Analysis of the Effects of the Global Financial Crisis and Government Measures: The Case of the Timber Industry in Congo, Cameroon and Gabon

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Introduction

Triggered by the collapse of the US and world financial system since 2007, the economic crisis deepened during 2008 and continued in 2009. Considered as the most serious and most synchronizedfor decades, the current crisis has spared no region of the world (ECA 2009; Devarajan 2009). The consequences are felt in all sectors, particularly in terms of international trade, down 11 per cent in 2009, investment and labour market, with an unemployment rate that increases sharply due to the decrease in economic growth (UNDP 2009). Global economic growth is systematically revised downward based on market indicators. With the weak development of the industrial sector, the performances of African economies are highly dependent on market trends in agricultural commodities and minerals. The decline in the demand for raw materials following the recession in developed countries and the slowdown in emerging markets has had a negative impact on African exports.

The timber of the Central African countries faces the effects of the global financial crisis. If the sub-region in 2007 exported 7.9 million m³ of roundwood to Europe (60 per cent) and China (30 per cent), an increase of 6 per cent per year since 2004, exports became lower due to declining demand from buyers. Samuel Nguiffo, Director of the Centre for Environment and Development (CED) points out that Cameroon registered at the end of 2008

about 2,000 lay-offs. Likewise 20,000 direct and indirect jobs were threatened in Cameroon and DRC (Sandouly and Labey 2009).

With regard to Congo-Brazzaville, the timber industry is the second largest economic sector and the second largest employer. Timber is also the second most important export. Similarly, Gabon has an economy characterized by heavy dependence on the oil sector. In 2006, this contributed to the tune of 51.5 per cent of GDP. The country's revenues are also dependent on mining and timber with a contribution respectively of 64 per cent of budget revenues and 82 per cent of export earnings (AfDB 2009). Furthermore, it should be noted that the timber sector represents the second source of employment in Gabon. In Cameroon, the timber sector employs nearly 170,000 persons, including 20,000 direct jobs. Timber is also the second export product of Cameroon.

However, faced with the rise of the effects of the crisis, the activities of the industry were threatened both upstream and downstream. Thus, the overall objective of this chapter is to analyse the impact of the global financial crisis on the timber industry in these countries. Specifically, it is to analyse the potential for production and export of these countries; highlight the effects of the crisis in this sector; and analyse the measures that have been taken by governments to reveal their limitations and suggest alternative solutions.

The research issues guiding the study were as follows: how is the international financial crisis affecting the forestry sector? What are the potentials for production and export of timber in Central Africa, including Congo, Gabon and Cameroon, and the effects of this crisis on the timber industry in these countries? What are the various measures implemented by the governments and the solutions proposed to help stakeholders mitigate the effects of this crisis?

Methodology

The study, which covers eight years from 2001 to 2008, was based mostly on existing documentation. The documentation study was undertaken mainly at the Department of Forestry of the Ministry of Forest Economy in Congo Brazzaville with the analysis of the reports and documents of the International Monetary Fund (IMF), the African Development Bank (AfDB), the World Bank, the Bank of Central African States (BEAC), the documents of various ministries in charge of the forest economy of Cameroon and Gabon and the documents of the International Tropical Timber Organization (ITTO). The effects of the crisis and its increasing complexity today cannot only be viewed as financial. The repercussion on the real economy is getting more and more obvious and it affects developing countries through a number of trade-related channels such as commodity prices, exportations, investment,

infrastructure and debt sustainability, macroeconomic imbalances, exchange rate fluctuation, trade finance, and credit for export-oriented production.

One can note that Congo, Cameroon and Gabon are members of the Economic and Monetary Community of Central African States (CEMAC) with a core mission to promote the harmonious development of the member states within the framework of a true common market. Hence our methodology approach was both qualitative and quantitative. The aim was to acquire a general understanding of the logging industry in these countries and analyse the impact of the financial economic crisis on the timber sector through the variation of commodity prices in the international market; the evolution of product; the decline of exportation; the income of states; and job losses; and then analyse the measures undertaken.

Theoretical and Conceptual Framework

The global financial crisis initially affected advanced economies, emerging markets, and low-income countries in very different ways. Advanced economies were first hit mainly by the systemic banking crisis in the United States and Europe. Emerging markets with well-developed financial systems were initially mostly affected by cross-border financial linkages through capital flows, stock market investors, and exchange rates. In financially less-developed countries the growth and trade effects dominated, with lags. Now, however, growth and trade effects are crucial for all countries. The channels through which the global financial turmoil affects developing countries include financial channels and real channels. Financial channels include effects through: stock markets, banking sector (borrowing from advanced economies, foreign ownership of banks, exposure to sub-prime market), and foreign direct investment. Real channels include effects through remittances, exports, imports, terms of trade, and aid (Massa and TeVelde 2008:2).

In Africa, frontier and emerging markets were hit first.By now indirect channels are fully at work in all countries, and risks are mounting that other channels may gain in importance, especially in the financial sector. In all countries, the global slowdown in economic activity has pushed commodity prices down, with negative effects on export earnings and the external current account, fiscal revenues, and household incomes. Commodity exporters face a major term of trade deterioration. IMF research shows that in the past a one percentage point slowdown in global growth has led to an estimated half percentage point slowdown in sub-Saharan African countries. The effects may be more pronounced this time because the tightening of global credit compounds the impact of the slowdown, exacerbating risks for trade finance and their capital flows (IMF 2009).

In fact, the link between African countries and the global market directly affects the production of timber. The exports of all African countries depend largely on the demand of the European, American and Asianmarkets, and in particular China, which is the second largest consumer of timber products in the world. Its growing population and expanding economy are increasing its demand for timber products. So, one can note that a large part of the timber products of these countries is sold on the international market; and many companies in that sector are represented by foreign capital.

Literature Review

The global financial crisis of 2008-09, with its epicenter in the United States, has brought enormous ramifications for the world economy. What started as an asset bubble caused by an array of financial derivatives that, *inter alia*, drove the sub-prime mortgage boom, exploded into housing and banking crises with a cascading effect on consumer and investment demand. The housing crisis quickly grew into a banking crisis with the investment and merchant banks first absorbing the impact before it spread to the commercial banks (Krugman 2009). With the United States' economy contracting sharply, it sent ripples across export-dependent Asian economies, which began to face a contraction as a consequence.

The Impact in African Countries

A number of publications exist on the impacts of the crisis in Africa. These include, but are not limited to, Biekpe (2009) on the impact of the credit crunch on foreign aid in Africa; Myburgh (2009) on correlations between sub-Saharan Africa (SSA) currencies during the 2008 financial crisis; Kiptoo (2009) on the potential impacts of the global financial crisis on African economies; and the International Monetary Fund (IMF) (2009) on the impacts of the global financial crisis on Africa. Many other works exist on country-specific issues on the crisis. The works include, but are not limited to, Ngowi (2009a, 2009b, 2009c, 2009d and 2009e).

According to Balchin (2009), the impact of the global financial crisis is likely to vary across African countries depending on their exposure to the international financial system, their production and export structure, and their capacity to use policy tools to cushion its adverse effects. In general terms, the short-term effects on many African countries are likely to be mitigated by the fact that most countries on the continent are relatively de-linked from the global financial system.

The slowdown in global growth, coupled with a sharp decline in global industrial production, has reduced demand for African exports, reflected most

notably in the downward spiral of both prices and demand for commodity exports. This is most alarming given the fact that commodity exports represent the primary source of export receipts for the majority of African countries. Furthermore, the fall in export revenues is likely to have negative spillover effects in terms of reducing government revenues, thereby worsening the already tenuous fiscal position in many African countries.

To analyse the impact on the timber sector, one can note that the decrease of demand affected the price on the world market. Thus, Ngowi (2009) argued that in all African countries, the crisis has pushed commodity prices down with negative effects on export earnings and the external current account, fiscal revenues, and household incomes (IMF 2009; Kiptoo 2009; World Bank 2008). According to Ngowi (2009b), the very few commodities whose price has not declined include gold. This is due to the historical position of gold in international financial and monetary system as detailed in Ngowi (2006). African commodity exporters face major terms of trade deterioration.

Effect on the Timber Industry

The 2008-09 financial and economic crisis has led to a fundamental shift within forestry and the forest industry sectors, the effects of which are being felt through the entire chain from the forest to the markets. Never since the first oil crisis in the 1970s have forest product markets experienced such a downturn.

The UNECE region, which is the largest global producer, exporter, importer and consumer of timber and paper products, and its forest sector, have been badly hit by the economic crisis. The extent to which each country has been affected varies from country to country, depending on different factors such as the fall of forest product prices due to a decrease in demand following the crash of the construction sectors, the decline in both foreign and domestic investment and the fluctuation in currency exchange rates.

The downturn in forest product markets has, of course, impacted the economic situation of the states and private forest owners through reduced demand for raw wood materials. However, the sustained demand for timber energy, buoyed by government polices to promote renewable energy sources, has been the bright spot during the market downturn. Supplying woody biomass maintains harvest levels and income for some forest owners.

In 2008, consumption of forest products in the UNECE region fell by an extraordinary 8.5per cent. This decrease in demand, accompanied by a decrease in production, is expected to be as significant for the current year as indicated by data for the first half of 2009. According to the UNECE/FAO Forest Products Annual Market Review, 2008-2009 (UNECE/FAO 2009a), most

of the 56 UNECE member countries have experienced sharp falls in demand and consumption of timber products.

Throughout the UNECE region the sector suffered from diminished demand for and falling prices of timber and paper products (UNECE/FAO 2009b). This has led to reduced income for producers, which resulted in mill closures in some countries (e.g. United States, Finland, France), job cuts (Estonia, Cyprus, Finland, France, Sweden, United Kingdom and US), and many companies had reduced profits. The short-term effects have been felt throughout the entire timber and paper processing chain, from primary processing activities to the production of value-added products, as well as the trade in forest products. The employment losses have been tragic, with ripple effects impacting entire communities, often in rural forested areas with low incomes. In just one year, between 2007 and 2008, the consumption of forest products in the UNECE region dramatically decreased by 117 million³ in roundwood equivalent, of which the biggest proportion (81 million³) occurred in North America.

At the same time, in Africa, that sector was also affected. According to Henk-Jan Brinkman and Ali (2010: 2), in Ghana for example timber exports declined. Between January and October 2009, the value (in euros) decreased by 33 per cent and the volume by 25 per cent compared to the same period in 2008. On the other hand, the world market price for timber, as reported by the World Bank's Global Economic Monitor, appears to have been moderately affected by the crisis. Throughout 2008, the price was relatively stable around 150 per cent of its 2000 level. It declined slightly in early 2009 and is reported to have reverted back to 145 per cent of its 2000 level in May 2009 (ILO 2009).

In central Africa, particularly in the Economic and Monetary Community of Central African States (CEMAC), the timber sector has suffered a great loss of activities with subsequent job losses amounting to between 20 and 30 per cent. The direct impact was under-valued. According to Wakeman-Linn and Ali (2009), the overall impact on expected export revenues for 2009 is aggravated by the ongoing contraction in export volumes for timber and other commodities. One can note that timber is a forest product. So in Congo-Brazzaville, for example, forestry companies had considered that a revision of fiscal policy would enable them to cope with the effects of the crisis. Thus, in fear of a permanent cessation and declining revenues, governments have implemented a policy to protect the timber industry at regional and national levels. However, these measures have some shortcomings (Ndzi 2008).

Presentation and Interpretation of Results

The potential of Republic of Congo

Until 1972, timber was the primary resource of Congo representing more than half of exports. It has been overtaken by oil now contributing approximately 7 per cent of GDP. Moreover, the potential national timber is estimated at over 150 million m³ in volume sales growth: 130 million in the mountains of northern Congo, 20 million in the massive in South (SANA CONGO 2010: 12). The annual production capacity is currently estimated at 2 million m³, without compromising natural regeneration (PFBC 2006). At this potential, there is an additional 73,000 hectares of eucalyptus, pines and limba, located in the south, corresponding to a volume of 4,000,000 m³. FAO estimated an annual levy of 2 million m³.

The Potential of Cameroon

Cameroon has potential forest and wildlife resources whose exploitation generates substantial revenues for the national economy. Its forest resources are valued at about 22 million hectares of which 17.5 million is exploitable (Ngolle Ngolle 2009). The potential is rich and constituted by diverse flora. It consists of over 300 species of trees. In addition, Thies and Beligné (2007:3) emphasize that with 0.6 per cent of world production of tropical timber, the Cameroonian forestry sector represents 0.5 per cent of world exports of tropical logs, in both volume and turnover. It represents about 3 to 6 per cent of world exports of tropical sawnwood, and about 7 per cent of the export of sawn tropical products in the tropics. While lumber exports are low by world trade levels, they remain the most important in tropical Africa.

The Potential of Gabon

With a dense forest covering some 21.09 million hectares, more than 80 per cent of the country (Mayaux et al 2004), coupled with low population density, Gabon has the highest rate of forest area per capita in Africa (Chevalier 2008:61). Between 1990 and 2005, the recorded loss of forest area remained very limited. This loss represented 0.15 million hectares, or less than one per cent (PNUD 2007: 391). Moreover, the forest has always played an important role in the development of the country. Economically, it has been for a long time the main source of national wealth, before being overtaken by oil in the early 1970s. Currently, the forestry sector ranks second in the export earnings of the country and remains the largest private employer with about 12,868 direct jobs generated (MEFEPPN FORAF 2008).

The Production of Raw Wood

The total production of raw wood in Central Africa (excluding DRC) increased by 18 per cent within 6 years and amounted to 7.9 million m³ in 2007. The situation in the three countries is as follows.

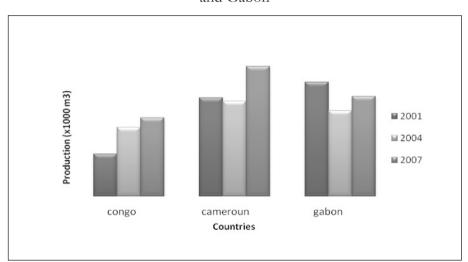


Figure 7.1: Evolution of Raw Wood Product of Congo, Cameroon and Gabon

Source: IMF, BEAC, UBIFRANCE 2008

The graph shows that the production of raw wood of Congo and that of Cameroon increased between the years mentioned. These increased from 895,000 m³ in 2001 to 1.65 million m³ in 2007, an increase of almost 84 per cent, and 1.999 million in 2001 to 2,731,000 in 2007, or 32 per cent. One notices also that the production of Gabon declined (25 per cent) between 2001 and 2004 and rose to 16 per cent in 2007. However, one should notice that in terms of timber production, Gabon is the largest lumber producer in Central Africa and the world's largest producer of Okoume.

$Evolution\ of\ Log\ Products\ of\ Congo,\ Cameroon\ and\ Gabon$

The total production of raw wood in Central Africa (excluding DRC) increased by 18 per cent within six years and amounted to 7.9 million m³ in 2007. Moreover, the three countries are major producers of logs in the region (UBIFRANCE 2008: 13). Figure 7.2 shows the evolution of the production of logs from 2000 to 2007.

The graph shows that log production is largely dominated by Gabon, which ranks first, followed by Cameroon and Congo. But this production declined slightly between 2000 and 2004 from 3.8 million m³ to 2.5 million m³. It also grew between 2005 and 2007. Production in Cameroon had some ups and downs over the entire period. However, between 2006 and 2007 it declined by about 225,000 m³.

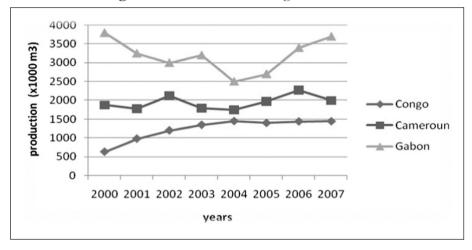


Figure 7.2: Evolution of Logs Production

Source: African Forest Observatory (FORAF) 2009

With regard to Congo, its log production witnessed a marked increase between 2000 and 2007. It increased from 630,000 m³ to 1.4 million m³ over a period of seven years, with a rate of increase of 129.3 per cent.

Evolution of Sawn Wood Product

On average, 19 per cent of the countries of Central Africa are exported after having undergone initial processing (UBIFRANCE 2008). For example, Cameroon has thesub-region's most developed processing industry with a total installed capacity of around 2.2 million m³ in 2007. The second transformation that is occuring is provided by industrial companies, SMEs in manufacturing furniture and craft industries. However, the units are mainly focused on the primary level and are usually equipped with hand equipment from Europe. With respect to Gabon, timber processing such as Okoume (peeling, veneer, lumber) that has developed recently is achieved primarily by French companies (Rougier, Leroy, Thebault) that have invested heavily in this activity.

In Congo-Brazzaville, timber processing developed in the northern region where the sawmill industry (downstream activities included) grew at the Congolese Industrial Bois (CIB), Forest Industry of Ouesso (IFO) and Likouala Timber. The graph in Figure 7.3 shows the evolution of the production of lumber from 2005 to 2007.

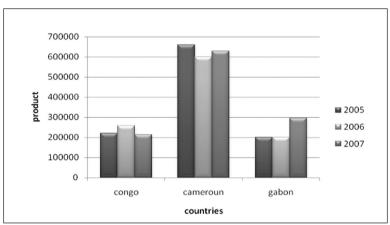


Figure 7.3: Evolution of Sawn Wood Product of Congo, Cameroon and Gabon

Source: Observatory for the Forests of Central Africa (OFAC)/ FORAF 2009

Reading by country shows that the production of sawn wood in Congo-Brazzaville and Gabon remains largely insufficient compared with that of Cameroon. At the level of a country such as Congo-Brazzaville, this production declined between 2006 and 2007. It went down from 235,000 to 210,000 m³, a decrease of -10.64 per cent. Similarly, for Cameroon, this decrease was about of -7.34 per cent. In the case of Gabon, its production increased by 45.5 per cent after stagnating at 200,000 m³ between 2005 and 2006.

Evolution of the Production of Plywood

Plywood production is largely dominated by Gabon, followed by Cameroon and Congo. Yet, it is fitting to note that in the latter two countries, production is relatively low but has seen some increase. However, for Gabon, one observes a sharp drop between 2005 and 2006 and some changes from 2007.

The Potential of Countries in Trade

The potential of these three countries is analysed in terms of exports of logs, sawnwood, veneer and plywood, recorded between 2005 and 2008.

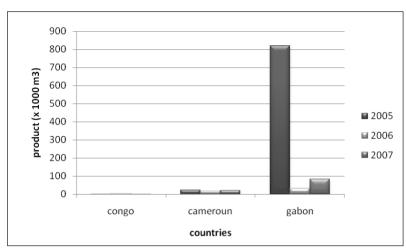


Figure 7.4: Evolution of Plywood Product in Congo, Cameroon and Gabon

Source: MEFEPPN-FORAF 2008, Timbertrade 2008

Evolution of Log Exports

Gabon is the country which exports most logs in Central Africa. It has performed better than its neighbours as manifested in its exports having increased between 2006 and 2007, an increase of 9.6 per cent. In the other countries, the exports have declined by around 6.7 per cent over a period of three years. Congo's exports recorded a decline between 2006 and 2008. This reduction represents 16 per cent in the same year. Similarly, Cameroon recorded a decline estimated at nearly 18.5 per cent over the same period. The graph (Figure 7.5) below shows the evolution of log exports from these three countries between 2006 and 2008.

The Exports of Sawn Wood

Generally, lumber products are marketed in Central Africa in a raw state and to only a few sawmills in the countries concerned to bring added value by providing dried lumber and then, probably, by providing a specific machine to produce profiles, items of flooring and other materials (Langbour and John Gerard 2007). Thus, unlike the export of logs, lumber exports were dominated by Cameroon over the period 2005-07. These declined between 2005 and 2007 but grew by 2 per cent between 2006 and 2007. Congo's exports grew but exports from Gabon were down slightly. In Gabon, for example, they lost nearly 0.6 per cent during the period 2006-2007.

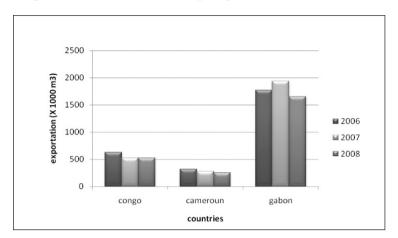


Figure 7.5: Evolution of Log Exports from 2006 to 2008

Source: Ministry of Water, Forests, Hunting and Fisheries/Forestry Data Centre (FDC) 2009.

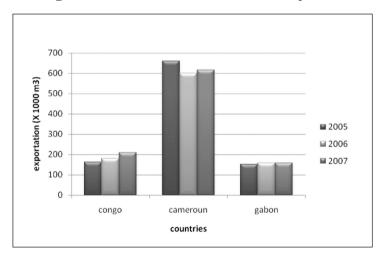


Figure 7.6: Evolution of Sawn Wood Exports

Source: ITTO, AfDB, Ministry of Forest Economy, National Gabon's Wood Company (SNBG), Société d'exploitation des parcs à bois du Gabon (SEPBG) 2009.

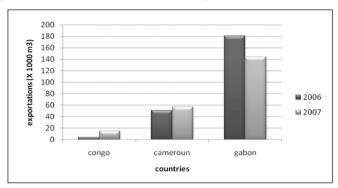


Figure 7.7: Evolution of veneer exports from 2006 to 2007

Source: Ministry of Water, Forests, Hunting and Fisheries/Forestry Data Centre (FDC) FORAF.

Plywood Exports

Although log exports may represent much of Gabon's timber exports one can notice that plywood also has a significant part. Thus, in comparison to Congo and Cameroon, Gabon ranks first. However, following the 2006 and 2007 period, we find that these exports were down sharply from 66 per cent. With regard to Congo, its exports declined by 50 per cent contrary to Cameroon that recorded a slight increase of 16 per cent.

Impact of the Crisis on the Timber Industry

Overview

The timber industry has been affected everywhere in Central Africa and on every other continent. According to Valbois (2009) all wood products and trade flows were affected and all stakeholders concerned in the sector have been forced to consider their position.

While global GDP grew sharply (+4 per cent) mainly due to emerging and developing countries (+9 per cent), what is seen in this trend is an abrupt decline (-6 per cent), especially in advanced countries (-7 per cent). In 2008, softwood sawmills in Europe, for example, lost an average worldwide of between US\$ 12 and US\$ 14/m³ as they earned US\$ 8 in 2006. Similarly, European exports, which amounted to some 5.6 million m³ despite a strong euro and high transport costs, had to be reoriented from US (4 million m³ in 2005 against one million m³ in 2008) and Japan (3 million m³ in 2004 against 2 million m³ in 2008) to other destinations like the Middle East, North Africa and Asia.

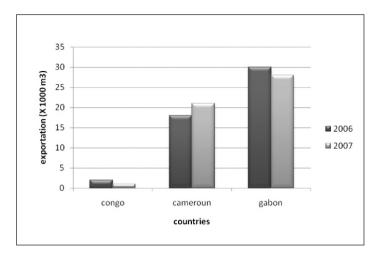


Figure 7.8: Evolution of Plywood Exports from 2006 to 2007

Source: OFAC 2010

Moreover, the crisis was not only limited to softwood lumber. The whole world timber industry was suffering. For instance, tropical plywood prices were severely compressed at the end of 2008 (10 to 20 per cent). Finnish sawn wood prices are another example: the redwoods that were selling for 245 euro/m³ FOB price in October 2007 fell to 160 euro/m³ in April 2009 (Valbois 2009).

Sub-Saharan Africa

In 2007, SSA benefited from the highest growth rate in decades. Real GDP grew by about 6½ per cent, led by progress in the extraction of oil exporting countries as well as rising domestic investment and productivity across the region (IMF 2008). The successes in implementing economic stabilization and structural reforms contributed to this result. Strong global demand for commodities, increased capital inflows in Africa and debt relief increased resources and accelerated expansion. But recently, the external environment became less favourable. The slowing global economy reduced demand for exports from sub-Saharan Africa.

In fact, hit by the collapse in global demand, the sector had to carry out massive layoffs of workers. 'Over 6,000 jobs are destroyed', announced the Ivorian Minister of Water and Forestsin April. In Gabon, Cameroon and Congo, key loggers such as Rougier, Precious Woods or the Company of Gabon timber, were deeply affected (Mouly 2009). Plysorol, a French company, filed for bankruptcy (taken over by a Chinese company), and Rougier stopped

the activity of two plants in Congo and Gabontemporarily. Moreover, leaders noted that the group recorded a 26 per cent drop in sales in the fourth quarter of 2008 while it invested 10 billion CFA francs, the equivalent of US\$20 million over the previous three years (Mouly 2009).

Central Africa Sub-region

At the state level in Central Africa, forest resources are an important part of international trade. Thus, in most regions, the revenues generated by forest products occupy second rank after those generated by the oil sector. The contribution of the timber sector to GDP is 6 per cent in Cameroon, 2 per cent in Congo, between 3 and 4 per cent in Gabon, 6 per cent in Equatorial Guinea, and 10 to 13 per cent in Central African Republic. It should be remembered that until the 1960s, countries only exported logs (WWF-France 2007). Currently, they sell primary and manufactured products such as planks, plywood, veneer and furniture abroad. Exports of lumber in Central Africa generated an income of more than 1.2 billion euros in 2001. Gabon, Congo and Cameroon accounted for almost 85 per cent of Central African exports. However, the financial crisis affecting the timber industry led to a decline of log exports and sawn wood for countries like the Central African Republic and Democratic Republic of Congo at 16 and 37 per cent, and 14 and 26 per cent respectively with the discontinuation of some mills and closing of some logging camps, particularly in Central African Republic (Eba'aAtyi and al 2009: 21).

Impact in Congo, Cameroon and Gabon

The financial crisis affected the timber industry of these three countriesdifferently. In this sub-section, the impact of the crisis is examined in terms of exports, demand from major customers, business companies, state revenues and jobs.

Impact on the Exports of Congo, Cameroon and Gabon

Congo

Congolese exports were affected by the crisis. One can note that compared to the exports of logs that experienced a small increase (0.19 per cent), sawn wood and logs eucalyptus declined respectively by 16.7 and 17.6 per cent. It is important to notice that the decline in exports of both these products is an enormous loss to the extent that the production of these requires significant investments and provides the industry with products that bring more value added.

Exports (m ³)	2007	2008	Variation
Logs	527 000	528 000	0.19
Sawnwood	209 000	174 000	-16.75
Eucaliptus log	250 000	206 000	-17.60

Table 7.1: Change in Exports of Some Products between 2007 and 2008

Source: Author's calculations from Statistics Ministry of Water, Forests, Hunting and Fisheries/Forestry Data Centre (FDC), 2009.

Cameroon

Let us recall that Cameroon has the second largest forest in Africa and among the top five world exporters of tropical timber. Eighty per cent of precious woods are destined for export. The forestry sector has a significant advantage and is even a substantial factor endowment and thus represents a capital in terms of natural resources that should be well exploited. This is especially the case as the sector remains fragile because of the crisis (Republic of Cameroon 2009).

Moreover, the decline in demand for housing was the first consequence of the decline in demand for timber. In 2008, the volume of crude timber exports from Cameroon declined by 4.6 per cent. This decrease was more marked in the second half of the year, when it affected the lumberyard. In relative to the first half, the decline was 9.9 per cent for the raw wood and 10.6 per cent for the sawn wood (GICAM 2009). Provisional data from the first quarter of 2009 confirm this trend with a 35 per cent drop in exports of sawn wood. One can recall that exports of timber and by-products were the second largest export after crude oil (14 per cent in 2008 against 16.3 per cent in 2007). The country recorded a fall of 3.32 per cent in log exports between 2007 and 2008, and 17 per cent for plywood in the same year.

Table 7.2: Variation of Exports by Products between 2007 and 2008

Exportation (m ³)	2007	2008	Variation
Logs	266 420	257 578	-3.32
Sawnwood	21 668	17 983	-17.01
Veneer	59 408	64 286	8.21

Source: Author's calculations from Statistics Ministry of Water, Forests, Hunting and Fisheries / Data Center of Forestry (CDF), ATIBT 2008.

Gabon

Log exports from Gabon in November 2008 registered a growth rate of -10.7 per cent against 10 per cent in 2007. Moreover, the quantities exported increased from 1.771 million to 1.582 million m³. The destinations most favoured were India and France, with respective contractions of about 55.8 per cent and 38 per cent (Doumba 2009). Similarly, for the years 2007 and 2008, the growth rate of exports of timber fell from 17 to 3.8 per cent. The growth rate for logs was positive from 10 per cent in 2007 as compared to that in 2008 which amounted to 11per cent.

Moreover, Demarquez Benedict (2008) points out that the relative decline in log exports from Gabon is due to the export quotas imposed by the government, but also to an effective decline of the timber market. There was a decrease of nearly 15 per cent of exports of all log species in 2007 ascompared to 36 per cent in 2000. The decrease of exports of logs from Gabon is more marked by the decrease of the demand in European markets (-63 per cent since 2000); Asian markets (-23 per cent between 2000 and 2008) and in the African market (-32 per cent).

Table 7.3: Change in Exports of some Products between 2007 and 2008

Exports (m³)	2007	2008	Variation
Logs	1 938	1650	-14.86

Source: Author's calculations from Statistics Ministry of Water, Forests, Hunting and Fisheries/Data Centre of Forestry (CDF), ATIBT 2008

Impact from the Demand Change of the Main Recipients

In recent years, China has become the first economic partner of African states. For historical reasons, Europe has long been the main destination for exports of timber from Central Africa. From 1994, China took first place with a market share of between 23 and 30 per cent, closely followed by France (15 to 18 per cent). From Central Africa, China imports not only oil but also timber. As an illustration, China remains the largest buyer of Gabonese timber (all species combined) with a 60 per cent market share, followed by France (only 12.2 per cent). Overall, Asia accounts for 73 per cent of log exports while 22.1 per cent go to Europe (French Economic Mission 2007).

Considering the demand, it must be noted that some buyers of these three countries' timber have reduced their consumption. Thus, the section that follows presents the changes in exports of some products by major destination countries between 2007 and 2008.

The results in Table 7.4 show that Congo's timber exports were down by -8.19 per cent. However, taking into account of the key partners, we notice that Congo's timber exports to China were not affected by the crisis. They showed an increase of 14.23 per cent.

Table 7.4: Evolution of Congo Forestry Exports by Destination

Countries	Volume 2007 (m³)	Volume 2008 (m³)	Variation (per cent)
China	371 255,00	424 070,00	14.23
Portugal	80 885,00	120 382,00	48.83
Morocco	41 059,00	85 206,00	107.52
Spain	88 639,00	79 228,00	-10.62
France	78 744,00	72 484,00	-7.95
Netherlands	64 191,00	37 775,00	-41.15
Belgium	48 757,00	34 082,00	-30.10
Germany	49 502,00	31 961,00	-35.43
Italy	176 705,00	28 818,00	-83.69
UnitedKingdom	36 963,00	26 218,00	-29.07
USA	43 822,00	25 621,00	-41.53
Malaysia	8 150,00	20 672,00	153.64
Switzerland	15 234,00	16 811,00	10.35
Turkey	13 487,00	14 349,00	6.39
Saudi Arabia	7 030,00	12 719,00	80.92
India	9 458,00	10 978,00	16.07
Other	96 335,00	88 105,00	-8.54
Total	1 230 216,00	1 129 479,00	-8.19

Source: Author's calculations from Statistics Atibit 2009

However, other countries such as France and the United States reduced their imports of timber from Congo. This is manifested by a decrease of -7.9 and -41.5 per cent respectively.

Table 7.5: Evolution of Cameroon's Timber by Destination

	V-1 2007	V-1 2000	V 7 : :
Country	Volume 2007 (m³)	Volume 2008 (m³)	Variation (per cent)
Italy	114 404,00	111 140,00	-2.85
Spain	104 890,00	88 350,00	-15.77
Netherlands	85 174,00	78 638,00	-7.67
France	67 297,00	62 941,00	-6.47
Belgium	54 856,00	54 963,00	0.20
China+HK+Taiwan	17 043,00	25 127,00	47.43
UK	25 917,00	17 654,00	-31.88
Senegal	17 234,00	16 798,00	-2.53
USA	25 737,00	15 474,00	-39.88
Tunisia	9 128,00	13 347,00	46.22
Portugal	13 653,00	13 015,00	-4.67
Turkey	8 168,00	9 275,00	13.55
Germany	13 367,00	9 235,00	-30.91
Total	556 868,00	515 957,00	-35.24

Source: Author's calculations from Statistics Atibit 2009

In the case of Cameroon, Table 7.5 shows that exports of lumber by this country fell by nearly 35 per cent. However, China including Hong Kong and Taiwan are the countries that imported more timber (47.43 per cent) despite the effects of the crisis. Exports to the United States, however, decreased (-39.88 per cent).

Table 7.6: Evolution of Gabon's Log Exports by Destination	,
end of November 2008	

Countries	Volume 2007 (m³)	Volume 2008 (m³)	Variation (per cent)
China	992 373,00	1 028 281,10	3.6
France	262 610,00	162 711,60	-38
Morocco	123 872,00	86 739,00	-30
India	165 573,00	73 219,00	-55.8
Turkey	48 396,00	67 686,80	39.9
Germany	32 293,00	28 101,50	-13
Spain	15 791,00	24 393,00	54.5
Taywan	29 722,00	20 131,00	-32.3
Belgium	10 539,00	18 832,20	78.7
Greece	20 738,00	21 355,50	3
Italy	28 085,00	21 377,30	-23.9
South Africa	2 406,00	1 851,00	-23.1
Tunisia	2 571,00	1 333,00	-48.2

Source: VDS/BOLLORE in late November 2008, Doumba 2009

For Gabon, log exports fell to 10 per cent. As in the case of Cameroon's exports to China, one can note an average increase of nearly 4 per cent. However, India, one of the largest importers of timber, cut its imports from Cameroon by more than half, or by -55.8 per cent.

The above three tables tell us that China remains the most important and most reliable partner on which to build support for the three countries to enhance their level of exports. Similarly, although the consumption of European partners is low, recovery in any country of the European Union will also affect the countries of Central Africa including Congo, Cameroon and Gabon. As should be noted, the presence of certain groups such as Rougier (French group) constitutes an important factor to the presence of the old continent in Africa.

Effects on the Revenue Related to Market Prices

State revenue including the admission of foreign exchange for exporters is based on demand but also on the trend in the various markets. Thus, the study undertaken by Eba'aetal (2009) shows a price trend of logs and sawn wood which is as follows:

— Ayous
— Okoumé
— Sapelli
— Period

Figure 7.9: Evolution of Log prices (January 2008-January 2009)

Source: Richard Eba'a et al (2009)

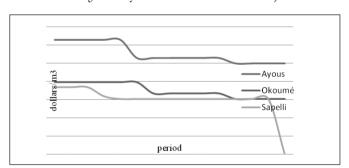


Figure 7.10: Evolution of Sawn Wood Prices (January 2008 and March 2009)

Source: Richard Eba'a et al (2009)

Figures 7.9 and 7.10 show that exports of logs and sawnwood were disrupted. Thus, for the three countries whose exports of timber are based on these main species (Ayous, Okoume, Sapele), falling prices inevitably affected the export earnings of these products. In Gabon, for example, exports of logs represented 1,768,080 m³ so 49 per cent and 51 per cent of Okoume and various timbers. Similarly, for the Congo, Okoume represents nearly 50 per cent of log exports followed by Sapelli (26 per cent) which is the first gasoline exported as sawn (64 per cent).

Impact on Corporate Activities

Key loggers in Central Africa are foreign-owned companies, primarily of European origin. Since 2000 one notes the arrival of investors from Asia (China, Malaysia) in search of new sources of wood supply following the sharp decline of forest resources in East Asia and a rise in Chinese demand (UBIFRANCE 2008). The group Vicwood (Hong Kong), which operates in Cameroon, Central African Republic and Congo-Brazzaville, has become one of the main operators in terms of export volumes in the area. The German Danzer Group operates in Congo through its subsidiary IFO and in the DRC through Siforco (the leader in forestry in this country). In terms of French actors, the first operator remains the Rougier Group, operating in Cameroon, Gabon and Congo. One also notes the presence of Pasquet Group. Local actors are changing mainly in the category of small and medium enterprises.

Effects of the Crisis on the Major Groups: The Case of Rougier Group

In the Congo, the group stressed that the level of operating profitability achieved in 2007 could not be maintained in 2008; Sapelli was quickly affected by the effects of the housing crisis on the North American and European markets. Also, in the light of the remoteness of production sites and the importance of logistics costs in the cost of production, the group decided to reduce the rate of production approximately by a quarter (Rougier 2009). Activities have since been temporarily stopped with the lay-off of the entire workforce after a hundred jobs were deleted.

In Cameroon, forestry and industrial performance have been deeply affected by the market trend developments with a direct impact on productivity and product quality. Efforts to strengthen the recovery results began in previous years were not sufficient to lower production costs to a level consistent with sales prices. Operating margins were also affected in 2008. The staff level, after rising significantly in the first half, was adjusted at the year end with the further deletion of a team on the site of Djoum. The deteriorating conditions led the group to recognize in its consolidated loss a value of assets amounting to euros 3 million euros. In 2009, the situation will remained tense, with the group focusing on improving resource planning and efficiency of industrial methods so as to reduce costs and control inventory levels.

In Gabon, the Group's operating results held up well and benefited from the good performance of European markets for logs and plywood. The company has not been able to take advantage of the full effect of the liberalization of the marketing of Okoume because of the slowdown in production forest. Moreover, the implementation of export quotas of logs strengthened the development model based on responsible management of the resource and industrialization that led to obtaining FSC certification. Some site of sawn

wood in Franceville (Mbouma-Oyali) and Ndjolé (Mévang) were affected by the lumber market of Okoume and decreased their production level. At yearend, the result was improved upon by obtaining a tax credit in connection with the transitional arrangements by the Gabonese government to promote the production competitiveness of plywood on international markets which was burdened due to the non-ratification of EPAs by Gabon.

Effects of the Crisis on Domestic Companies

Congo

Some companies such as the Congolese Industrial of Timber (CIB) have been disrupted, which prompted a dialogue between managers and employees. This consultation resulted in an agreement to stimulate voluntary worker retirement at the company. This policy which was directed towards unskilled labour reduced following the fall of industrial activity. Moreover, other disturbances such as reducing working hours were also recorded within the same company.

Cameroon

Because of the crisis,the Cameroon Forest United (CUF), a logging company based in Douala, took steps to turn off the lights and air-conditioners in offices from 12:30 p.m. In late September 2008,the crisis resulted in the cancellation of nearly 30 per cent of orders (Tassé and Nforgang 2008). Moreover, according to Antoine Darazi, CEO of the company, in early December of the same year this cancellation increased from 50 to 60 per cent. The turnover in October fell to 40 per cent compared to October 2007. Similarly, as with all professionals in the industry, investments were frozen and logging stopped, with the consequent removal of overtime, working weekends, production bonuses, etc.

Gabon

In 2008, the National Gabon Wood Company (SNBG) posted a turnover of over 53.342 billion CFA francs against 47.742 billion CFA francs, an increase of 12 per cent. However, its net profit showed an increase of 3 per cent to 2.616 billion CFA francs (AGP 2009). Yet its export turnover fell from 46.369 billion CFA francs in 2007 to 21.129 billion CFA francs in 2008, a decline of nearly 55.4 per cent. Moreover, the increase in activity appears to have been mainly due to the significant increase in sales value representing 40 per cent of total global exports in 2008 against only 9 per cent in 2007. Eighty-four per cent of company sales were absorbed by China, a leading buyer of Gabonese timber. Conversely, declining exports of Okoume in the European market led to a decline of over 30 per cent. We also note that many timber companies have experienced cancellations of their orders and falling exports.

Impact on State Incomes: The Case of Gabon

State revenues were affected by the crisis through lower export taxes. In Gabon, the decline of log exports led to a decline in tariffs and export taxes from 29.53 billion CFA francs in 2008 against 33.02 billion CFA Francs in 2007, representing a decrease of 10.6 per cent.

Impact on Jobs

Congo

In Congo, the forestry sector, the second largest export and job creation sector (with nearly 9,000 direct and indirect jobs created) was, over a period of about eight months, one of the hardest hit by the global financial crisis. The implications of this were manifested by the collapse of businesses, the significant drop in foreign capital and job losses estimated at nearly 50 per cent of the 9,000 jobs created. In addition, some workers were laid off in all forestry companies (Kitina 2009:4). This situation was much more noticeable in companies located in the northern part of the country. Similarly, one recorded a freezing order in the main markets. Employment deletions and other leave techniques were recorded in the logging companies, such as Mokabi, IFO, LTBI, Likouala Timber, and Thanry Congo. According to Donatien Nzaba, Executive Director of the Forest Economy, 200 jobs within were suspended the Forest Industry of Ouesso (IFO) company.

Cameroon

The downturn resulted in technical unemployment for more than 1,500 people and 762 layoffs. In early 2009, 2,000 job losses were expected. GFBC companies represented 20,000 direct and indirect jobs. Eba'a Atyietal (2009: 25) reported that this crisis laid off 1,000 people and resulted in the sacking of 3,500 people in Cameroon. Similarly, there was a reduction of working time in nearly three certified forestry companies.

Gabon

In Gabon, logging camps of Corawood Gabon drew up a job-cuts plan which saw the departure of 86 employees. With an initial strength of 150 employees, Corawood Gabon today has only 64 workers, an estimated job cut of 26 per cent of all employees. However, the manager promised to rehire 36 people in recovery activities, to work with a reported average of 90 employees (Gaboneco 2009).

Regarding the Forestry Society of Industrial Koulamoutou (SFIK), the drop in demand has also affected the entire chain of production and the company now employs eight workers. In addition, the company conducted a

redundancy of nine workers after offloading about 50 workers whose fixed-term contracts had expired. Today nearly 60 workers on permanent contracts are still laid off pending the resumption of activities. Moreover, the operations manager, Jerome Lauhiengiyii, notified that some strategies are not able to improve the situation of the likes of Harvest Bonuscompany and Operations Gabonese Timber (EGG), which have already filed for bankruptcy.

Measures Taken Against the Crisis

Company Responses

Faced with the crisis, forestry companies have taken a number of measures. Moreover, these measures are different from group to group, according to the market share held by these companies. Thus, the Rougier Group (French group) operating in Congo, Cameroon and Gabon advocates for the concentration of activities on sites deemed critical. This strategy is also applied by the Chinese group Vicwood (Eba'a Atyi et al 2009). Locally, the Congolese companies require a reduction of the fiscal taxes.

Policy Implications

According to Uzunidis and Yacoub (2008, 2009), contemporary economic theory justifies the revival of the role of the state. The merits of economic policy based on the existence of the so-called market failures must be the compensated by intervention of the state. Moreover, Yacoub (2008, 2009) points out that institutional inefficiencies, structural, production, distribution, financial, etc, all represent failures of markets that legitimate measures aimed at public administration with a view to ensuring effective functioning of the productive system and promoting its integration into the global economy, according to the challenges of development. In the face of the international financial crisis, the implementation of some measures was deemed urgent in order to mitigate the vulnerability of the key sectors to external shocks. In this regard, the next section presents the measures of the various governments concerned and discusses their scope and limits.

Measures Taken by Each Country

Congo

Some measures were been taken by the government to address the crisis in the timber sector. These measures involved, in particular, temporary increase in log export quota; suspension of completion of collective agreements; the suspension of advance payments of stumpage fees; and a reduction of 5 per cent VAT on imported petroleum products.

Cameroon

We recall that the policy of the forest sector in Cameroon is considered as one of the most advanced in the Congo Basin (Carret 2000; Karsenty 2006). This is the first country that produced and implemented a coherent forest code in the sub-region, immediately after the World Summit on Sustainable Development held in Rio de Janeiro (Brazil) in 1992. Sector policies related to biodiversity conservation and sustainable development in Cameroon mainly include the forests and wildlife regime. Following the crisis, and to protect its industry, the government at a meeting of CEMAC held in Douala in March 2009 (Eba'aAtyietal 2009) took some decisions involving the removal of the bank guarantee; the removal of a tax clearance prior to export; reduction of the FRG by 50 per cent; less than 15 per cent mercurial; and, the revision of the lists of species whose logs are allowed to be exported.

Gahon

Compared to Congo and Cameroon which took a set of measures, Gabon has focused on reducing mercurial. These measures advocated a reduction of almost 30 per cent for all species (Richard et al; Eba'a Atyi et al 2009).

Discussion of These Measures

The various measures taken by governments have a number of limitations. While these measures may be effective in the short term, it should be noted that these will be limited if demand on the international market continues to decline. Similarly, at the level of business activities, these measures do not guarantee financial support from governments.

At the Level of Demand

It is difficult to implement support measures regardless of demand. Indeed, regarding the weakness of domestic demand in these countries, the measures taken at the state level are limited due to the decline in global demand. Moreover, if these measures can produce effects in the short-term, in long term they will not produce conclusive results if major customers are not aware of sustained growth of their economies. However, Congo, Cameroon and Gabon would gain by strengthening relations with China.

Regarding domestic demand, it should be noted that over 90 per cent of total production of industrial round wood in developing countries is used onsite. Yet, neither governments nor corporations that process and market forest products in these countries generally pay this the attention it deserves. One of the major reasons for their lack of interest is that in many countries, the domestic market is dwarfed by the export market. There are several

explanations for this, including the fact that in many countries, forest products are an extremely important source of foreign exchange. Furthermore, the largest scale and more concentrated export activities make them more visible, so it is easier for governments to deal with. Often, the value of forest products in the national economy is significantly undervalued, hence the little attention from governments. However, the crisis is a reminder that policies should focus on domestic demand.

The Business Activities

The absence of direct measures to support forestry companies will exacerbate disruption both upstream then downstream. Thus, the entire industry is going to experience disruptions throughout the crisis. Similarly, the expected effects are likely to get worse because the crisis requires deep reforms within enterprises and the pursuit of measures whose performance can adapt to market conditions. Moreover, given the collapse of the banking system, the different groups and companies need to ensure continued funding of their activities. However, for financial institutions, guarantees of these groups can only come from demand in the timber market. But if the demand remains weak, the removal of bank guarantees advocated for example in Cameroon will not benefit all companies, but only a limited number.

Level of Employment

In the three countries, the timber sector represents the second largest provider of jobs. However, it is clear that the intervention levels of these countries do not include measures to mitigate job cuts recorded in the sector since then. Indeed, unemployment is a major handicap for these countries, with nearly half the populations already living below the poverty line. Moreover, lack of employment support is also an impediment to development in areas where commercial activities are supported by employees of forest enterprises (such as the case of the employees of Congolese Industrial Wood in the north of Congo Brazzaville).

Conclusion and Recommendations

Congo, Cameroon and Gabon are oil exporting countries experiencing poor economic performancedue to the effects of the current crisis characterized by falling exports, falling market prices and global demand. Moreover, a weak non-oil sector and the limited diversification of their economies make them more vulnerable to external shocks. Thus, the timber sectors in the three countries experienced the full effects of the crisisas demonstrated in this study.

These countries decreased their exports between 2007 and 2008 which was manifested by lower prices of logs and sawn wood, tax revenue and job losses in companies operating in the sector. Moreover, the measures taken by various governments also face some limitations. Some difficulties exist and governments will implement other measures to mitigate the effects of the crisis. Nevertheless, despite these difficulties, the revival of the Chinese economy would bring an established chain of hope in these countries since Chinaimports nearly half of the timber exports of the Central African countries.

In view of the foregoing discussion, we are making the following recommendations.

At the state level, it is important that governments should promote policies that that will build regional integration within the sub-region to develop a sub-regional market for the timber industry. Similarly, they should stimulate domestic demand through lower prices to stabilize production costs so as to sustain major construction needs. The reduction of forest taxes would also allow domestic enterprises, especially SMEs, to cope with the effects of the crisis. Moreover, the creation of a framework between the government and private companies would contribute to limiting the negative effects of unemployment in the localities in which forestry companies are located.

Thus, in terms of budget surpluses recorded by the Congo, for example, the support given to the timber industry should be through grants to local operators considered most effective; and renewed focus should be more sensitive to the communities whose jobs represent a significant percentage of the national workforce. At this stage, fiscal policy should focus on vulnerable sectors of the economy through a stimulus plan.

References

AfDB, 2009, Perspectives Economiques en Afrique, Paris: African Development Bank.

AGP, 2009, Gabon-économie-bois: La SNBG affiche un chiffre d'affaires en hausse en 2008, Libreville: AGPGABON.

BAfD, 2008, Etude sur la diversification des sources de la croissance économique, Libreville: African Developement Bank.

Balchin, N., 2009, "The Impact of the Global Financial Crisis in Africa', *Africa growth Agenda*, Available at: http://www.mthente.co.za/resources/mthente-in-the-news/The%20Impact%20of%20the%20Global%20Financial%20Crisis%20in%20Africa%20-%20Neil%20Balchin.pdf.

Brinkman H.-J., Bauer, J.-M., and Casely-Hayford, L., 2010, Assessing the Impacts of the Glob- al Economic and Financial Crisis on Vulnerable Households in Ghana: A sequel, Accra: WFP. Carret, J.-C., 2000, 'La réforme de la fiscalité forestière au Cameroun: Débat, politique Etanalyse économique', Yaoundé: Bois et Forêts des Tropiques, pp. 37–51.

- CEA, 2009, La crise financière mondiale: son impact sur l'Afrique, les mesures et la voie à suivre, Cairo: ECA.
- Chevalier, J., F., 2008, Les forêts du Gabon, Libreville: Ambassade de France.
- Devarajan, Sh., 2009, La crise économique mondiale: quels impacts sur l'Afrique subsaharienne?, Paris: IFRI.
- Eba'aAtyi R., Cerutti P. Lescuyer G., Carlos de Wasseige, Bayol N., and Karsenty A., 2009, Crise financière et secteur forestier en Afrique centrale, Yaoundé: OFAC/FORAF.
- FMI, 2008, Etudes économiques et financières, perspectives économiques régionales: Afrique subsaharienne, Washington DC: IMF.
- Gaboneco, 2009, *Gabon: la filière bois licencie*, Available at : http://gaboneco.com/show_article.php? IDActu=11953.
- Gicam, 2009, Impact de la crise financière et économique sur le Cameroun, les propositions du Gicam Available at: http://www.legicam.org/ index2.php?option=com _docman&task=doc_view&gid=168&Itemid=92.
- ILO, 2009, A Rapid Impact Assessment of the Global Economic Crisis on Liberia, Monrovia: International Labour Organization.
- Karsenty, A., 2006, 'L'impact des réformes dans le secteur forestier en Afrique Centrale', Dans Nasi, R., Nguingiri, J. C. and Ezzine de Blas, D., eds, Paris: *L'Harmattan*, pp. 25-60.
- Kiptoo, K. C., 2009, 'The Potential Impacts of the Global Financial Crisis on African Economies', *Tygervalle: Africagrowth Agenda*, pp. 14–18.
- Kitina, G., G., 2009, 'Secteur forestier congolais: la crise financière cause la pèrte de plus d'un millier d'emplois', Brazzaville: Les Dépêches de Brazzaville. N°726, p.4.
- Krugman, P., 2009, The Return of Depression Economics and the Crisis of 2008, New York: W.W. Norton & Company.
- Langbour, P., Jean Gérard, 2007, La transformation plus poussée en Afrique centrale, Yaoundé: CIRAD/OIBT.
- Massa I., TeVelde D.W., 2008, 'The Global Financial Crisis: Will Successful African Countries be Affected? Background Note', ODI. Available at http://www.odi. org. uk/sites/odi.org.uk/files/odi-assets/publications-opinion-files/3486.
- Mayaux, P., Bartholome, E., Fritz, S., Belward, A., 2004, 'A New Land Cover Map of Africa for the Year 2000', *Journal of Biogeography*, 33 (6): 861–77.
- MEFEPPN FORAF, 2008, Fiche de collecte des données pour le suivi de l'état des Forêts d'Afrique Centrale, Niveau national Gabon, Projet FORAF, Kinshasa, Libreville: MEFEPPN.
- Mission économique française, 2007, La filière bois au Gabon, Libreville: Ambassade de France.
- Mouly B., 2009, Plus de 70 milliards gelés en Afrique. Available at : http://www.jeu-neafrique.com/Article/ARTJAJA2532p082-083.xml0/-investissement projet- crise-economique-multinationale-Plus-de-70-milliards-de-dollars-geles-en-Af- rique.html.
- Ndzi A., N., 2008, Le secteur forestier congolais victime de la crise financière internationale. Available at: http://www.congo-site.com/Le-secteur-forestier-congolais-victime- de-la-crise-financiere-internationale_a2106.html.
- NgolleNgolle E., 2009, Foresterie: les potentialités et opportunités d'investissement dans le secteur forestier, Yaoundé: Cameroon Investment Forum.

- Ngowi, H. P., 2006, International Trade Finance: A Handbook for Students, Morogoro: Mzumbe Book Project.
- Ngowi, H. P., 2009a, The Impact of the Crisis on Employment and Official Development Assistance, Dar es Salaam: ILO.
- Ngowi, H. P., 2009b, *The Current Global Financial Crisis: Its Impacts and Solutions in Tanzania*, Dar Es Salaam: IFM.
- Ngowi, H. P., 2009c, The Earth in the World of Global Financial Crisis: Is the Crisis Good or Bad for the Environment? Some Opportunities and Challenges, Dar es Salaam: US Embassy.
- Ngowi, H. P., 2009d, Can the Budget Offer Recovery?, in The Business Partner, Issue 3.
- Ngowi, H. P., 2009e, *The Global Financial Crisis and its Impacts on Investment in Human Capital*, Arusha: CAPAM.
- PNUD/UNDP, 2007, Rapport mondial sur le développement humain 2007/2008, New York: Programme des Nations Unies pour le Développement/UNDP.
- NUD/UNDP, 2009, 'L'impact de la crise financière et économique sur les économies africaines: le cas du Sénégal', Dakar: Programme des Nations Unies pour le Développement/UNDP.
- Rougier, 2009, Rapport financier annuel 2008, Available at: http://www.rougier.fr/uploads/media/Communique_du_30_04_2009.pdf.
- SANA CONGO, 2010, Analyse et estimation des besoins et environnement dans le cadre de la mise en œuvre de la déclaration de Libreville: République du Congo.
- Sandouly, P., Labey, A., 2009, 'Panique dans la filière bois', *Jeune Afrique*, Paris, Available: http://www.jeuneafrique.com/Article/ARTJAJA2518p074.xml0/crise-economique-bois-sylviculture-chiffre-d-affairespanique-dans-la-filiere-bois.html.
- Tassé E., Nforgang Ch., 2008, La crise financière abat le bois Africain: cas du Cameroun, Bruxelles: InfoSud Belgique Agence.
- Thies, D. F., Beligné, V., 2007, *Note de synthèse économique du secteur forestier au Cameroun*, Yaoundé: Coopération Française.
- UBIFRANCE, 2008, La filière bois en Afrique centrale, fiche de synthèse, Yaoundé: Ambassade de France.
- UNECE/FAO, 2009a, Annual Market Review 2008-2009, Geneva Timber and Forest Study, Geneva: United Nations.
- UNECE/FAO, 2009b, *The forest sector in the green economy*, Timber and Forest Discussion Paper N°54, Geneva: United Nations.
- Uzunidis, D., Yacoub, L., 2008, Le développement dans la mondialisation: crise de gouvernance mondiale et retour de l'Etat, Paris: Recherches internationales, n°84, octobre-décembre, pp.105–31.
- Uzunidis, D., Yacoub, L., 2009, 'La Gouvernance de l'économie mondiale et le renouveau des politiques économiques actives dans les pays en développement, in S. Callens, D. Uzunidis', eds, *Gouvenance, Exercices de pouvoir*, Paris: Marché et Organisations, n°9. pp. 203–43.
- Valbois, 2009, Crise mondiale de la filière bois: bilan et perspectives, Libramont: Foire Agricole et Forestière de Libramont.
- Wakeman-Linn, J., Portillo, R., Iossifov, P., and Milkov, D., 2009, The International Financial Crisis and Global Recession: Impact on the CEMAC Region and Policy Considerations, Washington DC: International Monetary Fund.

- WWF-France, 2007, La responsabilité particulière de la France dans l'exploitation et la préservation des forêts tropicales du Bassin du Congo, Paris: Dossier de presse.
- Yacoub, L., 2008, 'Légitimité de la fiscalité de la politique industrielle dans le contexte de la mondialisation: cas de la Tunisie', Thèse de Doctorat en sciences économiques, Tunis: Université de Tunis El Manar.
- Yacoub, L., 2009, *La politique économique dans la mondialisation: de la récusation au renouveau*, Tunis: Laboratoire de Recherche sur l'Industrie et l'Innovation.

