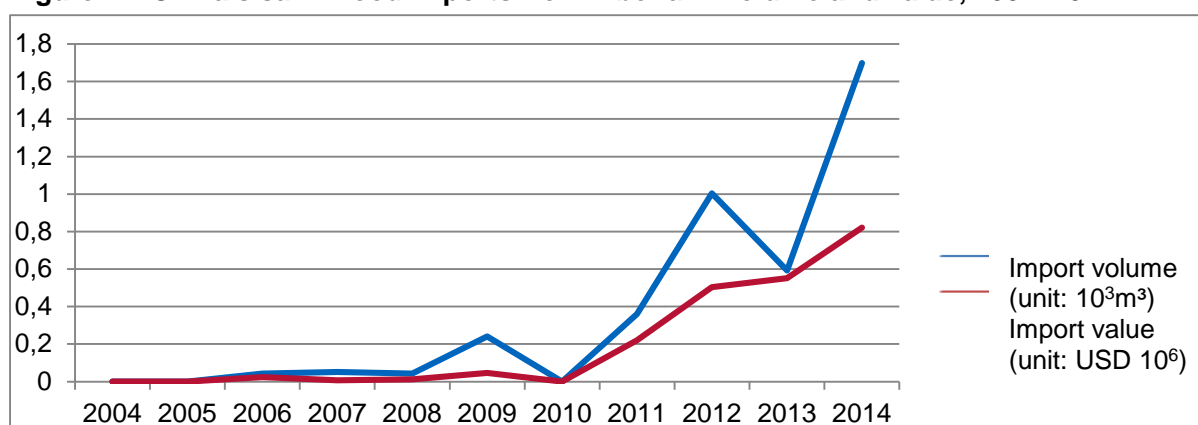
China's log imports from Liberia were 100 % non-coniferous logs. Non-listed non-coniferous woods under the category of other woods and non-listed tropical woods under the category of tropical woods represented the largest proportion of China's wood imports.

Sawnwood

After 2006, China's sawnwood imports from Liberia fluctuated upward (Figure 22), fell in 2013 (after surpassing 1 000 m³ in 2012), and then reached a new high of about 1 700 m³ in 2014.

Overall, China's sawnwood imports increased in value, growing especially rapidly since 2010, and exceeded USD 800 000 in 2014. The average unit price for sawnwood imported from Liberia fluctuated turbulently.

Figure 22. China's sawnwood imports from Liberia in volume and value, 2004–2014



Source: Chinese customs statistics, 2015

China imported 100 % broad-leafed sawnwood from Liberia, most of which fell under the non-coniferous woods category of other woods.

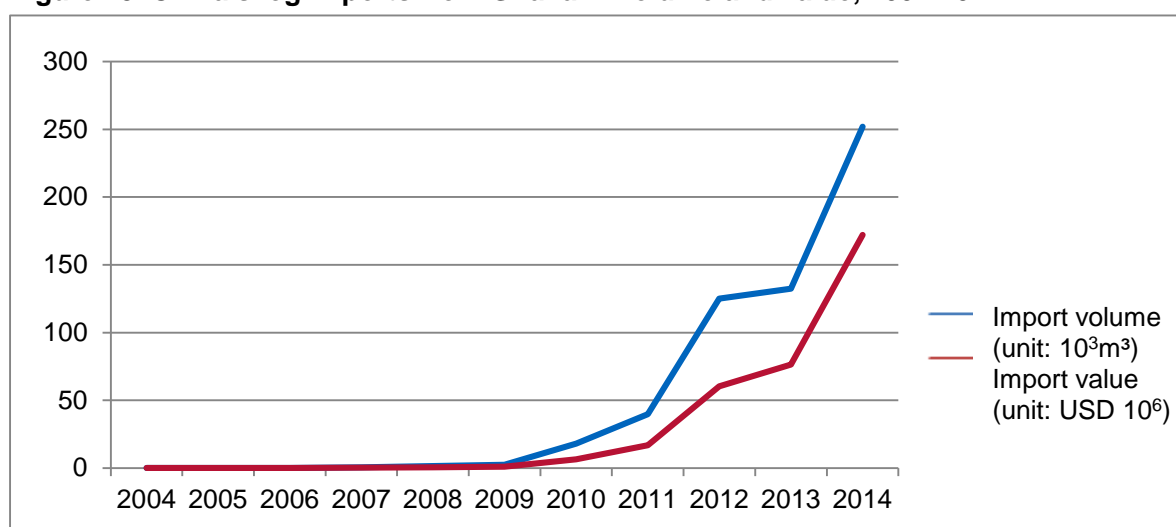
Ghana

Logs

China's log imports from Ghana grew rapidly (Figure 23) over the period from 2004 to 2014. Before 2010, the volume of China's log imports grew exponentially compared to the previous year, exceeding 10 000 m³ in 2010, then kept growing, and reached 252 000 m³ in 2014.

The value of China's log imports followed a corresponding rising trend. Imports grew from zero dollars in 2004 to USD 172 million in 2014. The average unit price for logs imported from Ghana fell during the period from 2005 to 2010 from about USD 500/m³ to USD 360/m³ and then increased year-by-year since 2011 to around USD 700/m³ in 2014.

Figure 23. China's log imports from Ghana in volume and value, 2004-2014



Source: Chinese customs statistics, 2015

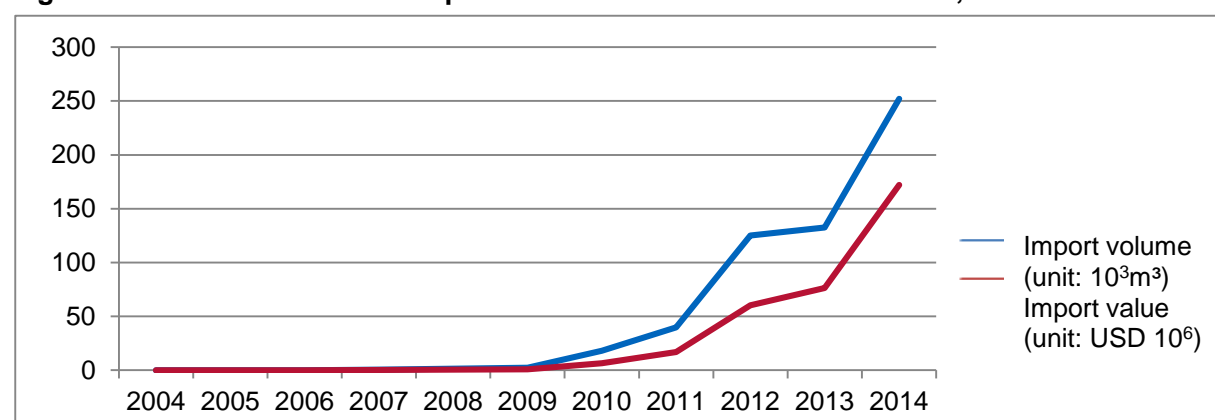
China's log imports from Ghana consisted 100 % of broad-leafed wood. The growth of rosewood under the category of other woods seemed significant and it increased China's total wood imports from Ghana. Since 2010, China has been importing rosewood because of a large demand for it in the domestic market. After four years, the import volume of rosewood reached 150 000 m³. Non-listed, non-coniferous woods also showed strong growth and exceeded 90 000 m³ in 2014. The import volume of non-listed tropical woods under the category of tropical woods (one of the types of logs imported) grew exponentially. There was also a growth in the volume of teak, approaching 400 m³ in 2014.

Sawnwood

China's sawnwood imports from Ghana increased over the period from 2004 to 2014 (Figure 24). The volume increased from more than 2 000 m³ in 2004 to more than 7 000 m³ in 2006, it declined every year starting in 2007 to 2 600 m³ in 2009, suddenly increasing to 15 300 m³ in 2010, and then levelled off to 12 000 to 17 000 m³ over the period from 2010 to 2014. The import value of China's sawnwood increased overall. It grew from USD 0.8 million to USD 3 million from 2004 to 2006, gradually declined to about USD 1 million from 2007 to 2009, increased to USD 6 million in 2010 and continued to increase reaching a historic high of USD 7.81 million in 2014. The average unit price for sawnwood imported from Ghana remained stable from 2004 to 2014, fluctuating to within 20 % up or down of USD 400/m³. China imported mainly broad-leafed woods as sawnwood from Ghana, most of which were tropical woods. Among them, other tropical woods grew steadily from more than 1 000 m³ in 2004 to more than 10 000 m³ in 2014.

Over the last decade, the import volume of other non-coniferous woods increased more than six times to more than 5 000 m³. The import volumes of African mahogany and teak wood were small and relatively stable.

Figure 24. China's sawnwood imports from Ghana in volume and value, 2004-2014



Source: Chinese customs statistics, 2015

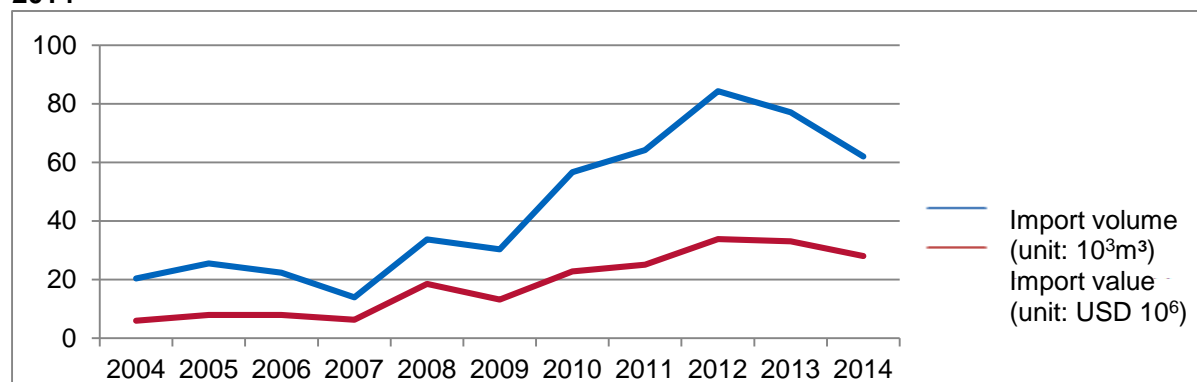
Central African Republic

Logs

China's log imports from Central African Republic (CAR) grew substantially from 2004 to 2014 (Figure 25). The volume of logs imported was 20 000 m³ during 2004 to 2006, rose rapidly during 2008 to 2012 after reaching a low point of about 14 000 m³ in 2007, increased five times compared to the volume of 2007, declined slightly in 2013 and 2014, and then dropped to 62 000 m³ in 2014.

The value of log imports also increased, but not as much as the import volume of logs. The value fluctuated between USD 6 million and USD 8 million over the period from 2004 to 2007, grew substantially from 2008 to 2012 to USD 34 million in 2012, fell slightly in 2013 and 2014, and declined to USD 28 million in 2014. The average unit price for logs imported from CAR increased rapidly from USD 300/m³ to about USD 550/m³, and it remained stable afterward fluctuating around USD 400 to 450/m³.

Figure 25. China's log imports from Central African Republic in volume and value, 2004-2014



Source: Chinese customs statistics, 2015

China imported 100 % broad-leafed logs from CAR. Non-listed tropical woods under the category of tropical woods represented the largest proportion of China's total imports from CAR. The import volume of such tropical woods increased from less than 20 000 m³ in 2004 to more than

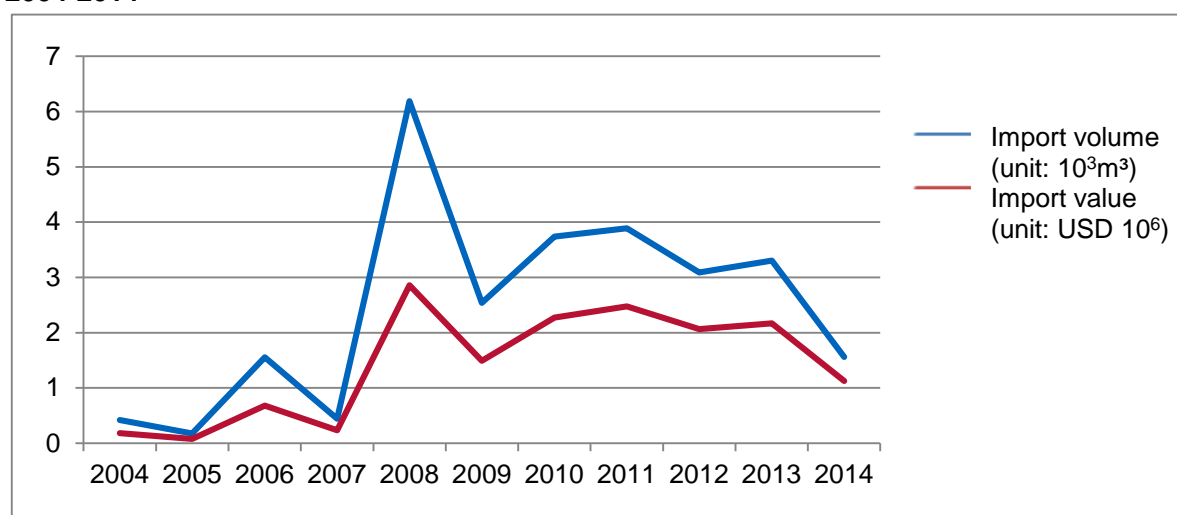
50 000 m³ in 2014. Moreover, imports of non-listed, non-coniferous woods under the category of other woods increased rapidly, reaching a peak of 12 900 m³ in 2012.

Sawnwood

China's sawnwood imports from CAR fluctuated over the period from 2004 to 2014 (Figure 26). Every year, the import volume for sawnwood varied compared to the previous year. The lowest point was in 2005 at about 180 m³, while the peak was in 2008 at more than 6 000 m³, which is 35 times more. It fluctuated around 2 500 to 3 900 m³ over the period from 2009 to 2013 and dropped to about 1 600 m³ in 2014.

The value of sawnwood imports fluctuated dramatically over the period from 2004 to 2007, declined to a historic low of USD 80,000 in 2005, surged to a historic high of more than USD 2.8 million in 2008, then dropped to about USD 1.5 million in 2009, fluctuated around USD 2 to 2.5 million from 2010 to 2013 and dropped to more than USD 1 million in 2014. The average unit price for imported sawnwood from 2004 to 2014 increased steadily from USD 440/m³ in 2004 to more than USD 700/m³, an increase of 65 %.

Figure 26. China's sawnwood imports from Central African Republic in volume and value, 2004-2014



Source: Chinese customs statistics, 2015

China imported 100 % broad-leafed sawnwood from CAR. Sapelli wood, under the category of tropical woods, dominated the mix of tree species imports. China started to import sapelli in 2007. By 2011, the volume exceeded 3 000 m³, then it dropped continuously to more than 1 000 m³ in 2014.

Cameroon

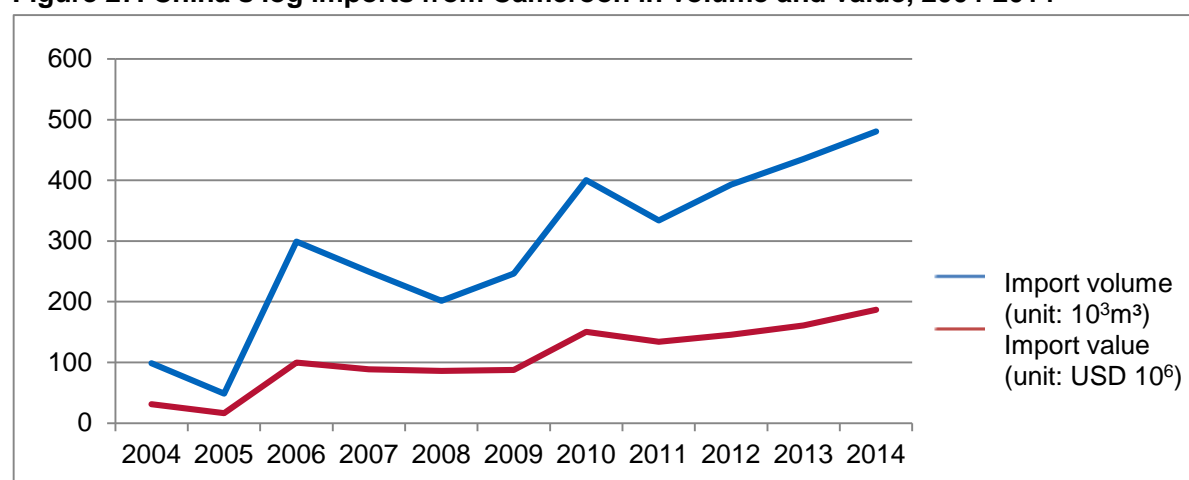
Logs

China's log imports from Cameroon increased from 2004 to 2014 (Figure 27). The volume of log imports dropped to a low of 50 000 m³ in 2005, grew rapidly to 300 000 m³ in 2006, fell to 200 000 m³ in 2007 and 2008, then fluctuated upward to a historic high of 480 000 m³ in 2014.

The value of log imports also increased correspondingly. The value fell to USD 16 million in 2005, fluctuated around USD 90 million and USD 150 million during the periods from 2006 to 2009 and 2010 to 2013, respectively, and then it increased to a historic high of USD 187 million in 2014. The average unit price for logs imported from Cameroon was mainly stable from 2004 to

2014, falling to USD 310/m³ in 2004, rising to USD 430/m³ in 2008, and fluctuated around USD 360/m³ until 2014.

Figure 27. China's log imports from Cameroon in volume and value, 2004-2014



Source: Chinese customs statistics, 2015

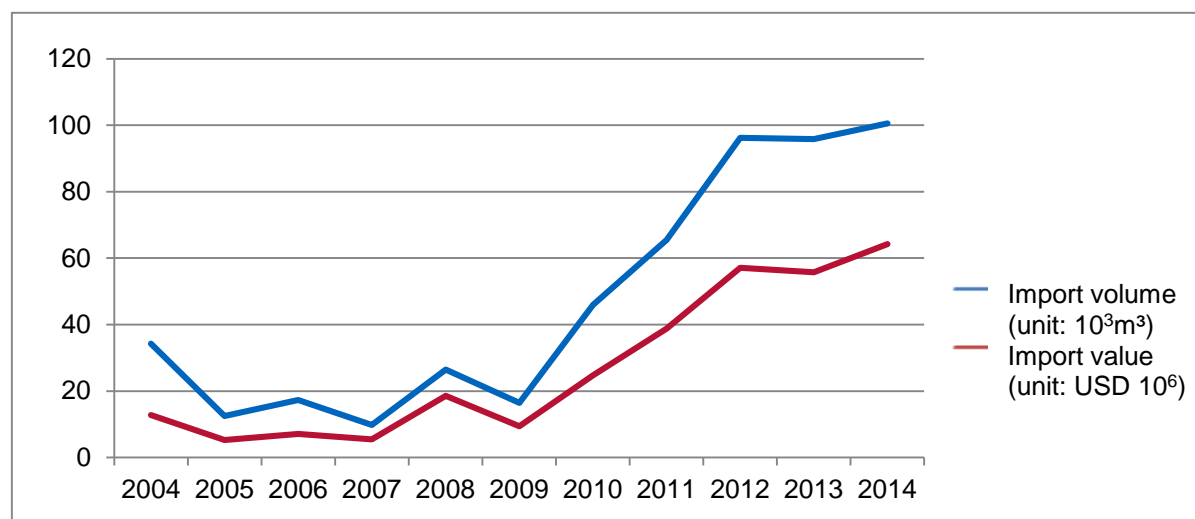
China imported 100 % broad-leafed logs from Cameroon. Among tropical woods, non-listed tropical woods accounted for the majority of China's imports for a long time. The import volume of such woods doubled from more than 90 000 m³ in 2004 to 180 000 m³ in 2014. The import volume of okoume wood reached 3 000 m³ in 2006, but has decreased sharply in recent years. Among other woods, there was a large import volume of non-listed, non-coniferous woods reaching 7 700 m³ in 2004 and almost 300 000 m³ in 2014 after many years of uneven growth.

Sawnwood

China's sawnwood imports from Cameroon increased over the period from 2004 to 2014 (Figure 28). The volume of sawnwood imports fell from 34 000 m³ to 9 800 m³ from 2004 to 2007, then grew yearly, reaching a historic high of 100 000 m³ in 2014.

The value of sawnwood imports also increased. The value dropped from more than USD 12 million to USD 5.5 million during the period from 2004 to 2007, then increased yearly reaching USD 64 million in 2014. The average unit price for sawnwood imported from Cameroon increased from USD 370/m³ to USD 700/m³ from 2004 to 2008 and then fluctuated around USD 600/m³ over the period from 2009 to 2014.

Figure 28. China's sawnwood imports from Cameroon in volume and value, 2004-2014



Source: Chinese customs statistics, 2015

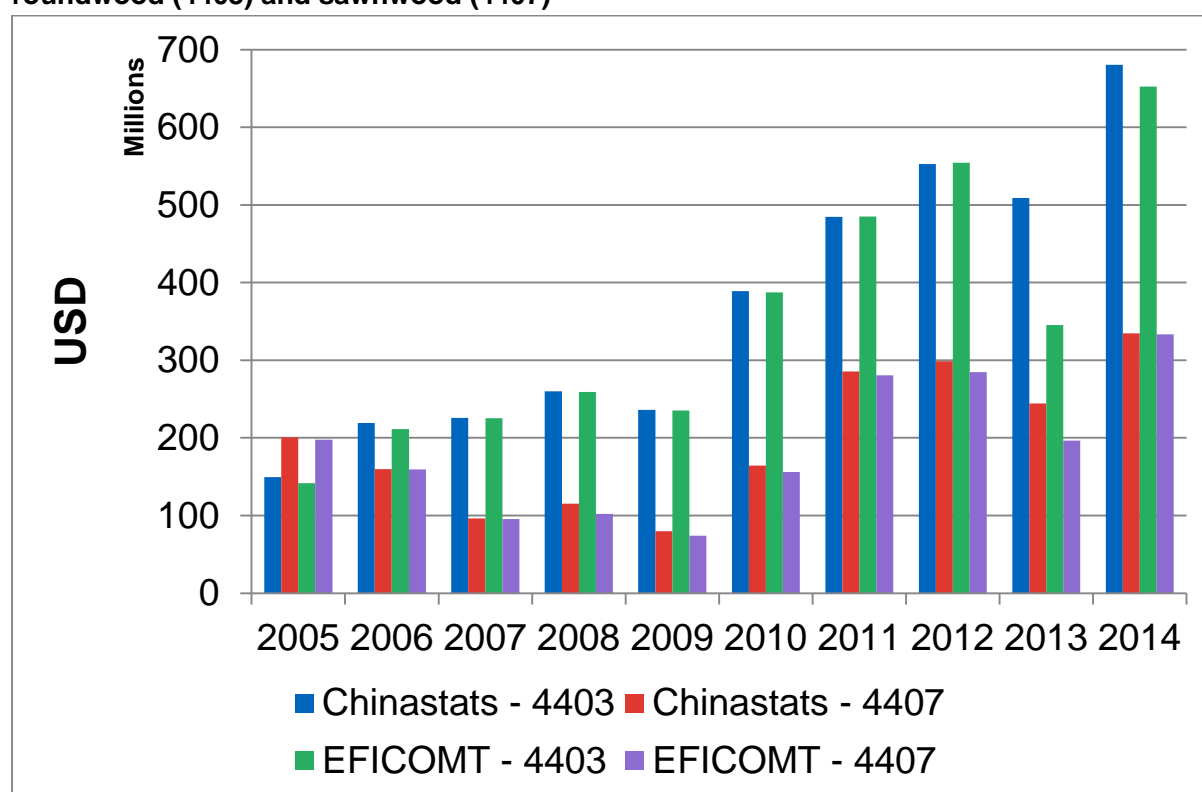
China imported mainly broadleaf woods as sawnwood from Cameroon, most of which were tropical woods. Among tropical woods, sapelli wood was the main one being imported. In 2007, China started importing such wood as a response to market demand. The volume was 42 000 m³ in 2014. The import volume of other tropical woods also grew yearly to more than 30 000 m³ in 2014. Among other woods, the import volume of other non-coniferous woods was the largest, growing from less than 4 000 m³ in 2004 to more than 20 000 m³ in 2014.

Discrepancy analysis between Chinese and VPA country statistics

Value comparison. A comparison between China's import values and the VPA countries' export reports show almost the same records for each year from 2005 to 2012 (Figure 29). Roundwood trade values were higher than sawnwood, sometimes twice the value. Sawnwood has a much higher value per cubic metre, therefore the larger roundwood value corresponds to a much higher cubic metre volume as shown in Figure 29.

However, 2013 values were quite different, especially for roundwood. Since statistics are the same for all the other years, including the following year 2014, this could indicate statistical errors.

Figure 29. Discrepancy analysis between China and VPA country statistics for values of roundwood (4403) and sawnwood (4407)

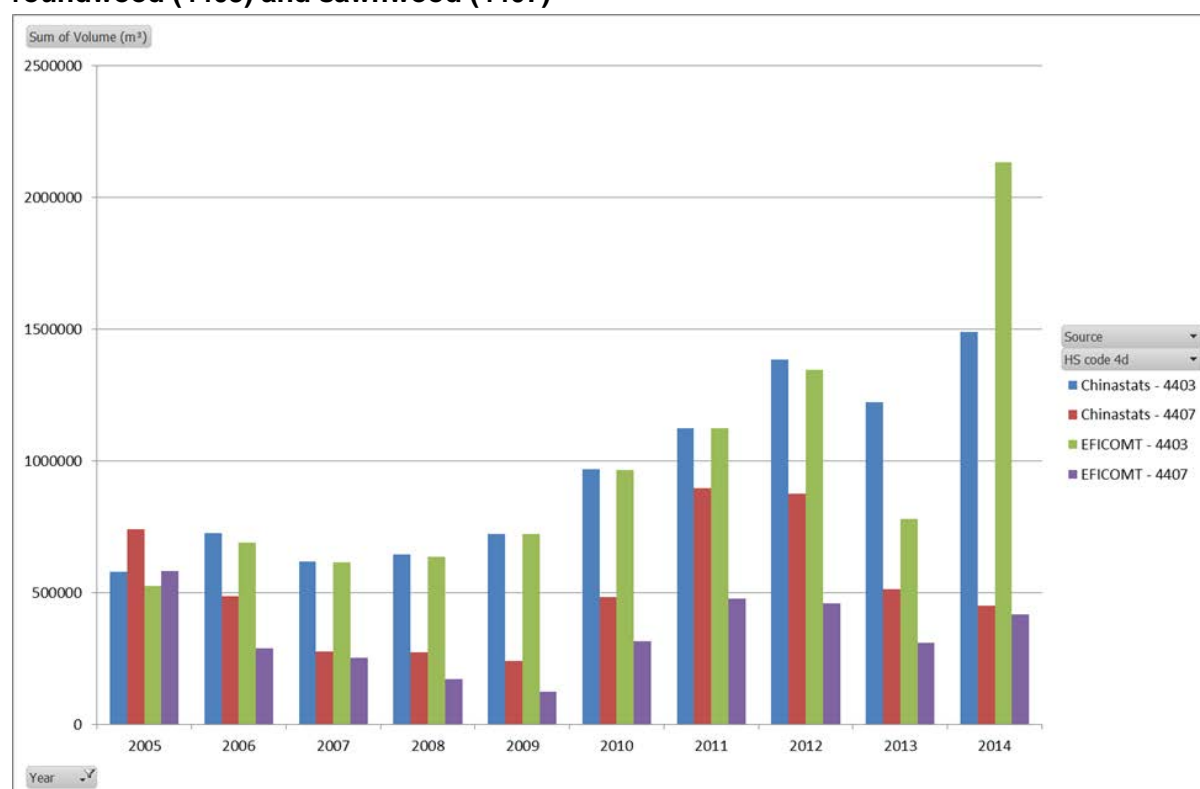


Sources: Chinese Customs for Chinese statistics and UN Comtrade for EFI statistics (Notes: For roundwood, compare China's blue bar with VPA countries' green bar. For sawnwood, compare China's red bar with VPA countries' purple bar. "EFICOMT" is the EFI database based on UN Comtrade.)

Volume comparison. The correlation between China's imports of roundwood and sawnwood from the six VPA countries is weaker in terms of volume, especially for sawnwood (Figure 30). Roundwood volumes records were almost the same each year from 2006 to 2012. But, in 2013 China recorded higher imports, while the VPA countries recorded higher exports in 2014.

Chinese import records for sawnwood were consistently higher than the VPA countries' exports.

Figure 30. Discrepancy analysis between China and VPA country statistics for volumes of roundwood (4403) and sawnwood (4407)



Sources: Chinese Customs for Chinese statistics and UN Comtrade for EFI statistics (Note: For roundwood, compare China's blue bar with VPA countries' green bar. For sawnwood, compare China's red bar with VPA countries' purple bar.)

The lack of correlation can partly be due to the lack of consistent and high quality volume statistics. When VPA countries' export in quantity was not available from UN Comtrade, the EFI database estimates the missing information based on standard conversion factors from the available value statistics. The estimation is extremely difficult for an entire group of species into roundwood and sawnwood. As a result, it is possible that the EFI database underestimates the exports. This theory would appear to be true until 2013 and 2014 when roundwood export volumes are inconsistent with China's statistics. However, the 2014 Chinese sawnwood imports closely match the VPA export records, which gives hope for better correlation in the future.

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2. Changes in China's forest product imports from VPA countries and their impact

In this chapter, the Chinese and European teams present different perspectives on the dynamic changes and trends as well as the effects of such changes on communities and industry development, and they were to list the five main challenges to addressing and guaranteeing legality in forest product trade in China and the VPA countries. Since their perspectives are so different, this chapter begins with the Chinese (importer) perspective in Section 3.1. Then the VPA (export) perspective is shown in Section 3.2. Finally, Section 3.3 shows a comparison of the two perspectives. References for the EFI authors appear in section 3.4.

Perspective of China as an importer

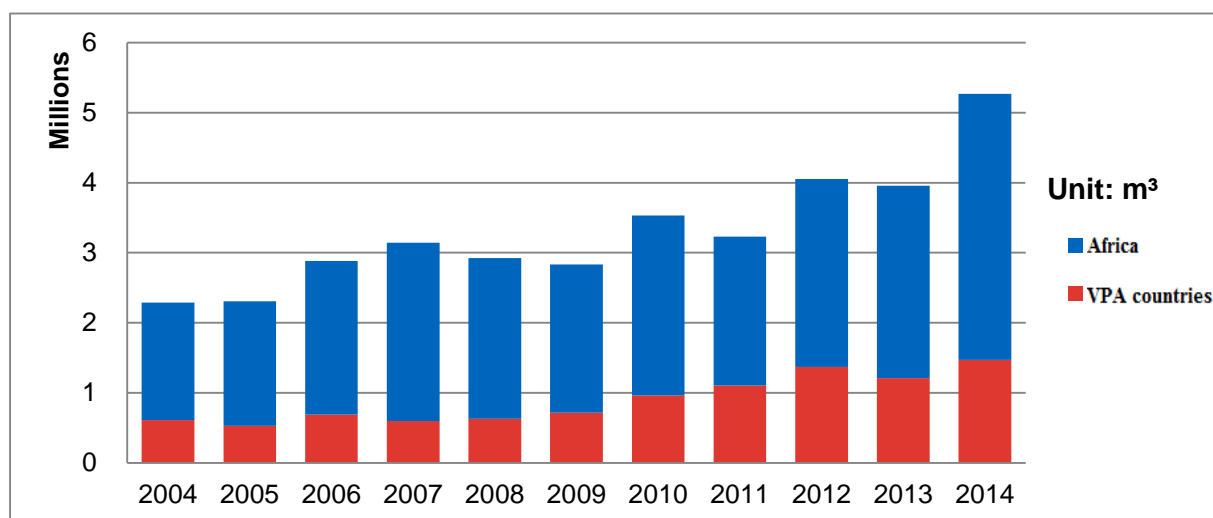
Dynamic changes and trends in China's sawnwood and log imports from African VPA countries

Logs

China's log imports increased from 26.3085 million m³ to 51.1929 million m³ from 2004 to 2014. The proportion of China's log imports from Africa increased from 6.28 % to 7.43 %. Though not high, Africa's growing export volume and product mix, which is dominated by tropical broadleaf wood, make it an ideal candidate for a steady supply of wood to China.

At present, there are five VPA countries in Africa that trade with China: Congo, Liberia, Ghana, CAR and Cameroon (Figure 31). The percentage of China's log imports from African VPA countries increased slightly to 38.69 % over the period from 2004 to 2014. China's log imports from African VPA countries fluctuated at around 600 000 m³ over the period from 2004 to 2008. The financial crisis of 2008 affected China's log imports and they decreased to 28.0593 million m³ in 2009, down by 5.11 % compared to 2008. However, in 2009 imports from African VPA countries increased to 13.4 % instead of falling. In 2010, due to factors such as an insufficient log supply in the domestic market, the value and volume of log imports from African VPA countries increased by more than one-third compared to 2009. Log imports from African VPA countries fluctuated over the period from 2011 to 2014, reaching 1.47 million m³ in 2014.

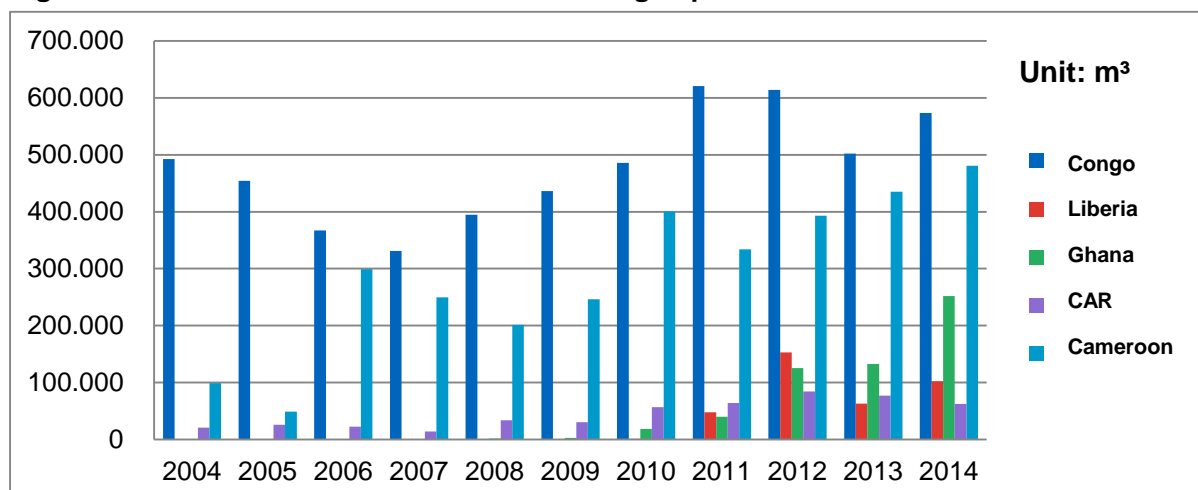
Figure 31. Comparison by volume of China's log imports from VPA countries with other African countries



Source: Chinese Customs statistics, 2015

China imported logs from numerous places from 2004 to 2014, which was reflected in the changes in China's log imports from African VPA countries by volume (Figure 32). Congo was China's traditional log supplier in Africa, and its annual log export volume was more than 300 000 m³, reaching 621 000 m³ in 2011. The proportion of China's log imports from Congo as part of China's total log imports from Africa fell from 29.35 % in 2004 to 15.09 % in 2014. Recently, Cameroon has become another major African timber supplier to China. China's log imports from Cameroon were less than 100 000 m³ and the import volume reached a peak of 480 700 m³ in 2004 and 2014 respectively, accounting for 12.65 % of China's total log imports from Africa. In recent years, China's log imports from Ghana have increased substantially. China's log imports from Ghana were low before 2009, reaching more than 10 000 m³ in 2010 for the first time, and increasing to 252 000 in 2014, and accounted for 6.63 % of China's total log imports from Africa. Liberia showed similar trends. In 2006, the UN lifted its sanctions on Liberian timber exports. From 2006 to 2010, the volume of China's log imports from Liberia was very low but it increased to 153 000 m³ in 2012, declined slightly in 2014, and accounted for 2.69 % of China's total log imports from Africa. China's log imports from CAR increased steadily from 2004 to 2014, increasing from around 20 000 m³ in 2004 to 60 000 m³ in 2014, reaching a peak of 84 400 m³ in 2012, dropping slightly, and fluctuating mildly overall.

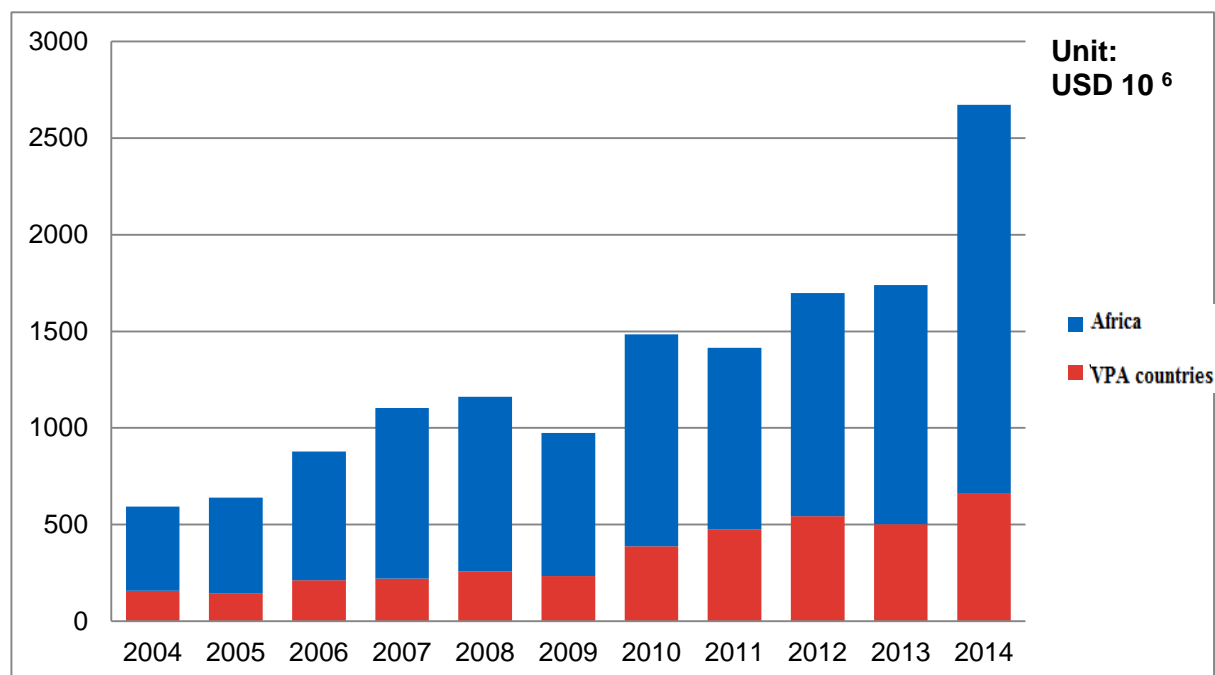
Figure 32. Variation in the volume of China's log imports from African VPA countries



Source: Chinese customs statistics, 2015

Over the period from 2004 to 2014, the value of China's log imports from African VPA countries increased, and its changes were basically consistent with China's total log imports from Africa. In 2014, the total value of China's log imports from African VPA countries was about USD 66 million in 2014, up 318 % compared to 2004. In terms of unit price, China's log imports from African VPA countries increased more than 70 % compared to 2004. In terms of proportion, the value of China's log imports from African VPA countries as a part of China's total log imports from Africa fluctuated slightly and at around 25 %. China's log imports from African VPA countries by value are shown in Figure 33.

Figure 33. Comparison of the value of China's log imports from VPA countries with other African countries



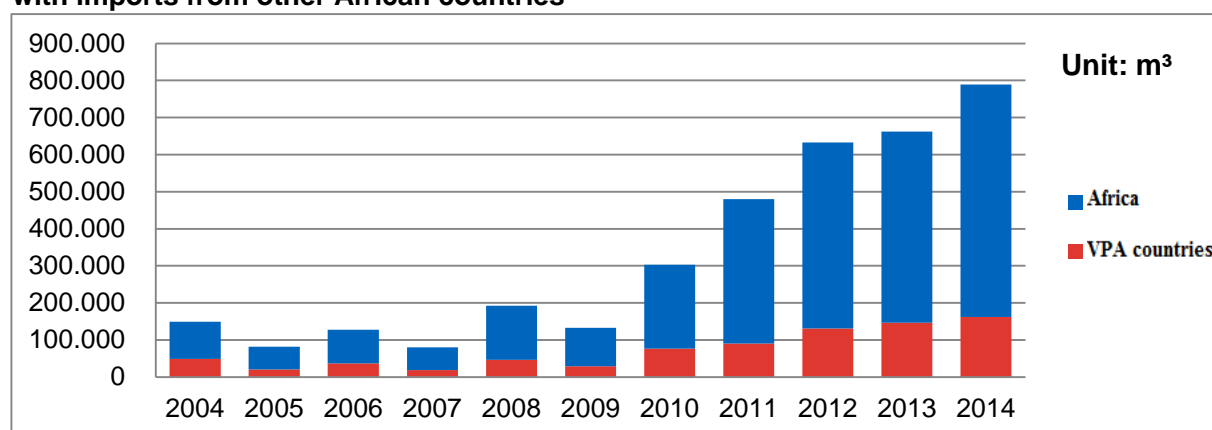
Source: Chinese customs statistics, 2015

Sawnwood

From 2004 to 2014, China's sawnwood imports increased from about 6.0517 m³ million to 25.7392 m³, up 325.32 %. Of which, the proportion of China's sawnwood imports from Africa increased from 1.65 % to 2.43 % (Figure 34). China's sawnwood imports from African VPA countries was small, growing from 49 000 m³ to 162 200 m³. Africa is not China's major supplier of sawnwood, but with the adjustment of export policies for forest products by some developing countries, there is the potential for growth for sawnwood imports from Africa.

From 2004 to 2014, China's sawnwood imports from African VPA countries accounted for half of China's total sawnwood imports from Africa, down to 26 %. From 2004 to 2009, China's sawnwood imports from African countries were less than 50 000 m³. Compared to 2009, China's sawnwood imports from Africa doubled in 2010 and those from African VPA countries increased by 176.22 %. Since then, China's sawnwood imports from African VPA countries maintained a growth rate of more than 10 % especially in 2012 when the rate reached 44.21 %. On the whole, the import volume for sawnwood was smaller than that for logs, with relatively large fluctuations and an obvious rising trend.

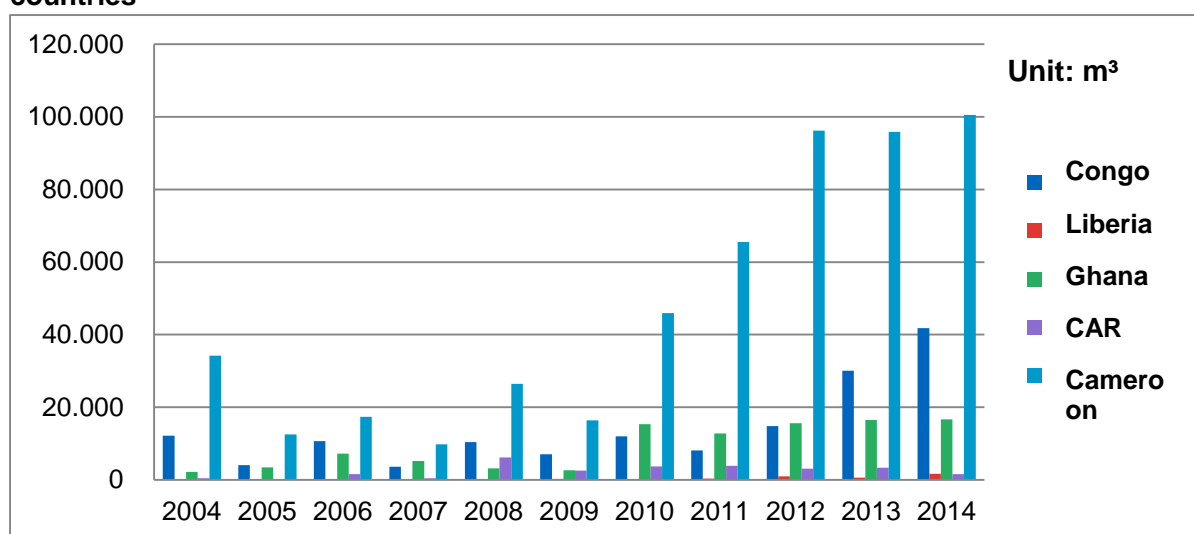
Figure 34. Comparison of the volume of China's sawnwood imports from VPA countries with imports from other African countries



Source: Chinese customs statistics, 2015

From 2004 to 2014, China's sawnwood imports from African VPA countries experienced varying degrees of growth (Figure 35), but the proportion of such imports from African VPA countries fell each year, indicating that more African countries were supplying sawnwood to China. By country, Cameroon was China's major sawnwood supplier in Africa, and it was also the largest sawnwood supplier among African VPA countries. In 2004, the volume of China's sawnwood imports from Cameroon exceeded 30 000 m³, after an adjustment period from 2005 to 2009 it reached 45 900 m³ in 2010, then grew yearly to more than 100 000 m³ in 2014. However, the proportion of China's sawnwood imports from Cameroon as part of China's total sawnwood imports from Africa fell from 34.2 % in 2004 to 16.05 % in 2014. Recently, Congo has become China's other important sawnwood supplier in Africa. Congo has supplied more than 40 000 m³ of sawnwood to China in 2014, up by 243.67 % compared to 2004. China's sawnwood imports from Congo decreased in 2014, representing 6.67 % of the total imports. From 2004 to 2009, the volume of China's sawnwood imports from Ghana grew steadily. The import volume was relatively small before 2009, and stayed around 150 000 m³ from 2010 to 2014. From 2004 to 2014, China's sawnwood imports from Ghana, as a part of China's total sawnwood imports from Africa, fluctuated slightly, representing 2.66 % of the total in 2014. China's sawnwood imports from CAR were low for a long time, peaked in 2011 at 4 000 m³, and fluctuated around 5 000 m³ overall. Total volume of China's sawnwood imports from Liberia were low, fluctuated upward over the period from 2004 to 2014, and were more than 1 500 m³ in 2014.

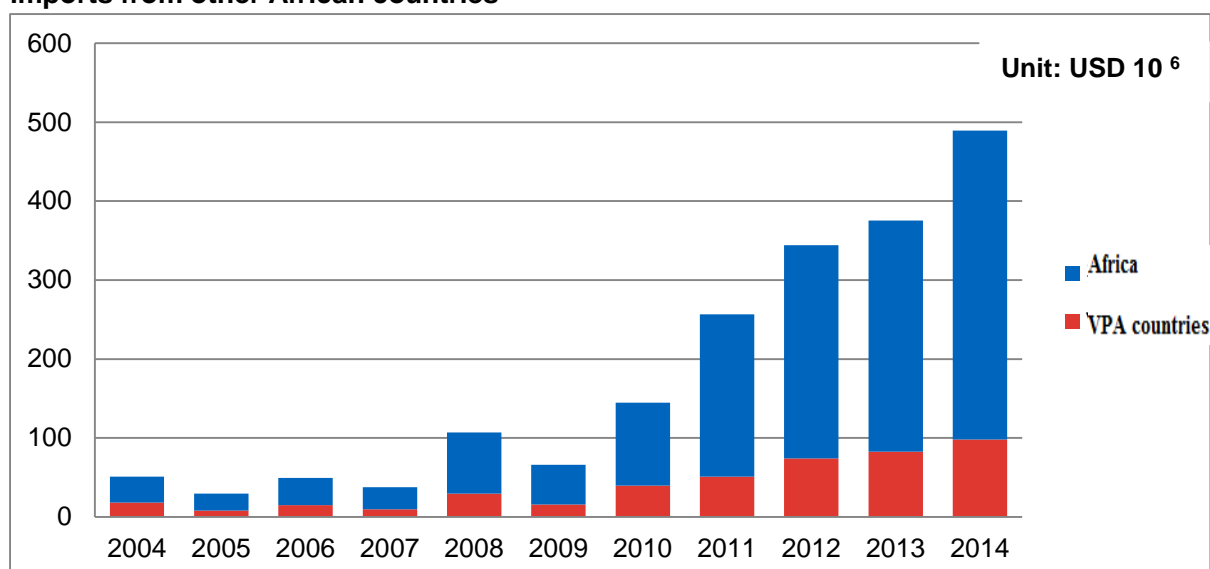
Figure 35. Variation in the volume of China's sawnwood imports from African VPA countries



Source: Chinese customs statistics, 2015

From 2004 to 2014, the value of China's sawnwood imports from African VPA countries increased overall (Figure 36). From 2004 to 2009, the base number of China's sawnwood imports from Africa was small and the import value fluctuated substantially. From 2010 to 2014, the value of China's sawnwood imports from Africa increased steadily. Similarly, the value of China's sawnwood imports from African VPA countries fluctuated early on and then grew steadily from 2009 approaching USD 100 million in 2014. In terms of unit price, China's sawnwood imports from African VPA countries increased by more than 60 % in 2014. In terms of proportion, the value of China's sawnwood imports from African VPA countries as a part of China's total sawnwood imports from Africa fell year by year from 55.71 % in 2004 to 25.03 % in 2014.

Figure 36. Comparison of the value of China's sawnwood imports from VPA countries with imports from other African countries



Source: Chinese customs statistics, 2015

Impact of forest products trade on China's communities and industry development

Impact on communities

Actively planting valuable timber species. China has 208 million ha of forest area with forest coverage of 21.63 %. But the productivity of its forest land is low, and the forest growing stock per ha is only 69 % of the world average, while plantation growing stock per ha is only 52.76 m³. The average diameter of the trees is 13.6 centimetres. Age class structure is not well distributed and the young- and middle-aged forests make up 65 % of the total forest area. China's foreign timber dependency is close to 50 %, in part because of a lack of required species, poor quality and relatively expensive domestic timber. In the short term, broadleaf wood from tropical regions such as Africa has helped ease the pressure imposed by the growing domestic demand, but the Government of China has realised that such a shortage problem must be solved through their own domestic forests. To promote cultivating rare tree species, the Government has attracted social investment and provided technical support by extensively promoting the idea and creating policies to favour it. The Government also encourages farmers to plant rare tree species near their homes, which creates huge ecological and social benefits as well as economic benefit for the farmers. This, in turn, encourages them to plant more rare trees.

Creating jobs for unemployed rural labor. With the emergence and expansion of the forest industry and its associated industries, there is a growing demand for labour. The primary, secondary and tertiary forest industries provide many jobs, especially in rural areas. Unemployed rural labourers and farmers have been employed in the forest industries. Some logging and timber transport labourers became forest operators instead. China's imports from Africa mainly included primary products such as logs and sawnwood. After many years of cultivation and development, a huge industry chain has been formed that provides multi-level job opportunities. Since most timber processing enterprises were located in townships this also promoted movement of workers. With the accelerated pace of forestry enterprises "going global", more and more Chinese enterprises went to Africa and Southeast Asia conducting forest operations and processing activities on a larger scale. This increased the labour demand and has led to some Chinese labourers working abroad.

Improving farmers earnings and increasing revenue. Against a background of forest protection, forestry was being restructured and it developed rapidly. In the state-owned forest regions, the previous ideas about timber production were replaced with new ideas about cultivating natural forests and operating plantations, which gradually diversified the forestry economic model. On the one hand, because of imported timber resources the timber processing industry developed increasing income, revenues, exportation and foreign exchange earnings, and this led to new industries being developed. Townships were used as bases for timber processing, and processing technology, technical and industrialisation levels were improved gradually. Geographically advantageous industry clusters formed and became an important source of revenue for some local governments. On the other hand, the staff in forest areas saw opportunities and made efforts to exploit the wide underwood space and to develop the underwood economy. They developed business models such as underwood planting, underwood breeding and forest tourism, bringing a new vitality to local economic development.

Driving the development of port and townships. Developing and exploiting forest resources have led to increased economic viability in the townships where the main businesses include timber processing, trans-shipment and sales. The concentration and development of the processing enterprises brought significant social and economic benefits, which are accelerating the pace of urbanisation in the townships where these enterprises are located. In southeast

coastal areas, where there are favourable conditions for trading ports, many important port cities were formed, and their port economies played an important role in the local economic development. Zhangjiagang, situated on the southern bank of the lower reaches of the Yangtze River, known as the Golden Watercourse, is surrounded by three economically developed cities (Suzhou, Wuxi and Changzhou), and is China's largest import port for African timber. The port enjoys extensive access to sources of goods, sound transportation facilities, convenient land and water transport. Over decades of development, this port has become China's largest timber trading market. Thanks to its unique location, surrounding cities also benefited from the development. Taking advantage of easily accessible timber resources, low transport costs, and convenient import and export, timber processing industry clusters formed in Huzhou, Changzhou and Jiaxing, etc, effectively promoting rapid development in cities and towns.

Impact on industries

Rising forest cultivation and operation. Since the natural forest protection project was implemented in 1998, large areas of commercial logging have been banned in non-commercial forests. The timber processing industry, which originally depended heavily on those forest resources, faced challenges because of the resulting shortage of raw materials. In the short term, timber imports from Southeast Asia and Africa have helped ease the problems of the forest industry, but such imports cannot fully satisfy the domestic demand for broadleaf wood, which can be seen from China's increasing timber imports in recent years. For the sake of protecting natural forests and species, meeting the needs of national interests and pressure from international organisations, many tropical countries that export broadleaf wood have increased their efforts to protect their resources and have restricted and cut back their exports of rare hardwoods. The Government has been supporting the development of timber forests for rare species and large diameter trees to improve the timber self-sufficiency rate and solve the structural timber shortage. Over the period from 2010 to 2014, 68 demonstration counties (cities) for cultivating national rare tree species have been established in Hainan, Guangdong, Fujian, Zhejiang and Sichuan provinces with 40 000 ha for cultivating national rare tree species.

Making up the timber supply gap. In 1998, China implemented the natural forest protection project to develop and cultivate natural forest resources. African timber entered the Chinese market through international trade, and helped ease the pressure created by the lack of available domestic timber. Domestic timber production from natural forests declined sharply after the natural forest protection project was implemented, and timber imports from the EU, the US, Southeast Asia and Africa became important for meeting the timber demand. These imported timber resources encouraged certain industries to start up. For example, in Jiashan County, in the north of Zhejiang was known as wood industry county with a timber industry focusing on plywood and furniture. However, there are no commercial forest resources nearby, so 70 % of the timber supply is imported from international markets and 30 % comes from domestic sources. The lack of resources in the area means that efforts must be made to improve the comprehensive utilisation rate of wood resources. Yet, it is also necessary to provide incentives to enterprises to improve their ability to innovate, to add value to their products and to ease the pressure that a lack of resources place on the industry.

Sudden rising of the rosewood industry. Along with rising income and living standards have come a taste for particular wood products. Ming and Qing furniture and rosewood artwork have become fashionable and collectible. The consumer demand for traditional art made of rosewood, led to a rosewood buying craze and production increase. In the Rosewood National Standard implemented in 2000, rosewood includes five genera, eight classes and thirty-three species. Most tree species in the standard are tropical broadleaf woods imported from foreign countries such as Indonesia, Vietnam, Lao People's Democratic Republic (Laos) and Cambodia in

Southeast Asia, as well as Angola, Congo, Cameroon, South Africa and Guinea-Bissau in Africa. Thanks to their high quality, hardness and desirable texture, rosewood and similar African woods are very popular among Chinese consumers and their import volumes and unit prices have grown rapidly. However, an influx of illegal money caused the import volume and price of individual species to rise and fall irrationally and this is dragging down the rosewood industry.

Rapid development of the flooring industry. Improved living standards have also led to increased home building materials. Timber used for flooring products must meet high standards and be wear resistant, durable and non-deforming, while the texture and colour must be uniform. The timber must be resistant to bending, shearing and crushing. An African broadleaf tree grows slowly, its wood is hard, strong, heat-tolerant and stable. Some tree species under the categories of African rosewood and padauk have good qualities, they are durable, wear-resistant, dimensionally stable, have attractive natural patterns, desirable wood colour and smooth feel, all of which are ideal for making high-end flooring. More African woods with such good properties and stability are being used for making high-end block board, furniture and cabinets, among other objects.

Main challenges faced by China in addressing and ensuring legality of forest products trade

Difficulty in identifying tree species. In recent years, with China's growing volume of timber imports of a variety of species, problems with inaccurate declaration information began to surface. Due to a lack of professional knowledge, non-standard names for tree species were used by some owners and traders in their contracts, making it difficult for officials in the Inspection and Quarantine Departments and Customs to verify the type of wood being imported. Such cases are even more prevalent when certificates need to be issued for rare tree species. Sometimes there were discrepancies between English names of a tree species used in the contract and the Latin names used in the customs declaration forms. Customs and the forestry departments jointly conducted thorough training programmes and this has improved the customs checkers' professionalism and knowledge. However, considering the growing number of tree species and the high turnover among customs checkers, it is still difficult to ensure 100 % accuracy in verifying species. Accurate tree species information plays a vital role in ensuring timber legality.

Trading statistics system fails to meet legality requirements. In order to clear customs, the exporter must produce relevant information such as the tree species, the product types of import and the export forest products. According to customs supervision and administration regulations, classification of woods and wood products are not clearly defined in the import and export tariffs system, which specifies the tariff rate for commodities. For example, under code 4403 in the import and export tariffs system, logs include three categories: coniferous, tropical and other woods. There are few listed tree species, such as five coniferous woods, eight tropical woods and six other woods, and the rest of the imported woods are only listed as other woods. Rosewood is listed under the category of other woods. The failure to accurately specify tree species and to use such vague categories causes confusion. According to the current customs statistics system, there are far more imported species than those that are listed, making it difficult for competent forestry authorities to follow up with trade information and to monitor timber legality.

Obscure information about the place of origin. According to customs requirements, to determine the origins of imported and exported goods, enterprises must submit a certificate of origin when clearing customs. Such a certificate is issued by the foreign supplier. Information about the origins of the timber is an important basis for determining timber legality, and the

certificate of origin is a necessary document used by foreign suppliers for declaring exported goods via customs in their own countries. At present, a certificate of origin issued by each country only indicates the country of origin and the export port. It is difficult to determine timber legality because there is no initial logging site indicated on such certificates. Moreover, reports by a non-governmental organisation showed that illegally harvested timber was smuggled into neighbouring countries and exported as local legal timber. Obscure information about place of origin for forest products makes it difficult to manage legal trade.

Lack of certification documents. Legality of imported timber is contingent upon the timber exporting country's administrative system. At present, there is neither a single definition of illegal logging in the world nor is there an administrative system and mechanism to coordinate timber legality. The EU made a constructive attempt towards this. In May, 2003, the EU launched the FLEGT Action Plan, and is signing VPAs with partner countries. Under the VPA, a timber import license system will be used to ensure that timber products produced by partner countries are in compliance with their laws, thus preventing illegally harvested timber from entering into the supply chain. The EU is testing and preparing to issue the first FLEGT license with partner countries such as Indonesia. In future, FLEGT-licensed Indonesian forest products will be accepted on the world's forest products market. As China is Indonesia's major forest products partner, imports of forest products bearing various consumer countries approved legal labels will help China to meet its need for legal forest product imports.

Trading data exchange mechanism urgently needed. China has become one of the world's forest products trading and producing countries. In 2014, China's forest products imports and exports amounted to USD 99.793 billion, although the import and export market concentration dropped slightly compared to 2013. With the number of trading partners and the product varieties growing, there are more frequent exchanges between competent forest products departments. But there is still room for in-depth and widened exchanges and cooperation. The traceability of timber origin is important for verifying legal timber. Timber producing countries need to trace the origin of their timber for export to assist the importing countries. A timber trade data exchange mechanism is yet to be established among the relevant competent departments. A cross-border and inter-departmental coordination mechanism is urgently needed. Such a mechanism will be used to share information such as species and origin of forest products, to make timely exchanges regarding trade status, to jointly tackle illegal logging and its associated trade, and to promote a legal and sustainable trade in forest products.

Perspective from VPA countries as exporters

Introduction

This first section outlines the most common challenges to addressing legality in the forest sectors of the six countries that have signed VPAs with the EU, and the second section presents the key challenges to legality in each VPA country. The third section highlights the social implications of the challenges and the fourth section provides concluding remarks.

Common challenges to addressing legality in VPA countries

Existing empirical studies show that VPA countries are facing several challenges and obstacles in ensuring legality in their forest sectors. The top five most frequently cited challenges to legality in forest product trade, common in all countries that have signed VPAs with the EU are:

1. political culture
2. weak and inconsistent legal frameworks
3. legitimacy factors (e.g. poor transparency and accountability)
4. non-compliance and poor enforcement
5. inadequate human and financial resources (Table 1)

Political culture. In academic literature, political culture is the most commonly cited barrier to ensuring legality in the VPA countries (with the exception of CAR where civil war is the first barrier to ensuring legality). The political culture refers to the abuse of power by elites and the culture of corruption. The most cited aspects of corruption in the VPA countries are requests for bribes, collusion between different types of government officials and illegal players, and the practice of buying legal papers.

In addition, the VPA countries suffer from too many dishonest state officials. In practice many state officials whose role should be to ensure legality are actively engaged in corrupt practices.

Weak and inconsistent legal framework. The challenges relating to this factor are incoherence and inconsistency within the legal framework and institutional conflicts between formal state laws and informal customary rules and practices. Guaranteeing legality in VPA countries is, therefore, hampered by a complex system of forest and tree tenure and overlapping and contradicting regulatory framework (Cerutti et al. 2013; Hansen 2011).

Challenges to legitimacy. VPA countries also suffer from poor transparency and accountability, and from a lack of sharing of forest information reporting. The VPA countries have poor reputations with respect to proper documentation, monitoring and sharing important forest information with the public (Cerutti et al. 2013; Pro-Formal 2015). There have been cases where state officials have been unwilling to collect and maintain information as a way of managing a network of corruption (for Indonesia, see Stone & Cashore 2014; Obidzinski et al. 2014; for Cameroon, CAR and Congo, see Cerutti et al. 2013; for Liberia see Pro-Formal 2015; for Ghana, see Hansen 2011).

Non-compliance and inadequate enforcement. Several scholars have pointed out that non-compliance and poor enforcement in VPA countries is mainly linked to the existence of broader governance failures including an insufficient enforcement capacity, and deficiencies in coordination between law enforcement and juridical bodies. These challenges also relate to the existence of norms and traditions. For instance, the informal domestic market is based on unwritten rules, norms or commonly accepted practices and customs. These practices fall outside the legal framework and are considered illegal, yet they still provide livelihoods for abundant but economically weak local communities and are widely accepted as normal practices by the locals.

Inadequate human and financial resources. Many of the VPA countries have limited capacity and lack the financial, human and materials resources necessary to address comprehensively legality in the forest sector. In Indonesia, Obidzinski et al. (2014) show a mismatch between the limited number of verification bodies and their staffs and the pace and amount of certification needed. The same is true in other VPA countries.

Challenges to ensure legality in the forest sectors of VPA countries

Cameroon

Challenges to legality in Cameroon, in order of importance, are:

1. vested interests of political and economic elites (also related to corruption)
2. lack of cross-sectoral communication and poor alignment of institutional boundaries (i.e. overlapping regulations)
3. poor transparency, which undermines the rule of law and erodes good governance

Several scholars (Cerutti et al. 2013; Carodenuto & Ramcilovic-Suominen 2014, among others) have demonstrated how corruption becomes a root cause of policy failures and how it will likely hamper any effort to ensure the rule of law and to improve the situation through policy reform in Cameroon. Several researchers (such as Cerutti et al. 2013) have identified the main underlying causes of a country-wide network of corruption, including the loss of the state's legitimacy to reform and implement policies and mistrust among officials. Other underlying causes are state officials who deliberately fail to collect and maintain information as a way of maintaining their network of corruption. These issues need serious attention and reform. Since government officials have become used to the supplementary income generated through their corrupt practices, they are likely to oppose strongly any changes to the existing state of affairs. This reluctance to change will have a significant effect on the development of the forest industry in Cameroon. The same is true for other VPA countries in the region.

Empirical studies in the Congo Basin countries also acknowledge that overlapping regulations, inconsistency and lack of coordination in formal state policies constitute other important challenges (Pro-Formal 2015; Korhonen-Kurki et al. 2015). In Cameroon the Ministry of Forests collects incomplete and/or contradictory legal texts that foster confusion and a sense of arbitrariness. There appears to be competition and overlaps among the sectoral ministries and their regulatory frameworks rather than a coordinated approach. This has led to overlapping and conflicting activities. At the same time, Carodenuto & Ramcilovic-Suominen (2014) observe that forest administration officials have an interest in maintaining an incoherent and uncoordinated state of affairs with respect to the power of different ministries and agreements with international partners, which allows them to pursue their personal agendas. All these challenges present significant barriers for industry developers and traders in the forest sector to function properly.

Ghana

In Ghana, the top five challenges to legality ranked in order of importance are:

1. political culture
2. inadequate legal framework (some of the existing laws are missing implementation decrees)
3. weak structure for detection and sanctioning non-compliance
4. bureaucracy
5. ignorance and lack of forest information such as forest taxation, forest resource assessments

In Ghana, many scholars (Hansen and Lund 2011; Ameyaw et al. 2015, among others) consider political culture, specifically the abuse of power by various elites in forest management, one of the main challenges to legality. Such abuse of power by elites weakens enforcement and perpetuates non-compliance. A key issue related to non-compliance and a lack of enforcement is the weak structure for detecting and sanctioning non-compliance. This allows most non-

compliance to go undetected, or when non-compliance is detected, it allows sanctions to be evaded. As for the legal framework, Ameyaw et al. (2015) identified three main problems with the existing legal framework in Ghana:

1. incomplete laws covering all relevant aspects of forest management
2. impractical laws that cannot be implemented
3. loopholes in existing laws resulting in poor enforcement

Procedures for obtaining services like timber rights and renewal of permits in Ghana are unduly bureaucratic.

Central African Republic

The main challenge to legality in CAR is the ongoing crisis and conflict. Although violence has declined overall in recent times, banditry and violence within communities continue to have a negative effect on efforts to ensure the rule of law across CAR. The second and third challenges are weak and overlapping legal frameworks and a culture of corruption respectively (Pro-Formal 2015; CAR R-PP 2011). The fourth challenge is the lack of respect by leaders and citizens for the rule of law and human rights. The judiciary in CAR is handicapped by structural difficulties and inadequate funding. There are also inadequate financial resources to ensure public institutions can operate effectively and can implement programmes and projects (Pro-Formal 2015; CAR R-PP 2011). Governance of public institutions is weakened and compromised as a result of unpredictable resources. Other challenges in CAR include a low level of accountability by national and local government institutions and poor quality of service.

Republic of the Congo

The top five challenges to legality in Congo's forest sector (Cerutti et al. 2013; Lescuyer et al. 2011; Pro-Formal 2015) in order importance are:

1. culture of corruption (including abuse of power by political and economic elites)
2. weak and overlapping legal frameworks
3. lack of accountability and poor transparency
4. state officials deliberately failing to collect and maintain information
5. inadequate staff and logistics for monitoring compliance with regulations (RoC R-PP 2011)

In Congo, several studies (Cerutti et al. 2013; Lescuyer et al. 2011; Pro-Formal 2015, among others) found that state officials are implicated in corruption. The Government does not publish important data. Different companies, including the forest concessions and state oil company, are directly under the control of the president's family and advisers. Domestic prosecutions for corruption have been few and are often politically motivated when they do occur. Congo was ranked 144 out of 176 countries surveyed in Transparency International's 2012 Corruption Perceptions Index.

Liberia

While Liberia faces many of the same challenges to ensuring legality as the other countries discussed, International Consulting Capital (ICC) and the Forest Venture Inc. (FV) identified three key challenges to guaranteeing legality in the forest sector of Liberia (CSIFM 2014). These challenges are:

1. poor transparency and accountability
2. lack of commitment from state officials to upholding the rule of law
3. weak and inconsistent legal frameworks

All these challenges relate to the political culture. In the forest sector of Liberia there is a complete lack of transparency. In particular, state officials and concessioners are unwilling to document and share information with the public. For example, the ICC was unable to commence logging activities in the concession area and so it subcontracted to FV to log the concession. During logging, the FV failed to deliver its obligations as enshrined in the Social Agreement. The officials were aware of this, but the local community was not informed of the details of the subcontract, including details of the Social Agreement that FV committed to. Local communities lodged complaints but the officials and the company failed to address their concerns, which led to conflicts between the company and the local community. In addition, FV breached the law regarding taxes, among others and became involved in several illegal forest activities, including logging from illegal areas. Yet, state officials failed to investigate the company's illegal activities. "The failure of the Government of Liberia to prosecute the company and its executives that were linked to these fraudulent activities demonstrate a lack of commitment to upholding the rule of law in the sector" (CSIFM 2014). This has implications for ensuring legality in the forest sector.

Indonesia

Several country-specific barriers to legality in Indonesia have been identified in the academic literature (Stone & Cashore 2014; Obidzinski et al. 2014). First, there has been collusion in the form of bribes, informal payments and transactions, between the Indonesian Government and business, which erodes the rule of law. Second, there is an abuse of power by politicians, traditional authorities and the timber industry. The third and fourth challenges are overlapping land tenure rights and the absence of accurate forest information. Like other VPA countries, there is high distrust among officials (also between national and local government) in Indonesia (Casson and Obidzinski 2002). Indonesia has a large and active, but informal and unorganised, timber sector run by people who seem unwilling to bring it up to international standards, and would instead prefer to carry on with their traditional, informal practices.

Table 1. Summary of the top challenges to ensure legality in six VPA countries

Ghana	Cameroon	Congo	CAR	Liberia	Indonesia
Political culture ¹	Political culture, including private interests of civil servants in the forest sector ²	High level of corruption ³	Lack of staff and logistics ³	Lack of staff and logistics ⁴	Strong alliance between state and business ⁵
Inadequate and unrealistic laws ⁶	Weak legal frameworks ^{2,3}	Weak and overlapping legal frameworks ³	Civil war ³	Lack of commitments by officials to uphold the rule of law ^{4,14}	Lack of accountability and mistrust among state officials ^{7, 10}
Non-compliance/poor enforcement ⁸	Poor alignment of institutional boundaries and lack of institutional acknowledgement ⁹	Lack of accountability and transparency ³	Lack of or weak coordination in formal state policies ³	Weak and inconsistent legal framework ^{4,14}	Legal inconsistencies with regard to tenure ¹⁰

¹ Hansen and Lund, 2011; The political economy of timber taxation: The case of Ghana; Ameyaw et al., 2015 Challenges to responsible forest governance in Ghana and its implication for professional education

² Cerutti et al., 2013 Cameroon's Hidden Harvest: Commercial chainsaw logging. Corruption and livelihoods

³ Cerutti et al., 2013; Lescuyer et al., 2011 The domestic market for small-scale chainsaw milling in the Republic of Congo: Present situation, opportunities and challenges; *Pro-Formal*, 2015

⁴ CSIFM, 2014 Partners in progress or illegality: the case of International Consulting and Forest Venture Inc

⁵ Obidzinski et al., 2014 The timber legality verification system and the voluntary partnership agreement (VPA) in Indonesia: Challenges for the small-scale forestry sector

⁶ Arts & Wiersum, 2010 Social safeguards in the Ghana-EU Voluntary Partnership Agreement (VPA); Hansen, 2011 Forest Law compliance and enforcement: The case of on-farm timber extraction in Ghana

⁷ Obidzinski, K., Kusters, K. 2015. Formalizing the Logging Sector in Indonesia: Historical Dynamics and Lessons for Current Policy Initiatives. *Society and Natural resources*, 28(5), 530-542

⁸ Hansen and Lund, 2011; Ameyaw et al., 2015

⁹ Korhonen-Kurki et al., 2015 Coordination and cross-sectoral integration in REDD+: Experiences from seven countries

¹⁰ Stone & Cashore, 2014 Global forest governance to address illegal logging: the rise of timber legality verification to rescue Indonesia's forest; Obidzinski et al., 2014

Prolonged and bureaucratic processes ¹¹	State officials deliberately not collecting and maintaining information ^{2,3}	State officials deliberately not collecting and maintaining information ³	Weak and overlapping legal frameworks ³	Poor transparency and accountability ^{4,14}	Prevalence of corruption and collusion ^{7,10}
Ignorance and lack of forest information ¹²	Authorities lack capacity and resources to enforce rules ^{2,3}	Lack of staff and logistics ³	Political culture ¹³	Lack of forest information ^{4,14}	Weak rule of law ^{7,10}

¹¹ Ameyaw et al., 2015

¹² Arts & Wiersum, 2010; Ameyaw et al., 2015

¹³ Elite power position of politicians, high corruption level

¹⁴ personal communication

Social effects of addressing legality and of industrial development in VPA countries

Social effects

Addressing legality in the VPA countries is difficult as reliable information is not readily available. The processes of ensuring legality in the forest sector could have positive and negative social implications, such as:

- **National economy.** Addressing legality could have a positive effect on the development of the local and national economy of VPA countries through the expected increase in tax contributions. The cost of implementing the VPA should only be a fraction of the increase in taxes and revenues for a national economy. However, the total cost of implementing the VPA is not clear, nor is it clear who ultimately pays for it once FLEGT licensing becomes operational.
- **Contribution to rural development.** The formal forest sector in VPA countries employs hundreds of thousands of people and several thousands of these jobs are located in the most remote parts of the countries where the governments are unable to open and maintain roads and build schools, medical facilities and community buildings. The salaries earned by these employees of the forest sector constitute the main source of finance for the local economies. Forest concessions and companies play an essential part in maintaining public infrastructure in these areas.
- **Corruption.** As corruption is a serious problem in several of the VPA countries, this seriously undermines progress, or the prospect of progress, on political, social, economic and environmental development. Okafor (2013) reports that without concerted effort by the state and all other stakeholders to fight corruption, any effort towards lasting industrial development is prevented, stifled or endangered.
- **Negative effects on livelihoods of local communities.** Due to strict law enforcement, forest dependent communities in the VPA countries could face a serious crisis among self-employed people in the informal sector who risk losing their means of livelihood. Thus, there could be a negative multiplier effect on the local communities once the people lose employment, family cash or material resources. However, such effects should be offset by increases in material use efficiency, and through employment in the growing formal sector.
- **Reducing poverty.** Enforcing legality often has immediate negative effects on the livelihoods of poor people. Buchy and Hobley (2012) showed that ensuring legality – taking the VPA process in Cameroon, Congo and Ghana as examples – could provide a strong framework and institutional context for reducing poverty in the VPA signatory countries. This is mainly because ensuring legality in the long term could contribute to strengthening the livelihood of local communities. It can give people a voice and allow them to have influence over decisions in appropriate forums and with respect to changes to the laws and policies that support the livelihoods of poor people.

Industrial development

As discussed elsewhere in this report, the dynamics of the timber trade from VPA countries has changed in recent years, and producer countries are now exporting substantial amounts of timber to the Asian market, mainly to China. The timber market in China entails less strict requirements for legality and sustainability of forest products compared to the EU market. As long as the EU market remains open for timber from VPA countries without FLEGT-licensed timber, those companies that already have due diligence systems in place can benefit from a so-

called EU market premium. These companies could lose out if consumer confidence wanes. If this cancels incentives to continue earlier engagements towards legality verification, it would cause major setbacks. This would affect all forest sector stakeholders and it would ultimately affect forest-dependent communities, where slight improvements in the recognition of their rights could be revoked. However, it is too early to assess the full effect of these changes on the forest-dependent communities in the VPA signatory countries.

China's legal framework

Yanhong (2012) indicated that China, under the guidance of its 12th five-yearly plan, is taking action to change from a passive complier to an active participant in international trading rules and standards, and that it wants to promote overseas investment and cooperation and to improve overseas investment quality. Brack's (2014) analysis of the official guidelines and credit policies for Chinese enterprises operating and investing abroad, endorses the view that the Government of China is increasing its efforts to regulate the business behaviour in the country, in order to improve the image of Chinese entrepreneurs and investors outside mainland China. The following is a sample of recent guidelines:

- Guide on sustainable overseas silviculture by Chinese enterprises (2007), by Ministry of Commerce, China (MofCom) and State Forestry Administration, China (SFA)
- Guide on sustainable overseas forests management and utilization, by Chinese enterprises (2009), MofCom and SFA.
- Guidelines for environmental protection in foreign investment and cooperation (2013), by MofCom and Ministry of Environmental Protection
- Guidelines for overseas sustainable forest products trade and investment by Chinese enterprises (development process started in 2013), by SFA and MofCom
- Green credit policy (2007), by China Banking Regulatory Commission (CBRC), People's Bank of China and State Environmental Protection Agency

These guidelines ask operators and investors in China to respect local laws and regulations, to pursue and support sustainable forestry resource operations and to follow ethical business practices in general. However, as Brack points out, these regulations are voluntary, and even if leverage may be stronger with investment guidelines, for example, effective control on the ground is weak. There are no known examples of divestment in cases where guidelines might not have been followed correctly.

Conclusion from the VPA countries' perspective

The five main challenges to legality in the six VPA countries (the first being the most difficult challenge):

1. political culture (i.e. high level of corruption, civil servants with personal interests in the forest sector)
2. weak and overlapping legal frameworks
3. lack of staff and logistics
4. lack of accountability and mistrust among state officials
5. ignorance and lack of information

Political culture (especially the abuse of power by some elites in forest governance) and institutional challenges to legality will likely be the most difficult problems to address because

they are inherent to the countries' political economy¹⁵. Chinese forest product traders and industry developers could face challenges to working with corrupt state officials and with the weak and inconsistent regulatory frameworks of the VPA countries. These challenges to legality remain the same with increasing trade.

The slight improvement observed in recent years was not because of increasing trade with China and other Asian countries, but mainly because of the slow progress made as VPA processes have been implemented, as highlighted during a timber legality-focused side event at the XIV World Forestry Congress in South Africa (WFC 2015). Even though progress has been slow, the process of implementing the transparency annex of the VPA and the awareness raising campaigns conducted by various state and non-state actors to raise awareness have made small yet noticeable changes. Nevertheless, addressing legality is a formidable task that requires the combined efforts of the governments of the VPA countries, practitioners of the VPA processes, the private sector and partners of the process.

Any concessionaire, processor or trader operating under the described regulatory circumstances in the VPA countries (and in developing countries elsewhere), is at risk of succumbing to the weakness of the system. China's regulatory framework expresses a genuine concern that Chinese companies abroad be socially and legally responsible. Since the regulations and guidelines are voluntary and lack enforcement and control mechanisms, they risk remaining at the level of good intentions.

Comparison of Chinese importer and VPA exporter perspectives on challenges to address legality in their respective forest sectors

The perspectives of the two teams of authors were completely different. While both teams analysed the dynamic changes, trends and issues of the China/VPA trade and investments, the CAF authors saw the effect on China, while the EFI authors saw the effect on the VPA countries. Evidently there are differences, but there are also some similarities. Each side was asked to list the five main challenges to their country (CAF) or countries (EFI).

China's trade with the six VPA countries provides economic benefits to both parties. China's growing imports of timber products mean revenues to the VPA countries. When roundwood is legally harvested, transported and exported, the VPA countries receive revenues along that short chain. Those revenues should be shared with the communities where the logs are harvested, the companies hauling the logs to landings, the exporting companies and the ports. Local, regional and national governments should receive revenues from taxes paid at the different stages. In the case of sawnwood, processing at sawmills is an extra step; this too should generate employment and revenues for the sawmilling company, as well as taxes for the government(s).

Likewise, in China, the timber imports generate economic benefits when the wood arrives at the port, during transportation and processing, and then at the point of sale for domestic uses or for export. These economic benefits, including employment, are similar, to those of the VPA countries in that they occur at the different stages of importing, transporting, processing and

¹⁵ **Political economy** is the interplay between economics, law and politics, and how institutions develop in different social and economic systems. Political economy analyses how policy is created and implemented.

shipping of finished or semi-finished goods. The Government of China should collect tax revenues along this chain, too.

This section was to compare China's and the VPA countries' challenges to and obstacles in the way of ensuring legality in the forest sector. From the VPA countries' perspective, the top five challenges to legality in forest product trade are related to:

1. political culture
2. weak and inconsistent legal framework
3. legitimacy factors (e.g. poor transparency and accountability)
4. non-compliance and poor enforcement
5. inadequate human and financial resources

These are considerable challenges for the VPA countries to overcome, however, the FLEGT Action Plan is devoted to providing the means to address these obstacles.

In China, the five main challenges to legality are (not in order of priority):

1. difficulty in identifying tree species
2. trading statistics system fails to meet legality requirement
3. obscure information about place of origin
4. lack of certification documents
5. lack of a trade data exchange mechanism

Details of these five challenges appear above in section 3.1.3.

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3. Overview of China's overseas investments in VPA countries forest sectors

Introduction

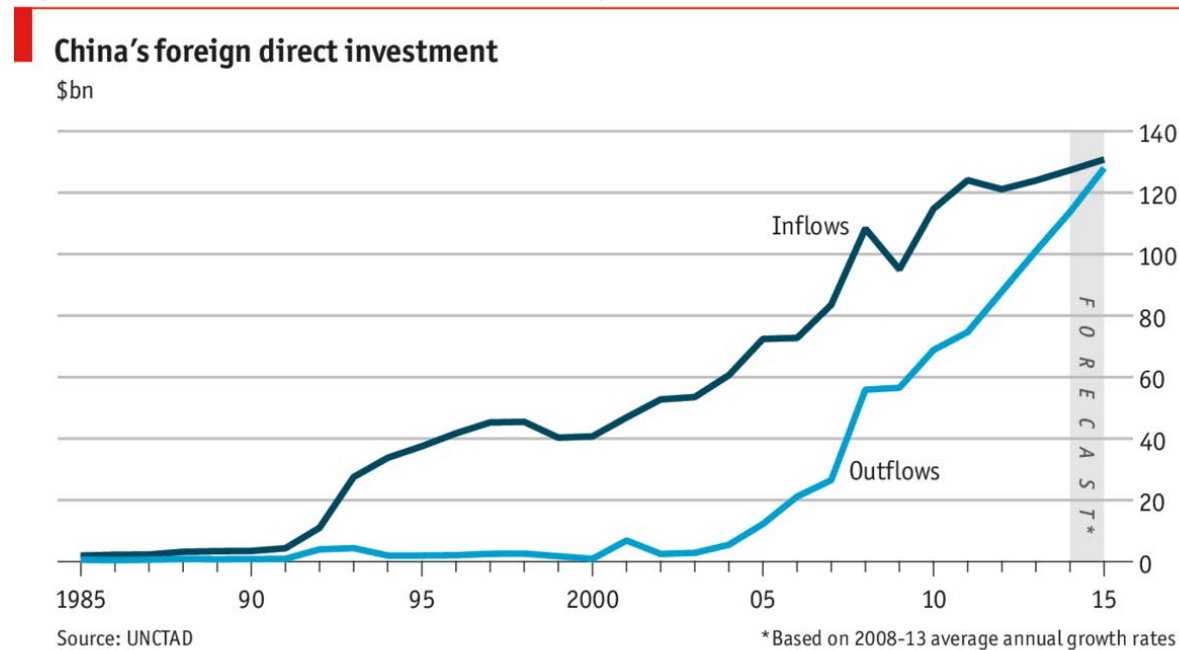
As analysed in Chapter one of this report, China's imports of primary-processed forest products, including logs, sawnwood and veneer, have escalated over the past 10 years due to an increasing domestic demand as well as a rapidly developing processing capacity within China to meet the growing export demand. China's domestic forest resources have been increasing mainly because plantations were established after disastrous floods that were caused, in part, by deforestation. Despite valuable domestic forests, restrictions on harvesting, in part to avoid flooding in some regions, have fueled the need for greater imports of tropical and temperate species. As restrictions on tropical imports increase, due to log export bans to promote domestic processing and forest sector economic development in tropical countries, China turned northward and began investing in Russia's logging, processing and transportation industries. Chinese investments in tropical countries are often obligatory to extract forest, and other, resources. For example, Chinese investors have built infrastructure to access (physically and politically) forests. Trade between China and Africa is expected to double by 2020 along with Foreign Direct Investment (FDI) from China into emerging economies in Africa and Asia (Mayers 2015).

When analysing China's investments in the VPA countries, we must remember that China is classified by the UN as a developing country, and that it receives more FDI, or inward foreign direct investment (IFDI) than any other country, according to the World Bank.¹⁶ China has received an increasing amount of FDI since 2004, reaching USD 348 billion in 2013 (most recent statistics).

However, according to forecasts by the United Nations Conference on Trade and Development (UNCTAD), this situation could change in 2015 or 2016 when, for the first time, China's foreign direct investment outflow (OFDI) exceeds its FDI inflow (Figure 37). The International Tropical Timber Organization (ITTO) Market Information Service reported in its May 2015 edition that China's OFDI exceeded IFDI in 2014 (ITTO 2015). Whether 2014 or 2015, a net capital outflow marks a fundamental change in China's financial and economic development. This change in the ongoing opening up, and opening outwards period is a result of the liberalisation of Government policies and the Government's promotion of "Going Global".

¹⁶ <http://search.worldbank.org/all?qterm=FDI+%26+CHINA&language=EN&op=>

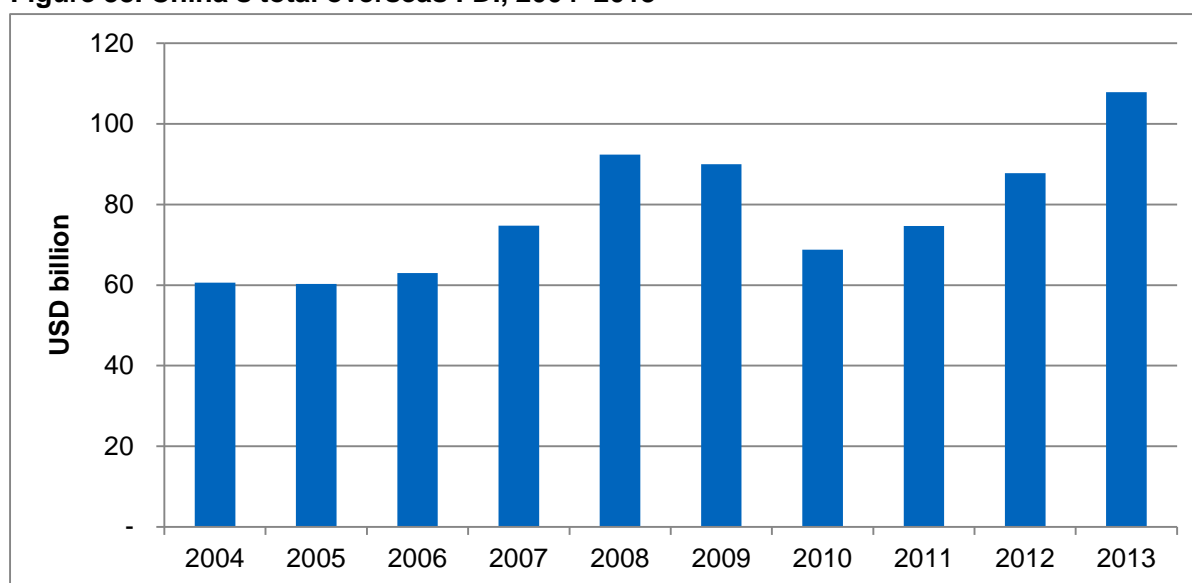
Figure 37. China's inward and outward foreign direct investment, 1985–2015



Economist.com/graphicdetail
Source: UNCTAD, 2015

China's total OFDI nearly doubled from 2004 to 2013, according to the latest statistics published in the China Statistical Yearbooks (China Statistical Yearbooks 2005–2014) (Figure 38).

Figure 38. China's total overseas FDI, 2004–2013

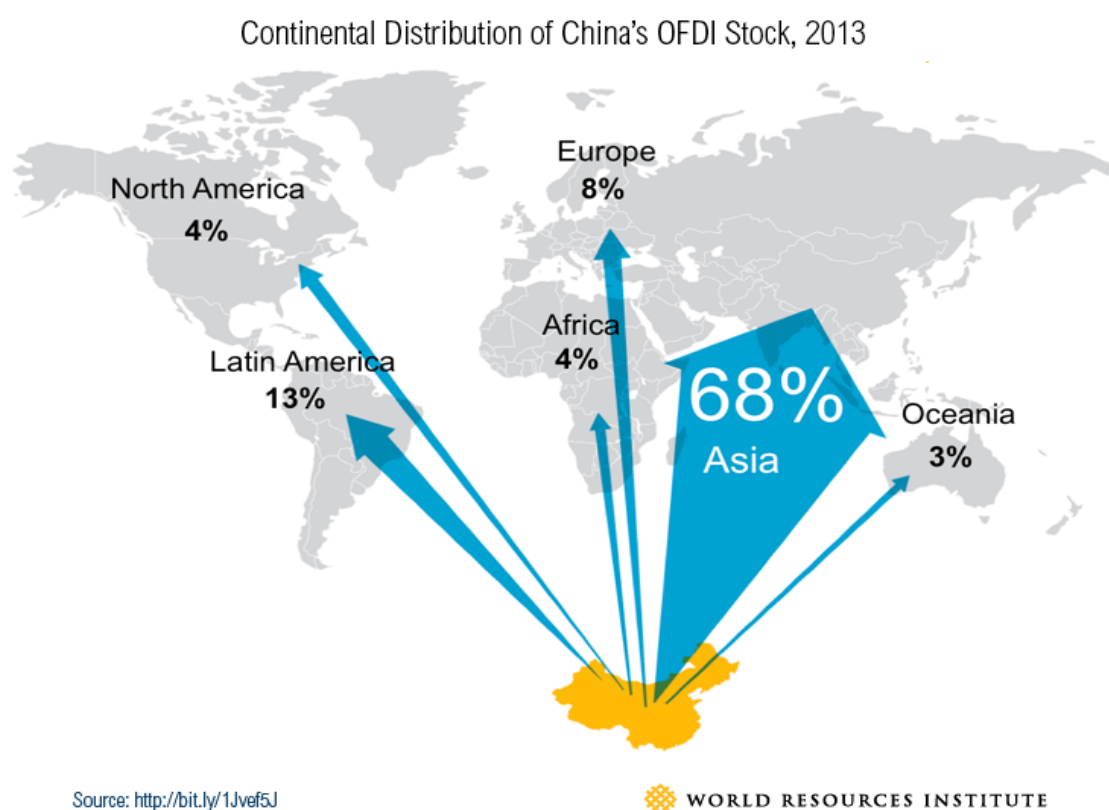


Source: China Statistical Yearbooks, 2005-2014

The ITTO Market Information Service stated in their May 2015 edition that Chinese OFDI in 2014 increased by 14 % to USD 103 billion (ITTO 2015). However, the value of USD 103 billion is not greater than the USD 108 billion reported by the China Statistical Yearbook 2014 and shown in the graph above.

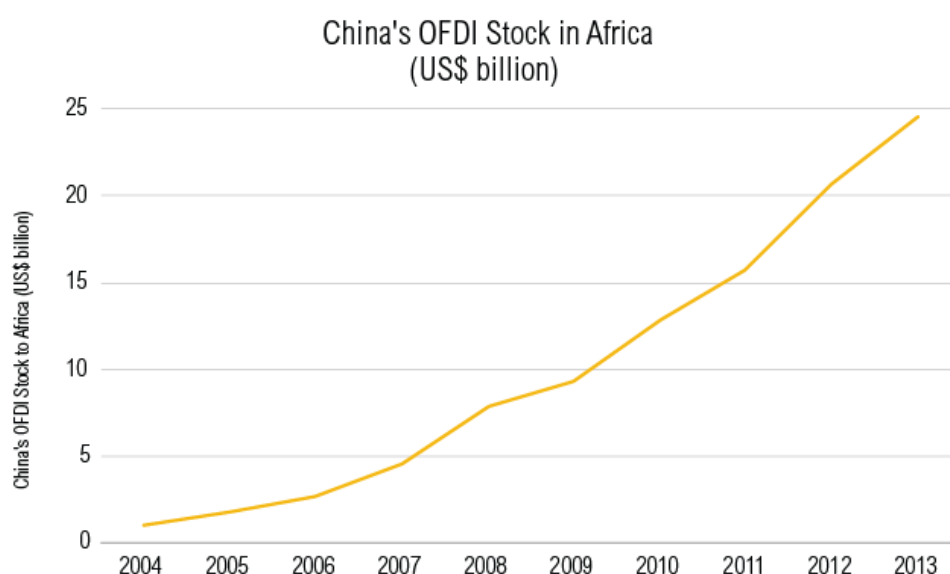
In 2013, only 4 % of China's total OFDI went to Africa (Figure 38) (Zhou and Leung 2015). The majority of investments, 68 %, are in other Asian countries. However, the African share of investments has risen rapidly in recent years (Figures 39 and 40) (ibid 2015).

Figure 39. China's geographical distribution of total overseas FDI, 2013



Source: China's Ministry of Commerce, as reported by Zhou and Leung for World Resources Institute, 2015

Figure 40. China's overseas FDI stock in Africa, 2004–2013



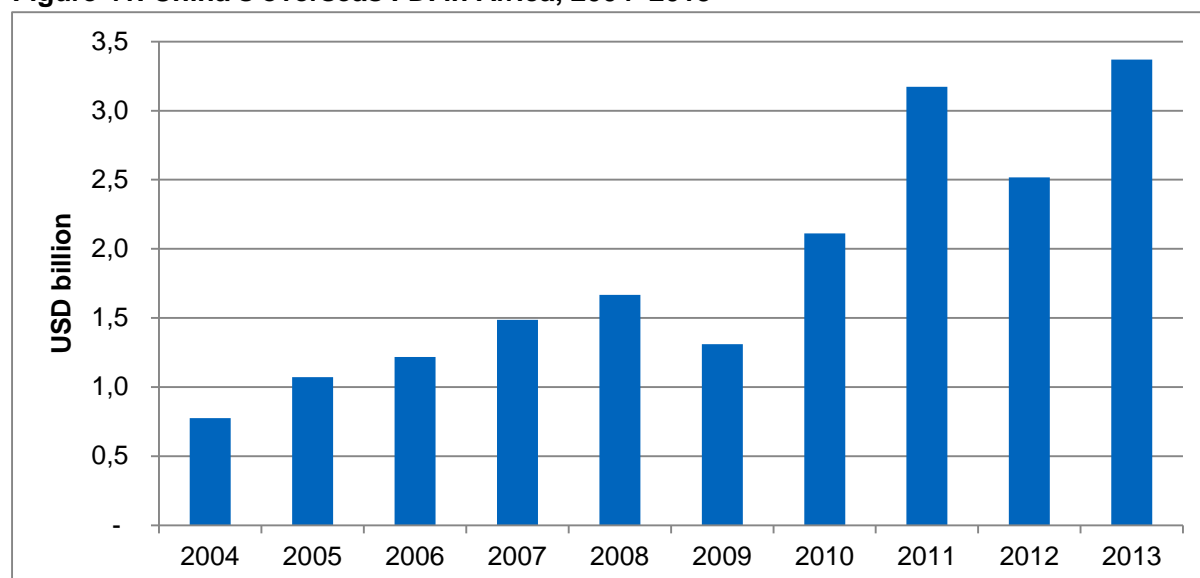
Source: <http://bit.ly/1Jvef5J>



Source: China's Ministry of Commerce, as reported by Zhou and Leung for World Resources Institute, 2015
(Note: It is not clear if by "stock" the World Resources Institute was reporting the cumulative value of OFDI that China has invested in Africa.)

The graph above (Figure 40) is titled "stock" by the World Resources Institute. In an effort to clarify if by "stock" the World Resources Institute means the cumulative investment, the annual investments shown in the figure below were added (Figure 41). The result for the most current year, 2013, was USD 18.7 billion, which is less than the almost USD 25 billion shown as "stock".

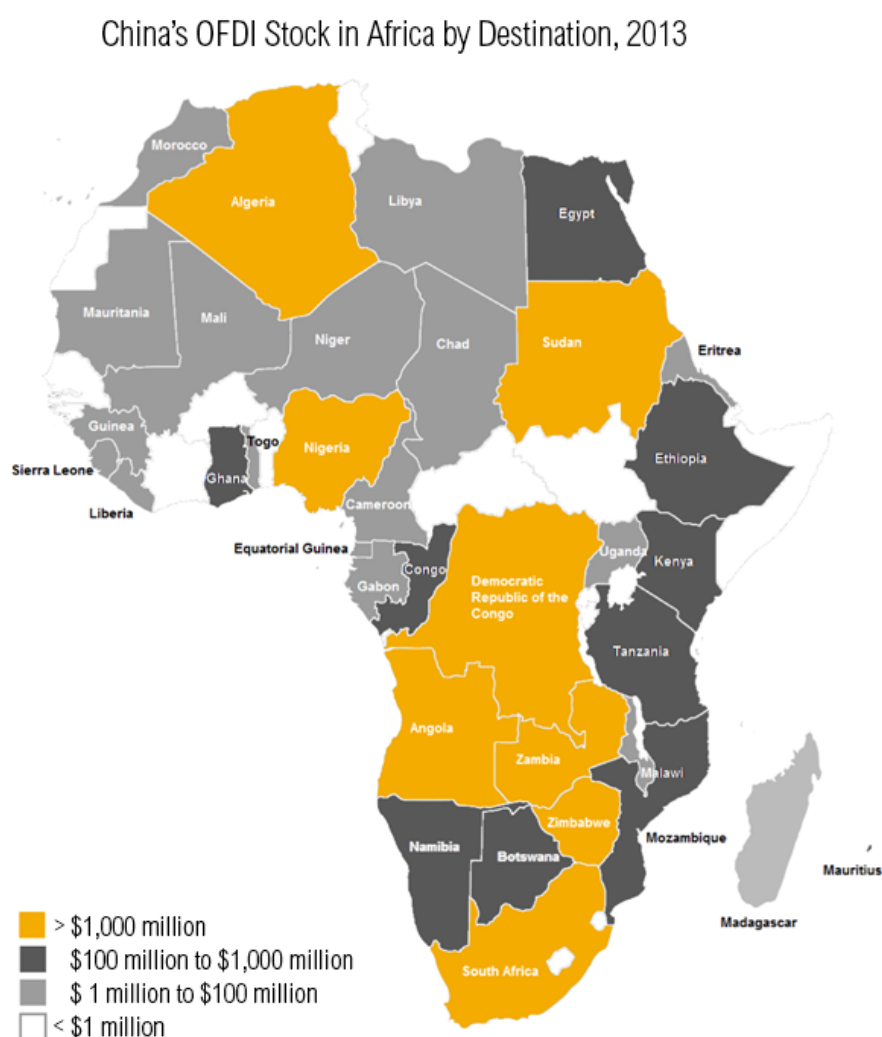
Figure 41. China's overseas FDI in Africa, 2004–2013



Source: China Statistical Yearbooks, 2005–2014

Chinese investments in Africa are not evenly distributed, but correspond directly to desired resources. Political stability and legal access to resources, their extraction and export, also contribute to the distribution of OFDI. According to a new study published in 2016, China has forest sector investments in 25 African countries as of 2015 (Li and Yan 2016). Of the 4 % of OFDI going to Africa, most went to South Africa, and of the five African VPA countries for this study, amounts received ranged from less than USD 1 million for the CAR to between USD 100 and 1000 for Ghana (ibid 2015) (Figure 42).

Figure 42. Distribution of China's FDI in Africa, 2013



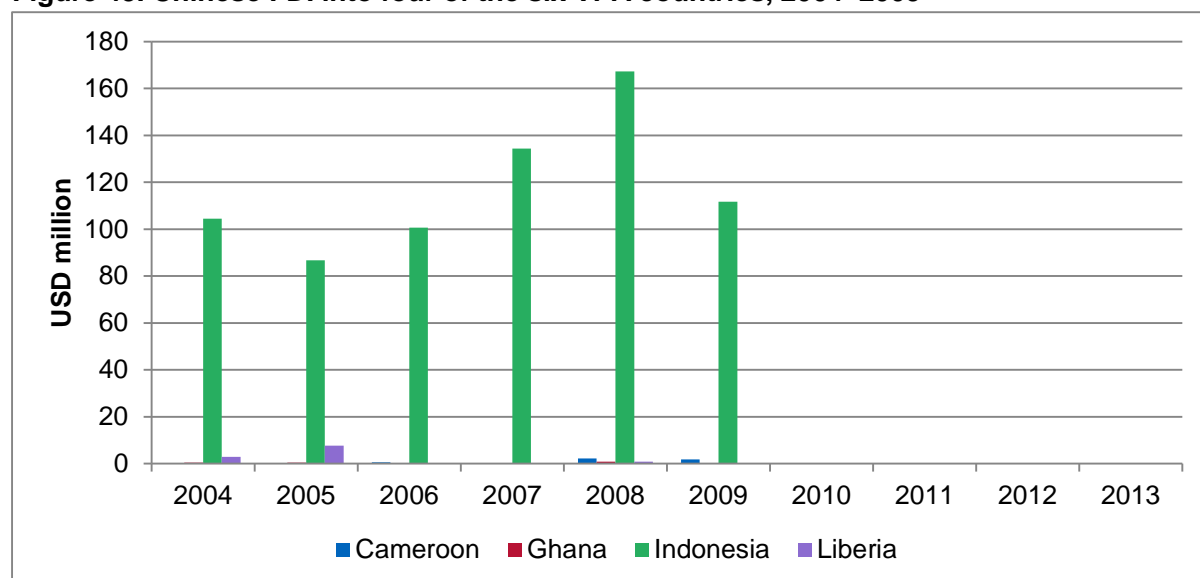
Source: <http://bit.ly/1Jvef5J>

 WORLD RESOURCES INSTITUTE

Source: China's Ministry of Commerce, as reported by Zhou and Leung for World Resources Institute, 2015.
(Note: It is not clear if by "stock" the World Resources Institute was reporting the cumulative value of OFDI that China has invested in Africa as of 2013.)

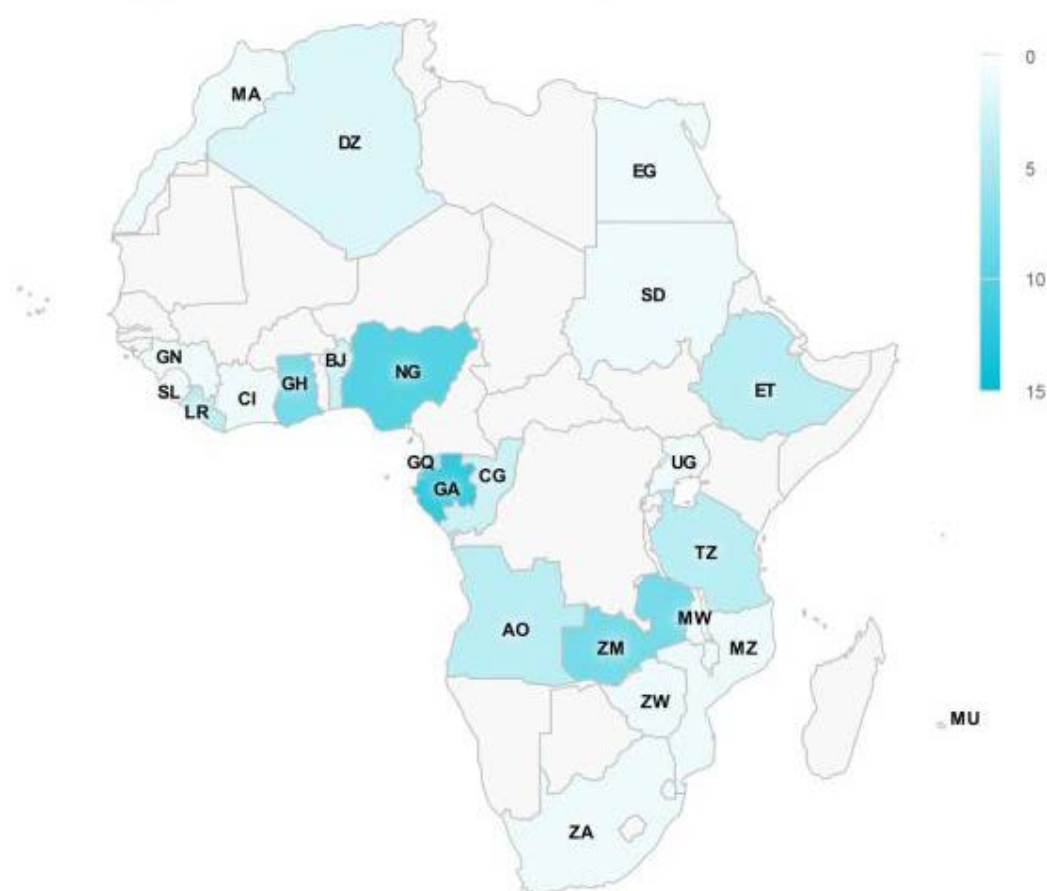
China's Statistics Yearbooks report OFDI into only four of the six VPA countries (Chinese Statistics Yearbooks, 2005–2014) (Figure 43). There was no FDI to CAR reported, which confirms the void in the map in Figure 6. But the map above shows FDI into Congo, which is not recorded in the Yearbooks. The map above shows FDI in 2013, but the Yearbooks recorded no FDI for any of the six countries for 2010 onwards. The map of the number of approved Chinese investment projects in Africa's forest sector confirms that there was no FDI into Congo (Figure 44).

Figure 43. Chinese FDI into four of the six VPA countries, 2004–2009



Source: Chinese Statistical Yearbooks, 2005–2014

Figure 44. Number of approved Chinese investment projects in Africa's forest sector



Source: Ministry of Commerce, China



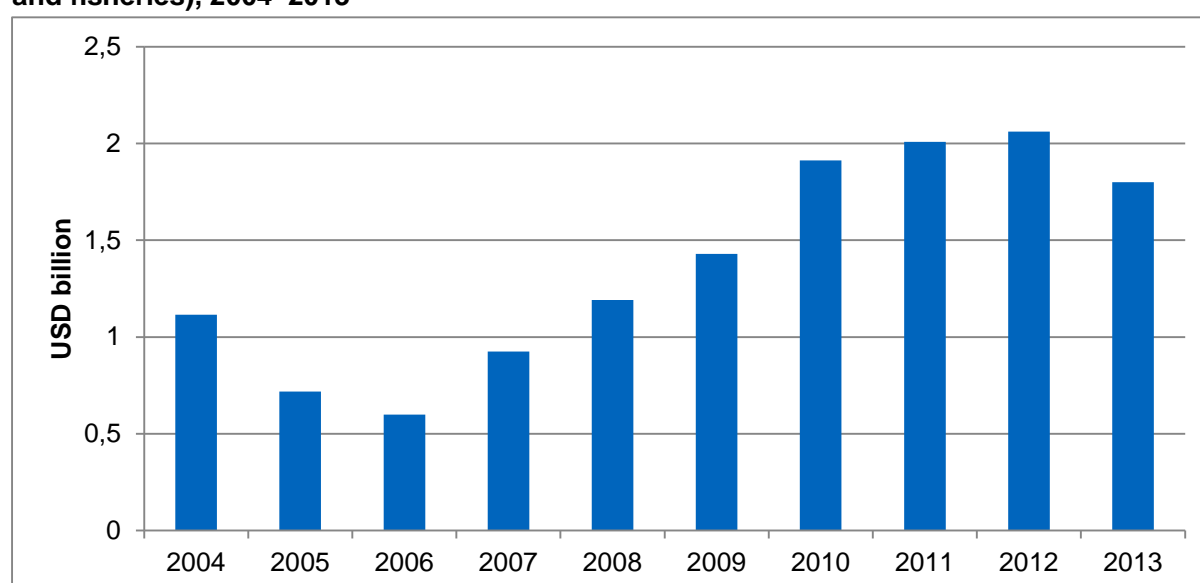
WORLD RESOURCES INSTITUTE

Sources: Ministry of Commerce, China, and World Resources Institute, as reported by Li and Yan, 2016

According to the Organisation for Economic Co-operation and Development (OECD), China's OFDI in the forest sector (along with agriculture, animal husbandry and fisheries) was only 1.7 % of total OFDI in 2010 (Davies 2013). However, by the end of 2011, this had reportedly increased

to 2.5 % (Xinhua 2013). China's OFDI in forestry, combined with agriculture, animal husbandry and fisheries, grew steadily and quadrupled from 2006, but decreased by 13 % in 2013 (China Statistical Yearbooks 2005–2014) (Figure 45). The largest share of China's OFDI was for manufacturing (43.2 %), followed by real estate (20.9 %). After real estate, the shares of OFDI diminish to finance (8.8 %), wholesale and retail (5.8 %), leasing and business services (6.2 %). Of the 19 categories in the OECD's study of China's OFDI, forestry ranks 11th, or 8th from last. Overall, China's OFDI in the forest sector is small compared to other sectors. OFDI in other sectors might involve the forest sector, for example, mining (0.6 %, USD 680 million), construction (1.3 %, USD 1.46 billion) and as mentioned above, manufacturing (43.2 %, USD 29.7 billion). When considering the percentages above, it is important to remember that some unknown part of China's OFDI is not recorded as China, but as other entities, e.g. Hong Kong. While this complicates the analysis, the trends can be assumed to be correct.

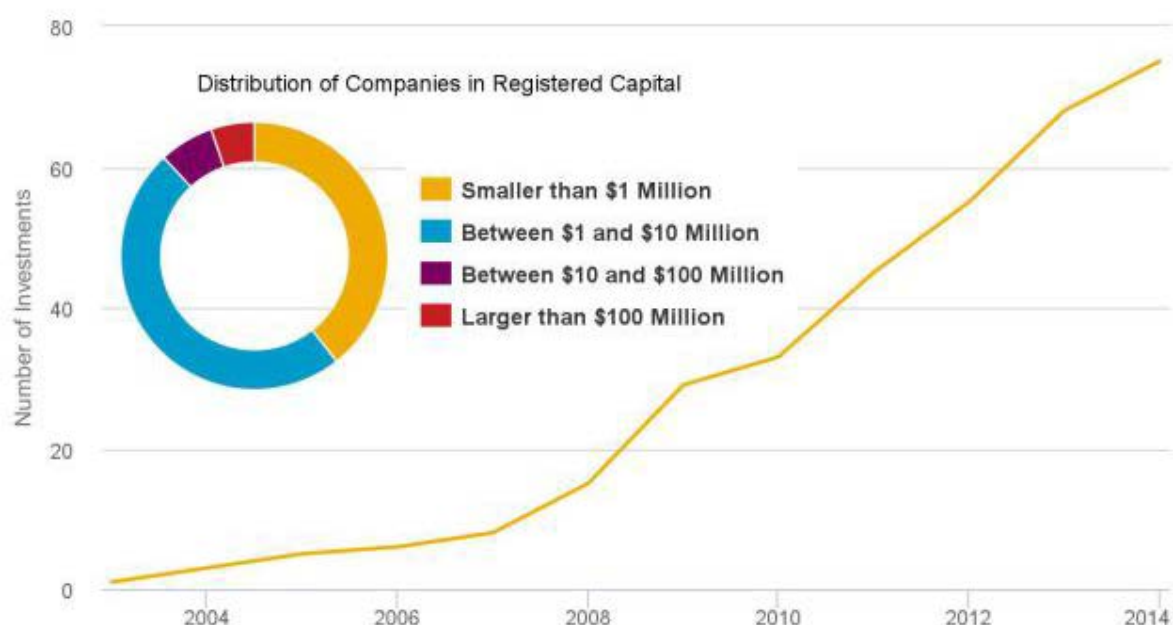
Figure 45. Chinese overseas FDI in forestry (together with agriculture, animal husbandry and fisheries), 2004–2013



Source: Chinese Statistical Yearbooks, 2005–2014

Although relatively small, China's OFDI in the forest sector is growing. China invested USD 7 billion in the forest sectors of Asia, Europe, Africa, the Americas and Oceania (China Invests Overseas 2015). China has approximately 200 forestry investment and cooperation projects in Asia, Europe, Africa, America and Oceania employing nearly 10 000 people. A new study published in 2016 states that investments in the timber sector have grown from 8 projects in 2007 to 84 in mid-2015 (Li and Yan 2016).

Figure 46. Cumulative number of approved Chinese investments in Africa's forest sector



Source: MOFCOM and SAIC

 **WORLD RESOURCES INSTITUTE**

Sources: MofCom, Chinese State Administration for Industry and Commerce (SAIC) and World Resources Institute as reported by Li and Yan, 2016

Within the China Forest Industry Federation, an International Trade and Investment Office assists companies with overseas investments. OFDI in forestry benefits from new opportunities through free trade zone strategies, bilateral investment protection agreements and favourable taxation (ibid 2015). But, companies investing in overseas forestry encounter problems including inadequate government support, insufficient financial and management support, lack of investor experience, lack of business management and the inability to assess risks – as well as inadequate international business experience (ITTO 2015).

Most of China's OFDI is from public (national, provincial and municipal) enterprises. Since 2000, China's national investment policy, called "Go Global Strategy" or "Going Out Policy", encourages private enterprises to invest overseas. The Going Global Strategy includes incentives for OFDI including below-market rate interest loans, direct capital contribution and subsidies (Brack 2014). Among the goals of the strategy, which are relevant to OFDI in the VPA countries forest sectors, are:

- encourage overseas investments to enhance China's competitiveness and expand the scope and modalities of China's economic and technical cooperation
- support companies exploring resources overseas that were in short supply domestically, and promote adjustment of the sectoral structure of resources trade (Huang, W. And A. Wilkes 2011)

China is developing guidelines to promote best practices for companies investing and operating overseas. Banks providing loans for OFDI have guidelines for "green credits". A new trend toward strengthening the responsibility of Chinese companies operating overseas has emerged, with several new policies supporting this trend in recent years. Examples include the "Performance appraisal and annual inspection joint system" of MofCom, the "Overseas forestry sustainable management guideline for Chinese enterprises" (SFA) and various initiatives related to "green finance" in the Chinese finance and banking system. These policies take the form of

voluntary guidelines and “suggestive” policies (meaning they lack a basis for legal enforcement), the fact that they were issued shows how the Government of China’s attitude has shifted towards an approach that considers both economic benefits and social and environmental responsibility (Huang and Wilkes 2011). However, Chatham House reports that there is a low level of compliance with these new guidelines because they are voluntary and because they are not well known (Hoare 2015).

China has increased substantially its investments in the African forest sector making investments in forest management (presumably concessions), logging, wood-based panels, furniture, flooring and pulp and paper (Hansen, et. al. 2013). The MofCom database indicates that 36 forest-sector investment projects were implemented in 14 African countries by 2010 (MofCom 2013). The main investment destinations for Chinese forest-sector companies were Gabon, Nigeria, Congo, Ghana and Zambia. China invested mostly in Gabon, at one-third of the total investments, because of several factors such as a relatively stable political environment, and rich forest resources. Prior to 2011, Gabon exported mainly logs to China, but following a log export ban in 2011, Chinese firms began investing in primary processing facilities to export sawnwood.

As reported by Brack (2014), based on an unpublished working paper by the Chinese Academy of Forestry titled “An Overview of China’s Overseas Investment in Forestry and Land Use”, Chinese OFDI plays an important role in securing imports of timber for China’s domestic industries. According to the overseas investment approval record kept by MofCom, investments in forestry and land use have been made in the following regions and countries:

Africa. Fourteen countries in Africa have received Chinese outward FDI in agriculture and forestry, in particular Gabon (23 % of total investment), Zambia, Equatorial Guinea, Liberia, Congo and Cameroon. Investments tend to target labour-intensive activities, such as logging and wood and rubber processing, rather than more capital-intensive activities such as paper or flooring manufacturing. Large state-owned enterprises account for the bulk of outward FDI, though the importance of private small- and medium-size enterprises are rising (and they prefer Africa to other regions for OFDI). Joint ventures are common as a means both of circumventing legal restrictions on foreign ownership and of reducing operational risks (Brack 2014).

Asia. Outward FDI in logging and processing has been mainly directed to Laos, Myanmar, Thailand and Korea, while particular efforts have also been made to establish plantations in border areas previously under opium poppy cultivation in Laos, Thailand and Myanmar. In general, FDI in Asia has been more capital intensive than in Africa, with paper and paper products and palm oil production among the most prominent investments. Rubber plantations designed to meet the need for rubber imports for China’s growing vehicle industry have been a particular target in Laos (Brack 2014).

According to forecasts by The African Economic Outlook (AEO), FDI into Africa could exceed USD 70 billion in 2015 (AEO 2015). This is due mainly to investments from China, which is Africa’s second largest trade partner after the EU. (Note that some sources state that since 2009, China has been Africa’s largest trading partner.) The report also demonstrates the increase in intra-African and outward FDI flows with South African companies leading the way.

Investment overview

Asian and African countries are important trade and investment partners with China. In the last decade, Indonesia and Ghana, two of the six VPA countries, have been consistently among China's top destinations in Asia and Africa for investment. Many Asian and African countries have banned log exports or set export restrictions on logs over the last few years, and this has led China to shift its forestry investment in six VPA countries from logging to timber processing and manufacturing.

History of investment by country

During the period from 2003–2015, considering geographical advantage and economic complementarity, etc, most of China's FDI went mainly to Asia, with an increasing amount going to Africa. In 2003, for example, 52.5 % of China's investments were made in Asian countries. Indonesia was the fifth in Asia, accounting for 1.78 % of China's total investment in the region. Africa accounted for only 2.62 % of China's total foreign investment, which places it well behind Latin America at 36 % and Europe at 5 %. Of China's total investment in Africa, Ghana accounted for 3.86 %, Liberia for 0.54 %, Cameroon for 0.37% and both Congo and CAR for 0 %.

From 2003 to 2013, China invested heavily in foreign countries, with peak investments in 2008. From 2003 to 2012, China's FDI grew at an annual rate of 41.6 %. In 2008, China's investments in Asia accounted for 77.89 % of investment flow, with Indonesia taking 0.39 % of China's total investment in Asia. Investments in Africa grew to 9.82 %, making China the second-largest investor in Africa in the world. However, five VPA countries were not among China's top investment destinations in Africa. Of China's total investments in Africa, Ghana received 0.20 %, Congo 0.18 %, Liberia 0.05 % and Cameroon 0.03%. Since 2009, the investment importance of these VPA countries has become more important. For example, Chinese enterprises started to invest in CAR in 2010, accounting for 1.22 % of China's total investment in Africa. In the same year, Ghana constituted 2.65 % of China's total investment in Africa, Congo 1.62 % and Liberia 1.41 %. In 2010, China's total foreign investment in Africa increased to 4.25 % (MofCom, Statistical Bulletin of China's Outward Foreign Direct Investment in 2011). According to enterprise overseas investment approval data compiled by MofCom (2002 to May, 2013), there were 37 entries about investments in the forestry sector involving 14 countries. Liberia, Congo and Cameroon were the main investment destinations in addition to Gabon, Zambia and Equatorial Guinea.

In 2012, China became the world's third largest outward investor for the first time, after the United States and Japan. By the end of 2013, Chinese enterprises established enterprises overseas in 184 countries and regions, with a coverage of 79 %. Asia was ranked the first with 97.9 % overseas enterprise coverage, followed by Vietnam, Japan, Singapore, the United Arab Emirates and Indonesia.

History of investment by sector

For a long time, most foreign investment from China went to the resources sector and into raw materials, natural resources and energy, etc. Over the last ten years, forestry has not been among the top areas for Chinese enterprises to invest, compared with mining and business services. As early as 2003, the proportion of investment in forestry (including timber processing under the manufacturing sector) was relatively large. The investment in agriculture, forestry, animal husbandry and fishery amounted to USD 85.5 million, accounting for 3 % of China's total

investment flow. The percentage of Chinese overseas enterprises engaged in the same sector was 6 % of China's total overseas enterprises. With the expansion of the scale and the depth of China's foreign investment, the investment in forestry grew annually, but its proportion of total investments dropped. This was indicative of a growing world-wide awareness about resources (such as forest) protection. In particular, in 2011, the investment in agriculture, forestry, animal husbandry and fishery amounted to USD 800 million, up 51 % over the previous year, accounting for 1.1 % of China's total investment flow. By the end of 2011, China's foreign direct investment in forestry reached USD 1.0602 billion, accounting for 0.248 % of China's total FDI. In 2013, China's investment in agriculture, forestry, animal husbandry and fishery amounted to USD 1.81 billion, up 24.1 % compared to the previous year, accounting for 1.68 % of China's total investment flow. By the end of 2013, among overseas enterprises, the proportion of enterprises engaging in agriculture, forestry, animal husbandry and fishery was 4.5 % (MofCom 2013).

In Africa, China invested mainly in such sectors as infrastructure, mineral resources development and agriculture. In 2012, China's direct investment in Africa reached USD 3.4 billion, an increase of 8.2 % over the last year. Forestry accounted for 3.6 % of China's total investment (MofCom). China distributed its investments in Africa mainly in such sectors as mining, manufacturing, services, etc.

History of investment by enterprise

Over the last decade, though Chinese large and medium state-owned enterprises played a leading role in overseas investment, many private and small and medium enterprises have become a new force in overseas investment. According to data from the Statistical Bulletin of China's Outward Foreign Direct Investment by the Ministry of Commerce, in 2003, the volume of China's private enterprises' FDI amounted to USD 42 million, accounting for 1.5 % of China's net FDI. By type of business registration, state-owned enterprises accounted for 43 % and private enterprises for 10 %. By the end of 2011, the number of Chinese foreign direct investors reached 13 500, of which, by type of business registration, state-owned enterprises accounted for 11.1 % and private enterprises for 8.3 %. In 2013, by type of business registration, state-owned enterprises accounted for 43.9 % and private enterprises for 2 % (MofCom 2003, 2011, 2013). Official data showed that the number of private enterprises was decreasing, however, according to the International Institute for Environment and Development (IIED) 2013 data, only a few large Chinese enterprises were authorised to invest in forestry in a very limited number of countries (Gabon, Ghana, CAR and Cameroon). Most small independent enterprises backed by China were informal enterprises, usually unknown to loggers, timber producers or buyers. For example, in Mozambique, about 90 % of the timber exported was destined for China, and all of this timber was produced and purchased by small enterprises. From 2002 to 2013, according to records kept by China's SFA, Chinese enterprises launched 37 investment projects in 14 African countries. Many private investments in Africa are very likely to have been overlooked (IIED 2015).

Forestry investment in VPA countries

Introduction

In recent years, China's timber imports from Africa have been increasing. An increasing number of Chinese forestry enterprises went to Africa to invest in resource development and to establish a number of wood-processing factories. The investment by Chinese enterprises in Africa is mainly characterised by strong territoriality, labour-intensive production and led by large state-owned enterprises.

China's forestry cooperation with Africa consists mainly of purchasing timber from African countries, cooperating with African countries in logging and establishing wood-processing factories in Africa. Chinese-funded forestry enterprise investments were mainly distributed in those countries with relatively rich forest resources and relatively high political stability such as Gabon and South Africa. Currently, there are no Chinese-funded forestry enterprises in Benin, Tunisia and Togo. China's forestry investment in Africa was mainly distributed in central and southern Africa, less in western Africa and least in eastern and northern Africa. China's forestry investment in African countries or regions was less than 50 %, far below the 81 % overall coverage rate of Chinese-funded enterprise investments in Africa.

Currently, Chinese enterprises' direct investments in forestry in Africa were mainly distributed in labour-intensive industries including wood processing, rubber processing and logging. Among which, wood processing and sawnwood manufacturing accounted for more than 70 %. As an example, the businesses of Li's Group in Liberia are labour intensive. Comparatively speaking, there were few enterprises producing capital-intensive products, e.g. papermaking and flooring enterprises. Chinese funded enterprises mainly focused on the production and exports of logs and sawnwood, while few engaged in production and exports of further processed forest products.

China's investment in Africa was usually used to provide assistance. With advantages such as easy access to finance, less attention to profitability and the capacity to assume the responsibility to achieve national strategic goals, Chinese large state-owned enterprises have taken a leading role in investment in Africa. At the same time, forestry investments in Africa by many Chinese private enterprises have been growing year by year, and they have become a new force in direct investment in Africa. Jinpeng Wood Industry Co, Ltd. in Ghana was one such enterprise. Currently, many Chinese forestry enterprises in Africa operate their businesses by means of joint venture, and the number of joint ventures is increasing (Tang Shuifu 2013).

Ghana

Ghana is considered as one of the countries in West Africa where it is easy to do business, where foreign investment is encouraged and protected and the investment environment is relatively good. Chinese enterprises are represented by Jinpeng Wood Co., Ltd., a Chinese private enterprises in Ghana, and Aihua (Ghana) Industry Co., Limited, featuring local operations and purchases, middle and low-end furniture making, exhibition and sales and whose products are sold in more than 70 furniture markets (Department of Commerce of Hunan Province 2014). According to statistics by China's MofCom, by the end of 2013, Chinese direct investment in Ghana amounted to USD 650 million, among which, USD 150 million was made in 2013.

However, due to a short in the foreign exchange reserve, the Government of Ghana imposed restrictions on foreign exchange outward remittances and made strict examinations of outward remittance made in US dollars. Moreover, China's enterprises suffered from the bad impression

that resulted from the wide-spread corruption in governmental and related bodies in Ghana and the exposure of Chinese illegal mining of gold mines and this made it more difficult for Chinese enterprises to apply for an entry visa and to go through customs clearance. This also dampened the enthusiasm of Chinese enterprises to make investments in Ghana, to some extent (MofCom).

Congo

Besides petroleum and natural gas, Congo also has rich agriculture and forest resources. According to “The Road Ahead” proposed by Congo, it plans to exploit its forest resources and to develop its wood processing industry. Chinese enterprises are represented by Zhengwei Technology (Congo) Co., Ltd., which is engaged in agriculture and forest development and Four Star Industrial Investment Co., Ltd., which is engaged in paper production and marketing (MofCom).

Liberia

Besides the aforementioned Li's Group in Liberia, there are several representatives of Chinese enterprises in Liberia, such as the state-owned Atlantic International Investment and Consulting Co., Limited (business scope: development of wood resources and relevant export and import business), Meitian (Liberia) Wood Industrial Co., Ltd. (business scope: timber wholesale and marketing) as well as Hongguang (Liberia) Forestry Investment Co., Ltd. (business scope: logging and investment, sawnwood processing and investment and log and wood products export and trade). According to the Investment Incentives Act of 1973 revised by the Government of Liberia, agriculture, forestry and fishery are eligible for industrial preferential policies, and the Investment Incentive Agreement shall be negotiated by and between the Government and project sponsors. After Liberia's log embargo was lifted by the UN Security Council in June, 2006, the Government formulated a National Forestry Law and set out management measures for commercial logging, i.e. that a logging contract will be awarded to enterprises based on prequalification and bidding. Forest management contracts involving 100 000 to 400 000 ha of forest land were open to Liberian and foreign investors. Currently, an increasing number of Chinese enterprises are investing in Liberia in areas like engineering contracting, resources project development, agriculture and restaurants (MofCom).

Cameroon

Over last few decades, China has become one of the main timber markets for Cameroon, especially since 2006 when China's timber imports from Cameroon increased from USD 50 million to USD 100 million. But a Hong Kong-based private enterprise, which operates in Cameroon through its several subsidiaries, is the only Chinese logging company currently operating in the country. In 1997, this company acquired a French company, whose subsidiary has been operating in Cameroon for more than 20 years. Through these subsidiaries, the Hong Kong-based enterprise operates nine forest management units under six forest concessions and operates several saw mills. Besides this Hong-Kong-based enterprise, several Chinese furniture enterprises and export merchants in Douala are extremely active in small-scale and informal investment fields. This Hong Kong-based enterprise ranks first with a forestry concession area of about 570 000 ha in Cameroon, which is about 10 % of Cameroon's total concession area, followed by several groups held by European countries, including France, Italy and the Netherlands (Louis 2011).

Cameroonian enterprises, especially middle and small sized enterprises, ordinarily face such problems as poor management, financing difficulty and short average life span. When operating in Cameroon, enterprises face power shortages, administrative office inefficiency, property

transfer and contract execution difficulty and poor access to cross-border trade (MofCom), all of which limit the increase of Chinese enterprises' forestry investment in Cameroon.

Chinese investments in Cameroon's forest sector include more than 10-25 % (the two different sources cited, state 10 % and 25 %, respectively) of the forestry permit area, equivalent to 650 000 ha (Kamkuimo-Piam 2015 and Mayers 2015). China ranks first among foreign countries investing in forestry, followed by France, Italy and the Netherlands (Putzel, et. al. 2011). Other than investment in concessions, Chinese investment in the sector is limited, for example, to trucks and machinery. In addition to logging equipment, a Hong Kong-based group owns a number of sawmills. Several small, ethnic Chinese-owned furniture companies and exporters, mainly located in Douala, are very active in the small-scale, informal sector (ibid 2011).

"Chinese-linked trade and investments have major implications for forests and community livelihoods in the context of questionable sustainability of investments, illegal logging, violation of laws, and poverty amongst the rural population. Weak implementation of national and international regulations applying to Chinese-linked investments, and a lack dialogue amongst Chinese and Cameroonian actors, exacerbate these effects" (ibid, 2015). There are 25 to 35 Chinese enterprises established year-round in the Cameroon forest sector. Half of the 12 000 jobs created through Chinese investments (presumably since 2007) are in the forest sector (ibid 2015). IIED states that the economic benefits of Chinese investments in the Cameroonian forest sector are limited, with little local value-added processing. Chinese wood processing is highly developed, and highly efficient in China, and processing imported timber supports Chinese workers and their local economies. Workers' rights are questioned because of a lack of registration of workers in social insurance and because of low wages. According to Putzel, et. al., illegal practices cannot be attributed to any foreign country, but rather to the "general national context" which must be a way of saying general corruption.

Indonesia

Indonesia is an important country for China's overseas forestry investments. China's investments in Indonesia are mainly in forest development and bamboo products. According to MofCom statistics, from January to September 2015, Chinese enterprises invested directly in 48 countries along One Belt & One Road amounting to USD 12.03 billion, up 66.2 % from the year before. Indonesia is a major investment destination following Singapore, Kazakhstan and Laos. In terms of China's investment in the Association of Southeast Asian Nations (ASEAN) in 2013, USD 543 million went to agriculture, forestry, animal husbandry and fishery, accounting for 7.5 %, and Indonesia followed Laos as a major location for China's investments.

According to the Directory for Overseas Investment Enterprises (bodies) filed and issued by MofCom, 1 290 enterprises were approved to invest in agriculture, forestry and mining in Asia from 2000 to 2013, among which were 203 enterprises in Indonesia, second only behind Laos with 245 enterprises. Among these enterprises, 186 were approved to invest in forestry in Asia from 2000 to the present, with 17 in Indonesia making it third, only behind Laos with 86 and Cambodia with 21 (MofCom 2013).

In 2013, the China Development Bank invested USD 1.8 billion in the construction of Indonesia's largest pulp and paper mill in Sumatra (APP 2013). The bank's investment was complemented by an additional investment of USD 800 million by shareholders. The Masterplan for Acceleration and Expansion of Indonesian's Economic Development calls for Indonesia to become the fifth largest pulp and paper producer in the world by 2025. FDI is needed to accomplish this goal. The pulp for this mill is to be sourced exclusively from plantations. The mill was forecast to create 10 000 jobs and raise South Sumatra's GDP by 9 %.

Summary and outlook on investment trends

The above analysis shows that the VPA countries, except CAR, are all among China's major overseas forestry investment destinations. Through a good foundation for cooperation and with the China-Africa Economic Cooperation Zone, China's investments in VPA countries shifted from low-end products to high-end, and to an upgraded investment scale and technical content. In recent years, besides expanding the width and depth of economic cooperation, with increasing of awareness of environmental protection in Asian and African countries, and with domestic wood processing increasing and adding value to their exports, many countries prohibit or limit log exports, which makes the economic relationships between China and African countries and between China and Indonesia more complex. How to respond to and deal with the economic frictions that may continue and even increase is a practical and urgent question.

After years of high-speed growth in overseas investments, Chinese enterprises have become more rational. When Chinese private enterprises first became a new force in overseas investments, their investment scale was generally small. Failures and lessons from previous resource investments and increasing investment risks have made the resources industries, such as mining where the average investment is significant, less appealing to Chinese enterprises, and have made the service and manufacturing industries more appealing. In future, China and the six VPA countries will face new challenges in forestry cooperation.

China's investments in Africa, whether in the forest sector, or other sectors, are controversial (African Progress Panel 2013). China needs the African resources, whether for its domestic market or for processing for export (and in many cases, back to the African countries supplying the raw materials). Chinese investments can build needed social institutions, such as schools and medical facilities, and they build infrastructure, such as roads that open new areas for exploitation. Done with careful planning, taking the long term into consideration, Chinese investments can help African countries with their economic development. Chinese forest sector investments can improve market access and increase income for local, small-scale operators (Li and Yan 2016).

Done without adequate consultation by stakeholders, and adequate short-, medium- and long-term planning, FDI by China, or any other country, can have short-term benefits that deplete needed resources for the long term. Forest-dependent communities and wood resource-dependent manufacturing facilities need a sustainable supply of timber. When logging occurs without adequate planning for regeneration the people and their industries are negatively affected. IIED states that Chinese investment and trade "has brought economic benefits to rural communities, however there are also severe sustainability consequences (Kamkuimo-Piam 2015). A new study published in 2016 cites research by Forest Trends that shows how negative effects can include "low contribution to local employment, inferior labour practices, deforestation and illegal logging and trade" (Li and Yan 2016).

According to the African Economic Outlook, growing illicit financial flows (IFFs) undermine efforts to mobilise domestic resources. IFFs involve funds that are illegally earned, utilised or transferred out of a country in contravention of national or international laws (OECD 2014). IFFs evade taxes, launder money and involve bribes by international companies to public officials. Their economic and social impact on African countries is especially negative given the smaller size of the resource base and markets (OECD 2014). Illicit financial flows do not reinvest in the forest sector, nor in social and public services. They also weaken African financial systems and undermine state structures (OECD 2014c). Ndikumana and Boyce (2012) estimate that Africa's

capital stock would have increased by more than 60 % if illicit funds remained within the continent, and that GDP per capita would be 15 % higher (Ndikumana 2012).

The official Chinese Guidelines for Overseas Sustainable Forests Products Trade and Investment by Chinese Enterprises issued jointly by China's SFA and MofCom are a step in the right direction towards mutually beneficial overseas foreign direct investment (OFDI). The March 2013 China-Africa Forest Governance Learning Platform concluded that there is potential, through collaboration in research, dialogue and joint action, to contribute to improving forest governance in both China and Africa. In Africa compliance with forest protection laws and laws protecting local communities is needed as it is part of the development of a timber legality verification programme (Meyers 2013). The second Platform was scheduled in Yaoundé, Cameroon, 22–25 June 2015.

Recently, China became a net contributor of FDI, of which a growing volume is directed towards Africa and Asia. China's FDI in Asia and Africa is growing, especially in countries rich with forest resources and with stable political environments. If China's investments move from obtaining raw materials, such as roundwood and sawnwood, to investing in value-added processing in African and Asian countries, those countries' economies and peoples would benefit.

Indonesia receives far more FDI from China than any of the other five VPA countries in this study. Presumably Indonesia's rich forests and relatively stable political environment promote Chinese investments in the forest sector.

While the statistics from different sources could not always be collaborated, the trends appear the same. Discrepancies in statistics and availability of statistics pose difficulties in providing a comprehensive, and precise analysis. Nevertheless, the trend toward increasing Chinese investments in Asia and Africa, including in the six VPA countries and in their forest sectors, is increasing with China's demand for raw materials. The value of China's FDI in other sectors is increasing more than the FDI in the forest sector. Along with these increases in investments come increasing controversies over their long-term environmental, economic and social benefits.

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4. Recommendations and conclusions

Legality in forest products trade

Legality in forest products trade is a shared responsibility between importers and exporters. This is precisely the reason that the FLEGT Action Plan, including the EU Timber Regulation (EUTR), assists countries signing a VPA to produce FLEGT-licensed timber, which is legal throughout the production and trade chain. Obviously, legality starts at the forest in the tropical timber countries, and importers, both in China and the EU, must do their due diligence to ensure that their logs are produced and harvested legally. The VPA countries through the Timber Legality Assurance System (TLAS) system have a means to control legality at each point in the processing and transport chain up to the point of export. But until such time as these VPA countries have a functioning TLAS system and are exporting FLEGT-licensed timber, importers are responsible for ensuring comprehensive legality. When VPA countries produce legal timber for export, there is an opportunity to improve the legality of timber for domestic purposes too.

Based on this study's findings, some trade discrepancies between exporters' reports and China's import records indicate some quantities of undocumented trade. There are many reasons for statistical discrepancies, for example mistakes in customs reports, differences in classifications and wood products coding, differences in reports timing, as well as a lack of resources in the exporting VPA countries to collect, validate and publish statistics.

Undocumented trade may be illegal. A unified definition about illegal logging and illegal timber trade is needed. Furthermore, a global system and mechanism to administer and coordinate timber legality should be considered seriously.

It is recommended that China work together with the statistical bureaus in the VPA countries to discover the reasons for the discrepancies. Differences may not necessarily be illegal trade, but they could be.

Legality requires all points in the supply chain to comply with relevant laws and regulations. VPA countries and China are expected to make collective efforts to regulate the legality of their forest products, as they are not only trading partners but also partners to ensure legal products. A joint working mechanism for both sides is needed to strengthen information sharing and regular data exchange.

It is recommended that VPA countries and China set up an effective cooperation mechanism to promote the administration at the government level of timber producing, export and import.

Progress, including necessary reforms and system development, have been made since the agreements were signed in the VPA countries. When the TLASs are established, especially in Indonesia and Ghana, the timber produced will be licensed as legal and recognised by the EU. Some VPA countries face challenges during the implementation of VPA.

It is recommended that China provide technical assistance and related resources to support the development of TLASs in VPA countries.

Due to the weak capacity of forest management and law enforcement in most VPA countries, illegal logging still occurs in some places. The forest sector has a limited ability to supervise

logging and trade. Custom agents in VPA countries and in China need capacity building to identify tree species. Training is also needed to improve the information processing capacity.

The HS of customs classifications for tree species needs to be expanded to allow timber species to be identified accurately rather than grouping non-classified species as “not elsewhere specified (nes)”, which is a loss of important information for due diligence systems required by the EUTR.

Due diligence systems need specific information about the source of imported timber. “Country of origin” is not sufficient for some species and countries, and more information is required for such things as logging sites. Traceability of timber origin is an important indicator of legal timber.

It is recommended that China help VPA countries with their capacity building by organising related meetings, workshops and events to enhance management and enforcement at the source.

According to the EUTR, EU importers must do their due diligence to ensure legal imports. Chinese companies exporting to the EU are asked by their European buyers to document the legality of their shipments. Therefore, when exporting to the EU, Chinese companies need comprehensive information on the source of their timber products, and indications of their legality. A timber trade data exchange mechanism should be established among relevant competent departments. Cross-border and inter-departmental coordination mechanisms are also urgently needed. Such mechanisms will be used to share information such as species and origin of forest products, and the timely exchange trade status, and will contribute to jointly tackling illegal logging and associated trade, and promoting legal and sustainable forest products trade.

It is recommended that Chinese importers especially, and other companies in the timber processing and trade chain, have equivalent due diligence systems to ensure their imports are legal.

The following recommendations are proposed to assist with some of the challenges to addressing legality in the VPA countries:

- To address the problem of corruption by civil servants, attractive compensation packages and good prospects for promotion and professional development of forest officials and law enforcement officials can serve as good incentives to improve performance. It is also crucial to strengthen the role of independent bodies and third-party monitoring in addressing corruption.
- Conduct participatory reforms of regulatory frameworks aimed at overcoming the various problems inherent in the law and legislation of the countries.
- It is critically important to change the behaviour of forest and law enforcement officials and the general public through improved transparency and accountability. This calls for changes in forestry education towards incorporating meta-disciplinary skills and attitudes.
- Transparency and accountability could be improved via transforming the current system of forest sector information dissemination in the countries. Authorities should take responsibility for organising and improving the quality of statistics and developing the appropriate channel of information dissemination, e.g. web portals for publishing data and documents. Whilst this depends on the in-country technical and human resource capacity, NGOs with the support of donors can also provide assistance in collecting, interpreting and disseminating complex information without replacing the role of the state. This will require capacity building.

- Addressing the challenges of limited resources is likely to have positive repercussions on a number of other challenges such as non-compliance and poor enforcement, political culture and incentive structure.

Maintaining mutually beneficial investments in the forest sector

China and the VPA countries share the responsibility of ensuring that investments are mutually beneficial. China needs the natural resources in the VPA countries. And the VPA countries need export markets for their timber and other raw materials. Responsible trade ensures that both the importer and exporter benefit.

In order to have sustainable forest management there must be sustainable forest products markets. Fairly constant demand for wood and other forest resources allows for planning of sustained yields of timber. It also allows for a more constant flow of income for forest owners, as opposed to unsustainable, periodic cutting.

As described above, China has invested in the forest sectors of the VPA countries. For many reasons the investments are not equal between the six countries, and the most important reason is the availability of the desired wood products for export to China. The investments have positive impacts both in the VPA countries and in China, as noted above. However, when investments are not thoroughly and comprehensively planned between trading partners, they can lack equability, and may not last long. Such investments can become like mineral mining, i.e. when there is no goal of sustainable production.

It is recommended that Chinese investors consider the need for the VPA countries to provide timber products on a sustained basis. This is not only beneficial to their forests, but also to forest-dependent communities. And it is beneficial to China to have a constant, dependable flow of high-quality timber products.

The Government of China is well-aware of the laws of other countries, including the EU's laws, to ensure legal timber imports. China is developing a legal verification policy which should become law, be widely communicated throughout the forest sector in China and with China's trading partners (importing and exporting) and would be enforced.

It is recommended that Chinese investors plan their investments with all VPA country stakeholders. The VPA process begins by bringing together all forest sector stakeholders to understand the FLEGT Action Plan, and most importantly, to receive their input into the process. Chinese investors could use the same contacts as the FLEGT process to ensure that stakeholders' needs are considered, and that stakeholders are informed in advance of any investment. The stakeholder groups have included government officials at various levels, forest managers, non-governmental organisations (NGOs), the forest industry, exporters, port authorities and representatives of forest-dependent communities.

As mentioned above, China's investments abroad have strong impacts on Chinese communities receiving the imported timber. Chinese investors have an obligation at home to ensure that the imported timber, and its processing, have positive impacts. To ensure acceptance of new investments abroad, Chinese stakeholders need to be informed of how the imported timber will be processed and used.

It is recommended that Chinese investors consider the positive impacts and potential negative consequences to communities in China. To do this, stakeholder meetings could be organised to inform stakeholders and help them to understand reactions to the investments.

As shown in Section 4 above, it was extremely difficult from outside China to find information about Chinese investments into the forest sectors of VPA countries. The statistics available from both China and the VPA countries are not sufficiently detailed to understand the investments into the forest sector.

It is recommended that the China's MofCom stop combining the forest sector investments with those of agriculture, animal husbandry and fisheries. Perhaps more detailed information is available within the country, but for analyses such as this study, the website should show the forest sector investments separately.

The VPA countries should provide more statistical and supplementary information about their forest sectors, including foreign investments received, on publicly accessible websites.

Bilateral information-sharing about investment opportunities must be strengthened. In order to ensure the harmonious development of the investment and cooperation between China and the VPA countries, the information-sharing and communication mechanisms need to be strengthened between them. Except for the official channels of bilateral intergovernmental dialogue, there are relatively few opportunities for dialogue at all levels, such as between the business community, academic community, non-governmental organisations and etc. In addition, it is difficult to find authoritative data about forestry investment. This has increased the difficulty of relevant research and has also set the tone for communication at all levels between China and the VPA countries. Both China and the VPA countries can go further in allowing for open and transparent investment information, and in increasing increase dialogue to promote mutual trust and more investment opportunities.

Chinese investors should consult with the multi-stakeholders before initiating investments to avoid labour disputes or adverse impacts on the local community and the environment. Chinese investors should create and maintain good relations with the local communities, establish an unimpeded communication mechanism with multi-stakeholders before investment, strive to communicate actively with forest-dependent communities, forest governments, non-governmental organisations and trade unions (multi-stakeholder from African VPA countries also including the opposition party) to deal with and to understand the local workers' needs and culture, to inform and understand reactions to the investments in order to avoid labour disputes or adverse impacts to the local community and the environment made by their investments.

Chinese investors need to pay attention to labor protection and improve working conditions when implementing investments. Chinese investors should strive to be consistent with international rules and practices in the treatment of labour and environmental protection. Chinese investors should establish a favourable image for themselves in their investment activities, invest more to improve working conditions, carry out more comprehensive labour protection measures for their staff and actively take measures to improve production and management.

Guidelines based on the national condition of VPA countries are required to ensure that Chinese investors fully respect the laws and regulations of VPA countries. Guidelines should refer to the "Chinese enterprises overseas trade and investment guidelines" and "Sustainable Management of Chinese enterprises overseas forest use guidelines" jointly issued by the SFA and the MofCom. The guidelines aim to help Chinese investors to understand the development of

politics, folklore, religion, history, culture, economic and the overall social situation in VPA countries. Through the guidelines investors can become familiar with the specific provisions in all aspects of the relevant policies, laws and regulations in VPA countries, to comprehensively and accurately understand the demand of domestic and export markets, to fully evaluate investment risks, and to avoid labour disputes or adverse impacts on the local community and the environment by their investment and economic cooperation.

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6. Annex

Annex for chapter 1

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Figures for import values of Roundwood at HS 6 digit detail

Figure 17. China imports from VPA countries of roundwood: HS code 440310 Poles, treated/painted etc

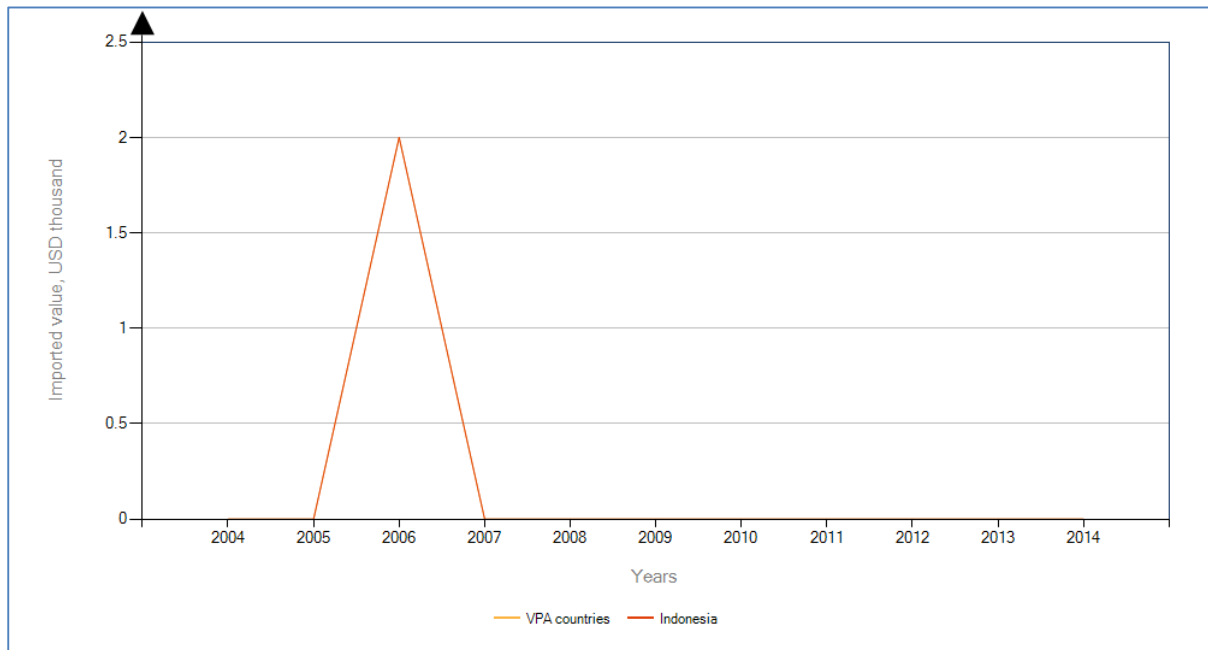


Figure 2. China imports from VPA countries of roundwood: HS code 440320 Logs, poles, coniferous nes

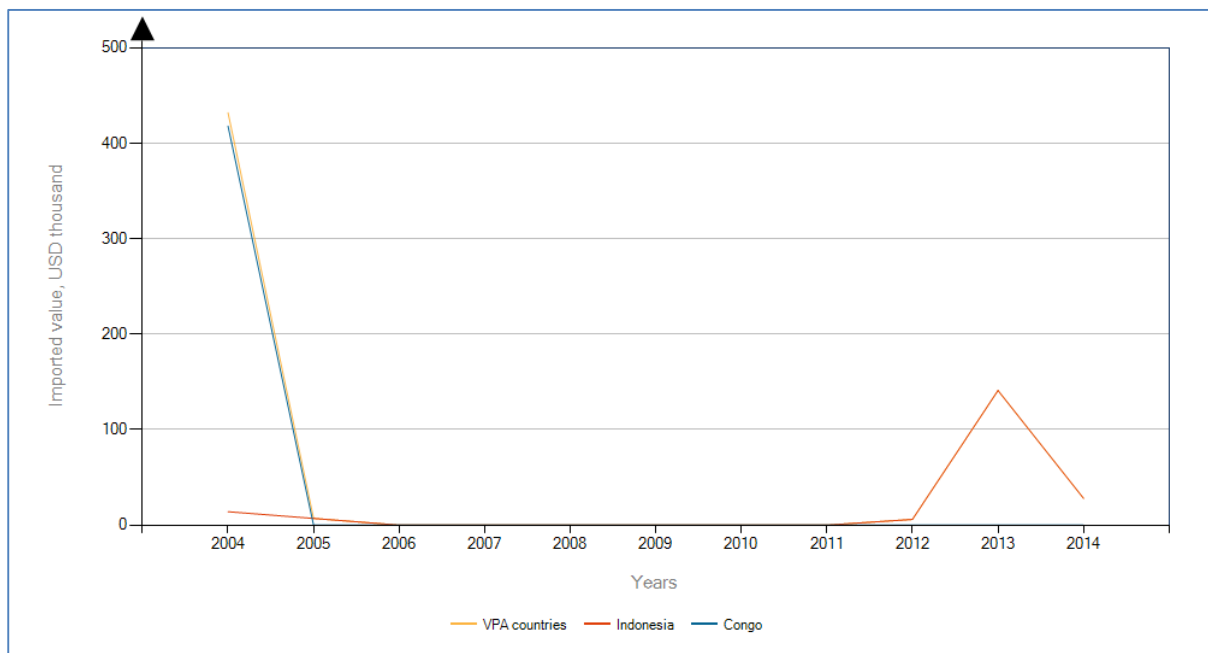


Figure 3. China imports from VPA countries of roundwood: HS code 440332 Logs, with lauan, meranti, seraya yellow meranti etc (no data)

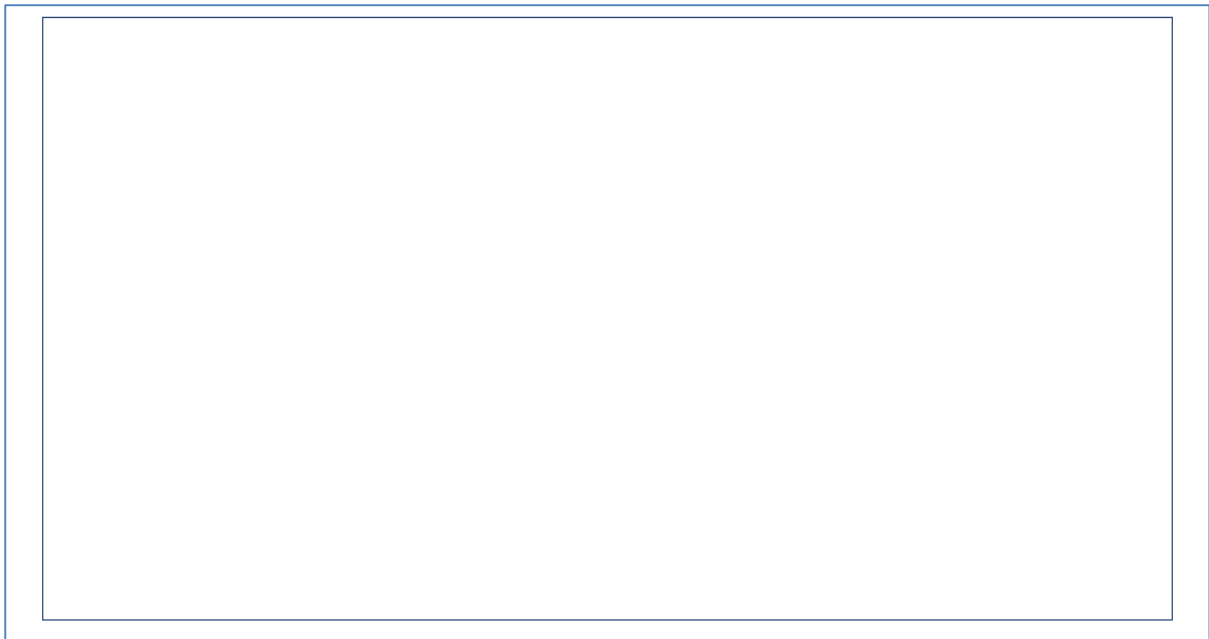


Figure 4. China imports from VPA countries of roundwood: HS code 440341 Logs, meranti red in rough

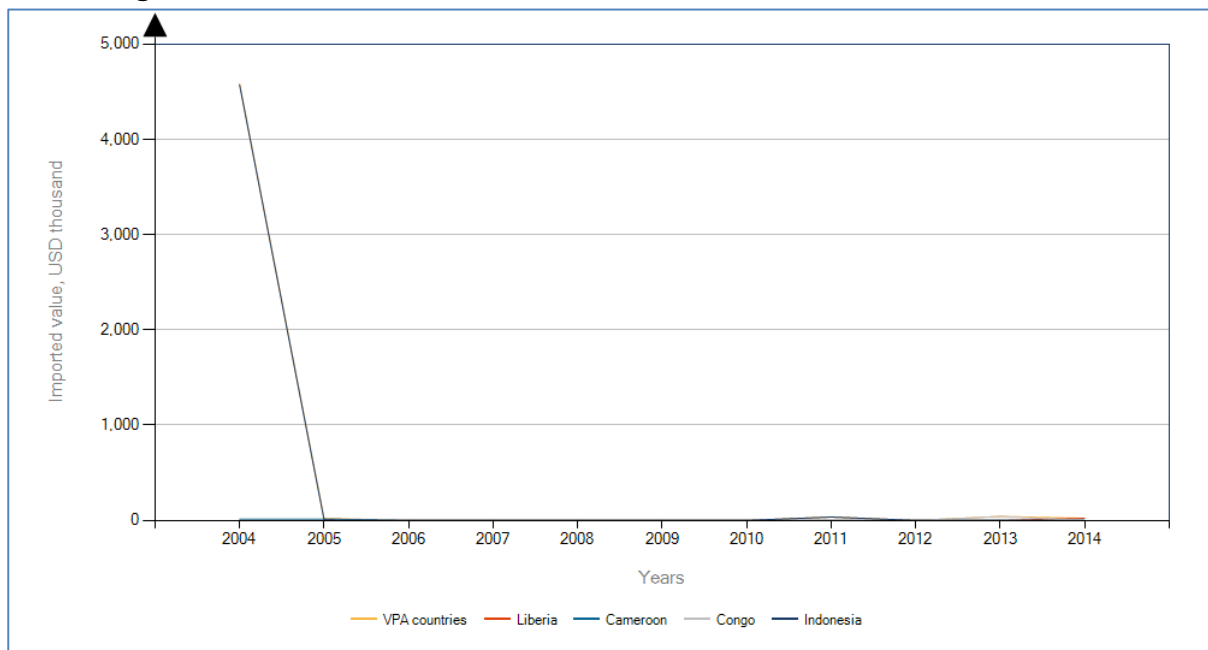


Figure 5. China imports from VPA countries of roundwood: HS code 440349 Logs, tropical hardwoods nes

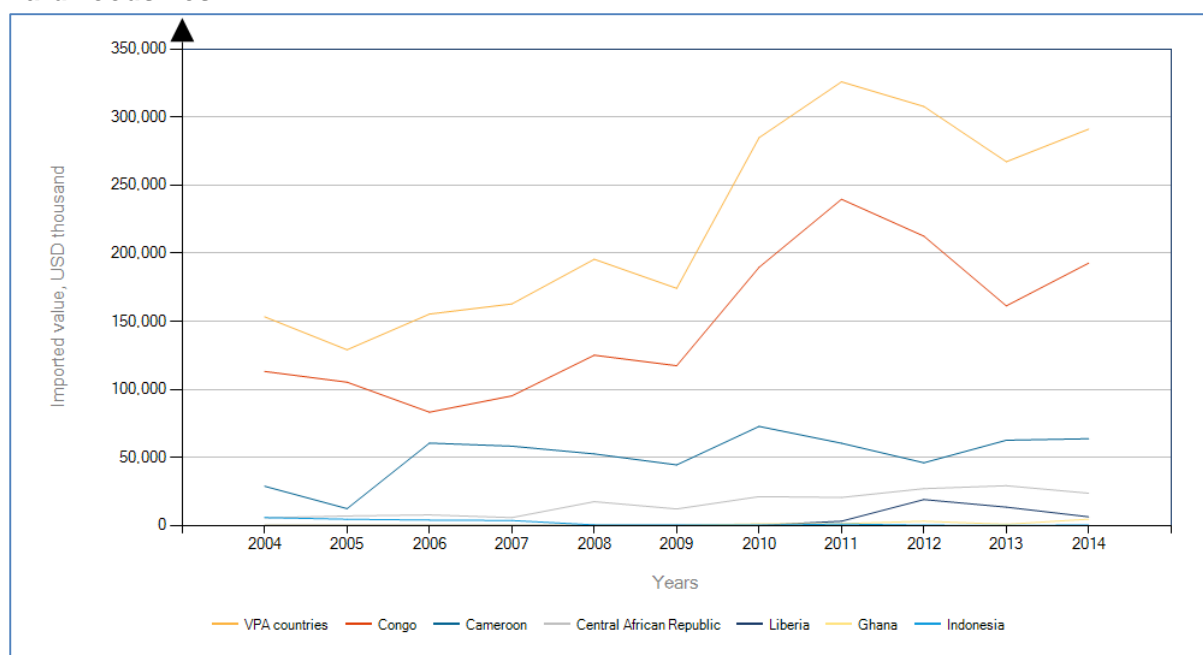


Figure 6. China imports from VPA countries of roundwood: HS code 440391 Logs, oak

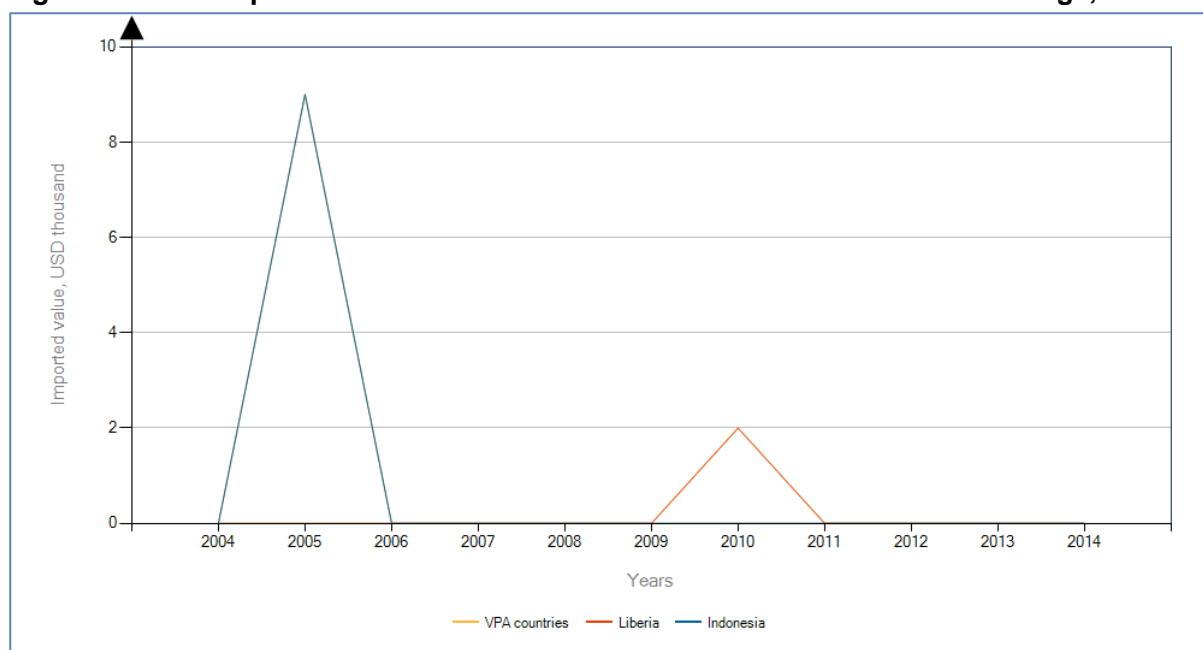


Figure 7. China imports from VPA countries of roundwood: HS code 440392 Logs, beech

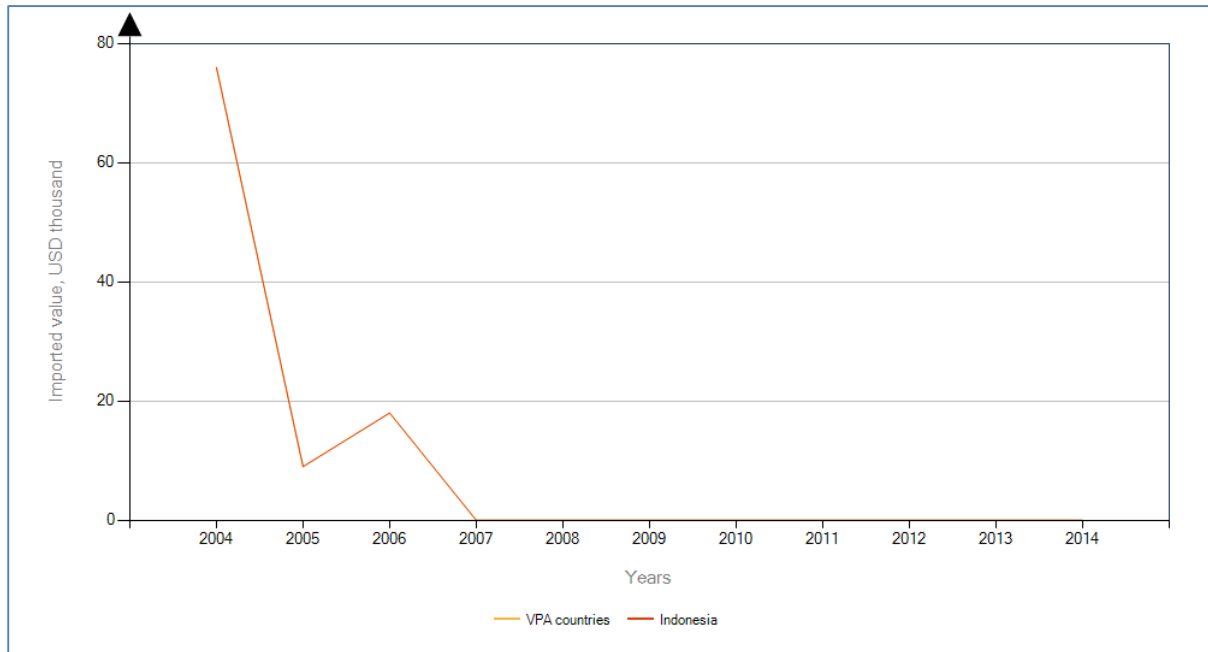
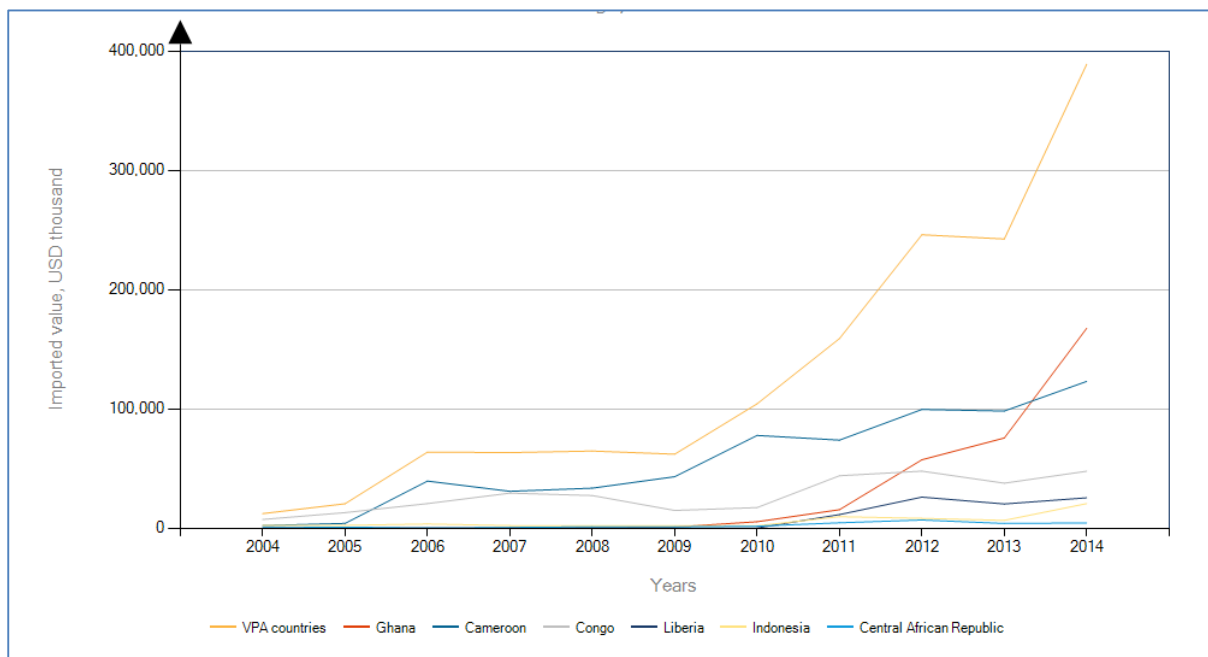


Figure 8. China imports from VPA countries of roundwood: HS code 440399 Logs, non-coniferous nes



Figures for import values of sawnwood at HS 6 digit detail

Figure 9. China imports from VPA countries of sawnwood: HS code 440710 Lumber, coniferous (softwood) 6 mm and thicker



Figure 10. China imports from VPA countries of sawnwood: HS code 440721 mahogany Swietenia spp., sawn or chipped lengthwise, sliced or peeled



Figure 11. China imports from VPA countries of sawnwood: HS code 440722 Virola, imbuia and balsa, sawn or chipped lengthwise, sliced or peeled

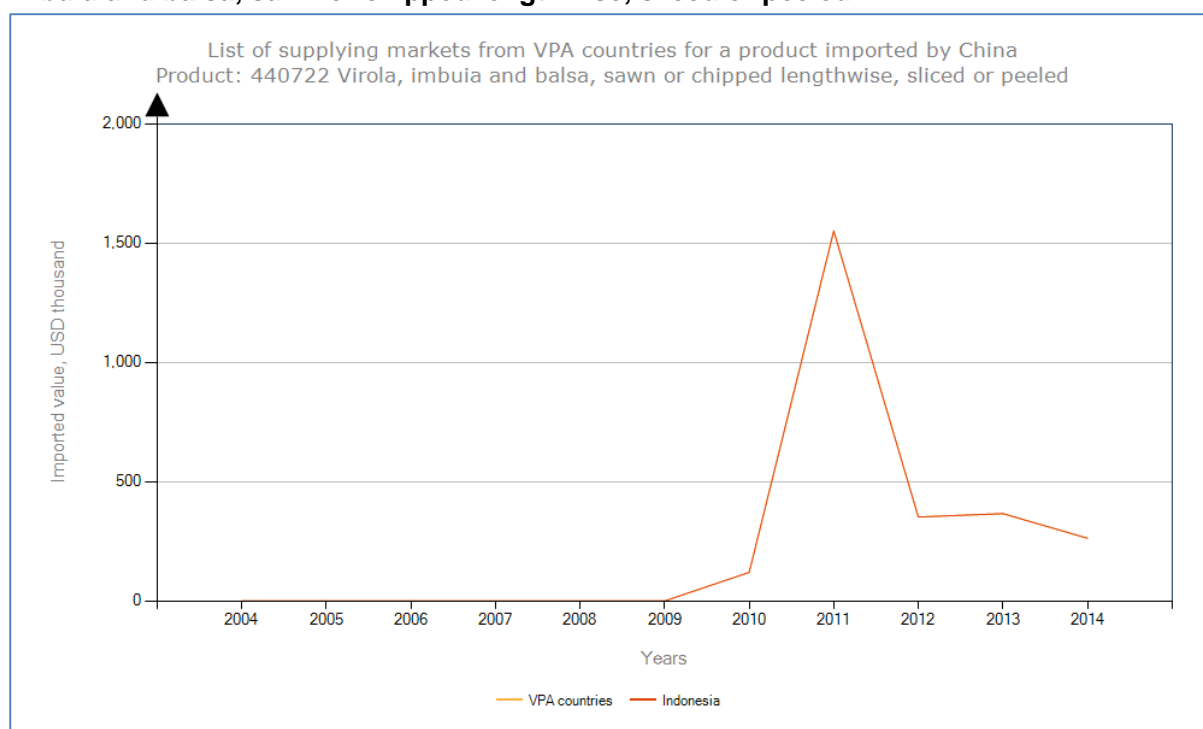


Figure 12. China imports from VPA countries of sawnwood: HS code 440724 Lumber, Virola, mahogany, imbuia, balsa, sawn >6mm

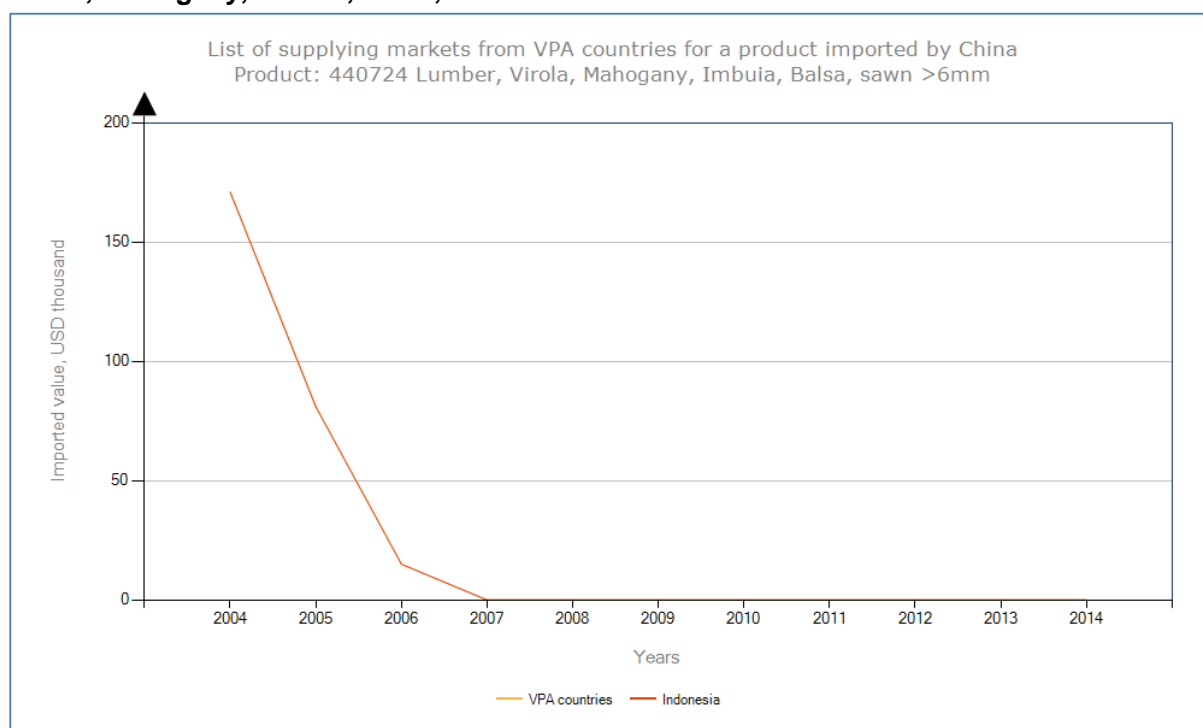


Figure 13. China imports from VPA countries of sawnwood: HS code 440725 Lumber, meranti sawn lengthwise >6mm



Figure 14. China imports from VPA countries of sawnwood: HS code 440726 Lumber, meranti nes, lauan, Seraya, alan sawn >6mm



Figure 15. China imports from VPA countries of sawnwood: HS code 440727 sapelli, sawn or chipped lengthwise, sliced or peeled, whether or not

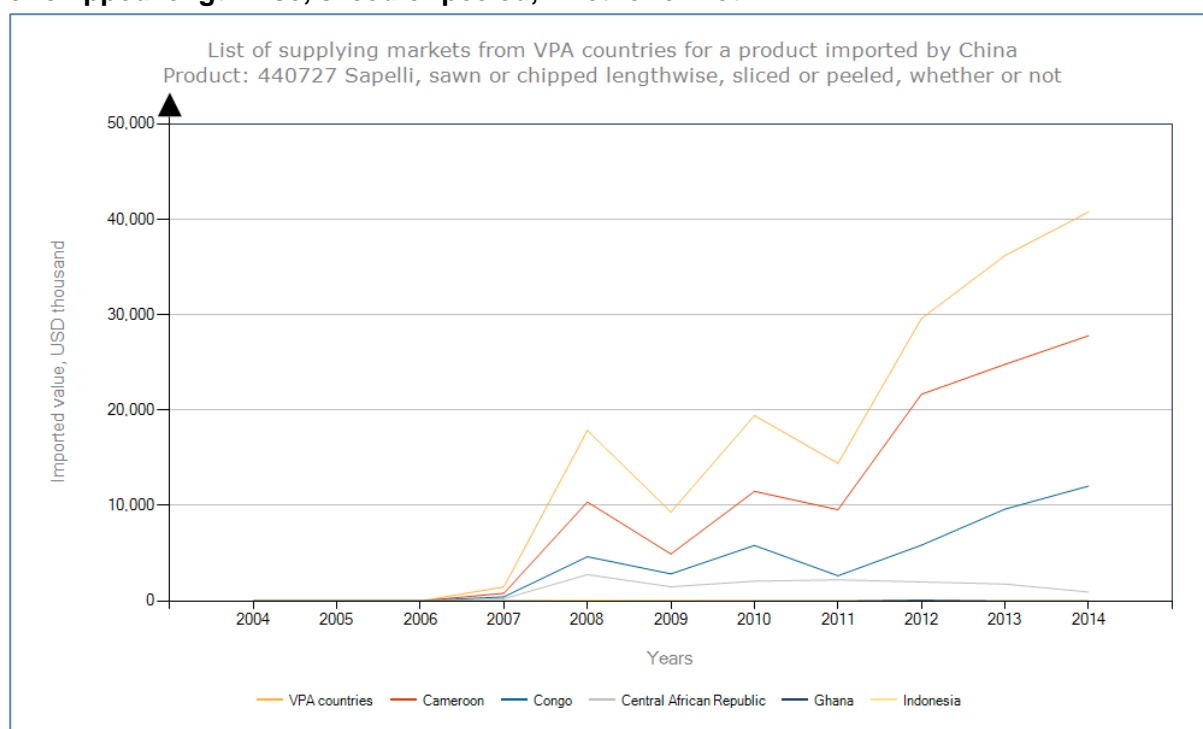


Figure 16. China imports from VPA countries of sawnwood: HS code 440728 iroko, sawn or chipped lengthwise, sliced or peeled, whether or not

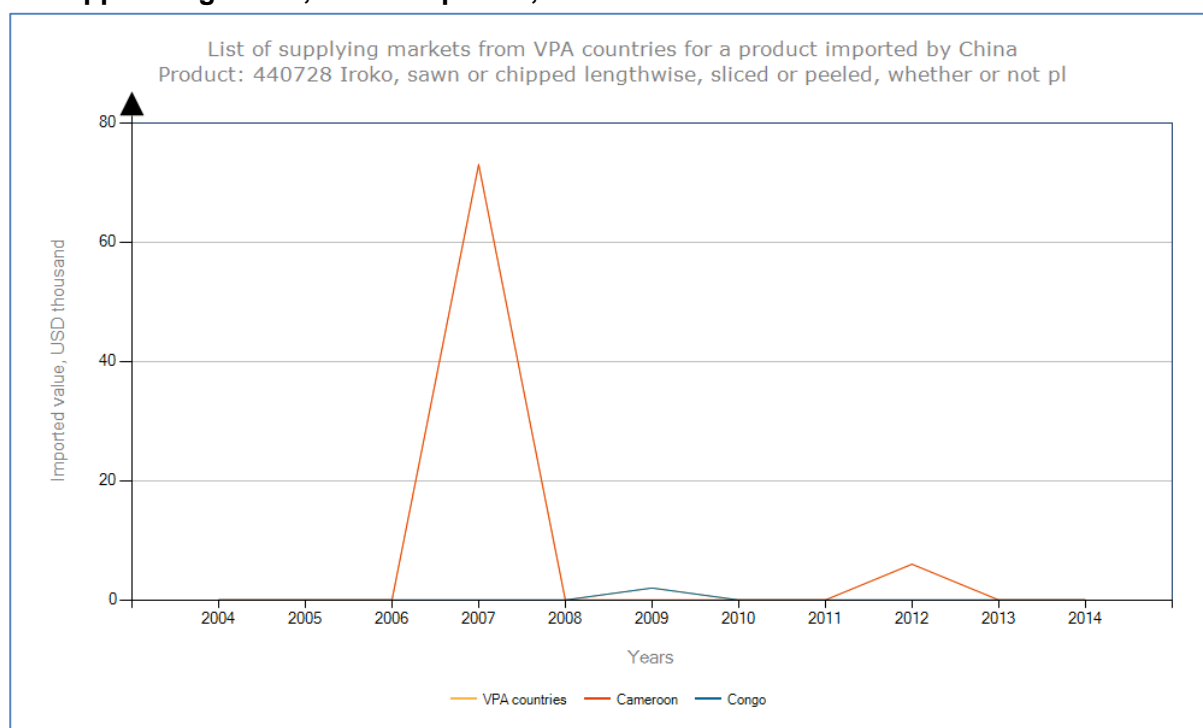


Figure 17. China imports from VPA countries of sawnwood: HS code 440729 Lumber, tropical hardwood nes, sawn lengthwise >6mm



Figure 18. China imports from VPA countries of sawnwood: HS code 440791 Lumber, oak



Figure 19. China imports from VPA countries of sawnwood: HS code 440792 Lumber, beech



Figure 20. China imports from VPA countries of sawnwood: HS code 440793 maple Acer spp., sawn or chipped lengthwise, sliced or peeled



Figure 21. China imports from VPA countries of sawnwood: HS code 440794 cherry *Prunus* spp., sawn or chipped lengthwise, slice or peeled



Figure 22. China imports from VPA countries of sawnwood: HS code 440795 ash *Fraxinus* spp., sawn or chipped lengthwise, sliced or peeled

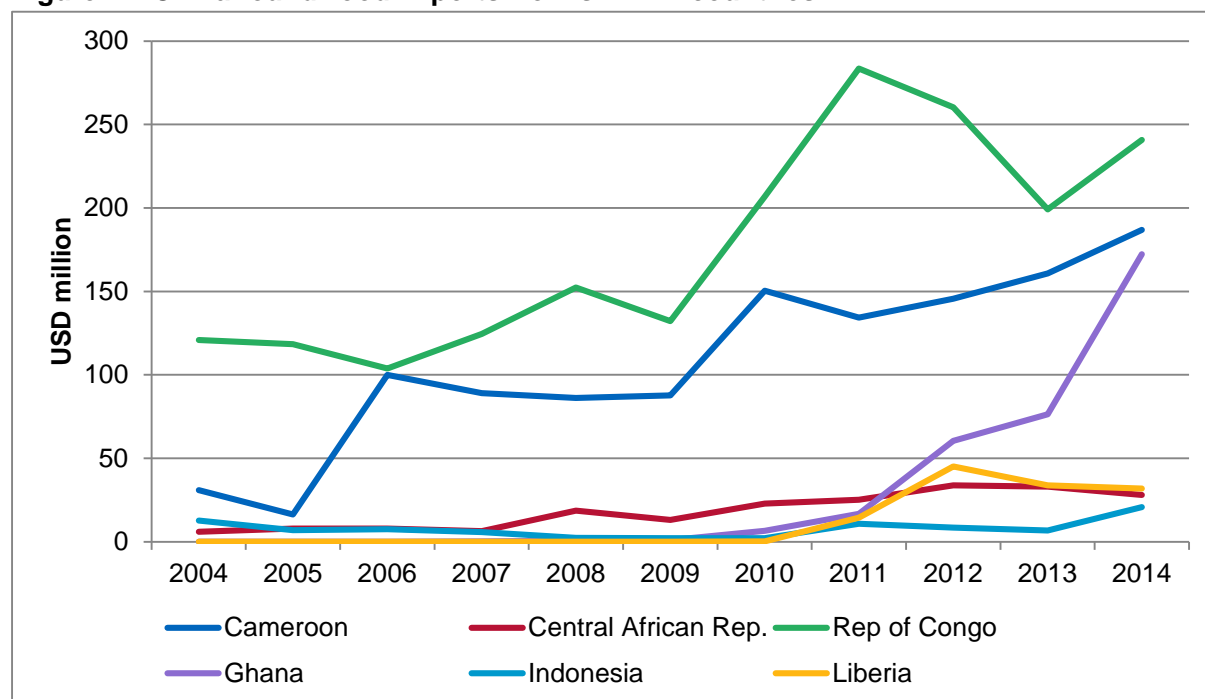


Figure 23. China imports from VPA countries of sawnwood: HS code 440799 Lumber, non-coniferous nes



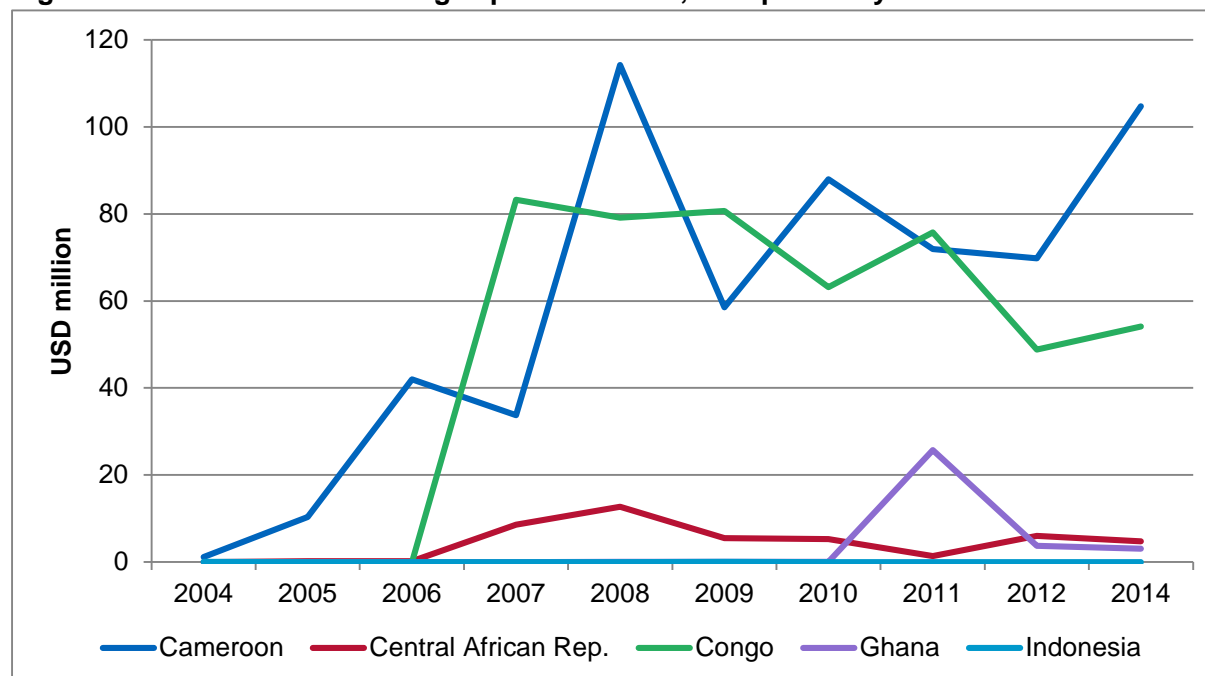
Figures showing discrepancies between China's import reporting and VPA countries' export reporting

Figure 24. China roundwood imports from six VPA countries



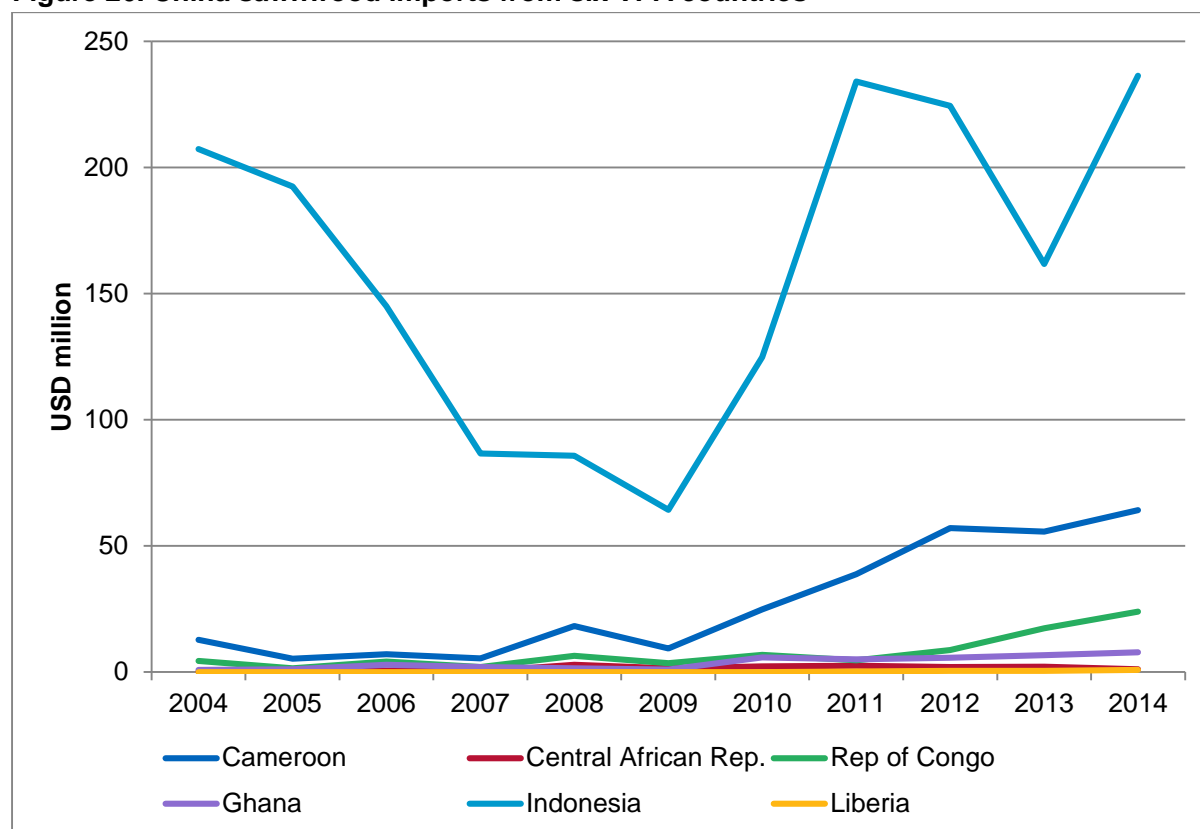
Source: UN Comtrade, 2015 (Note: As reported by China. No Liberian imports reported 2004–2007. No Ghanaian imports 2004.)

Figure 25. Six VPA countries' log exports to China, as reported by VPA countries



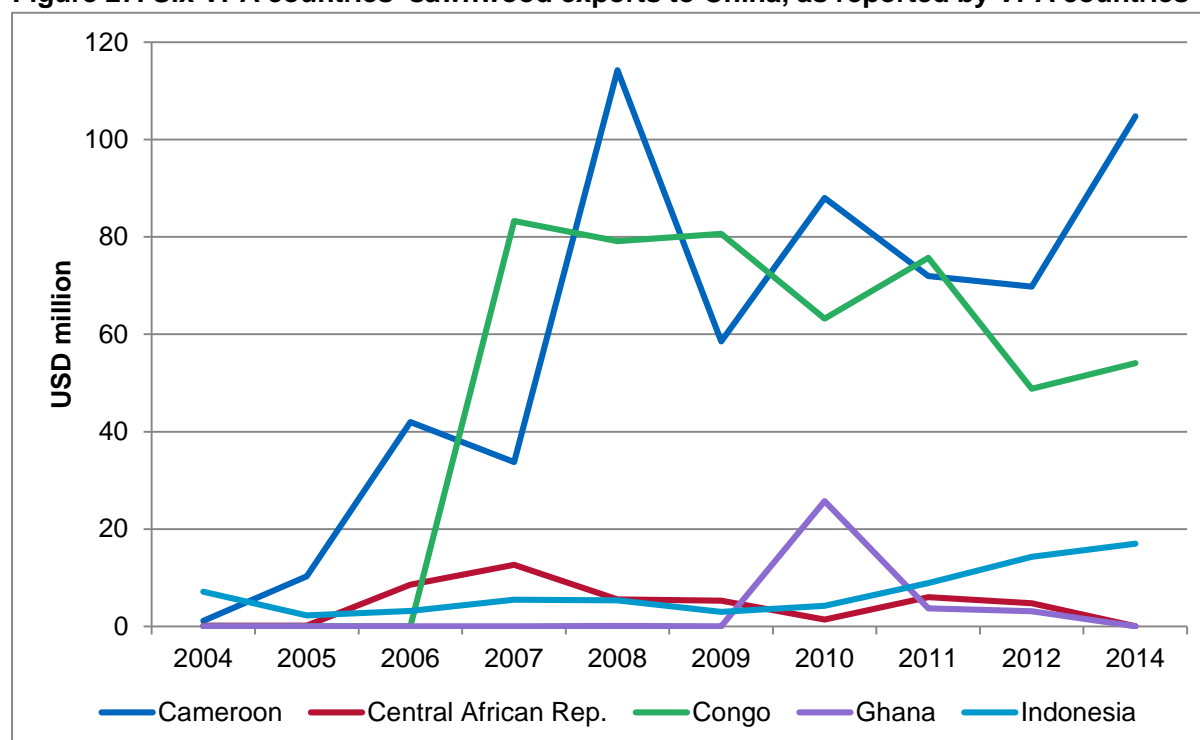
Source: UN Comtrade, 2015 (Note: Almost no quantities reported. Almost no imports of logs from China reported with exception of Ghana for 2008–2010 and 2012. Liberia reported no export of logs to Comtrade. Indonesian reporting stopped after 2009.)

Figure 26. China sawnwood imports from six VPA countries



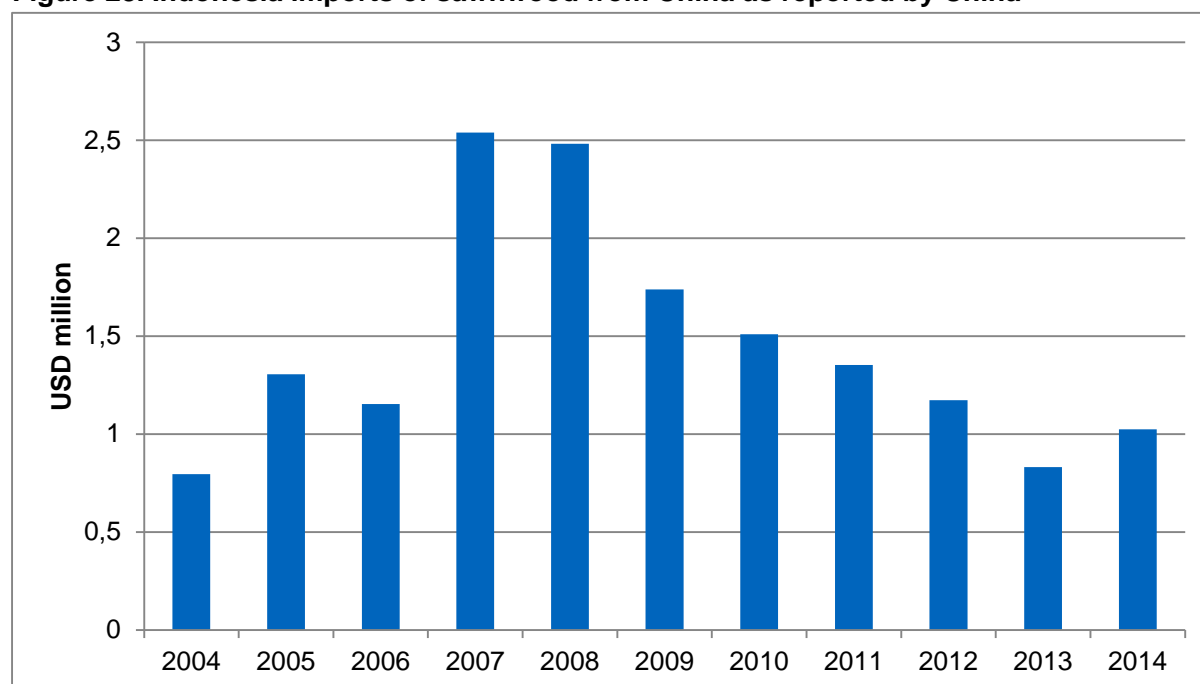
Source: UN Comtrade, 2015 (Note: As reported by China)

Figure 27. Six VPA countries' sawnwood exports to China, as reported by VPA countries



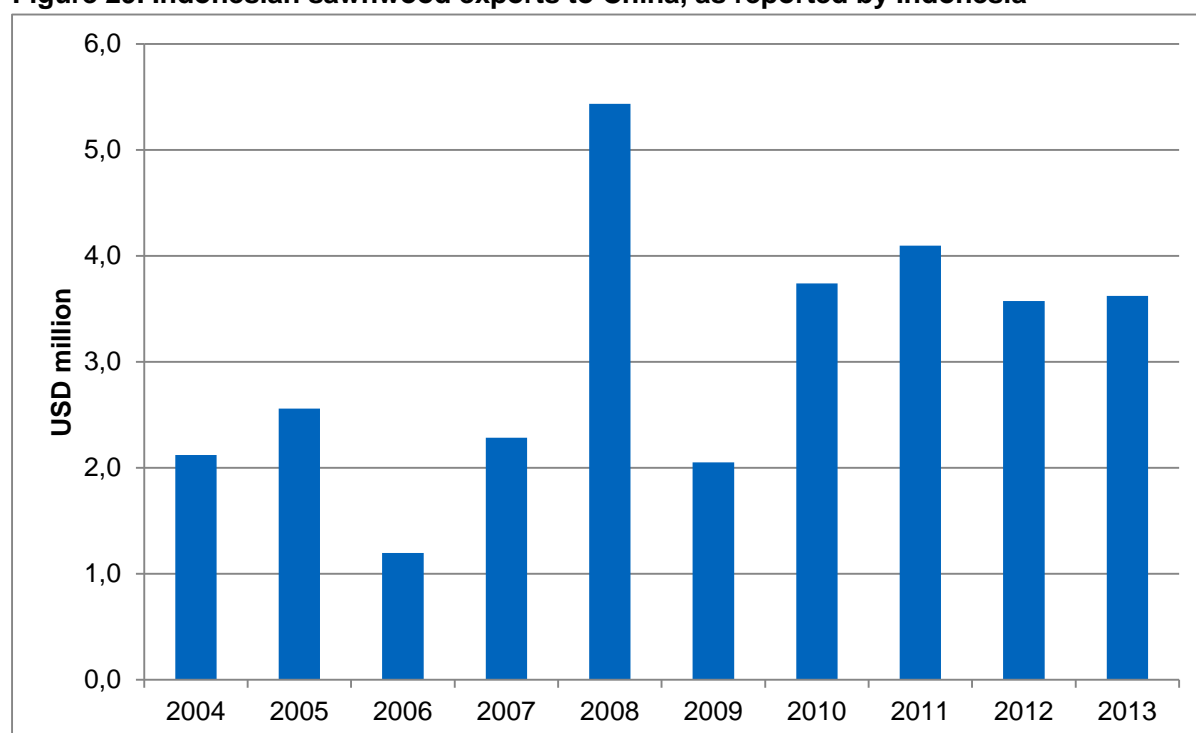
Source: UN Comtrade, 2015 (Notes: Quantities missing for most countries and years. No exports recorded by Liberia to Comtrade. Imports probably non-existent or minima, and only reported by Ghana for 2008–2012)

Figure 28. Indonesia imports of sawnwood from China as reported by China



Source: UN Comtrade, 2015 (Notes: Of the six VPA countries, only Indonesia imports significant volumes of sawnwood from China. As reported by China.)

Figure 29. Indonesian sawnwood exports to China, as reported by Indonesia



Source: UN Comtrade, 2015 (Note: As reported by Indonesia. Quantities not regularly reported. No 2014 values reported as of July 2015.)

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