Forest Sector Investments in FLEGT VPA countries

Scoping Study on Investors´ Perspectives and Investment Monitoring

UNIQUE forestry and land use

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Client

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CPI	Corruption Perception Index
DFI	Development Financing Institution
FDI	Foreign Direct Investment
FLEGT	Forest Law Enforcement, Governance and Trade
FCL	FAOSTAT Commodity List
GHG	Green-House Gases
HS	Harmonized Commodity Description and Coding System
IMM	Independent Market Monitor
ITTO	International Tropical Timber Organization
IFC	International Finance Corporation
ISIC	International Standard Industrial Classification
LAS	Legality Assurance System
NWFPs	Non-Wood Forest Products
SFM	Sustainable Forest Management
SME	Small and Medium Enterprises
SNA	System of National Accounts
TIMO	Timberland Investment Management Organization
TLAS	Timber Legality Assurance System
UNCTAD	United Nations Conference on Trade and Development
VPA	Voluntary Partnership Agreement

1 EXECUTIVE SUMMARY

There is increasing investors´ interest in VPA countries´ forest sectors. Latin American and Asian countries are in the forefront of this development, while the African forest investment space has not yet reached a level of maturity that triggers large-scale investments.

FLEGT VPA countries receive increasing interest from international forest sector investors. This is mainly in Asia and Latin America, while Africa is still maturing. International investments are mainly targeting industrial plantations and large wood industries. Average annual investment volume in of these investors is estimated at USD 8.5 Bn: the lion's share of this is invested in Asia.

Besides international investors, there is a huge number of domestic enterprises (i.e. SMEs) in VPA countries, investing in a wide spectrum of forest sub-sectors and value chains (both natural forests and plantation based). Total value of these investments is not known. However, country data indicates that average annual investment volumes may be as high as USD 3.7 Bn in Indonesia and USD 2.7 Bn in Viet Nam. Investment volumes in African countries are considerably lower, e.g. USD 120 M per annum in Ghana.

Although investment volumes in natural tropical forest management are not known, this asset type receives presumably much lower investments. This, because (1) capital intensity is not as high as in plantation forestry and wood industries, and (2) because large international investors are reluctant to invest in tropical natural forests due to reputational risks, and social and environmental concerns.

There is no specific evidence that the VPA process has had significant positive influence on forest sector investments to date. However, positive impacts are expected in the future when more countries will initiate FLEGT-licensing and when important Asian consumer countries will adopt legislation banning illegal timber from their markets.

The underlying assumption for this study was that implementation of FLEGT VPAs attracts legal and sustainable forest sector investments. The study surveyed domestic and international investors in eight VPA countries to analyses this nexus.

In terms of investment volumes in the forest sector, VPAs only have strong influence on a minor share, i.e. on investors who target international markets and are invested in natural forest-based value chains. These investors rated the relevance of VPAs higher than other actors did.

Large-scale investors in plantation-based operations did not perceive VPAs as being of major significant relevance to them. Thus, the potential positive impact of VPAs on attracting major investments flows and influencing investment strategies seems limited at present, which may be partly due to the fact that actual and/or potential benefits of VPA implementation have not been well communicated in the past.

VPAs may positively influence investment decisions of domestic SMEs if the implementation process improves access to capital, raw material access and market opportunities. On the other hand, investors articulated that SMEs might also divest or exit the sector, if VPAs restrict one of these factors.

Generally, investors recognize that the FLEGT process is an initiative to primarily combat illegal logging and enhance the export of sustainable wood products. FLEGT`s impact on enhancing the enabling environment for investments is rather perceived as being a by-product. Most investors do not perceive themselves being major direct beneficiaries of the process.

Actions related to VPA implementation that directly affect the enabling environment for investments are not widely known in the investors´ landscape. Partly because these actions are not implemented, and partly because these actions are not visible or not communicated.

Investors acknowledge the positive impacts the process may have on sector reforms in the VPA countries, though the lengthiness and the limited effectiveness of the process to date was stated as well. There is a general perception that the process is not inclusive enough.

Investors do not consider ongoing VPA implementation or negotiation processes being a major investment risk mitigating factor. However, they rate an operational VPA being an encouraging factor for allocating investments.

The FLEGT VPA process may have an indirect impact on enhancing the maturation of emerging markets´ forest sectors and making them more attractive for international investments. Since the implementation of VPAs is promoting the formalization of enterprises in VPA countries, making them bankable, the universe of investable projects for international investors is gradually increasing. This, however, is also linked to enhancing the technical and managerial capacities of these enterprises.

This has also positive impacts for the overall economy, since formalized enterprises are contributing to the national tax revenue and are more likely to generate decent work opportunities than informal enterprises.

Monitoring forest sector investment flows is only useful for VPA countries that have entered the licensing phase. To assess FLEGT's influence on forest sector investments, monitoring needs to include monetary investment flows and qualitative investment criteria.

Monitoring of investment flows will be a useful approach to analyze investment dynamics in countries where FLEGT licensing has started. Besides monetary investment flows, the monitoring will need to assess qualitative aspects of the VPA system to establish the FLEGT-investment nexus and differentiate it from other investment driving factors.

In general, investment data availability in VPA countries ´is limited. Most countries do not record and capture investment information regularly. In some cases, data has been captured, but is not publicly available. Only Vietnamese and Indonesian sources allow for an easy access of current and historical data. However, with continuing improvements of the national statistical systems, availability may improve in the future.

Due to the limitations in available data, it may be worthwhile to consider a primary data collection approach, using available ITTO industry and investors´ contacts. The primary aim of this would be to assess the attractiveness of VPA partner countries for investments, with a specific view on activities related to VPA implementation.

Results could help prioritizing the implementation of FLEGT action areas with regard to investors` requirements, i.e. investment safeguards, forest tenure reforms, enterprise formalization, capacity development, and taxation and incentive system reforms.

2 BACKGROUND

2.1 The FLEGT VPA process

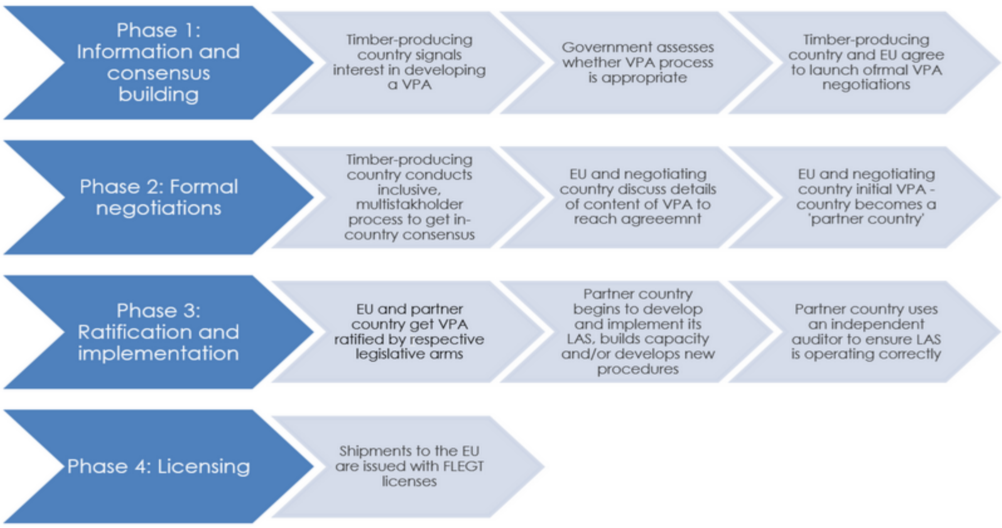
The European Union Forest Law Enforcement, Governance and Trade (FLEGT) Action Plan is an initiative to combat illegal logging that was established in 2003. The plan involves activities and measures to combat illegal logging including regulation to prevent EU businesses from importing or trading illegal timber. FLEGT Regulation empowers the European Commission to negotiate bilateral trade deals with timber exporting countries. These bilateral agreements are known as Voluntary Partnership Agreements (VPAs).

Illegal logging can have drastic impacts on natural forests. Environmental impacts include deforestation, loss of biodiversity and emission of greenhouse gases. Social impacts include conflict with indigenous populations, human rights' abuses, corruption and worsening of poverty. FLEGT aims to address these issues by providing various kinds of private and public sector support as well as economic incentives via legislative measures.

The FLEGT Action Plan operates under seven broad areas (Figure 1 and Annex 7.6):

1. Supporting timber-producing countries by providing financial and technical support.
2. Promoting trade in legal timber.
3. Promoting environmentally and socially beneficial public procurement policies.
4. Supporting private-sector initiatives.
5. Financing and investment safeguards.
6. Using existing or new legislation.
7. Addressing the problem of conflict timber.

Figure 1: Negotiation of a VPA process



Source: *http://www.rfo-sea.org/regional_flegt.htm*

As of October 2018, when this study was commissioned, 15 countries were at various stages of the VPA process (Table 1). Indonesia remained the only FLEGT-licensing partner country in 2018, but Ghana signaled readiness for launching the Final Joint Assessment of its VPA during the year and the Assessment is currently underway. Moreover, after Vietnam in 2017, two additional countries, Honduras and Guyana, initialed their VPAs in 2018.

Table 1: Status of FLEGT VPA negotiations in October 2018

Stage of FLEGT Process	Country
FLEGT licensing	Indonesia
VPA-implementing	Cameroon, Central African Republic, Congo, Ghana, and Liberia
VPA- initialed	Viet Nam, Honduras
VPA-negotiating countries	Côte d'Ivoire, the Democratic Republic of the Congo (DRC), Gabon, Guyana, the Lao People's Democratic Republic (Lao PDR), Malaysia and Thailand

2.2 Scope of the study

The aim of this scoping study is to assess the current and potential impact of FLEGT licensing on forest sector investment flows. The study is intended to contribute to the Independent Market Monitor (IMM) assessment of trade and market impacts of FLEGT VPA in the EU and partner countries.

Forest sector investments are realized by a diverse set of investors. They all have the common aim to materialize returns from economic activities related to forest management and wood processing. This includes formal and informal actors and may involve illegal operations. The underlying assumption for this study is that implementation of FLEGT VPAs attracts legal and sustainable forest sector investments, while reducing informal and illegal economic activities in the sector.

The study focuses on countries where the VPA process has advanced far enough to potentially identify impacts and effects on forest sector investments in the near future. Thus, the countries analyzed are: Indonesia, Cameroon, Central African Republic, Congo, Ghana, Liberia, Viet Nam and Honduras (Table 1).

The study´s detailed objectives were to:

- provide a baseline assessment of the views of international investors on the role of FLEGT licenses as a way to mitigate risk;
- assess the suitability of existing data for monitoring the impact of FLEGT licensing on forest sector investment;
- make recommendations for the long-term monitoring of forest sector investment flows.

2.3 Approach

The analytical work on this study was based on two approaches:

1. An interview-based survey amongst investors in the forest sector.
2. An analysis of quantitative data on forest sector investment flows in the selected countries for this study.

2.3.1 Investors` survey

To provide a baseline assessment on the potential role of FLEGT licenses as a way to mitigate investment risk, domestic and international investors in the sector were contacted and asked for their opinion on the guiding questions for this study.

Most of the contacted investors agreed to share their perspectives during an interview, others provided written statements by email.

The blend of contacted investors aimed at obtaining a comprehensive panorama of opinions and experiences in terms of investor types, investment regions and types of forest assets. Investors in the forest sector are commonly classified according to their financial capacities, sources of capitalization and vehicles used for investment (for details see Annex 7.1):

- Domestic enterprises (including micro enterprises, SMEs and large enterprises)
- International forest industries (frequently referred to as strategic industry investors)
- Financial investors (including TIMOs[1], institutional investors[2], banks, family office)
- Impact investors (usually non-profit organizations and foundations with lower financial return expectations)

The present study follows this typology, putting emphasis on the most important sub-groups relevant to answer the study´s guiding questions on the interrelation of FLEGT VPAs and investment flows.

Hence, the study approached associations representing SMEs in VPA countries, internationally operating forest industries and TIMOs/institutional investors (Table 2).

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[1] A Timber Investment Management Organization (TIMO) is a management group that aids institutional investors in managing their timberland investment portfolios. A TIMO acts as a broker for institutional clients. The primary responsibilities of TIMOs are to find, analyze and acquire investment properties that would best suit their clients. Once an investment property is chosen, the TIMO is given the responsibility of actively managing the timberland to achieve adequate returns for the investors.

[2] Institutional investors have several options for timberland investment types and structures. These options include subscribing to commingled funds, pursuing direct investments (in forest enterprises) or separate accounts, and investing in timber REITs. Some of the largest institutional investors pursue direct investments, including co-investments alongside their fund investments, which aligns with a trend among the larger investors toward internal management of assets and efforts to reduce fees. On the other hand, most institutional investors are constrained by limited in-house timberland investment expertise and a lack of scale to undertake direct investments. Therefore, the majority of investors opt for external managers, such as TIMOs, while some asset managers may include forestry investments as part of broader real assets or combined forestry and agriculture mandates (New Forests, 2017b).

The group of TIMOs and institutional investors was divided into (1) investors with specific interest in emerging markets, and (2) investors that are not yet invested in these regions.

Table 2: Investors that provided inputs to this study

Investor type	Number (interviews or written statements)
Domestic SMEs	5
International industry investors	5
TIMOs/institutional investors invested in assets in emerging markets	7
TIMOs/institutional investors without significant investments in emerging markets	4
Civil society actors	3

To respect the request of several investors for a strict level of confidentiality, the study's results do not present individual opinions or investors' strategies. The study synthesizes and aggregates investors` information and presents it for groups of investor types.

2.3.2 Forest sector investment data

For establishing a baseline dataset of forest sector investments in VPA countries, the following data sources were reviewed and analyzed:

- Meta-studies and publications on forest investments;
- Strategies and publications of international investors (i.e. TIMOS and specialized forest funds);
- National statistics on FDI flows and capital stock increase in forest sub-sectors (Forestry and logging, Wood industry, Pulp and paper).
- International databases (World Bank, UNCTAD).

The review of publicly available forest investment studies, investors´ strategies and publications resulted in a global picture of international investors` activities in emerging markets. In combination with the inputs directly obtained from contacted investors, this information provided the framework for understanding investment trends and regional characterization of investment priorities. This information was analyzed with a specific view on emerging economies and VPA countries.

For quantification of forest sector investment volumes in VPA countries, data was sought from national statistics, following the United Nations System of National Accounts (SNA) guidelines. In theory, the data recorded in the national statistics should reflect the complete annual capital stock increase for a sub-sector (excluding informal enterprises). This includes both, foreign and domestic investments, since all nationally registered enterprises are captured in this dataset.

If adequately recorded and publicly available, the SNA data delivers comprehensive information on annual increase of capital stocks according to industrial activities[3]. The key parameters for investment monitoring are:

- <u>Capital expenditure and fixed assets</u>

  Capital expenditure is the total payment for tangible asset to facilitate operations or to expand a business. Examples include production machinery or real estate. Capital expenditures are recorded as fixed assets because they cannot be sold directly to consumers and which are not easily convertible into cash.

- <u>Gross fixed capital formation</u>

  Gross fixed capital formation is the value of acquisitions of new or existing fixed assets minus the value of disposals of fixed assets. The term is "gross" because it does not account for depreciation.

For the purpose of this study, investment data for eight VPA countries was reviewed and analyzed (Table 3). The countries have been selected for their progress in the VPA process, assuming that potential correlation of investment flows and VPA will most likely show up in countries with substantial VPA track record.

Data availability has been generally poor for most countries. Only four countries provided some kind of publicly available forest sector investment data. However, long-term time series were only available for Indonesia and Viet Nam.

Table 3: Forest investment data availability for study countries

Region	VPA country	Availability and quality of statistical investment data
Africa	Ghana	Statistical investment data only available for the year 2013
	Cameroon	Statistical investment data only available for the years 2014 and 2015
	Congo	No statistical data available
	Central African Republic	No statistical data available
	Liberia	No statistical data available
Asia	Indonesia	Time series of statistical investment data available from 2011 to 2017
	Viet Nam	Time series of statistical investment data available from 2011 to 2017
Latin America	Honduras	No statistical data available

[3] The countries keep records in their SNAs in accordance with the International Standard Industrial Classification (ISIC rev. 4) system. The following ISC divisions are relevant for FLEGT VPAs: 02 Forestry and logging, 16 Wood industry, 17 Pulp and paper, and 31 Furniture.

3 RESULTS OF INVESTORS` SURVEY

3.1 General perception and knowledge of investors´ on FLEGT VPAs

Investors perceive the FLEGT process being mainly an approach to enhance trade with sustainable wood products to the European Union. They acknowledge that the FLEGT process is driving major institutional changes in the partner countries` forest sectors that also improve the enabling environment for investments. However, investors clearly state that the process is taking too long with an uncertain outcome to be factored in when making concrete investment decisions.

The interviews revealed a very homogenous understanding of the investors´ recognition of the FLEGT process. Overall, the FLEGT approach and intention was received positively. FLEGT was mainly associated to the following characteristics:

- FLEGT aims at enhancing trade with sustainable tropical timber in the EU.
- FLEGT's major objective is to combat illegal logging.
- FLEGT is implementing legality verification systems.
- FLEGT is basically a market-based approach.
- FELGT enhances national forest policy reforms and law enforcement.

This shows a rather clear but also restricted reflection of the FLEGT process, compared to the wide spectrum of actions that the FLEGT process may involve, and that may impact on investment activities´ (see Annex 7.6 on description of FLEGT action areas). However, this is understandable if one considers the focus of public communication of FLEGT and the actions actually implemented in the partner countries.

The evaluation of the EU FLEGT Action Plan for the years 2004 to 2014 (TEREA, 2016) revealed that the process in partner countries prioritizes activities that directly relate to the implementation of supply chain traceability, legality due diligence and to strengthening institutions to combat illegal logging (see Annex 7.7 on summary of FLEGT evaluation 2004-2014).

On the other hand, FLEGT action areas with a more direct impact on forest sector investments, as e.g. the action area on safeguards for financing and investment, are not widely implemented.

Although the investors assessed the intention of FLEGT positively, they articulated criticism with regard to implementation of the process. Commonly mentioned critical opinions on the FLEGT process were:

- The process in the countries would take by far too long and could not be taken into consideration for reliable planning and decision making at enterprise level.
- The process would need to include the key target markets. While the EU Timber Regulation (EUTR) and the US Lacy Act address this issue, there is a major ongoing shift to Asia, where no robust import legality legislation is in place yet. Thus, there is no level playing field between EU and US and Asian market actors yet and the FLEGT process alone will not help resolving this.

- The process was perceived to not include all forest sector enterprises in a country. Investors interviewed for this study believed that only larger export-oriented industries would have to comply with the VPA requirements; smaller enterprises were perceived to be unable to comply due to technical and financial restrictions.

Since the perception of the FLEGT VPA process is influenced by the respondents` position, these opinions do not necessarily reflect the organizational understanding and knowledge of FLEGT. Most direct interview partners were CEOs or investment managers, while only four respondents were directly working on FLEGT or related topics (Table 4).

Table 4: Position of respondents in organization

Interviewee`s / Respondent`s position in organization	No. (interviews or written statements)
CEO or investment managers	12
Technical expert in organization (e.g. sales manager, production manager)	5
Organization's expert on FLEGT or certification	4
Others (i.e. civil society actors)	3

Differences between investors in acknowledging FLEGT´s potential for improving the investments´ enabling environment in a country were found for the following groups:

1. Domestic and international industry investors rated the importance and impact of FLEGT VPAs higher than TIMOS and institutional investors did (see Table 2 for investor typology).
2. Respondents invested in natural forest value chains rated FLEGTs potential on investment decisions higher than plantation value chain investors did (see Table 5 for investors´ value chain background).

Table 5: Investors in tropical natural forest and plantations value chains

Type of value chain	No. of interviewed investors engaged in value chain (multiple answers possible)
Tropical natural forest value chain	10
Tropical plantation based value chain	11
No tropical country investments	4

3.2 Consideration of FLEGT in forest investment strategies

Emerging economies including a number of VPA countries attract increasing forest sector investments. This is occurring mainly in Asia and Latin America, while the market in Africa is still considered to be not mature enough for many international investors. TIMOs/institutional investors in VPA countries are mainly targeting plantations and related industries. Domestic and international industry investors dominate investments in natural tropical forests. To date, a VPA is not a criterion for any investor type to rate partner countries being preferential investment locations.

Investment decisions are generally driven by risk adjusted returns. Furthermore, the source and amount of finance to be deployed is determining the investment strategy. Assets and locations are strictly sought in accordance with the overall investment strategy.

The enabling investment environment is a crucial decision factor for all non-domestic investors. This includes the status of economic development, political risk and stability, infrastructure and human resource capacity, market openness for foreign investors and trust in the legal and tax system etc. Most of the decision factors are reflected in the ease of doing business index of the World Bank and forest sector specific indicators.

Some VPA countries have made substantial progress with regard to the enabling environment while others have not improved significantly since start of the VPA process. Annex 7.2 provides country fact sheets showing the historical development of the ease of doing business score and the corruption perception index ranking of the eight selected VPA countries of this study.

In their strategies, investors flag out priority investment locations / regions, and sometimes explicitly exclude countries from investments (e.g. for market maturity, security reasons, human rights situation, etc.). The strategies clearly define investable projects and asset types, e.g. forest types and product groups.

Industry investors` strategies follow market trends of forest products consumption, which is defining the regional scope of their engagement. TIMOs/institutional investors prefer mature markets with more opportunities for an investment exit. The more investable forest sector assets are available in a country/region, the more attractive it becomes for TIMOs and institutional investors (see Box 1: What make a forest asset investable?).

The following table compares the guiding elements of investment strategies by main investor type. While domestic SMEs and industry investors pursue competitiveness driven strategies, TIMOs/institutional investors develop their strategies around portfolio optimization and hedging risks.

Table 6: Drivers of investors` strategies

Domestic SMEs and international industry investors	TIMOs/institutional investors
Growth and market driven	Return driven
Optimization of performance in reaction to domestic or global market developments	Portfolio diversification in line with investors` return expectation
Strategic options restricted by capital, information and non-financial resources.	Options restricted by investors` risk appetite and availability of investable assets

Source: UNIQUE based on review of investment strategies

Figure 2 illustrates how institutional investors´ strategies have evolved over time and which countries/regions are currently in the focus of investment activities. While Latin America has been targeted in the early 2000s, other emerging markets are gaining interest. However, restrictions are clearly identified in the lack of investable assets and market liquidity.

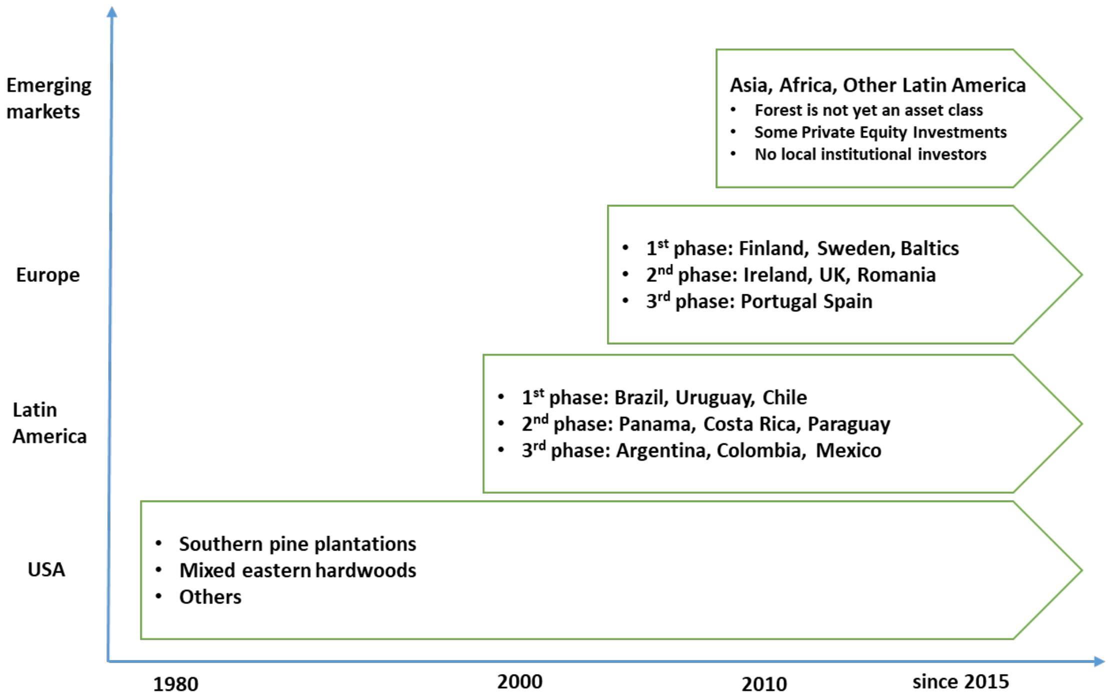

Figure 2: History of institutional investments in the forest sector

(DASOS Capital, 2019)

Commonly, emerging markets receive a higher risk ratings than developed markets for forest investments. The higher risk triggers a premium on the expected returns (Figure 3). This correlation leads to further restrictions regarding the identification of investable assets, since investors are highly selective to ensure that the asset´s performance meets the expectations.

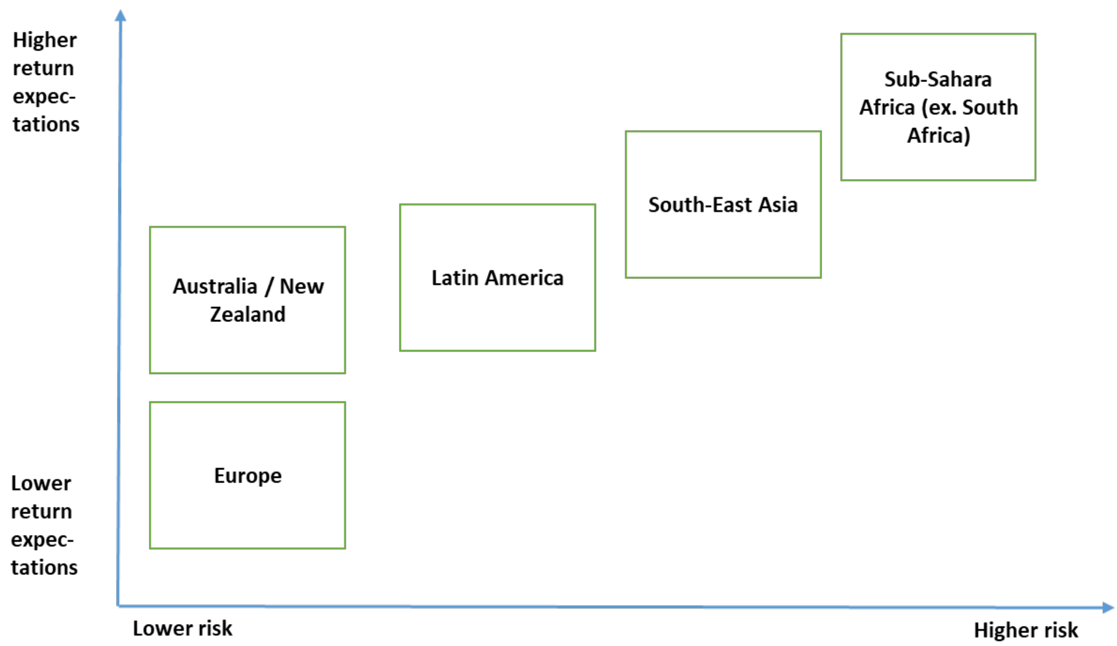

Figure 3: Risk-return assessment according to investment regions

UNIQUE. NOTE: Higher return expectations in Australia/New Zealand than in Europe at comparable risk rating due to better growth and production performance.

Box 1: What makes forest assets investable?

Each investor defines investable assets in accordance with their investment strategy. Beyond the strategic considerations, there are three key criteria defining an investable asset:

Asset value:

Determined by biological, managerial and financial factors. Well performing assets are commonly more expensive than under-performing assets. Hence, they have a low risk-return profile, which is preferred by large TIMOs and institutional investors. On the other hand, achieving the turn-around of a low-performing asset can offer high returns, which is a precondition to accept more risk. Specialized TIMOs and industry investors with substantial experience in forest operations are more likely to take on these investments.

Asset size:

For investors from forest industries, this criterion is commonly defined by the investor´s ability to mobilize financial resources (equity, loans, stock markets, etc.). It varies strongly: large international industries from the pulp and paper sector realize single investments of several billion USD. In VPA counties (with the exception of Indonesia and Vietnam) investment volumes are usually in the range of USD 5-20 million. SMEs' maximum investment volumes do usually not surpass a few million USD and frequently much less.

TIMOs and institutional investors are usually investing volumes from 5 to 500 million USD in individual assets. Whereas, the size is defined by the overall financial capacity of the investment vehicle. E.g. a TIMO managing a forest fund of 100 million USD will most likely invest in 5 to 7 assets; the "ticket size" is between 10 to 20 million USD, respectively. Large TIMOs capitalized by pension funds and insurances usually hold assets under management of several hundred million USD (sometimes several billion USD). Individual asset size is usually much larger and investments have frequently volumes of more than 100 million USD.

Market place for forest assets:

For TIMOs and institutional investors in closed end funds, a decisive criterion for investing is the possibility to liquidate the asset – ideally towards the end of the fund lifetime or at any given time to optimize the risk-return profile of the fund. This requires a) that the assets can be freely sold, b) that there is a critical mass of value chain or institutional buyers interested in this type of asset, and c) valuation and liquidation of the asset follows common capital market´s regulations and procedures.

Source: UNIQUE based on review of investment strategies and project work

Natural tropical forests

In general, the impact of VPAs on forest sector investments is restricted by the fact that most TIMOs/institutional investors exclude investments in natural tropical forests. The low appetite to invest in natural tropical forests is caused by the following factors:

- Tropical forests are usually managed as concessions or leaseholds; the land cannot be privately owned (in contrast to plantations and forest assets in the northern hemisphere).
- Investment volumes are comparably low because no land has to be purchased and the investments are often cash-flow positive quite quickly. Thus, the assets are too small for large scale TIMOs and institutional investors (e.g. pension funds, insurances).
- Tropical forest management is exposed to severe reputational risk unless significant technical expertise to manage natural forests sustainably and mitigate related risks is available.
- Tropical forest management can yield competitive returns (Gardingen van, 2003) (Grulke, 1998) but risks are often not adequately compensated.

Investments in natural tropical forest operations are mainly realized by domestic enterprises and internationally operating industries. Asian based industries in particular have extended their involvement in VPA countries' forest concessions (e.g. in Western Africa and Southeast Asia). On the other hand, European actors have partly divested (e.g. in Africa) (oral communication during interviews; see also (Karsenty & Ferron, 2017)).

Furthermore, there is a new group of enterprises lining up in natural forest management - namely, community based enterprises. These enterprise models, however, are technically weak and often lack the trust of their shareholders to develop capital stocks (Jagger, 2014). Their impact on investment and development in the forest sectors is thus still marginal. Nonetheless, they are receiving increasing attention by the forest investment community[4] and investigations in strengthening their attractiveness as investable assets are going on (Elson, 2012).

Plantations

Investments in plantations are increasingly gaining interest by a wide range of investors, including TIMOs/institutional investors. This includes VPA countries, i.e. in Asia and Latin America, while in Africa interest is still comparably low. Nonetheless, recent decades have seen decent TIMO investments in Southeastern Africa and more recently in some Western African countries, (e.g. Ghana and Sierra Leone)[5]. The overall number of investable projects for TIMOs and institutional investors in VPA countries is still limited however.

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[4] E.g. the Forestry and Climate Change Fund (FCCF) is currently developing an asset portfolio in Central America that includes community forestry projects.

[5] TIMOs that are currently active with a focus on emerging markets include Criterion African Partners, Arbaro partners and New Forests. The common vehicle for these investments are forest funds that comprise of a small number (commonly 5 to 10) of assets (equity shares in forest enterprises). Further, in Africa (excluding South Africa), a number of individual companies that are capitalized by development banks, commercial banks and institutional investors hold significant forest assets: namely, Criterion Africa, Green Resources S.A, the New Forests Company, IWC, Form international.

Industry investors are very active in Latin America and Asia. These emerging market regions show significant market and economic growth. Hence, within the scope of their global strategies, industries aim at participating in market shares and/or securing resources in these regions.

In Sub-Sahara Africa, however, international industries have not yet invested significantly outside South Africa despite the rapidly increasing demand driven by population growth. The prematurity of timber and forestry markets, difficult access to land, and the green-field character of most investment opportunities, have distracted international investor. Some Asian VPA countries, e.g. Cambodia, have similar investment barriers.

Table 7 summarizes common features of investment strategies and consideration of FLEGT partner countries as stated during the investors´ survey.

Table 7: Common investment strategies of investor types and relevance of VPA countries

Investor type	Common investment strategies	Consideration of FLEGT partner countries in investment strategies
Domestic SMEs	Mainly market driven strategy: return optimization based on available resources (raw material, HR and capital).	"No choice" option
International industry investors	Mainly market driven strategy to secure market shares in specific regions, improve value adding or enhance value chain integration. Pursue a corporate portfolio strategy (assets fulfill corporate tasks as profit or cost centers).	Increasing interest of Asian investors in tropical forest concessions in FLEGT countries. On the other hand, European investors have partly divested. Increasing interest in plantation investments in FLEGT countries. However, most FLEGT countries perceived being pre-mature, except for some Asian countries.
TIMOs/institutional investors invested in assets in emerging markets	Mainly driven by shareholder interests, i.e. increased risk appetite and partially non-financial returns expectations (co-benefits). Pursue an asset portfolio strategy (all assets are profit-centers).	FLEGT countries are targeted. Generally no investments in natural tropical forests. Investors focus on plantation investments or forest rehabilitation.
TIMOs/institutional investors without significant investments in emerging markets	Mainly driven by shareholder interests, i.e. reduced risk appetite and stable returns. Pursue an asset portfolio strategy (all assets are profit-centers).	If at all, only emerging economies with advanced forest sectors (e.g. Uruguay). Thus, hardly any FLEGT countries considered. Generally no investments in natural tropical forests. Focus on northern hemisphere timberlands and southern hemisphere plantation estates.

Source: UNIQUE based on review of investment strategies and investors´ interviews

The relevance of VPAs for sector investors` decision-making varies in function of the investor type and value chain strategy. Figure 4 illustrates how investors rated the importance of VPAs during their investment due diligence process. In terms of investment volumes in the forest sector, VPAs have only strong influence on a minor share, i.e. on investors who target international markets and are invested in natural forest based value chains. These investors rated the relevance of VPAs higher than other actors did. However, the investment volumes of this investor group are comparably lower than investments in plantation based operations.

Large-scale investors in plantation based operations did not perceive VPAs being of major significant relevance to them. Thus, the potential positive impact of VPAs on attracting major investments flows and influencing investment strategies seems limited.

For domestic SMEs, VPAs are of high importance for day-to day business. Hence, VPAs may positively influence investment decisions if the process improves access to capital, raw materials and market opportunities. On the other hand, investors articulated that SMEs might also divest or exit the sector, if VPAs restrict one of these factors.

Indirectly, VPAs are perceived having a positive impact on formalization of SMEs. This means that there is an increase in "formalized" capital in the forest sector driven by VPA implementation. This has also positive impacts for the overall economy, since formalized enterprises are contributing to the national tax revenue and are more likely to generate decent work opportunities than informal enterprises.

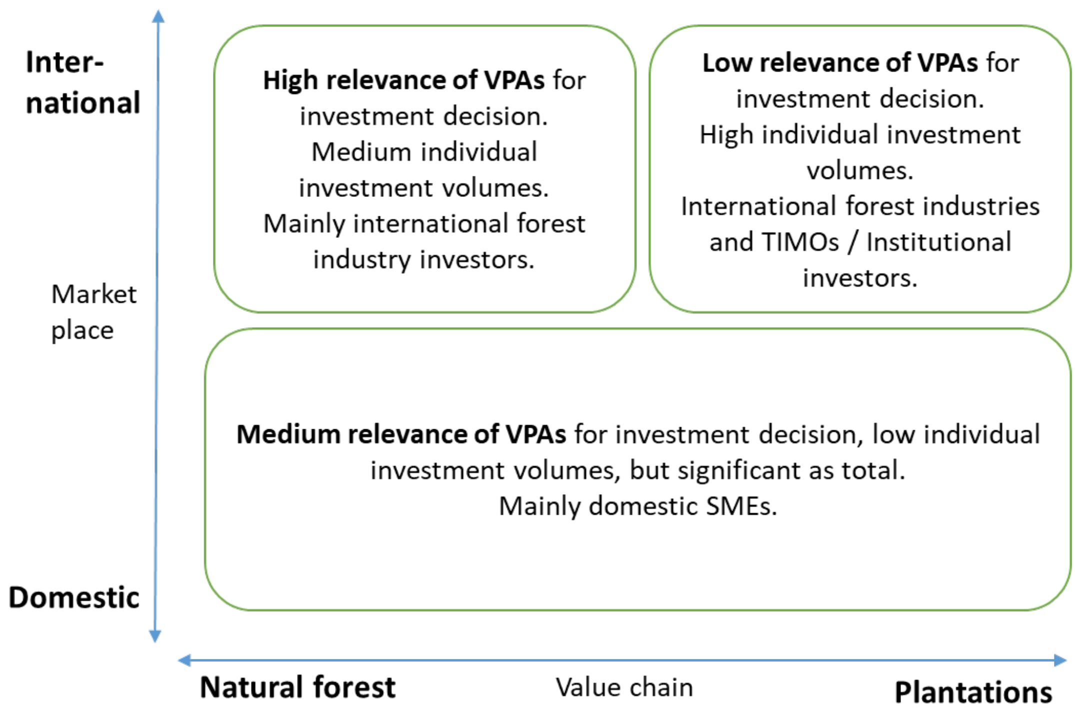

Figure 4: Relevance of VPAs for investment decisions for investor types by market place and value chain supply

Source: UNIQUE based on investor survey

3.3 Investments in the forest sectors of VPA countries

The past decades have shown growing investments in forest assets across the globe. Despite this, however, the volumes invested by TIMOs and institutional investors in VPA countries is marginal compared to global forest sector investment flows. Today´s investors in VPA countries´ commercial forest sectors are some specialized TIMOs, but the majority of investors are international forest industries and domestic SMEs.

Out of the top 30 TIMOs, only three hold forest assets in Africa (incl. South Africa) and three in Asia. However, 16 hold assets in Latin America (most in Brazil, Uruguay and Chile) (Fastmarkets, 2019). This indicates that the majority of investments in emerging economies` forest sectors are currently mobilized by industries through domestic equity investments and loans.

Of the currently USD 100 Bn of assets under management by TIMOs, less than 5% are invested in emerging economies (excluding South Africa, Brazil, Chile, Uruguay; estimate based on New Forests 2017 and Fastmarkets 2019). Despite the obvious barriers to investing in emerging markets´ forest sectors, investors are well aware of the potentials. The Australian based TIMO New Forests (2017) estimates the pool of potentially investible forest assets in Southeast Asia to be USD 5 Bn and in Latin America (ex-Brazil) USD 20 Bn.

Figure 5 illustrates annual average greenfield investments[6] into new plantations and wood processing for Asia, Africa and Latin America, totaling around USD 8.5 Bn annually. The lion's share of these greenfield investments has been realized in Asia and Latin America.

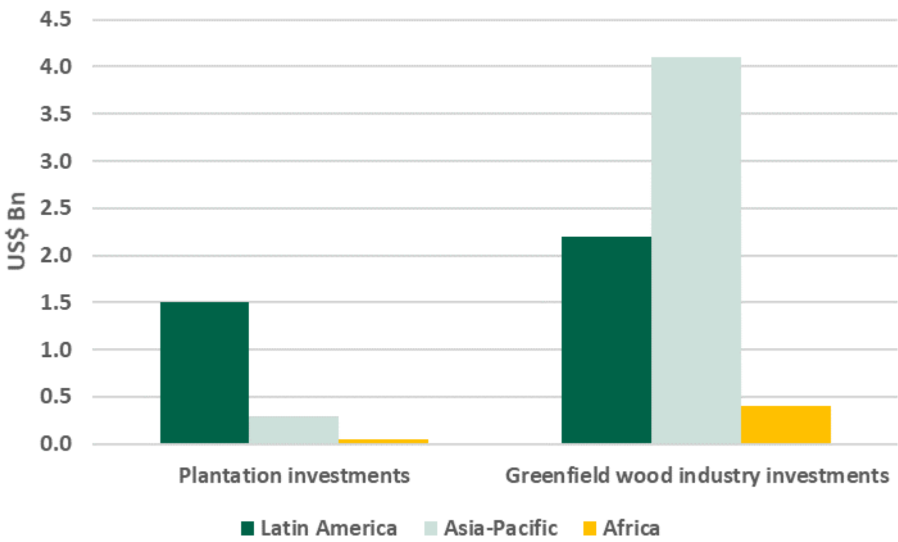

Figure 5: Average annual investments (2010-2015) in emerging markets´ forest sectors

Source: (Criterion African Partners, 2017)

[6] Greenfield investments are investments in new operations ("start-ups"). In contrast to brownfield investments, that commonly refer to acquisition of existing operations. Both terms do not consider the regular investments of existing enterprises into modernization, replacements, maintenance and diversification.

The values in Figure 5 are low compared to the investments annually realized by enterprises operating in the forest sectors of emerging economies. In the VPA countries Viet Nam and Indonesia, annual net capital increases of forest sector enterprises are as high as USD 2.7 Bn and USD 3.7 Bn. The capital increases are driven by modernization, replacements and maintenance. This indicates that private sector capital allocation in the forest sector has rather matured.
On the other hand a larger investment of USD 20 M in a forest or wood industry asset in Cameroon could be real "game changer", since the average net capital increase of the whole sector in 2014/15 was only USD 15 M[7] (Table 8).

Table 8: Annual investment volumes in the forest sectors of selected VPA countries

VPA country	Average value of net capital increase	Database
Viet Nam	USD 2,700 M	Average 2010-2017 All enterprises in forestry, wood industry, pulp & paper and furniture
Indonesia	USD 3,700 M	Average 2011-2017 Medium and large enterprises in wood industry, pulp & paper and furniture
Ghana	USD 120 M	2013 All enterprises in forestry, wood industry, pulp & paper and furniture
Cameroon	USD 15 M	2014-2015 All enterprises in forestry, wood industry, pulp & paper and furniture

Sources: National statistical databases

Most available statistics do not allow for detailing the sources of capital (foreign or domestic). However, disaggregated data for Indonesia shows that average annual direct investments of domestic enterprises in forestry and logging sub-sector has been USD 123 M compared to USD 106 M foreign direct investments (average 2011-2017). This underlines two major interlinked conclusions:

1. There is a significant number of investing enterprises and industries in emerging markets. However, the major limitation in VPA countries is the lack of investable assets.
2. Private sector forest enterprises require specific attention by facilitating access for capital to grow and enhancing the enabling environment for investments. This in turn makes domestic and joint venture enterprises more attractive for investments by TIMOs and institutional investors.

[7] NOTE: Investment flows may vary significantly between years. Thus, the average of two years may not be representative for the long-term investment average in Cameroon. Further, the official data does not reflect informal sector investments.

With regard to these two factors, VPA related activities[8] assist SMEs in becoming compliant with legality and sustainability requirements and accessing markets. The increase in formality and enhanced organizational and technical capacity is generally improving domestic SMEs investment risk profile and can improve their ability to access loans from commercial banks. Over time, this will increase the chance to attract joint venture partner that can provide capital, technology and know-how.

3.4 Potential of FLEGT to mitigate forest sector investment risks

The FLEGT VPA process has not proven to offer substantial investment risk mitigating potential in any partner country yet. However, investors in natural forests value chains in particular recognize the positive impacts of the FLEGT VPA process on the enabling environment and see risk mitigating potential if VPAs become fully operational.

Investment in forestry depends on a set of factors. Each of these factors is tested by investors for opportunities and related risks before taking an investment decision. If the risks outweigh opportunities, an investment will not be realized. From the perspective of an investor in the forest sector, risks are typically grouped into three categories[9]:

- **Project risk:** These are risks directly related to technically operate an asset in the forest sector and generate the expected returns. These include site conditions and productivity, production costs, financing requirements (volume, CAPEX or working capital type investment), cash flow profile, overall complexity, presence of off-takers, product prices, natural hazards, etc.
- **Forest sector risk:** sector specific policies, taxes and incentives, competition, level of differentiation, level of formalization and legality, access to land/forests and tenure security, environmental and social safeguards and requirements, etc.
- **Country risk:** all other factors “surrounding” project and sector risk, i.e. maturity of the market, economic stability and growth, terms of trade, incentives for investment, taxes, ease of doing business, regulatory frameworks, national security, etc.

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[8] E.g. through the Kumasi Wood Cluster in Ghana, the NEPCON/Sustainable Forest Management Institute (SFMI) project on Timber Legality in Viet Nam or the ATIBT working group on Governance, FLEGT, REDD and Certification.

[9] NOTE: There are various approaches to structure forest investment risks in literature (see PROFOR 2014 for a comprehensive review of forest investment risk). However, they all comprise of the same risk elements, though grouping them under different headings. For the purpose of this study, we applied a modified risk categorization to better match the key questions on the causal nexus of VPA and investment risks.

In theory, FLEGT hosts an array of activities and tools that enhance forest sector attractiveness for investments by reducing typical risks. Investors recognize that a VPA would be a positive criterion when evaluating investment opportunities. However, most of these risk-mitigating characteristics only materialize when a VPA turns fully operational and the majority of market participants in a partner country comply with the requirements. The interviewed actors observed that integration of all market participants is a lengthy process. Even when a VPA is operational as it is in Indonesia, especially small and informal enterprises would not immediately be fully captured by the system.

Table 9 summarizes the risk categories that are commonly applied by forest sector investors. The table compares the relevance of the risk categories against (1) the current most common risk mitigation approaches, (2) the theoretical potential of FLEGT VPAs mitigating these risks, and (3) how investors currently rate the relevance of the VPA process for risk mitigation.

Table 9: Forest investment risk categories and risk mitigation

Risk category	Relevance for investors	Investors current risk mitigation approach	Theoretical FLEGT risk mitigation potential	FLEGT risk mitigation potential as currently rated by investors
Project related risks	Top priority for any commercial investor; also of high importance for impact investors, but balanced against non-financial co-benefits.	Pre-investment due diligence Site-species/products-markets approach Portfolio diversification	Creating a level playing field for market participants by eliminating market distortions through illegal/informal activities	High risk mitigation potential for export markets that apply timber legality legislation (e.g. EUTR, Lacy Act, FLEGT VPA-related import legislation). Limited risk mitigation in domestic markets of FLEGT countries, as interviewees believe that there is still a high prevalence of illegal/informal market participation. Low risk mitigation potential for target markets without mandatory legality requirements (e.g. China)
Country risk	High importance Exclude high risk countries from investment strategy.	Investment strategy explicitly exclude high risk countries (in response to the general risk appetite of the investor) Hedging risk in fund portfolio by diversifying assets across countries and regions	Generally no influence on country risk, rather country level conditions influence progress of FLEGT VPAs	Investors do not see the influence of FLEGT on these risk factors as the factors are embedded in a wider political context and are usually resolved outside the forest sector.
Forest sector risk	High relevance for most international investors and domestic investors involved in international trade.	Pre-investment due diligence of E&S risk Voluntary certification (i.e. FSC and PEFC) Environmental and Social Governance systems Free Prior Informed Consultations	Creating a consistent forest policy for SFM and enhancing law enforcement. This supports: Overall investment security and long term planning Reducing E&S and reputational risk Facilitates certification	Currently investors see low risk mitigation potential: Improvements are recognized, but countries do not pursue the process consistently and fast enough. Investors feel that the FLEGT process seems to prioritize TLAS implementation. FLEGT actions that do not directly pursue this target are not implemented, in their opinion.
Others	Varying	Specific approaches	None	None

Source: UNIQUE based on review of investment strategies and investors´ interviews

Project risk: VPAs may mitigate market risk

The most significant risk for investors is the performance risk. Thus, direct project risks related to productivity, and costs and returns are most crucial for taking investment decisions. Assessing the project risks defines in the first instance whether an asset is “investable”.

Project risks are those that are directly related to forest-based operations and can be influenced and mitigated internally. Thus, the investor`s / asset manager`s assessment of managing the asset successfully is decisive for a positive investment decision. Mitigation of these risks is related to technical experience in the forest sector, management capacities (i.e. Human Resources), and the optimal choice of the production system in response to market demand and prices. Project related risk is the most crucial barrier for investors not to invest in VPA countries assets.

Currently, investors see the only potential of VPAs reducing project level risk in the field of eliminating price distortions caused by illegality. Such market distortions for wood products prevail in domestic and export markets, which are indifferent to legality and sustainability of sources from where the products originate. An operational VPA would resolve this distortion by integrating the market participants along the full value chains for both, domestic markets and exports.

In countries where the major source of timber supply is from illegal operations, price levels can be as much as 50% lower than in fully formalized/legalized market environments (Source: oral communication from investors´ interviews)[10]. Hence, there is no market driven incentive for formal operators to realize significant long-term investments. As currently perceived by the investors, even in countries with advanced VPAs (Indonesia, Ghana, Viet Nam) integration of domestic market actors in the VPA Legality Assurance System (LAS) is still far away from reaching a significant share of domestic market actors.

A similar picture is drawn for export market destinations, where legal producers meet illegally sourcing competitors. Investors exclusively exporting to Europe clearly state the positive impact of VPAs on reducing illegal competition on this very specific market place. However, most investors diversify their export markets in reaction to demand, price and Forex dynamics. They do not see a significant risk-mitigation potential of VPAs, unless the country of destination itself is implementing a VPA or a strict legality due diligence, too. In general, investors in natural forest value chains see more risk mitigating potential of VPAs than plantation sector investors.

Country risk: VPAs cannot mitigate country level risk

Country risk (incl. political risk, investment environment, tenure security) is usually captured by the investment strategy but can also make a significant difference during the pre-investment due diligence process as these risks can hardly be mitigated by the investor.

Investors interviewed for this study believed that VPAs do not influence country level risk. Rather, country level factors strongly influence the pace of the VPA processes, forest sector role

[10] NOTE: The price distortions caused by illegal market participation do not necessarily result in lower price levels. Illegality is frequently related to informal transaction costs that countervail the gains from avoidance of fees and taxes.

and priority in overall national development, and the enabling environment for doing business and investments. Such parameters for investment decisions are reflected in World Bank´s annual ease of doing business scoring (see the historical development of the scores in the country fact sheets in Annex 7.2).

Typical country level risk factors that hinder investments in the forest sector are political unrest, armed conflicts, poor tenure security, and financial regulations that prevent materializing returns from investments. Investors perceive the impact of FLEGT VPAs on these factors being very limited.

Forest sector risk: VPAs are supportive

Forest sector risks encompass political and socio-economic factors that directly affect long-term planning security of investments (i.e. forest operations and markets). For investors, the most important risk factors are tenure (in)security (i.e. forest land tenure), divergent and overlapping sector policies, unpredictable wood product market and trade regulations, and overall weak sector governance and law enforcement.

Some of the risk factors directly affect the economic performance of an investment (e.g. regulatory changes that reduce allowable cuts, logging bans, export restrictions). Others threaten the investors´ reputation (e.g. poor environmental standards, land claims due to unresolved land titles, overlapping use rights in forest concessions, etc.).

Forest sector risks are rated high by investors and they see significant potential of VPAs to mitigate these risks. Investors acknowledge the presence of FLEGT in a country as a positive signal. Investors appreciate policy reforms. However, investors state that it is not clear to them, whether a specific forest policy reform is driven by the FLEGT process or by other factors.

Forest sector risks are usually embedded in wider and complex national contexts (e.g. land tenure, economic development). Hence, substantial changes require long-term cross-sectoral negotiations, followed by exhaustive legislative processes. Thus, the VPA process has been very slow and unpredictable in most partner countries and investors do not factor in VPAs when setting up their strategies.

For investors in natural tropical forests value chains, the decisive factor for realizing future investments in VPA countries is whether policy reforms will support commercial use of natural forests. Investors that are focusing on plantation-based industries are looking for countries with well-defined and delineated land tenure and use rights policies. Investors recognize positive impacts of the VPA process on forest policy reforms, but these are not enough to build upon their investment decisions.

Larger industry investors and TIMOs usually implement risk mitigation approaches according to frameworks provide by third-party certification systems (FSC or PEFC). Further, investors establish elaborate Environmental and Social Governance systems (ESG) and engage local stakeholder in the investment preparation process following IFC safeguard standards. Larger investors have commonly better structures and financial capacities to establish these risk-mitigating tools than local SMEs. Investors acknowledge that the FLEGT process is improving the institutional and legal environment for certification of forest projects.

3.5 Future of forest sector investments in VPA countries

The VPA process facilitates forest sector reforms and sets market incentives that create a favorable environment for investments in both plantations and natural forests. If successfully implemented, VPAs may have a substantial positive impact on attracting forest sector investments in partner countries. However, considering current market trends, VPAs are likely to only have marginal influence on the global investment flows. The trade link between the EU and VPA partner countries will likely not be a decisive argument for many investment decision, as demand and consumption are expected to grow primarily domestically in VPA countries and in exports to Asia. To achieve a substantial leverage, Asian markets, in particular China, need to be integrated in the process and introduce mandatory timber legality legislation.

There are three major trends that will guide decision making of investors in the near future:

1. Increasing demand for wood products.
2. Forest landscape restoration and GHG emission offsetting.
3. Multi-targeted SFM in natural forests.

Wood products demand

The main drivers of forest products' consumption are population growth and income. While population growth is affecting overall consumption volumes of wood products, income growth triggers increase in per capita consumption of wood and paper products. World population is expected to grow until 2050 to almost 10 billion people, which could lead to an increase in wood products demand by ca. 30%, assuming a stable per capita consumption. There are likely to be higher growth rates if income growth is taken into account. Income growth is expected to almost triple its value in China and South Asia, and to double in Sub-Sahara Africa until 2030.

Paper consumption will significantly increase in emerging economies, driven by demand for tissue, packaging and graphical papers. Further, new wood products are lining up for market entry, mainly wood chemicals and fiber-based materials, but also the next generation of wood-based construction materials.

With a growing population, the general need for housing increases. Although there are significant regional variations, wood products usually constitute key raw materials for the construction sector, either in permanent structures of walls and roofs, or as temporary auxiliary products for concrete works and scaffolding. Furthermore, the construction of new housing triggers the consumption of furniture and wooden interiors, e.g. in floors and doors. World Bank estimates that by 2030, 300 million new housing units will be required to provide homes for the growing population and replace sub-standard housing conditions in the developing world (World Bank, 2016).

Plantations will be the major source supplying the raw material for the growing demand. Today, plantations cover only ca. 7% of the total forest area, but they produce 46% of the global industrial roundwood (Payn, 2015). With growing plantation area, their importance for roundwood production will further increase.

Forest landscape restoration and GHG emission offsetting

The restoration and rehabilitation of degraded forest landscapes (Forest Landscape Restoration, FLR) has become a major global initiative to mitigate climate change impacts and restore the global forest resource base. Globally, FLR initiatives aim at re-establishing 350 million hectares of forests worldwide by 2030[11]. Of these targets, African countries have pledged more than 100 million hectares (AFR 100 Initiative) and Latin American countries 20 million hectares (20 x 20 Initiative). In the Asia & Pacific region, FAO is currently setting up a similar initiative framework.

These initiatives offer investors opportunities to get involved in planted forest management, jointly with public actors. Large multinational corporates from the energy and transport sectors articulate interest in off-setting GHG emissions through reforestations, while contributing to these FLR targets. However, the governance mechanisms and financial architecture to mobilize private sector capital have not yet fully evolved.

Multi-targeted SFM in natural forests

Tropical forests will be increasingly managed to optimize economical, ecological and social returns. Local ownership and communities will become increasingly important and need to be considered as business partners in forest sector investment models. Also, the range of products will increase. Besides timber, also non-timber forest products, tourism, and ecosystem services will be part of the forest enterprises` product portfolio.

Investment cases will change and commercial forest management will become more challenging. The investors´ landscape will also change. Although products beyond timber aren't part of the original FLEGT Action Plan, the FLEGT process may also improve the framework conditions for this new type of forest enterprises.

Overall influence of VPAs on future forest sector investments

VPAs may positively affect forest sector investments in the future. FLEGT VPAs aim at improving the productive and socioeconomic functions of natural forest resources, and promoting legal timber markets. Hence, they support securing the biological assets for economic operations and support a level playing field for legal market participants. As indicated in the previous chapters, investors do not fully reflect the potential benefits of a VPA for investment decisions. This, partly because the VPA processes have not yet yielded these results and partly because the respective efforts are not visible for the investors.

Hence, the FLEGT-investment nexus requires enhanced communication. Particularly, the contribution of FLEGT to enhanced enabling environments for forest sector investments requires clearer communication within the investors´ landscape.

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[11] Numbers dated December 2018, The Bonn Challenge aims to have brought 150 million hectares of degraded landscapes into restoration by 2020. In 2014, leaders meeting in New York called for the restoration of an additional 200 million hectares by 2030, a target incorporated into the Bonn Challenge (Besseau, Graham , & Christophersen, 2018).

FLEGT delivers a set of positive outcomes that improve competitiveness of investors` operations:

- FLEGT primarily aims to address illegal logging and promoting legal timber trade, which covers international trade and domestic markets. Thus, FLEGT can eliminate market opportunities for illegally harvested timber.
- Inventories form an important part of VPAs` timber legality assurance systems (TLAS). TLAS and associated inventories and commitments provide information about, inter alia, the allocation of timber concessions and contracts, taxes, management plans.
- FLEGT can promote the availability and use of data in forest productivity and management. Better forest law enforcement ensures that reliable data related to timber production, processing, and trade (e.g., harvest reports, timber export files) are produced.

FLEGT VPAs aim at enhancing the legal, policy, and institutional framework, i.e. improving public policy-making, participation, and forest governance in tropical timber producing countries. Of major interest for investors in the sector are VPAs potential impact on:

- By improving the enforcement of legal requirements related to environmental requirements for enrichment planting, tree planting, afforestation, VPAs may contribute to attracting plantation-based investments.
- FLEGT VPAs, through improved governance and law enforcement, can have an important role in clarifying and strengthening the tenure rights of both private forest operators and local and indigenous communities.

Of specific interest for investors targeting non-wood forest products and ecosystem services are:

- Illegal logging can lead to over-harvesting and even extinction of species. In addition, poaching, which is associated with illegal logging, can have significant negative impacts on forest wildlife. Therefore, improved legality and forest law enforcement can aid in the conservation of biodiversity, and thus maintaining business opportunities for forest based tourism and NWFP based investments.
- Although climate change mitigation and adaptation is not a stated objective or an intended impact of FLEGT, VPAs support enhanced SFM, hence improving forest carbon stocks and offering opportunities for investment cases based on carbon trade.
- FLEGT VPAs support maintaining the protective functions of forests for soil and water that might otherwise be negatively affected by illegal logging. Hence, investments in business cases targeting payments for ecosystem services may benefit from VPA implementation.

4 MONITORING FOREST SECTOR INVESTMENTS

4.1 Data availability – national sources

Data availability is a major constraint to assessing investment volumes for most FLEGT VPA countries. Historical data on investment flows is only available for Vietnam, Indonesia, Ghana and Cameroon. Table 10 shows the availability and suitability of data sources identified to date. Available data would allow for monitoring of investment flows in Vietnam, Indonesia, and possibly Cameroon. However, for the other countries there appears to be little chance of finding a source of reliable regular data on investment flows in the forest sector. Publicly available data does not provide the detail or regularity required.

Table 10: Forest investment data availability by country

Country	Direct indicators	Qualification of direct indicators	Suitability for investment monitoring
Indonesia	Investment data available for 2011-2017 for medium and large scale enterprises	Only medium and large enterprises – data for small and micro enterprises is Value Added. For forestry and logging, data is direct investments, but no capital net increase.	Suitable data publicly available
Ghana	National Statistical Yearbook to 2015 - no detail beyond "Manufacturing" Ghana Statistical yearbook – only has data for 2013 (previous census year 2003)	Data from the integrated business establishment survey only has one data point – 2013 (report published in 2018). Other sources do not provide detailed enough investment information.	Unsuitable, since not regularly updated
Vietnam	Investment data available from statistical yearbooks until 2017	Value of fixed asset and long-term investment of enterprises available for the period in question.	Suitable data publicly available
Cameroon	Investment data available (in French) from statistical yearbook to 2015 for years 2014 and 2015	Regularity of updates is difficult – latest available data is 2015.	Data updates are too slow for reliable practical monitoring
Congo	No data	No data	Further investigation required
Central African Republic	No data	No data	Further investigation required
Liberia	No data	No data	Further investigation required
Honduras	No data	No data	Further investigation required

Source: (BPS, 2018), (GSS, 2018), (Statistics Office of Vietnam, 2017), (National institute of Statistics Cameroon, December 2018)

4.2 Forest sector investments in VPA countries

From publicly available sources, it was possible to identify investment data for four of the target countries. However, data availability and type of indicators vary between countries. Cross-referencing the identified investment flow against the progress of the VPA status in the selected country did not result in correlations (see also country fact sheets in Annex 7.2).

Vietnam

Vietnam has experienced sustained growth in investment in the forest sector since 2013 as can be seen from the results presented in Figure 6. Investment has been concentrated in the pulp and paper sector as well as the furniture sector.

The VPA process in Viet Nam started in 2010; the VPA was signed in 2018. Vietnam is currently preparing VPA implementation and is developing an import regulation that will accept FLEGT-licensed timber from other VPA countries as legal.

Vietnamese investment data time series since 2011 does not show clear tendencies in correlation with the VPA process. The data shows downward development from 2011 to 2013 and increasing investment activity since 2014.

Indonesia

There appears to be an issue with the investment data reported by the Indonesian Bureau of Statistics and figures are not consistent between the two most recently available statistical yearbooks. However, there still appears to be an upward trend for each set of figures and the strength of the furniture and wood industry is evident relative to the pulp and paper industry. Data on net capital increase are for large and medium enterprises in wood manufacturing sectors only. Investment data for forestry and logging shows the sum of domestic and foreign direct investments (Figure 7).

The VPA process in Indonesia started in 2007; the VPA was ratified in 2014 and FLEGT-licensing started in 2016. Indonesian investment data time series since 2013 does not show clear tendencies in correlation with the VPA process. The data shows strong increase until the VPA entered in force. After 2014, annual investments have been stable at low level.

Ghana

There is limited data on forest sector investment for Ghana. The best data set was sourced from the Integrated Business Establishment Survey Phase 2[12]. This census of businesses was published in 2018, however the reference period for the survey is 2013. Data from that survey is presented in Figure 8. The census is conducted infrequently, census years to date are 1962, 1978, 1987, 2003 and 2013. In 2017, the survey has been repeated, but data is only publicly available at a highly aggregated level.

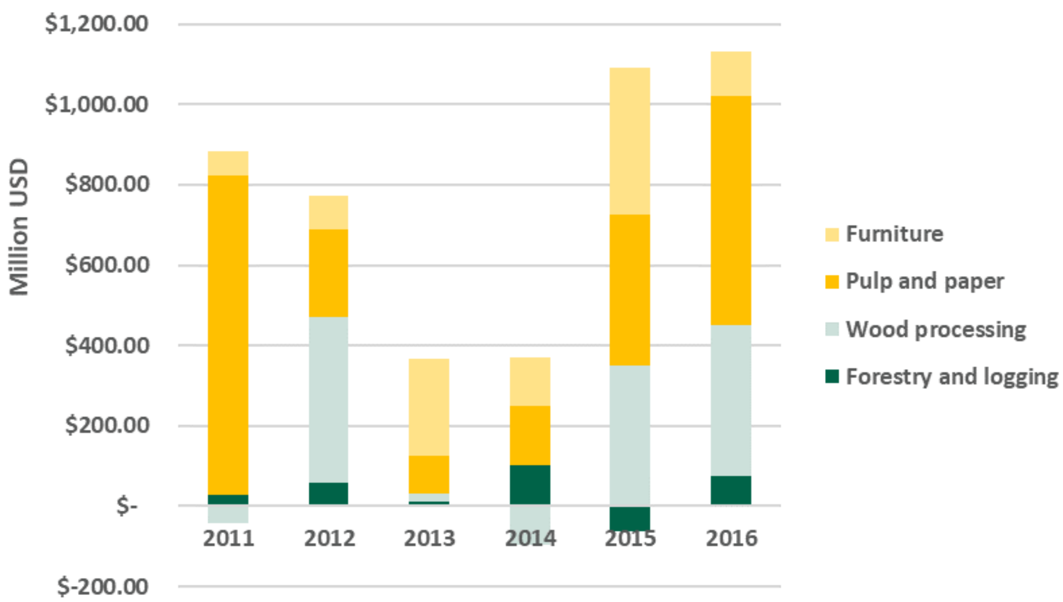
The VPA process in Ghana started in 2007, with the VPA entering into force in 2009. In 2019, Ghana and the EU launched the Final Joint Assessment of the Timber Legality Assurance System.

Cameroon

Figure 9 shows change in net fixed assets over time for the forest industry sectors in Cameroon. This data was sourced from the National Statistical Yearbook of Cameroon for 2014 and 2015 (the most recently available). Fixed assets declined in the forest sector in 2014, and in the paper sector in 2015.

Cameroon started VPA negotiations in 2007, signed the agreement in 2010 and ratified it in 2011. However, the pace of VPA implementation has been slow in recent years.

Investment data limitations and the slow pace of VPA implementation do not allow for drawing any conclusions on positive or negative correlations.



[12] Table A.99 and A.111, converted to USD

Figure 6: Net fixed assets and long-term investment of enterprises, 2011-2016, Vietnam

Source: (Statistics Office of Vietnam, 2017), (Statistics Office of Vietnam, 2014)

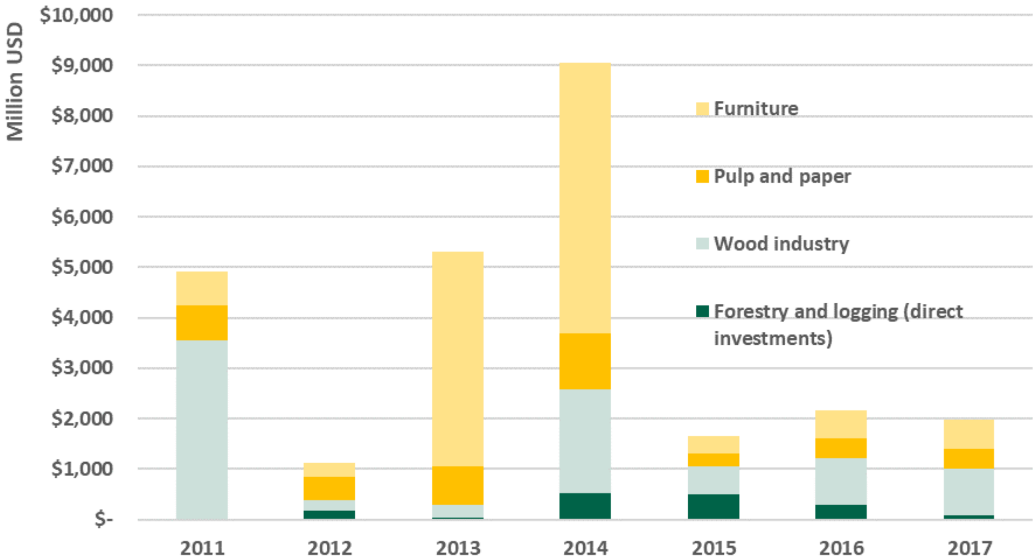


Figure 7: Net increase in fixed assets, 2011-2017, Indonesia

*Source: (BPS, 2018), (BPS, 2017) *Appears to be a discontinuity in 2015 – Yearbooks are inconsistent. Note that for Indonesia fixed asset data is only provided for large and medium industries in wood manufacturing sub-sectors, and direct investments in forestry and logging*

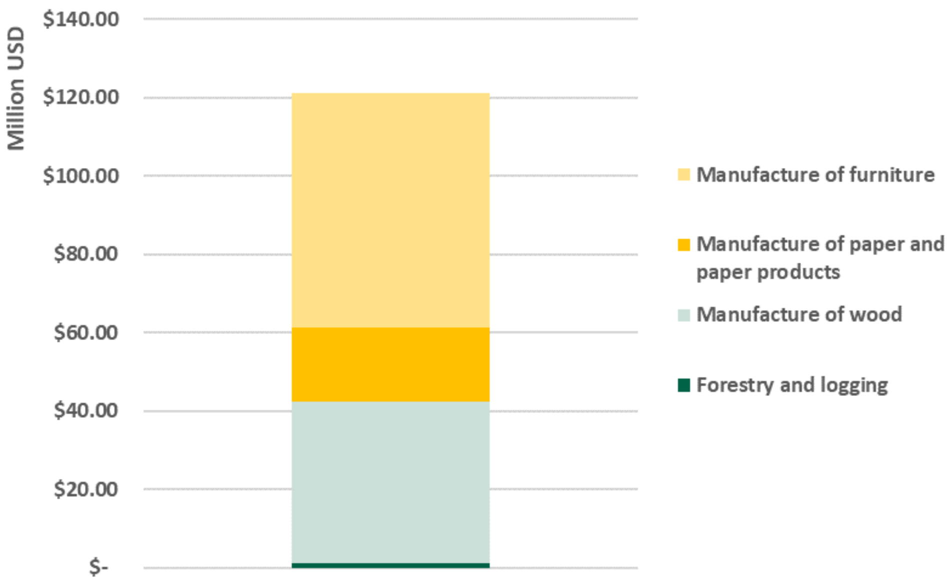


Figure 8: Gross additions to fixed assets at end of year 2013, Ghana

(GSS, 2018)

Figure 9: Change in net fixed assets in the forest sector 2014 and 2015, Cameroon

Source: (National institute of Statistics Cameroon, December 2018)

4.3 Data availability – international sources

Besides national data sources, there are international organizations that collect investment relevant data in VPA countries: the followings sections explain the most important sources.

World Bank Enterprise surveys

The World Bank Microdata Library is a compilation of data collected through surveys of households, business establishments and other facilities. Enterprise surveys are available for the countries of interest. However, for the forest sub-sector sample sizes of the surveys are quite small and the surveys are not undertaken at regular intervals for all of the countries of interest. A summary of availability of the data and sample sizes is presented in Table 11.

Despite small sample sizes, the World Bank surveys are quite comprehensive and it might be worthwhile to examine barriers to investment in these sectors compared with other sectors. The survey asks for example about the level of spending on fixed assets in the previous year, and about barriers to credit. However, it would not be possible to make any meaningful interference with respect to the impact of the FLEGT process on the basis of the available information due to the sample size considerations. Another issue is the frequency of reports which would not support regular monitoring of investment flows.

Table 11: World Bank Enterprise Survey available information

Country	Enterprise Survey, most recent year	Survey Sample for Manufacture of Furniture, Paper/Pulp, Wood Sectors
Indonesia	2015	62
Ghana	2014	58
Congo	2009	No industry specific data
Central African Republic	2011	No industry specific data
Cameroon	2016	12
Liberia	2017	16
Vietnam	2016	41
Honduras	2016-17	17

Source: (World Bank, 2019)

UNCTAD

The United Nations Conference on Trade and Development (UNCTAD) is hosting a database on inward and outward FDI flows. Thus, domestic investments are not covered by this source. Further, the data captures only high level aggregates of investment flows, making identification forest sub-sectors flows difficult. A request for better-disaggregated data has not been answered to date.

Private sector sources

There are a number of private sector enterprises that regularity collect financial data from forest sector investors.

PricewaterhouseCoopers (PWC) publishes an annual survey on the dynamics in forestry and packaging investment dynamics, i.e. Mergers and Acquisitions (M&As) realized by the top actors in the forest sectors. This, however, is mainly covering industrialized countries and the key emerging marketplaces in Latin America, Asia and South Africa. VPA countries are hardly included in this survey, as the investor types covered by the survey have not yet developed significant appetite for investing in these markets.

The US-New Zealand based market research organization FASTMARKETS/RISI is regularity conducting a panel survey among major institutional and industrial investors. Similar to the PWC, the target group is not yet significantly invested in VPA countries. Further, the dataset, as it is currently compiled by FASTMARKETS, would not allow for a disaggregated monitoring of investment flows in forest sub-sectors of VPA countries.

5 CONCLUSIONS

Investors´ perception on FLEGT

1. Forest sector investors recognize that the FLEGT process is an initiative to primarily combat illegal logging and enhance trade with sustainable wood products. FLEGT`s impact on enhancing the enabling environment for forest sector investments is rather perceived being a by-product.
2. The investors interviewed for this study were generally supportive of FLEGT and interested in contributing to its stated objectives. They recognize the positive impacts the process has in the partner countries on sector reforms, though articulating criticism on lengthiness and effectiveness of the process.
3. The investors do not perceive themselves being major direct beneficiaries of the process. FLEGT actions that directly affect the enabling environment for investments are not widely known. This is partly because these actions are not implemented and partly because these actions are not visible/not communicated.
4. The FLEGT initiative may consider producing targeted communication tools to better address and integrate forest sector investors. However, the FLEGT process is acting within a well defined mandate with the ultimate goal to eliminate illegal logging. Thus, communication needs to reflect also the limitations of FLEGT with regard to enhancing forest sector investment flows.
5. It may be worthwhile to assess at country level how to prioritize actions during VPA preparation and implementation with a view to investors` requirements. There are potential synergies with FLEGT actions related to mobilize and integrate the private sector. It may involve topics such as finance and investment safeguards, forest tenure reforms, export market development, and taxation and incentive systems.

Investors´ survey on de-risking potential of VPAs on forest sector investments

1. There is no evidence that the VPA process has had significant positive influence on investment activities in the forest sectors of partner countries to date.
2. Although the investors´ survey results are not overly encouraging with regard to the positive correlations of VPAs and forest sector investment activities in the past, the study indicates that in the future this may change with more VPAs entering the licensing phase.
3. Positive impacts in forest sector investments can be assumed for countries where VPAs have been implemented and licensing started. However, correlation of VPA and forest sector investments remains weak unless the majority of a country`s market participants are successfully integrated and compliant with VPA requirements.

Monitoring forest sector investments in VPA countries

1. The System of National Accounts (SNA) is the most comprehensive and direct source to assess a country´s investment data. The dataset includes capital stock increases of all formal enterprises and thus also includes foreign investments flows into their capital stocks. Other national and international sources do not provide the level of detail required to monitor forest sub-sector investment flows.
2. In general, quantitative investment data availability in VPA countries´ forest sectors is poor. The countries do not record and capture investment information regularly. In some cases, data has been captured, but is not publicly available. Only Vietnamese and Indonesian sources allow for an easy and timely access of data. However, with continuing improvements of the SNA, availability may improve in the future.
3. Some countries (e.g. Indonesia) provide data on foreign direct investment flows into the forest sector. This, however, only captures a share of total investments. Nonetheless, FDI development over time can be used as proxy to assess the attractiveness of forest sectors for international investors. Aggregated data available from the UNCTAD database suggests that sector specific FDI flows information is available for VPA countries. However, formal requests to validate this assumption have not been answered to date.
4. Indirect investment indicators - i.e. number of registered enterprises in forest sub-sectors - are sometimes easier to access. However, in most VPA countries, data for these indirect indicators is also fragmented and rarely available.
5. As the results of investors´ survey indicate, the VPA process has not yielded significant impact on investments in VPA countries to date. Nonetheless, investors articulate positive influence of VPAs on investments once they are fully implemented. Monitoring of quantitative statistical investment data is thus recommended for countries where licensing has started. In countries with poor data availability, close cooperation with national statistical offices will be required. Alternatively, primary data could be directly sourced by the IMM (see next section).

Primary data on forest sector investments

1. Investment decisions take into consideration an array of factors and risk criteria. There is no direct one-on-one correlation between VPA process and investment growth. Thus, primary sourcing of forest investment metrics needs to be accompanied by assessing the investment drivers.
2. Due to the limitations of available data, it may be worthwhile to consider alternative approaches to monitoring investment flows. An obvious alternative measure is to conduct a regular survey of forest investments using available ITTO industry and investors´ contacts (panel survey). The primary aim of this would be to assess the attractiveness of VPA countries for investments with a specific view on FLEGT implemented activities.
3. Regular surveys on forest sector investment are conducted by specialized market research organizations. The IMM may consider cooperating with one of these organizations.
4. Results of a panel survey can be used to produce an investment attractiveness rating of VPA countries, ideally disaggregated for investor types (domestic SMEs, forest industries, TIMOs and institutional investors) and forest sub-sectors.

6 BIBLIOGRAPHY

Besseau, P., Graham , S., & Christophersen, T. (2018). Restoring forests and landscapes: the key to a sustainable future. . *Global Partnership on Forest and Landscape Restoration, Vienna*.

BPS. (2017). *Statistical Yearbook of Indonesia 2017.* Badan Pusat Statistik (Indonesian Bureau of Statistics).

BPS. (2018). *Statistical Yearbook of Indonesia 2018.* Badan Pusat Statistik (Bureau of Statistics Indonesia).

Criterion African Partners. (2017). *Allocating Capital for Maximum Impact in Africa`s Plantation Forestry Sector.* Criterion African Partners.

CSIL. (2014). *The EU Furniture Market Situaton and Possible Furniture Products Initiative.* Brussels: European Comission.

DASOS Capital. (2019). *From trees to asset class*. Presentation held at RISI Forest Investment Conference, May 7-9 2019, London, UK.

EIB. (2017). *Investing in the forest value chain.* Luxembourg: European Investment Bank.

Elson, D. (2012). *Guide to investing in locally controlled forestry.* Growing Forest Partnerships in association with FAO, IIED, IUCN, The Forests Dialogue and the World Bank. IIED, London, UK.

FAO. (2018). *Global Forest Resources Assessment 2020.* Rome: Food and Agriculture Organization of the United Nations.

FAO. (2019, January 29). *What are Secondary Forests*. Retrieved from www.fao.org: http://www.fao.org/docrep/006/J0628E/J0628E16.htm

FAOSTAT. (2019, February 8). *FAOSTAT*. Retrieved from Food and Agriculture data portal: http://www.fao.org/faostat/

Fastmarkets. (2019). Global Timberland Investment Overview. Presentation held at RISI Forest Investment Conference, May 7-9, London, UK.

Gardingen van, e. (2003). Financial and Ecological analysis of management options for logged-over Dipterocarp forests in Indonesian Borneo. *Forest Ecology and Management 183*.

Grulke, M. (1998). Überführung exploitierter Naturwälder Ostparaguays in naturnahe Wirtschaftswälder. *Schriftenreiche Freibur-ger Forstliche Forschung, Band 2*.

GSS. (2018). *Integrated Business Establishment Survey Phase 2.* Ghana Statistical Service, Ministry of Trade and Industry, UK Aid, Government of the Netherlands.

IBISWorld. (2018). *Global Pulp and Paper Mills Industry.* IBISWorld.

Indufor. (2016). *The State of Forestry Plantation Investments in Africa - Overview of Volumes and Invesment Patterns.* Accra: INDUFOR forest intelligence.

Jagger, P. (2014). *Tenure and Forest Income: Observations from a Global Study on Forests and Poverty.* World Development. Volume 64.

Karsenty, A., & Ferron, C. (2017). Recent evolutions of forest concessions status and dynamics in Central Africa. *International Forestry Review vol. 19*.

MY. (2015). *Furniture Industry Sector.* Malaysian Goverment Mega Science 3.0.

National institute of Statistics Cameroon. (December 2018). *Banque des données économiques et financieres en 2015.* Yaounde: Statistics Cameroon.

New Forests. (2017). *Pulp and Paper: Focus on Hardwood Opportunities.* New Forests Company.

New Forests. (2017b). *Timberland investment outlook.* Australia: New Forests.

OEC. (2018, February 5). *Data Sources*. Retrieved from The Observatory of Economic Complexity: https://atlas.media.mit.edu/en/

Payn, T. (2015). *Changes in planted forests and future global implications.* Forest Ecology and Management. Volume 352, 7 September 2015.

PROFOR. (2014). *Business Climate for Forest Investments: A Survey.* Washington: Program for Forests.

Stafford Capital Partners. (2019). Stafford´s secondary approach to timberland investments. Presenation held at RISI forest investment conference, May 7-9, London, UK.

Statistics Office of Vietnam. (2014). *Statistical Yearbook of Vietnam 2014.* Ha Noi: General Statistics Office of Vietnam.

Statistics Office of Vietnam. (2017). *Statistical Yearbook of Vietnam 2017.* Ha Noi: General Statistics Office of Vietnam.

TEREA. (2016). *Evaluation of the EU FLEGT Action Plan 2004-2014. Main Report.*

World Bank. (2008). *Forests Sourcebook: Practical Guide for Sustaining Forests in Developing Countries.* Washington: The World Bank Group.

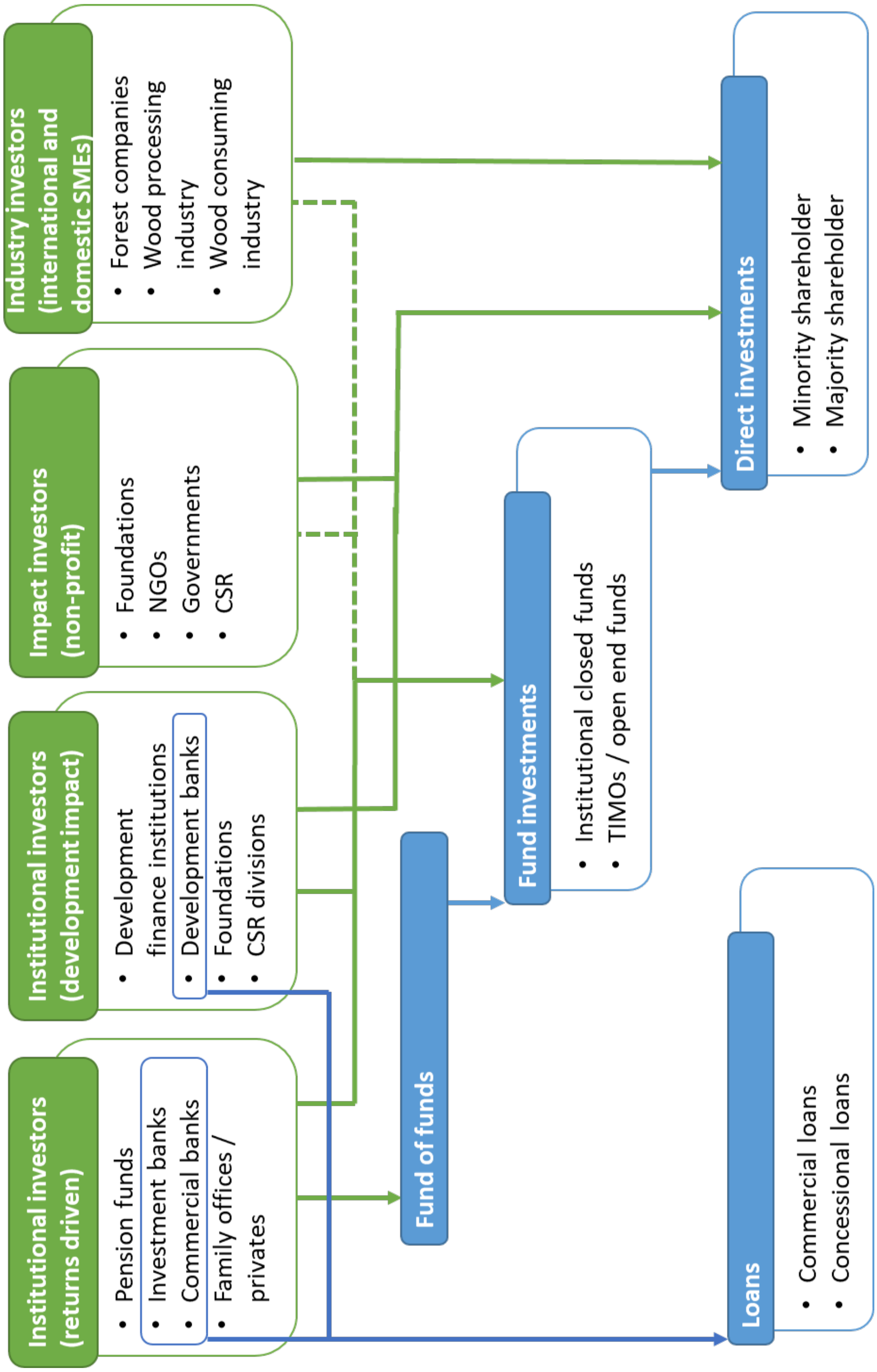
World Bank. (2016). Housing for all. Infographic by www.worldbank.org/housingfinance.

World Bank. (2019, February 5). *World Bank Microdata Catalogue*. Retrieved from Enterprise Surveys: http://microdata.worldbank.org

WRI. (2018). *The business of Planting Trees.* World Resources Institute.

7 ANNEX

7.1 Typology of investors and investment vehicles



Source: UNIQUE

7.2 Country fact sheets

The country fact sheets for each of the eight selected partner countries.

The fact sheets detail descriptive indicators showing:

- Historical progress of the VPA status along milestone years from start of negotiations to most recent milestone (e.g. VPA signature).

The NEPCon country timber risk rating of 2017

- For VPA milestone years:
  - Ease of doing business score
  - Corruption Perception Index (CPI) rank
  - Foreign Direct Investment (FDI) attractiveness rank
  - If available, the investment volumes (in national currency and USD) disaggregated for the sub-sectors:
    - Forestry and logging
    - Wood processing
    - Paper
    - Furniture
  - Number of forest sector enterprises disaggregated for the forest sub-sectors
  - Production volumes of:
    - Industrial roundwood,
    - Sawnwood, veneer, plywood
    - Particle and fiber board
    - Pulp and paper products

7.2.1 Viet Nam

Year		2010	2017	2018	n.a.	n.a.
VPA status (1)		**Negotiations started**	**Agreed**	**Signed**	**Into force**	**Licensing started**
Timber risk rating 2017 (100 = best) (6)		n.a.	31	n.a.	n.a.	n.a.
Ease of doing business score (2)		58.1	65.1	66.8	n.a.	n.a.
CPI rank of 178 (3)		116	107	117	n.a.	n.a.
FDI attractiveness rank of 109 (4)		n.a.	57	56	n.a.	n.a.
Forest sector net capital stock increase (Billion Dongs) (5)	**Forestry and logging**	301	n.a.	n.a.	n.a.	n.a.
	Wood processing	5,815	n.a.	n.a.	n.a.	n.a.
	Paper	-126	n.a.	n.a.	n.a.	n.a.
	Furniture	1,738	n.a.	n.a.	n.a.	n.a.
Forest sector investments net capital stock increase (Million USD) (5)	**Forestry and logging**	16	n.a.	n.a.	n.a.	n.a.
	Wood processing	306	n.a.	n.a.	n.a.	n.a.
	Paper	-7	n.a.	n.a.	n.a.	n.a.
	Furniture	91	n.a.	n.a.	n.a.	n.a.
Forest sector enterprises (n) (5)	**Forestry and logging**	478	n.a.	n.a.	n.a.	n.a.
	Wood processing	3,626	n.a.	n.a.	n.a.	n.a.
	Paper	1,714	n.a.	n.a.	n.a.	n.a.
	Furniture	2,619	n.a.	n.a.	n.a.	n.a.

Sources: (1) http://www.euflegt.efi.int/vpa; (2) www.doingbusiness.org. NOTE: The ease of doing business methodology has been undergoing regular adjustments. Thus, years are not directly comparable. I.e. until 2009 scoring differs substantially from the years 2010 onwards; (3) https://www.transparency.org/research/cpi/overview; (4) http://www.fdiattractiveness.com/; (5) Annual Statistical Yearbooks of Viet Nam published at www.gso.gov.vn; (6) NEPCon timber risk assessment 2017 (https://www.nepcon.org/sourcinghub/timber)

7.2.2 Indonesia

Year		2007	2011	2013	2014	2016	2018
VPA status (1)		**Negotia-tions started**	**Agreed**	**Signed**	**Into force**	**Licensing started**	**Li-cens-ing**
Timber risk rating 2017 (100 = best) (6)		n.a.	n.a.	n.a.	n.a.	n.a.	100
Ease of doing business score (2)		n.a.	n.a.	n.a.	61.8	61.2	66.5
CPI rank of 178 (3)		143	100	n.a.	107	90	89
FDI attractiveness rank of 109 (4)		n.a.	n.a.	63	63	68	68
Forest sector investments (Billion Rp) (5)	**Forestry and log-ging (direct in-vestments)**	n.a.	205.2	352.6	6,612.9	3,778.8	n.a.
	Wood processing (net capital stock increase)	n.a.	31,724	3,090	25,267	12,422	n.a.
	Paper (net capital stock increase)	n.a.	6,354	9,564	13,926	5,230	n.a.
	Furniture (net capital stock in-crease)	n.a.	5,971	51,913	66,442	7,633	n.a.
Forest sector investments (Million USD) (5)	**Forestry and log-ging (direct in-vestments)**	n.a.	22.8	28.9	533.3	282.0	n.a
	Wood processing (net capital stock increase)	n.a.	3,524	253	2,038	927	n.a.
	Paper (net capital stock increase)	n.a.	705	784	1,123	390	n.a.
	Furniture (net capital stock in-crease)	n.a.	663	4,255	5,358	570	n.a.
Forest sector enterprises (n) (5)	**Forestry and log-ging (number of investment ro-jects)**	n.a.	26	50	37	124	n.a.
	Wood processing	n.a.	1,150	1,067	1,106	1,727	n.a.
	Paper	n.a.	450	477	485	626	n.a.
	Furniture	n.a.	1,463	1,284	1,327	1,679	n.a.

Sources: (1) http://www.euflegt.efi.int/vpa; (2) www.doingbusiness.org. NOTE: The ease of doing business methodology has been undergoing regular adjustments. Thus, years are not directly comparable. I.e. until 2009 scoring differs substantially from the years 2010 onwards; (3) https://www.transparency.org/research/cpi/overview; (4) http://www.fdiattractiveness.com/; (5) Annual Statistical Yearbooks of Indonesia published at www.bps.go.idhttp://www.gso.gov.vn/; (6) NEPCon timber risk assessment 2017 (https://www.nepcon.org/sourcing-hub/timber)

7.2.3 Honduras

Year		2013	2018	n.a	n.a.	n.a.	n.a.
VPA status (1)		Negotiations started	Agreed	Signed	Into force	Licensing started	Licensing
Timber risk rating 2017 (100 = best) (5)		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Ease of doing business score (2)		59.3	58.1	n.a.	n.a.	n.a.	n.a.
CPI rank of 178 (3)		26	29	n.a.	n.a.	n.a.	n.a.
FDI attractiveness rank of 109 (4)		78	81	n.a.	n.a.	n.a.	n.a.
Forest sector investments (Million Lempira)	Forestry and logging	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	Wood processing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	Paper	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	Furniture	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Forest sector investments (Million USD)	Forestry and logging	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	Wood processing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	Paper	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	Furniture	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Forest sector enterprises (n)	Forestry and logging	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	Wood processing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	Paper	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	Furniture	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Sources: (1) http://www.euflegt.efi.int/vpa; (2) www.doingbusiness.org. NOTE: The ease of doing business methodology has been undergoing regular adjustments. Thus, years are not directly comparable. I.e. until 2009 scoring differs substantially from the years 2010 onwards; (3) https://www.transparency.org/research/cpi/overview; (4) http://www.fdiattractiveness.com/; (5) NEPCon timber risk assessment 2017 (https://www.nepcon.org/sourcing-hub/timber); (5) NEPCon timber risk assessment 2017 (https://www.nepcon.org/sourcinghub/timber)

7.2.4 Ghana

Year		2007	2008	2009	n.a.	2018
VPA status (1)		**Negotia-tions started**	**Agreed**	**Signed and into force**	**Licensing started**	**Most re-cent year**
Timber risk rating 2017 (100 = best) (5)		n.a.	n.a.	n.a.	n.a.	35
Ease of doing business score (2)		73.7	77.4	82.2	n.a.	57.1
CPI rank of 178 (3)		69	67	69	n.a.	41
FDI attractiveness rank of 109 (4)		n.a.	n.a.	n.a.	n.a.	80
Forest sector in-vestments (Million Cedi)	**Forestry and logging**	n.a.	n.a.	n.a.	n.a.	
	Wood pro-cessing	n.a.	n.a.	n.a.	n.a.	
	Paper	n.a.	n.a.	n.a.	n.a.	
	Furniture	n.a.	n.a.	n.a.	n.a.	
Forest sector in-vestments (Million USD)	**Forestry and logging**	n.a.	n.a.	n.a.	n.a.	
	Wood pro-cessing	n.a.	n.a.	n.a.	n.a.	
	Paper	n.a.	n.a.	n.a.	n.a.	
	Furniture	n.a.	n.a.	n.a.	n.a.	
Forest sector en-terprises (n)	**Forestry and logging**	n.a.	n.a.	n.a.	n.a.	
	Wood pro-cessing	n.a.	n.a.	n.a.	n.a.	
	Paper	n.a.	n.a.	n.a.	n.a.	
	Furniture	n.a.	n.a.	n.a.	n.a.	

Sources: (1) http://www.euflegt.efi.int/vpa; (2) www.doingbusiness.org. NOTE: The ease of doing business methodology has been undergoing regular adjustments. Thus, years are not directly comparable. I.e. until 2009 scoring differs substantially from the years 2010 onwards; (3) https://www.transparency.org/research/cpi/overview; (4) http://www.fdiattractiveness.com/; (5) NEPCon timber risk assessment 2017 (https://www.nepcon.org/sourcing-hub/timber)

7.2.5 Congo Republic

Year		2008	2009	2010	2013	n.a.	2018
VPA status (1)		Negotia-tions started	Agreed	Signed	Into force	Licensing started	Most re-cent year
Timber risk rating 2017 (100 = best) (5)		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Ease of doing business score (2)		43.3	38.1	36.7	37.3	n.a.	39.4
CPI rank of 178 (3)		158	162	154	152	n.a.	165
FDI attractiveness rank of 109 (4)		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Forest sector in-vestments (Mil-lion Franc)	Forestry and logging	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	Wood pro-cessing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	Paper	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	Furniture	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Forest sector in-vestments (Mil-lion USD)	Forestry and logging	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	Wood pro-cessing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	Paper	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	Furniture	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Forest sector en-terprises (n)	Forestry and logging	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	Wood pro-cessing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	Paper	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	Furniture	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Sources: (1) http://www.euflegt.efi.int/vpa; (2) www.doingbusiness.org. NOTE: The ease of doing business methodology has been undergoing regular adjustments. Thus, years are not directly comparable. I.e. until 2009 scoring differs substantially from the years 2010 onwards; (3) https://www.transparency.org/research/cpi/overview; (4) http://www.fdiattractiveness.com/; (5) NEPCon timber risk assessment 2017 (https://www.nepcon.org/sourcing-hub/timber)

7.2.6 Cameroon

Year		2007	2010	2011	n.a.	2018
VPA status (1)		**Negotia-tions started**	**Agreed and signed**	**Into force**	**Licensing started**	**Most re-cent year**
Timber risk rating 2017 (100 = best) (5)		n.a.	n.a.	n.a.	n.a.	22
Ease of doing business score (2)		43.54	42.57	44.36	n.a.	46.95
CPI rank of 178 (3)		138	146	134	n.a.	152
FDI attractiveness rank of 109 (4)		n.a.	n.a.	n.a.	n.a.	102
Forest sector in-vestments (Million CFA Franc)	**Forestry and logging**	n.a.	n.a.	n.a.	n.a.	n.a.
	Wood pro-cessing	n.a.	n.a.	n.a.	n.a.	n.a.
	Paper	n.a.	n.a.	n.a.	n.a.	n.a.
	Furniture	n.a.	n.a.	n.a.	n.a.	n.a.
Forest sector in-vestments (Million USD)	**Forestry and logging**	n.a.	n.a.	n.a.	n.a.	n.a.
	Wood pro-cessing	n.a.	n.a.	n.a.	n.a.	n.a.
	Paper	n.a.	n.a.	n.a.	n.a.	n.a.
	Furniture	n.a.	n.a.	n.a.	n.a.	n.a.
Forest sector enter-prises (n)	**Forestry and logging**	n.a.	n.a.	n.a.	n.a.	n.a.
	Wood pro-cessing	n.a.	n.a.	n.a.	n.a.	n.a.
	Paper	n.a.	n.a.	n.a.	n.a.	n.a.
	Furniture	n.a.	n.a.	n.a.	n.a.	n.a.

Sources: (1) http://www.euflegt.efi.int/vpa; (2) www.doingbusiness.org. NOTE: The ease of doing business methodology has been undergoing regular adjustments. Thus, years are not directly comparable. I.e. until 2009 scoring differs substantially from the years 2010 onwards; (3) https://www.transparency.org/research/cpi/overview; (4) http://www.fdiattractiveness.com/; (5) NEPCon timber risk assessment 2017 (https://www.nepcon.org/sourcing-hub/timber)

7.2.7 Central African Republic

Year		2009	2010	2011	2012	n.a.	2018
VPA status (1)		**Negotiations started**	**Agreed**	**Signed**	**Into force**	**Licensing started**	**Most recent year**
Timber risk rating 2017 (100 = best) (5)		n.a.	n.a.	n.a.	n.a.	n.a.	22
Ease of doing business score (2)		29.6	24.6	24.8	31.4	n.a.	34.2
CPI rank of 178 (3)		158	154	154	144	n.a.	149
FDI attractiveness rank of 109 (4)		n.a.	n.a.	n.a.	n.a.	n.a.	109
Forest sector investments (Million CFA Franc)	**Forestry and logging**	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	Wood processing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	Paper	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	Furniture	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Forest sector investments (Million USD)	**Forestry and logging**	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	Wood processing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	Paper	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	Furniture	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Forest sector enterprises (n)	**Forestry and logging**	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	Wood processing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	Paper	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	Furniture	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Sources: (1) http://www.euflegt.efi.int/vpa; (2) www.doingbusiness.org. NOTE: The ease of doing business methodology has been undergoing regular adjustments. Thus, years are not directly comparable. I.e. until 2009 scoring differs substantially from the years 2010 onwards; (3) https://www.transparency.org/research/cpi/overview; (4) http://www.fdiattractiveness.com/; (5) NEPCon timber risk assessment 2017 (https://www.nepcon.org/sourcing-hub/timber)

7.2.8 Liberia

Year		2009	2011	2013	n.a.	2018
VPA status (1)		Negotia-tions started	Agreed and signed	Into force	Licensing started	Most re-cent year
Timber risk rating 2017 (100 = best) (5)		n.a.	n.a.	n.a.	n.a.	22
Ease of doing business score (2)		70.5	41.9	46.6	n.a.	43.5
CPI rank of 178 (3)		97	91	94	n.a.	120
FDI attractiveness rank of 109 (4)		n.a.	n.a.	n.a.	n.a.	n.a.
Forest sector invest-ments (Million Libe-rian Dollar)	Forestry and logging	n.a.	n.a.	n.a.	n.a.	n.a.
	Wood pro-cessing	n.a.	n.a.	n.a.	n.a.	n.a.
	Paper	n.a.	n.a.	n.a.	n.a.	n.a.
	Furniture	n.a.	n.a.	n.a.	n.a.	n.a.
Forest sector invest-ments (Million USD)	Forestry and logging	n.a.	n.a.	n.a.	n.a.	n.a.
	Wood pro-cessing	n.a.	n.a.	n.a.	n.a.	n.a.
	Paper	n.a.	n.a.	n.a.	n.a.	n.a.
	Furniture	n.a.	n.a.	n.a.	n.a.	n.a.
Forest sector enter-prises (n)	Forestry and logging	n.a.	n.a.	n.a.	n.a.	n.a.
	Wood pro-cessing	n.a.	n.a.	n.a.	n.a.	n.a.
	Paper	n.a.	n.a.	n.a.	n.a.	n.a.
	Furniture	n.a.	n.a.	n.a.	n.a.	n.a.

Sources: (1) http://www.euflegt.efi.int/vpa; (2) www.doingbusiness.org. NOTE: The ease of doing business methodology has been undergoing regular adjustments. Thus, years are not directly comparable. I.e. until 2009 scoring differs substantially from the years 2010 onwards; (3) https://www.transparency.org/research/cpi/overview; (4) http://www.fdiattractiveness.com/; (5) NEPCon timber risk assessment 2017 (https://www.nepcon.org/sourcing-hub/timber)

7.3 Forest sector classification

Several potential data sources assessed for this study use the International Standard Industrial Classification (ISIC) system. As such, it is important to understand how the forest sector is categorized under ISIC and how the Harmonized Commodity Description and Coding System (HS) product classification system relates to ISIC[13].

Broadly speaking, the forest sector can be divided into 3 main sectors, and seven subsectors as outlined below:

Primary sector: Production

1. Forestry and logging: Industrial round wood production (*ISIC 0220 Logging*) / *HS Chapter 44 (Wood) (4401-4404)*
2. Forestry and logging: fuel wood and charcoal production (*ISIC 0220 Logging*) / *HS Chapter 44 (Wood) (4401-4404)*
3. Forestry and logging: non-wood forest products extraction and primary processing (*ISIC 023 Gathering of non-wood forest products*) / *not relevant for FLEGT*

Secondary sector: Processing

4. Wood industry (*ISIC 16 Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials*) / *HS Chapter 44 (Wood) (4405-4421);*

   NOTE: ISIC division 16 also includes manufacturing of bamboo and rattan
5. Pulp and paper (*ISIC 17 Manufacture of paper and paper products*) / *HS Chapter 47 (Paper) and Chapter 48 (Pulp);*

   NOTE ISIC division 17 also includes non-wood-fiber based pulp and paper products (e.g. from agricultural fiber)
6. Furniture (ISIC 31 Manufacture of furniture) / HS Chapter 94 (Furniture).

   NOTE: ISIC division 31 and HS 94 also include non-wood furniture

Tertiary sector: Services

7. Forest based tourism (e*.g. ISIC 55/56 Accommodation and food services; ISIC 79 Travel agency, tour operator, reservation service and related activities*) / *not relevant for FLEGT*

[13] There is no direct correspondence between the two systems as HS is a product classification system as opposed to ISIC which is an industry classification system.

7.4 Draft questionnaire

Guiding questions

- Explain and discuss envisaged role of FLEGT for markets and forest sector governance.
- General discussion on forest sector investment risk and de-risking.
- Is one or more of the following countries excluded from your investment strategy? If so, why?

Country	Excluded (yes/no)	If excluded, why?		If country is specifically excluded, why?				Would implementation of a FLEGT VPA change your country rating?	
		Region is generally not in investment strategy	Investment in the region is possible, but country is specifically excluded	Market risk and production risk	Unfavorable investment policies (taxes, incentives, …)	Political and governance risk	…	No	Yes, would motivate re-assessment of country risk
Viet Nam									
Indonesia									
Cameroon									
Central African Republic									
Congo (Brazzaville)									
Ghana									
Liberia									
Honduras									

7.5 Data requests

Table 12: Requests to national statistical agencies

Country	Statistical office / Website	Status of contact
Indonesia	Statistics Indonesia https://www.bps.go.id/	Data available from statistical yearbook
Ghana	Ghana Statistical Service http://www.statsghana.gov.gh/	Data request sent 16.1.2019, and 23.1. 2019
Congo	Institut National De la Statistique(ins) http://www.cnsee.org/	Emailed request 16.1.2019. No response, no phone number available
Central African Republic	Direction Générale de la Sta-tis-tique http://www.stat-centrafrique.com/	Statistical offices unreachable by phone or email
Cameroon	Institut National de La Statistique Du Cameroon http://www.statistics-cameroon.org/	Emailed 6.2.2019, Attempts to call made 17.01.2019 and 21.01.2019 with no response
Liberia	Liberia Institute of Statistics and Geo-Information Services http://www.tlcafrica.com/lisgis/lisgis.htm	Statistical offices unreachable by phone or email
Vietnam	General Statistics Office of Vietnam https://www.gso.gov.vn/	Data available from statistical yearbook
Honduras	Instituto Nacional de Estadística https://www.ine.gob.hn/	Multiple phone attempts and email requests for data.

Table 13: Data requests to specialist data providers

Source	Request sent	Status	Website
System of National Accounts UN/ Comtrade	22.01.2019	Do not have coverage	https://unstats.un.org/unsd/nationalaccount/sna.asp
Fastmarkets RISI	30.01.2019 and 6.02.2019	Do not have coverage for the countries and sectors requested	https://www.risiinfo.com/
Trading Economics	16.01.2019	Do not possess such detailed data	https://tradingeconomics.com/
Price Waterhouse Coopers	28.01.2019	Response pending	https://www.pwc.com/us/en/industries/forest-paper-packaging.html
International Trade Center	6.02.2019	Response pending	http://www.intracen.org/
IBISWorld	31.01.2019	No data available for countries of interest – only Global Paper and Pulp Industry report	https://www.ibisworld.com
UNCTAD	8.02.2019	Response pending	https://unctadstat.unctad.org/

Table 14: Publicly available data sources

Source	Data available	Issues	Website
World Bank	National level for foreign direct investment	Not sector specific	https://data-bank.worldbank.org
FAO	Production and trade data available	No investment data	http://www.fao.org/fao-stat/en/#data/FO
International Trade Center (ITC)	FDI data not publicly available at the level of detail required for the countries of interest	Investment Map data should technically be available from ITC, but detail is not there.	http://www.intracen.org/
International Monetary Fund	National Level inward and outward investment	Not available for some countries and not availa-ble at sector level	https://www.imf.org/ex-ternal/index.htm
United Nations Conference on Trade and De-velopment	National level inward and outward FDI flows.	Not sector specific	https://unctad-stat.unctad.org/wds/TableViewer/dimView.aspx

7.6 Action areas of FLEGT

The Action Plan sets out a package of measures through which the EC proposes to achieve the FLEGT objectives, focusing on seven broad areas with their respective fields of action – henceforth referred to as Action Areas - as follows:

1. Support to timber producing countries, including actions to (1) promote equitable and just solutions to the illegal logging problem, (2) verification systems, (3) transparency measures, (4) capacity building and (5) policy reform;
2. Activities to promote trade in (legal) timber, including actions to (1) develop the multilateral framework and pursue multilateral cooperation, (2) develop voluntary licensing of exports (through bilateral or regional FLEGT Partnership Agreements between the EU and timber exporting countries) and (3) review and develop additional legislative options.
3. Promotion of public procurement policies, including actions that guide contracting authorities on how to deal with legality when specifying timber in procurement procedures.
4. Support for private sector initiatives, including action to encourage private sector initiatives for good practice in the forest sector, including the use of voluntary codes of conduct for private companies to source legal timber.
5. Safeguards for financing and investment, including actions to encourage banks and financial institutions investing in the forest sector to improve due diligence practices when making investments.
6. Supporting the EU FLEGT Action Plan with existing legislative instruments including (1) anti-mony laundering legislation, (2) the CITES Convention and (3) other legislative instruments such as the OECD Convention on Bribery and Corruption.
7. Support work undertaken to address the problem of conflict timber.

7.7 Summary of FLEGT evaluation report 2016

The FLEGT evaluation report for the years 2004 to 2014 (TEREA, 2016) has 10 key messages:

1. The EU FLEGT Action Plan continues to be fully relevant but needs to address new challenges, in particular with regard to deforestation and forest conversion.
2. The overall design is innovative, comprehensive and future-proof, but objectives and intervention logics need to be clarified. Main pillars and action areas should be retained, but FLEGT support to producing countries should be delivered in a more demand-driven and flexible manner, while bottlenecks affecting VPAs should be addressed and the private sector more involved.
3. The Action Plan has not been implemented in a sufficiently balanced manner; strategic direction and monitoring of FLEGT Action should be improved; management and outcome monitoring also need strengthening and require corresponding human and financial resources.
4. Communication has initially not been commensurate to the importance of the EU FLEGT Action Plan as an innovative and experimental policy initiative. More attention should be given to internal and external FLEGT communication at all levels.
5. While the Action Plan contributes to its specific objectives, effectiveness across action areas varies widely. Shifts in priorities and approaches within and between actions areas are required, notably with regard to VPA and EUTR implementation and private sector engagement.
6. While the direct FLEGT objective of decreased EU imports of illegal wood is being achieved, a shift in geographical focus to non-VPA countries and focus on international coalitions is required - if global illegal logging and trade is to be addressed.
7. The EU FLEGT Action Plan is resulting in improved forest governance in all targeted countries, both VPA and non-VPA. However, fundamental governance challenges persist, slow down progress and need more effective tackling.
8. FLEGT’s contribution to the higher objective of Sustainable Forest Management is unclear and needs to be made more explicit. FLEGT has proven to have potential to make an important contribution to poverty reduction, but this requires more attention for domestic timber markets and support for the actors operating in them.
9. FLEGT is largely coherent with EU and international policies. While the principle of basing VPAs primarily on national legislation should be maintained, due attention should be given to obligations deriving from international conventions as well.
10. The FLEGT Action Plan has clear EU added-value through its market leverage and increased political weight. However, effective implementation requires broader political and financial support and promotion across EU Member States, as well as enhanced coordination.

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