

EY global forest products,
paper and packaging report 2013

Reaching out

Opportunities in the new
rapid-growth markets



Building a better
working world



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Introduction

The past difficult and turbulent years, due to the financial crisis, have caused fundamental shifts in the world economy. The developed economies have been in crisis while the rapid-growth markets - or RGMs - have fueled the world economy. This has led to a shift in economic power to the RGMs and this process is expected to continue.

There are signs that the crisis in the developed economies is gradually easing and this will lead to more positive prospects for growth, employment, investments and trade. This report is based on the research jointly carried out by EY and Oxford Economics - covering 25 RGMs. What are the implications and opportunities of the global shift for the forest products, paper and packaging (FP&PP) industry?

We have selected the seven most interesting RGMs from the FP&PP industry perspective - Mexico, Colombia, South Africa, Turkey, Thailand, Vietnam and Indonesia. We have not included the BRICs - Brazil, Russia, India and China - because these markets are already widely researched, and many FP&PP companies have already established a presence there. And in some cases, companies have rejected a "BRIC investment" for various reasons and decided to look for growth elsewhere. The above-mentioned seven countries, however, are not well-known and they all offer interesting opportunities for the industry.

In this report, we present the key economic forecasts for the above countries as well as an overview and assessment of each country's attractiveness - from the point of view of the international and local paper industries. There are risks and rewards, of course - but unless companies act quickly, the best opportunities will be used by the competition.

I sincerely thank all contributors and I hope you will find this latest thought leadership report insightful. For more detailed information regarding all the 25 RGMs, please visit www.ey.com/rapidgrowth or contact our FP&PP professionals.

A handwritten signature in black ink, appearing to read 'T. Uronen', with a stylized flourish at the end.

Timo Uronen

Global Leader

Forest products, paper and packaging

World economy and the rapid-growth markets

The shifts in world economic balance started much earlier than the financial crisis of 2008. The very rapid growth of China and India - far exceeding the economic growth of the developed economies - had already begun during the 1990s. However, it is clear that the continuing crisis in the developed economies has accelerated this shift and the rapid-growth markets (RGMs) are now the main drivers of global growth.

The troubles in the Western economies are certainly far from over. In particular, the Euro crisis and the political stalemate in the United States regarding budget deficits continue to be sources of concern and uncertainty. Economic growth is sluggish at best during 2013 and unemployment rates are forecast to remain high for several years. These issues remain the biggest risks for the global economy.

Also the prospect of reduced quantitative easing by the United States and other countries has for the short-term weakened the currencies and growth prospects of many RGMs for 2013.

However, our joint analysis with Oxford Economics (*EY Rapid-Growth Markets Forecast*, July 2013) suggests that, gradually, the worst is over in the Western economies and a slow recovery is on the way. Stronger private consumer confidence and spending in the United States will offset the fiscal austerity measures, and this would support an eventual recovery. Another positive sign for boosting economic growth both in the US and Europe is the start-up of the transatlantic free-trade negotiations in July 2013. And the developed economies will also benefit from the growing exports to the RGMs.





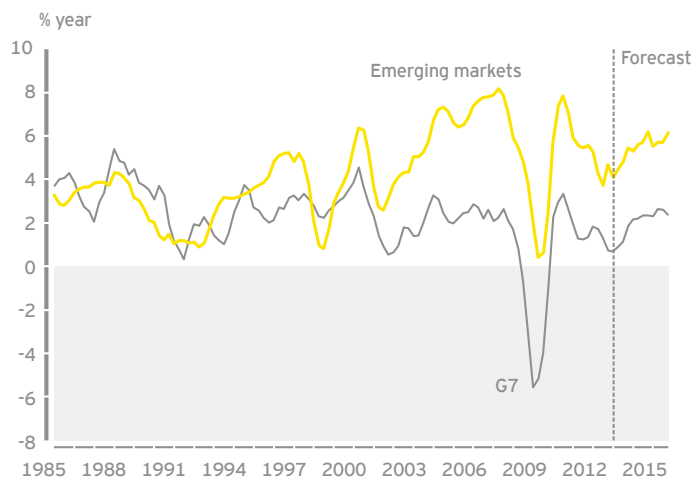
Despite the above cautiously positive signs of slow recovery in the developed economies, RGMs will take the lion's share of global growth. Figure 1 shows the forecast GDP development of the G7 countries and the emerging markets. Growth in the RGMs is forecast to grow from 4.7% in 2012 to 6.0% in 2015 (Oxford Economics).

Over the long term, the RGMs are forecast to become the dominant force in global trade. As shown in Figure 2, by 2036, RGMs are forecast to contribute 20% of global GDP, whereas the advanced economies share would decline from the current 12% to just 10%. Trade will be increasingly focused around Asia, Middle East and Africa, and it seems likely that the proliferation of free-trade agreements will continue, thus decreasing trade barriers further. All of this is beneficial to global growth.

Growth in the RGMs is forecast to grow from 4.7% in 2012 to 6.0% in 2015.

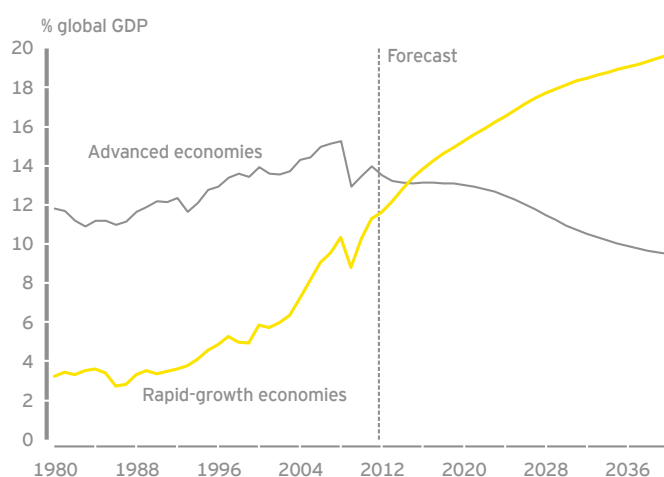
(Oxford Economics)

Figure 1
G7 and the emerging markets



Source: Oxford Economics

Figure 2
Exports as a percentage of world GDP



Source: Oxford Economics

**It is estimated
that, over the next
two decades,
another three billion
people will enter
the middle class.**



The main reasons for the impressive development of the RGMs vary country by country – after all, each country is unique in many aspects. But some reasons that apply to most RGMs are local deregulation, low costs, abundant natural assets in many cases, favorable population trends and lower trade barriers, which all have spurred growth and attracted foreign investment.

For instance, sub-Saharan Africa has benefited greatly from demand for commodities, especially from China, but it is also in the process of tighter economic integration and reduced difficulties of doing business. As a consequence, the region now has three RGMs – South Africa, Ghana and Nigeria – with forecast GDP growth until 2016 ranging between 4.0% and 6.5% per annum.

Population trends and demographics play a key role in the RGMs future development. This applies especially to the growth of the middle class. As a result of the remarkable growth of the RGMs, hundreds of millions of people have been drawn out of abject poverty over the past two decades. This trend is now expected to accelerate, and it is estimated that, over the next two decades, another three billion people will enter the middle class (Source: EY, *Innovating for the next three billion*, 2011).

But there are various definitions of “middle class.” The World Bank uses a measure of a daily income between US\$2 and US\$13 as a definition of middle class, bearing in mind purchasing parity power. While this definition is certainly useful for the purposes of defining poverty levels, it is not very useful for Chinese or Indian car manufacturers or producers of Western durable consumer goods for example.

A more useful definition from a business viewpoint is a daily income level between US\$10 and US\$100. By this definition, a sobering 70% of the global population is currently poor and earn less than US\$10 per day. However, this is forecast to change dramatically over the next 20 years. Table 1 illustrates the development by region.

Table 1
The middle class: size and distribution

	2009		2020		2030	
North America	338	18%	333	10%	322	7%
Europe	664	36%	703	22%	680	14%
Central and South America	181	10%	251	8%	313	6%
Asia Pacific	525	28%	1,740	54%	3,228	66%
Sub-Saharan Africa	32	2%	57	2%	107	2%
Middle East and North Africa	105	6%	165	5%	234	5%
World	1,845	100%	3,249	100%	4,884	100%

Source: IEMS; Kharas and Gertz, 2010



A photograph of three women in a yoga or fitness studio. They are lying on their backs on mats, with their arms extended straight up towards the ceiling. The woman in the foreground is wearing a white t-shirt and has dark hair. The woman in the middle is wearing a light blue tank top. The woman in the background is wearing a pink tank top. The background is a bright, airy room with large windows and a white lattice railing.

**More and more
RGM companies
are establishing
operations and
acquiring businesses
in the West.**



State of the global pulp and paper industry

It is hardly news to any stakeholder of the paper industry that it has been undergoing a dramatic transformation process for several years. The industry has been extensively closing down excess capacity and reducing costs, resulting in thousands of job losses. Rapidly growing digital media has reduced demand for many printing paper grades, especially newsprint. The financial performance of most companies has not met investor expectations, except for brief periods of time.

While the developed economies have been in crisis, the RGMs have continued to grow and invest – especially China. This has led to an interesting triangular situation: the developed economies still retain the technological edge. Fiber, on the other hand, is increasingly sourced from Latin America (and also Southeast Asia) and the growth markets are in the Far East.

Global demand is expected to grow, but China will take the biggest share of the growth. A crucial issue for the industry and individual companies is, how to take advantage of the situation while mitigating the risks involved.

Figure 4

The different regional development phases of the paper industry



WESTERN EUROPE

- Maturing market
- Severe restructuring
- Still technology leadership

RUSSIA

- World's largest coniferous forests
- Big investment needs

CHINA

- Strong growth
- Huge investments
- Good infrastructure
- Asset quality rapidly improving

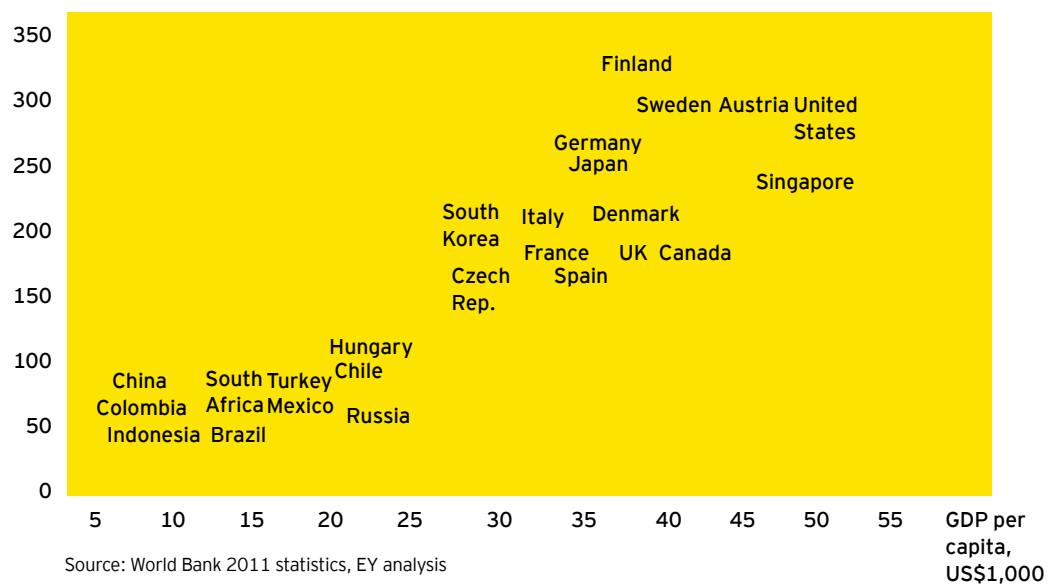
INDIA

- Big market potential
- Poor infrastructure
- Fiber sourcing an issue



Figure 5
The correlation between GDP per capita and paper and board consumption in selected countries

Paper consumption, kg/capita





Western companies that have the required resources and capital are increasingly seeking growth from the RGMs - the primary motivation is access to growing markets, in addition to lower costs. Recently announced moves are:

1. International Paper's acquisition of Andhra Pradesh Paper Mills in India
2. Stora Enso's and Arauco's joint venture to build a pulp mill in Montes del Plata, Uruguay
3. Stora Enso's pulp and paperboard project in Quangxi, China
4. Stora Enso's acquisition of Inpac in Pakistan and China
5. MeadWestvaco's acquisition of Ruby Macons in India
6. SCA's acquisition of tissue mills in China
7. UPM's acquisition of Frey Bentos pulp mill in Uruguay
8. International Paper's acquisition of Temple-Inland, which led to a substantial presence in Mexico

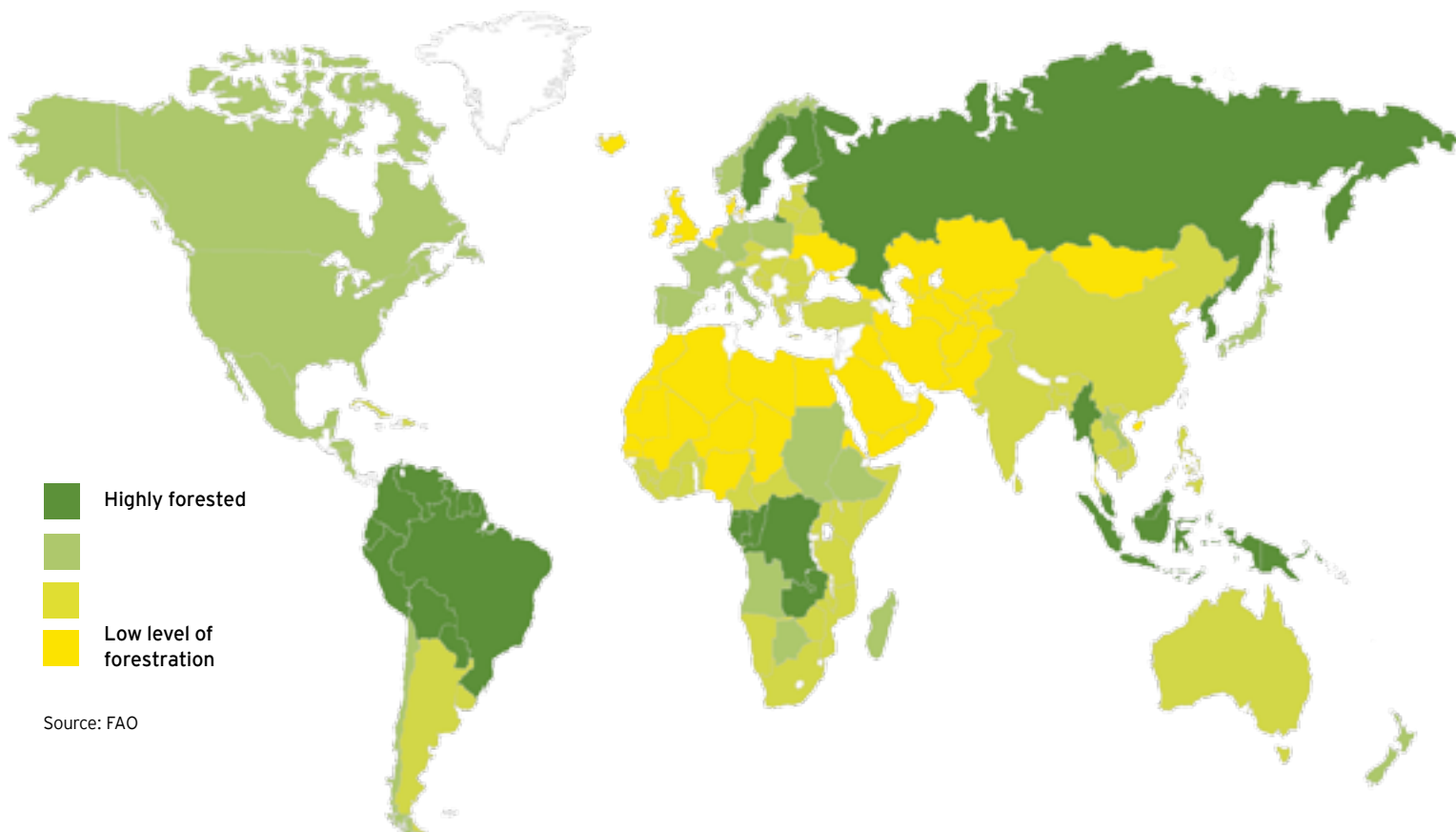
Besides cutting costs extensively and closing down capacity, one of the industry's responses to the crisis has been increased consolidation. For instance, UPM acquired Myllykoski in 2011 and it is now the clear market leader in European magazine

and newsprint. Similarly, RockTenn acquired Smurfit-Stone and International Paper acquired Temple-Inland - both moves led to substantial consolidation of the North American containerboard production. It remains to be seen whether increased consolidation results in improved profitability.

As outlined in the previous sections regarding the world economy, perhaps the worst is over for the developed countries and a slow rebound is expected. Paper and board demand is closely linked to both overall GDP growth and industrial production, and gradual easing of the economic crisis will help the FP&PP industry to recover.

As shown in Figure 5, the correlation between GDP per capita and paper and board consumption per capita has historically been clear, and China and India, for example, still offer a huge growth potential when compared with per capita consumption figures of, for instance, the United States. It is likely that, in the future, this correlation may become weaker (e.g., due to digital media or "greening" of the society), but even then the consumption potential of the BRICs and other RGMs is likely to be very big.

Figure 6:
World's forest resources



Besides market potential, another crucial consideration for investing in the RGMs - whether local producers or international - is availability of fiber. Access to reliable deliveries of either virgin or recycled fiber is often one of the starting points when evaluating if a particular investment or acquisition is viable. Figure 6 shows the regional distribution of world's forest resources.

Figure 6 shows only the regional overview and not the actual availability of forests for pulp and paper. For instance, Russia has the biggest coniferous forest resources in the world, but these are, to a large extent, inaccessible due to poor infrastructure and unclear forest ownership rules.

A large part of the forests in the equatorial area are rainforests, which are not suitable for pulp or paper production. They contain hundreds of wood species, most of which cannot be productively used, and rainforests are therefore not an economically viable source of fiber. Despite this, a common accusation in the media by different environmental groups against the paper industry is that it is "destroying the rainforests."

Although all large-scale production has environmental impacts, depletion of rainforests is mainly due to agricultural reasons and illegal logging for building and furniture products. The pulp and paper industry in tropical and sub-tropical regions is based on plantation wood and recycled fiber.

The debate on rainforests is just one indication of why sustainability issues need to be taken very seriously by all companies operating in the RGMs or considering entry. Sustainable forestry, land ownership and the use of land for competing purposes such as food production are all very contentious issues, especially in the RGMs.



A permanent shift has taken place in the global economy and the paper industry is likely to invest increasingly in the RGMs - not only the BRICs but also some other smaller, but still attractive markets. Most of the big players, as well as smaller ones, in the industry have already extensively studied the BRICs. They have either decided to stay out and seek fortunes elsewhere or establish operations there and invest. The reasons for staying out of the BRICs vary company to company, but some likely ones include:

- ▶ Insufficient resources for establishing a significant and long-term presence in the BRICs - for instance, building a greenfield pulp mill in Brazil or Russia.
- ▶ Building a presence in these markets typically takes a long time. The Western companies that have operations in for instance China have gradually expanded for 10-20 years. Currently the share of Chinese operations is below 5% of turnover for the biggest industry players.
- ▶ Lack of attractive assets for sale in the BRICs.
- ▶ Reliable access to required fiber sources are limited - whether virgin or recycled fiber.

Despite the challenges mentioned above, for many companies - especially the ones that already have established operations - the BRICs continue to be very attractive and most companies will continue to invest there. These markets and economic importance are simply so big. However, in addition to the BRICs, there are other attractive pockets of growth that generate increasing interest.

The BRICs continue to be very attractive and most companies will continue to invest there. But also other RMG's are generating more and more interest.



Selected RGMs and their pulp and paper industry

In the following sections, we present the overall economic development of each of the selected RGM and key figures, as well as the market and structure of the local pulp and paper industry.

Methodology

How did we select the 7 countries from a total of 25 rapid-growth markets? The key criteria were:

- Long-term growth prospects
- Sizable domestic market
- Big and growing population
- Significant forest resources
- Relative stability of the local government
- Proximity to bigger markets
- Local pulp and paper industry structure



Although we did not use any weighted scoring system, the emphasis was on long-term growth prospects, size of the local market for different paper and packaging grades, proximity to bigger markets and the local industry structure. Another aspect of the selection process was focus - we felt that seven countries out of 25 is sufficient and makes our findings more relevant to senior management.

The attractiveness of each country depends on the individual companies' strategy and business focus. We did not carry out any further ranking between the selected seven. The main source for the macroeconomic forecasts and analysis is Oxford Economics, one of the world's leading providers of economic analysis, advice and models, based in Oxford, UK.

Other RGMs also offer opportunities. For instance, StoraEnso & Arauco and UPM have recently invested in two world-class pulp mills in Uruguay. Some companies are also considering investing in Mozambique and Papua New-Guinea. But these countries do not yet qualify as "RGMs" due to more modest economic growth prospects.



- ▶ Real GDP growth per year between 2.8% and 4.8% during 2013 and 2016
- ▶ A growing population of 118 million people and a sizable market
- ▶ Proximity to United States – world's biggest paper and packaging market
- ▶ Mexico has some 60 pulp and paper mills, mainly focused on packaging and tissue
- ▶ Current paper and board per capita consumption 61.6kg – only 25% of US level

Mexico

A rapid growth economy and a major market

Mexico's economy is projected to grow significantly over the next four years. This is due to recent and planned reforms of the labor market and taxation, the opening up of sectors such as telecommunications and oil industries, as well as the slowly improving US economy. Table 2 shows the key macroeconomic indicators of Mexico between 2011 and 2016.

Mexico has a sizable paper and packaging industry and a big domestic market. Its attractiveness is also augmented by proximity to the United States and, due to these factors, a number of multinational paper companies have established operations there – namely International Paper, Kimberly-Clark, Smurfit Kappa, CMPC and SCA. The biggest local producers are Grupo Durango and Copamex.



Table 2
Key economic figures for Mexico

	2011	2012	2013	2014	2015	2016
Real GDP growth (% per year)	3.9	3.9	2.8	4.8	4.5	4.3
CPI inflation (% per year)	3.4	4.1	4.0	3.6	3.4	3.2
Current account balance (% of GDP)	-0.9	-1.0	-1.2	-1.1	-0.9	-1.0
External debt total (% of GDP)	23.4	25.1	23.5	22.7	22.4	22.2
Short-term interest rate (%)	4.4	4.4	4.0	4.2	4.9	5.3
Exchange per US\$ (year average)	12.4	13.2	12.5	12.6	12.9	13.2
Government balance (% of GDP)	-1.9	-2.2	-2.2	-2.4	-2.5	-2.5
Population (millions)	115.0	116.3	117.6	118.9	120.2	121.4
Nominal GDP (US\$b)	1,160.3	1,177.6	1,311.8	1,409.8	1,485.7	1,560.2
GDP per capita (US\$ current prices)	10,094.2	10,125.0	11,151.0	11,852.2	12,359.3	12,847.2

Source: Oxford Economics



Although Mexico’s paper production is largely based on recycled fiber – of which it has ample potential due to a large population and huge cities such as Mexico City, it also has significant forest reserves. According to FAO statistics, in 2011, 33.3% of the land is forested (not including trees in agricultural production or recreational use).

Total forest resources are 196 million hectares, most of which is naturally grown forest. Actual availability would obviously require more detailed data per species, growth yields and location, but the total forested area is substantial and much of it is intended for commercial use.

Mexico’s paper and board demand and supply per grade in 2011 is shown in Table 3.

As can be seen from Table 3, Mexico, is despite its substantial domestic production, to a large extent dependent on imports and fiber is mostly sourced from recycled paper. Considering also that Mexico has significant forest lands, fiber sourcing should not be an overwhelming obstacle for expanding capacity. Domestic production and logistic costs are likely to be more competitive than imports, so it is not inconceivable that increased domestic production of, for instance, high-quality cartonboard could displace part of the imports in the future.

Table 3 Mexico's demand and supply in 2011				
1,000 tons	Production	Imports	Exports	Apparent consumption
Total paper and board	4,701	2,686	308	7,079
Newsprint	251	165	0	416
Printing and writing	607	731	24	1,315
Containerboard	2,106	895	5	2,997
Cartonboard	460	408	60	808
Tissue	1,015	83	141	957
Wood pulp	159	817	0	976
Recovered paper	3,736	1,449	437	4,748

Source: RISI 2012



The main players of the Mexican pulp and paper industry and their main production facilities are shown in Map 1.

It should be emphasized that only the biggest production units are presented in Map 1. The biggest domestic producers are Durango and Copamex, but Mexico has already attracted a number of foreign producers as well. Given that Mexico is a big RGM, with a favorable cost base, its proximity to the United States and current high dependence on paper and board imports, other companies should also seriously consider Mexico as one investment destination.

Map 1

Mexico's main paper and board producers in 2011

Company	Owners	Mill	Capacity t/a	Grade
Absormex	CMPC	Altamira	37,000	Tissue
Papelera Atenquique	Durango	Atenquique	135,000	Container-board
Papelera Chihuahua	Copamex	Chihuahua	126,000	Packaging paper
Copamex	-	Monterrey	191,000	Packaging paper
Pondercel	Copamex	Chihuahua	120,000	Industrial
Centauro	Durango	Cuesta el Registro	270,000	Container-board
Titan	Durango	Monterrey	181,000	Container-board
Gondi	-	Guadalajara	200,000	Paperboard
Kimberly-Clark	-	5 mills	674,000	Tissue
Modernos	Gondi	Guadalajara	180,000	Container-board
Procter & Gamble	-	Apizaco	75,000	Tissue
SCA Mexico	SCA	3 mills	165,000	Tissue
Smurfit Carton	Smurfit Kappa	3 mills	461,000	Container-board
Grupo Scribe	40% K-C	5 mills	260,000	Printing and writing

Source: Lockwood Post

- 
- ▶ Real GDP growth forecast between 3.9% and 4.4% during 2013 and 2016
 - ▶ Low inflation rate between 2.4% and 3.3% during 2013 and 2016
 - ▶ Indication that negotiations between government and main guerilla groups will be successful which could attract more foreign investments (US\$13.4b in 2011)
 - ▶ Ample natural resources in mining, energy and forestry
 - ▶ Average per capita consumption of paper and board 32.8kg

Colombia

Given Colombia's recent history and reputation as a haven for drug cartels, it may at first glance seem surprising that we are recommending that paper industry executives take a closer look at it. But the reality is that much has changed in Colombia over the past 10 years.

Peace talks are proceeding with the main remaining guerilla group and most of the country is now stable. Several economic reforms have been implemented by the government in recent years and the country is now enjoying relatively strong growth and good longer-term prospects. Colombia is also currently in the process of negotiating a free-trade agreement with the EU, which is a further sign of change in the country.

The GDP per capita has risen from US\$7,200 in 2011 to US\$7,900 in 2013 (total 10% increase in income), so the ordinary citizens of Colombia are also reaping some of the benefits of stability and growth. With a population of 48 million, Colombia is a sizable market of its own. Table 4 lists the economic indicators of Colombia between 2011 and 2016.

Table 4
Key economic figures for Colombia

	2011	2012	2013	2014	2015	2016
Real GDP growth (% per year)	6.6	4.0	3.9	4.4	4.2	4.0
CPI inflation (% per year)	3.4	3.2	2.1	3.2	3.3	3.3
Current account balance (% of GDP)	-2.8	-3.1	-3.6	-3.6	-3.5	-3.3
External debt total (% of GDP)	22.9	21.5	23.9	26.4	28.8	30.8
Short-term interest rate (%)	4.0	5.0	3.4	4.3	5.5	6.5
Exchange per US\$ (year average)	1,848.1	1,796.9	1,860.2	1,970.8	2,089.6	2,195.0
Government balance (% of GDP)	-2.0	-1.9	-2.2	-1.9	-1.8	-1.7
Population (millions)	46.9	47.5	48.1	48.8	49.4	49.9
Nominal GDP (US\$b)	336.3	369.8	379.0	385.4	391.2	400.1
GDP per capita (US\$ current prices)	7,170.1	7,781.6	7,872.4	7,904.6	7,925.0	8,013.7

Source: Oxford Economics



Despite its past reputation, Colombia is a rapid-growth market with promising future prospects.

Colombia is one of the more forested countries in the world, with roughly 52% of the land area classified as forests (excluding forests in agricultural or recreational use, FAO 2010). Much of this is located in the southeastern part of the country and consists of rain forests not suitable for production, but there are sizable forested areas in other parts of Colombia. Around half of the current production of pulp and paper is based on virgin fiber. Table 5 shows the demand and supply figures for the main paper and board grades for Colombia.

Colombia still has a low per capita consumption rate of paper and board - only 32.8kg per person annually (Source: RISI). Given the historical correlation between GDP and paper and board consumption and the long-term growth prospects, it is likely that Colombia's paper and board market will grow significantly - especially in packaging boards, which are linked to industrial production.

Many of the big international pulp and paper producers have not shied away from the country's past problems - examples

Table 5
Supply and demand figures of Colombia in 2011

1,000 tons	Production	Imports	Exports	Apparent consumption
Total paper and board	1,158	528	201	1,485
Newsprint	0	96	0	96
Printing and writing	320	125	82	364
Containerboard	374	160	15	518
Cartonboard	121	84	5	200
Tissue	252	15	47	220
Wood pulp	229	145	0	374
Recovered paper	609	112	3	719

Source: RISI, 2012



are Kimberly-Clark, SCA, Smurfit-Kappa and Sonoco, that are the dominant players, operating in Colombia for many years. The biggest local producers are Propal, Cartonas Americas and Sancella, which has a joint ownership with SCA of three tissue mills. Map 2 shows the location and capacity of the biggest producers.

Colombia's long-term prospects seem good. It has a sizable population, favorable growth prospects, abundant natural resources and it enjoys relative stability after many years of severe problems. In particular, producers of tissue and packaging boards - whether domestic or foreign - should not overlook the long-term potential that Colombia offers.

Map 2

Colombia's main paper and board producers in 2011

Company	Owners	Capacity t/a	Grade
Smurfit-Kappa	Barranquilla	55,000	Containerboard
Smurfit-Kappa	Yumbo	246,000	Container-board, P/W
Smurfit-Kappa	Antioquia	65,000	Containerboard
Kimberly-Colpapel	Barbosa	30,000	Tissue
Kimberly-Colpapel	Cali	65,000	Tissue pulp
SCA & Sancella	Bogota	35,000	Tissue
SCA & Sancella	Medellin	39,000	Tissue
Propal	Yumbo	118,000	Woodfree uncoated
Propal	Caloto	126,000	Woodfree uncoated
Cartones Americas	Cali	105,000	Containerboard
Papeles Nacional	Pereira	71,000	Tissue
Sonoco Colombia	Cali	18,000	Industrial board

Source: Lockwood Post

- 
- ▶ Most developed economy in sub-Saharan Africa and with favorable growth forecasts
 - ▶ Sizable market with a population of 51 million people
 - ▶ Abundant natural resources, especially in mining
 - ▶ A major player in the global pulp and paper industry
 - ▶ Per capita consumption of paper and board surprisingly low – only 47.7 kg annually

South Africa

Rebounding to growth

South Africa remains the economic powerhouse of the continent. Recent labor unrest especially in the mining sector and slowdown of the global economy has slowed the pace of growth in 2012 and 2013, but during 2014 South Africa is forecast to return to a period of GDP growth in excess of 4.0% during 2015. The vital statistics of the South African economy are shown in Table 6.



Table 6

Key economic figures for South Africa

	2011	2012	2013	2014	2015	2016
Real GDP growth (% per year)	3.5	2.5	2.0	3.6	4.0	4.4
CPI inflation (% per year)	5.0	5.7	6.0	5.5	4.9	4.8
Current account balance (% of GDP)	-3.4	-6.3	-6.5	-5.7	-5.1	-4.6
External debt total (% of GDP)	27.2	33.0	41.0	41.3	40.3	38.4
Short-term interest rate (%)	5.6	5.4	5.2	5.7	6.4	7.2
Exchange per US\$ (year average)	7.3	8.2	9.5	9.3	9.1	8.9
Government balance (% of GDP)	-4.2	-4.7	-4.4	-4.0	-3.6	-3.3
Population (millions)	50.5	50.8	51.0	51.2	51.5	51.7
Nominal GDP (US\$b)	403.1	384.9	365.9	408.5	456.7	511.8
GDP per capita (US\$ current prices)	7,982.7	7,582.2	7,173.4	7,975.1	8,874.3	9,899.2

Source: Oxford Economics

A photograph of a classroom scene. In the foreground, a student with dark skin, wearing a purple sweater with a white and blue checkered collar, is seen from the back, raising their right hand high. In the background, other students are seated at wooden desks, and a chalkboard with some writing is visible. A yellow text box is overlaid on the left side of the image.

**South Africa is
the most developed
economy in sub-
Saharan Africa and
favorable growth
forecasts.**

Table 7
Supply and demand figures for South Africa in 2011

1,000 tons	Production	Imports	Exports	Apparent consumption
Total paper and board	2,233	659	564	2,328
Newsprint	317	14	56	275
Printing and writing	474	332	174	632
Containerboard	998	45	285	758
Cartonboard	28	156	20	164
Tissue	219	19	8	230
Wood pulp	1,502	49	159	1,392
Recovered paper	995	8	73	930

Source: RISI, 2012

Although South Africa has a relatively low share of forested land - only 7.6% or 34 million hectares - it supports a sizable local pulp and paper industry. The supply and demand figures for South Africa are shown in Table 7.

Considering that South Africa is a relatively developed country, its paper and board consumption figure of 47,7kg is surprisingly low - below that of Mexico, for instance. This indicates that there is market potential for future growth.

South Africa's pulp and paper industry is clearly dominated by three players - Sappi, Mondi and Nampak. All of these also have substantial capacity abroad - especially Sappi and Mondi, which are among the industry's top 20 global producers. Map 3 shows the main production facilities, capacities and location.

South Africa's available virgin fiber from its own forests is already, to a large extent, used by domestic production. Although it is likely that the overall long-term market development will support an expanding capacity, this would need to be based on recycled fiber. For instance, as shown in Table 7, South Africa is completely dependent on imports of cartonboard, and a major part of cartonboard production is based on recycled fiber.

Given the highly concentrated structure of the local industry, it does not seem likely that bigger international players would enter the market with any major investments - with the exception of converting and other smaller-scale operations. Possible future capacity expansion would most likely be carried out by the existing domestic players. The South African paper industry is already a major international producer with significant capacity in Europe and North America, and it is likely to focus on expansion in other RGMs and southern Africa rather than its domestic market. This is just one case where investments could increasingly flow from RGMs to developed markets.



Map 3

South Africa's main paper and board producers in 2011

Company	Owners	Mill	Capacity t/a	Grade
Sappi Fine Paper	Sappi	Enstra	200,000	Uncoated woodfree
Sappi Fine Paper	Sappi	Stanger	110,000	Uncoated woodfree tissue
Sappi Kraft	Sappi	Ngodwana	380,000	Container-board Newsprint
Sappi Kraft	Sappi	Tugela	390,000	Container-board
Sappi Saiccor	Sappi	Umkomaas	800,000	Dissolving pulp
Mondi Merebank	Mondi	Merebank	490,000	Uncoated woodfree
Mondi	-	Richard's Bay	490,000 280,000	Market pulp Linerboard
Mondi Shanduka	Mondi	Shanduka	227,000	Newsprint
New Toyo Pulpppy	Mondi	Felixton	155,000	Container-board
Nampak Paper	Nampak	Rosslyn	160,000	Container-board
Nampak Paper	Nampak	2 mills	64,000	Tissue
Kimberly-Clark	-	Enstra	45,000	Tissue

Source: Lockwood Post



- ▶ Strong growth exceeding 5% projected for 2014-16
- ▶ Accession to EU likely in the medium to long term
- ▶ Increased trade and political influence in the Middle East
- ▶ Sizable paper and board industry mostly privately owned
- ▶ Per capita consumption of paper and board is 65.7kg annually

Turkey

Pivotal position between Europe and Middle-East

Turkish economy's growth declined from the high-growth levels exceeding 7%-8% per annum during previous years to a sluggish 2.2% in 2012. This has been the result of the recession in Europe, which is Turkey's biggest trading partner. The impact of the European recession has been gradually offset by increasing trade with the Middle East.

However, there are also risks in the Turkish economy. These mainly have to do with turbulence in the region - especially the civil war in Syria - and also recent social unrest and riots in Turkey.

The country's inflation rate is relatively high and the current account deficit is close to 7%. Provided that these risks are mitigated, the growth prospects for the economy are very good.

With a population of nearly 80 million, growing middle class, relatively good infrastructure and a very advantageous geographic position, Turkey's attractiveness as an investment destination is set to increase. In 2011, foreign direct investment was a sizable US\$16b (Source: Oxford Economics). Turkey's key financial figures are shown in Table 8.



Table 8
Key economic figures for Turkey

	2011	2012	2013	2014	2015	2016
Real GDP growth (% per year)	8.8	2.2	3.5	5.4	5.2	5.2
CPI inflation (% per year)	6.5	8.9	6.6	5.4	5.0	4.6
Current account balance (% of GDP)	-9.7	-6.1	-7.0	-7.2	-6.9	-6.7
External debt total (% of GDP)	39.2	41.5	40.8	39.8	39.0	37.1
Short-term interest rate (%)	8.6	8.7	5.6	7.4	9.4	9.5
Exchange per US\$ (year average)	1.7	1.8	1.8	1.9	2.0	2.0
Government balance (% of GDP)	-1.4	-2.1	-2.1	-1.7	-1.4	-1.3
Population (millions)	73.7	74.6	75.5	76.3	77.1	77.9
Nominal GDP (US\$b)	777.2	790.5	855.2	905.1	954.2	1,034.4
GDP per capita (US\$ current prices)	10,539.4	10,595.2	11,332.9	11,863.4	12,375.5	13,280.4

Source: Oxford Economics

Table 9
Supply and demand figures for 2011

1,000 tons	Production	Imports	Exports	Apparent consumption
Total paper and board	2,848	2,715	328	5,236
Newsprint	0	487	1	486
Printing and writing	322	797	19	1,100
Containerboard	1,394	715	105	2,004
Cartonboard	564	462	55	972
Tissue	462	18	130	350
Wood pulp	57	666	0	733
Recovered paper	2,308	72	120	2,260

Source: RISI 2012

Turkey's sizable pulp and paper industry is mostly based on recycled fiber, as the country's forested area is relatively low - 14.9% of the land is forested (Source: FAO 2012). The supply and demand situation per main product groups is depicted in Table 9.

As can be seen from Table 9, Turkey's market is big - over 5.2 million tons. It is also highly dependent on imports and recycled fiber. This would indicate that there is still potential for expansion to reduce dependence on exports.

Turkey's paper and board industry is still largely family owned. The only international producer so far is Mondi. Map 4 shows the main producers and their mill locations.

It seems that Turkey represents a very interesting investment opportunity both for the domestic, family-owned companies as well as the bigger international firms. The current capacity is mainly located in the northwest of the country, with proximity to the growing Eastern Europe economy. The long-term prospects of the economy look good; domestic market for paper and board is big and the geographic location between Middle East and Europe is very advantageous.



Map 4

Turkey's main paper and board producers in 2011

Company	Owners	Mill	Capacity t/a	Grade
Modern Karton	Eren Holding	Corlu	700,000	Containerboard
Mopak Kagit	Mehmet Ali Malay	Dalaman	170,000 100,000	Woodfree coated Linerboard
Olmuksa Sabanci	50% IP 50% Sabanci Holding	Olmuksa Edime	65,000	Containerboard
Mondi Tire Kutsan	64% Mondi	Tire	135,000	Containerboard
Lila Kagit	Marmara	Corlu	70,000	Tissue
Kahramanmaras	Ciger Family	Kahramanmaras	144,000	Containerboard
Köknar Kagit	Türkoglu Family	Kirklareli	153,000	Boxboard
Hayat Temizlik	Yahya Kigli	Yeniköy	70,000	Tissue
Alkim Kagit	Kora Family	Kemalpasa	80,000	Printing and writing
Balikesir Albayrak	Albayrak Group	Balikesir	120,000	Newsprint
Halkali Kagit	Saral Family	Istanbul	135,000	Containerboard
Ipek Kagit	Private	Yalova	100,000	Tissue
Kartonsan	-	Kullar Koyu	185,000	Boxboard

Source: Lockwood Post



- 
- ▶ Projected GDP growth close to 5% during 2013-16
 - ▶ Rising middle class in a population of 70 million people
 - ▶ Strong exports and trade with other emerging Asian countries
 - ▶ Sizable paper industry and domestic market
 - ▶ Per capita paper and board consumption is 64.9kg annually

Thailand

Second-largest paper producer in Southeast Asia

The Thai economy has fared better than most countries in the global slowdown of the past two years - in 2012, the GDP grew by a robust 6.4% and the forecast for 2013 to 2016 is close to 5% per annum (Source: Oxford Economics). Unemployment and inflation remain at a low level and exports driven by the automotive and electronics industries are strongly increasing. After a period of political turmoil during 2011 and 2012, the present government seems stable. The vital statistics of Thai economy are shown in Table 10.

Table 10
Key economic figures for Thailand

	2011	2012	2013	2014	2015	2016
Real GDP growth (% per year)	0.1	6.5	4.2	5.5	4.9	5.0
CPI inflation (% per year)	3.8	3.0	2.5	2.7	2.4	2.4
Current account balance (% of GDP)	1.7	0.7	0.3	0.9	0.7	0.7
External debt total (% of GDP)	23.2	21.1	20.3	21.1	21.5	23.0
Short-term interest rate (%)	3.1	3.1	2.8	3.2	4.5	5.4
Exchange per US\$ (year average)	30.5	31.1	30.0	30.9	32.0	32.9
Government balance (% of GDP)	-1.6	-4.4	-2.8	-3.0	-2.4	-2.2
Population (millions)	68.6	68.9	69.3	69.6	70.0	70.3
Nominal GDP (US\$b)	346.1	366.4	403.7	424.7	439.7	459.9
GDP per capita (US\$ current prices)	5,046.3	5,314.9	5,825.4	6,098.6	6,282.9	6,541.9

Source: Oxford Economics

Table 11
Supply and demand for Thailand in 2011

1,000 tons	Production	Imports	Exports	Apparent consumption
Total paper and board	4,426	815	965	4,276
Newsprint	165	111	22	240
Printing and writing	1,194	326	527	993
Containerboard	2,391	61	310	2,142
Cartonboard	403	186	64	525
Tissue	116	30	16	130
Wood pulp	1,001	390	152	1,239
Recovered paper	2,705	959	32	3,632

Source: RISI, 2012

Thailand is a relatively forested country, with 37.2% of the land classified by FAO as forested - this does not include trees for agricultural or recreational use. The climate is ideal for acacia or eucalyptus plantations, and a large part of the domestic production is based on these, as well as recycled fiber. The supply and demand situation of the market is shown in Table 11.

As can be seen from Table 11, Thailand is a net exporter of paper and board and a significant producer of printing and writing papers. Despite own pulp production based on plantation wood, most of the fiber is based on recovered paper. However, the projected good economic growth, coupled with a relatively low consumption of paper and board per capita, indicates that the currently quite significant market of 4.3 million tons has further growth potential.

Thailand's paper industry is dominated by two major local producers, Siam Cement and Advance Agro, who together control over 60% of the production. The remaining 40% is split between a number of smaller producers. Norske Skog and Kimberly-Clark are the only international players in Thailand. The main producers and their location is depicted on Map 5.

Although the Thai market is mainly controlled by Siam Cement and Advance Agro, the market is large and likely to grow and there are a number of smaller, privately owned companies. Thailand's geographic location is good - between India and rest of Southeast Asia, it has a good infrastructure and a growing middle class. Considering the long-term growth prospects of the entire region, Thailand should be on the watch-list of companies considering establishing a presence in the region.



Map 5
Thailand's main paper and board producers in 2011

Company	Owners	Mill	Capacity t/a	Grade
Advance Agro	Institutional & Private	Prachinburi	500,000	Fine papers
Siam Kraft Industry	Siam Cement	Banpong	380,000	Containerboard
Thai Kraft Paper Co	Siam Cement	Wangsala	584,000	Containerboard
Thai Paper	Siam Cement	Banpong	299,000	Fine papers
Thai Union Paper	Siam Cement	Wangsala	175,000	Paperboard
Phoenix Pulp & Paper	Siam Cement	Nam Phong	230,000	Market pulp
Panjapol Paper	Tejabulya Family	Ayuthaya	350,000	Containerboard
Siam Cellulose	Siam Cement	Wangsala	600,000	Pulp
Hiang Seng Fibre	Tejabulya Family	Samut Sakorn	500,000	Containerboard
Asia Kraft Paper	-	Samut Sakorn	240,000	Containerboard
Norske Skog Thailand	Norske Skog	Singpuri	135,000	Newsprint
Environment Pulp	Thai Sugar Group	Nakhon Sawan	100,000	Non-wood pulp
Kimberly-Clark	-	Pathumthani	20,000	Tissue

Source: Lockwood Post





- ▶ Strong recent GDP growth and projected growth averaging 6.9% for 2014-16
- ▶ Population of 91 million with competitive labor costs
- ▶ Abundant natural resources, including forests
- ▶ Gradual deregulation and opening of the economy in recent years
- ▶ Low per capita usage of paper and packaging - at 29.4kg

Vietnam

A rising player in the Asian paper industry?

Considering Vietnam's recent history, the economic development and growth of the country has been astonishing. The economy has gradually been opening up due to deregulation, foreign investments have poured in (US\$7.4b in 2011), exports have increased, the tourism industry has flourished and the average GDP per person has risen dramatically.

Despite the impressive development, many problems remain to be solved. Curbing inflation while maintaining growth is a challenge, and in many parts of the country the infrastructure badly needs investment – for instance, power shortages are still common. The vital statistics of Vietnam are presented in Table 12.

Table 12
Key economic figures for Vietnam

	2011	2012	2013	2014	2015	2016
Real GDP growth (% per year)	6.0	5.0	5.5	6.9	7.1	6.6
CPI inflation (% per year)	18.7	9.1	7.7	6.4	4.8	4.5
Current account balance (% of GDP)	0.2	4.7	2.7	0.8	-0.1	0.0
External debt total (% of GDP)	46.8	37.8	31.9	28.2	25.8	23.7
Short-term interest rate (%)	15.0	8.3	7.0	6.0	6.0	6.0
Exchange per US\$ (year average)	20,509.8	20,858.9	21,402.3	21,995.1	22,497.6	22,900.3
Government balance (% of GDP)	-2.8	-3.5	-3.7	-3.7	-3.4	-3.2
Population (millions)	88.8	89.7	90.6	91.5	92.4	93.2
Nominal GDP (US\$b)	123.6	139.2	154.2	170.7	187.3	204.9
GDP per capita (US\$ current prices)	1,392.4	1,552.6	1,702.1	1,865.2	2,025.9	2,197.8

Source: Oxford Economics

A photograph of a dense, lush green forest. The trees are tall and thick, with a misty or hazy background. A yellow rectangular box is overlaid on the left side of the image, containing text.

**Vietnam has abundant
natural resources,
including forests.**

Vietnam has abundant forest resources – 45% of the land area is forested (not including forests in agricultural or recreational use, FAO). Although domestic production is, to a large extent, based on recycled fiber, Vietnam has a surplus of harvested wood, and it exports wood mainly to China. Details of Vietnam's paper and board market are presented in Table 13.

Table 13
Supply and demand figures of Vietnam in 2011

1,000 tons	Production	Imports	Exports	Apparent consumption
Total paper and board	1,750	992	53	2,690
Newsprint	39	53	0	92
Printing and writing	335	339	20	654
Containerboard	950	299	0	1249
Cartonboard	118	225	0	343
Tissue	100	14	33	81
Wood pulp	310	241	13	538
Recovered paper	928	386	0	1314

Source: RISI 2012



Considering that Vietnam has a wood harvest surplus and exports wood, and the economy is largely driven by increasing exports, the figures in Table 13 clearly indicate a potential for expanding domestic production. Vietnam has a considerable pulp and paper industry, but most of the assets are outdated and badly in need of investments.

The largest domestic producer is Vietnam Paper, which is a state-owned enterprise. In 2009, Lee & Man (based in Hong Kong) announced it was building a new containerboard machine in Vietnam, but for various reasons the project was postponed. Currently, the only foreign producers in Vietnam are China's Nine Dragons and Thailand's Siam Cement, which both own majority shareholdings in containerboard mills. The main producers are shown in Map 6.

Vietnam clearly has a big potential in the long term to expand its pulp and paper industry. Projected overall economic development is positive, population and demographic development supports growth, the government is keen to increase exports, labor costs are still competitive and imports of paper and board are nearly 40% of domestic demand. Local industry is also badly in need of modernization and investments. It remains to be seen whether Vietnam really becomes a "rising star" of the Asian paper industry.

Map 6
Vietnam's main paper and board producers in 2011

Company	Owners	Mill	Capacity t/a	Grade
Vina Kraft	70% Siam Cement	Ho Chi Minh City	220,000	Container-board
Vietnam Paper	State-owned	Bai Bang	100,000	Printing & Writing
An Binh Paper	Private	An Binh	80,000	Container-board
Chen Yang Paper	60% Nine Dragons	Binh Duong	100,000	Container-board
My Xuan Paper	Private	Dong Nam Bo	897,000	Container-board
Binh An Paper	Tan Mai Paper	Binh Duong	54,500	Uncoated woodfree
Tan Mai Paper	40% Vietnam Paper	Dong Nai	140,000	Newsprint
Viet Tri Paper	29% Vietnam Paper	Phu Tho	80,000	Container-board
New Toyo Pulp	Benline Investment	Binh Duong	34,000	Tissue
Haiphong Paper	Jointstock	7 mills	70,000	Several

Source: Lockwood Post

- 
- ▶ Southeast Asia's most populous country with 240 million consumers
 - ▶ Strong economic growth since 2011 and set to continue GDP growth at average 5.8% during 2013-16
 - ▶ Abundant natural resources - especially in mining, oil and forests
 - ▶ Very low per capita consumption of paper and board - 26.5 kg per person

Indonesia

Southeast Asia's pulp and paper giant

The past 20 years have been good to Indonesia. It has emerged from dictatorship to a democracy and the country has enjoyed high economic growth almost continuously since then - with the exception of the Asian financial crisis in 1997-98.

The current forecasts predict this trend to continue, suggesting the per capita GDP will increase by nearly 33% from 2013 to 2016. The main macroeconomic problems are maintaining inflation at a competitive level and the current account deficit, as well as easing the way of doing business to attract more foreign investments - in 2011, FDI was US\$19.2b. The economic figures of Indonesia are presented in Table 14.



Table 14

Key economic figures for Indonesia

	2011	2012	2013	2014	2015	2016
Real GDP growth (% per year)	6.5	6.2	6.1	6.0	5.6	5.5
CPI inflation (% per year)	5.4	4.3	5.4	5.0	4.8	4.8
Current account balance (% of GDP)	0.2	-2.7	-2.7	-2.1	-1.9	-1.6
External debt total (% of GDP)	26.1	27.5	26.6	23.4	21.1	19.5
Short-term interest rate (%)	6.5	4.7	5.0	5.7	7.3	7.5
Exchange per US\$ (year average)	8,789.4	9,403.2	9,733.5	9,566.2	9,548.4	9,724.9
Government balance (% of GDP)	-1.1	-1.8	-1.7	-1.7	-1.4	-1.1
Population (millions)	235.3	237.7	240.0	242.3	244.5	246.6
Nominal GDP (US\$b)	844.9	876.4	941.4	1,066.2	1,181.8	1,283.0
GDP per capita (US\$ current prices)	3,591.0	3,687.5	3,922.4	4,401.0	4,834.4	5,203.3

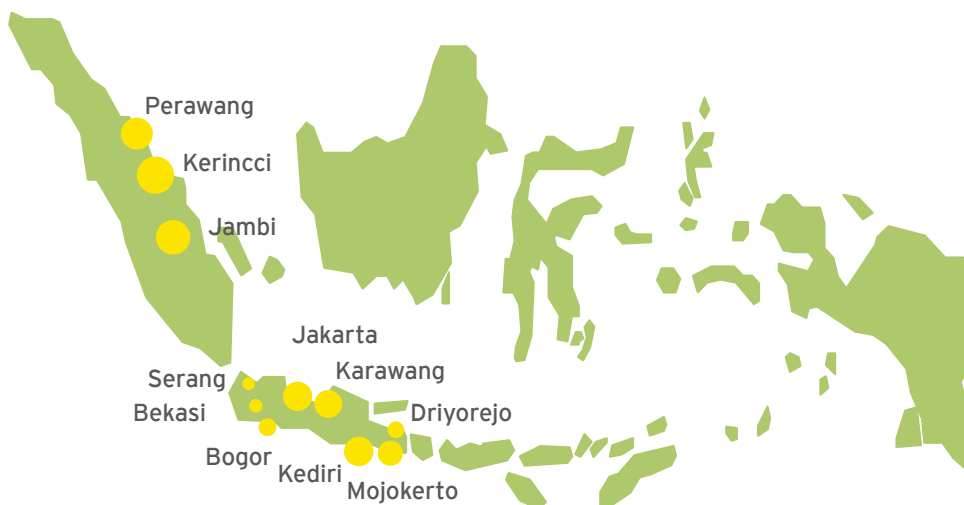
Source: Oxford Economics

The Indonesian market for pulp and paper is shown in Table 15.

Indonesia's importance as a key producer in the pulp and paper industry is further increased due to the fact that two Indonesian companies - Asia Pulp & Paper and APRIL - are the major players in China. The main Indonesian producers are shown on Map 7.

But the main interest for big international companies lies in the access to plantation wood and the building of a greenfield pulp mill. Kalimantan and Iryan Jaya have considerable eucalyptus plantations, and these are of main interest to foreign companies.

1,000 tons	Production	Imports	Exports	Apparent consumption
Total paper and board	10,035	602	4,038	6,599
Newsprint	460	8	154	315
Printing and writing	4,353	118	2,902	1,570
Containerboard	2,632	93	261	2,463
Cartonboard	1,775	112	225	1,662
Tissue	525	7	355	177
Wood pulp	6,547	801	2,912	4,436
Recovered paper	3,483	2,324	18	5,789



Map 7
Indonesia's main paper and board producers in 2011

Company	Owners	Mill	Capacity t/a	Grade
Indah Kiat	APP	Perawang	2.15m 685,000	Pulp Woodfree uncoated
Riau Andalan	APRIL	Kerinci	2.9m 840,000	Pulp Woodfree uncoated
Twiji Kimia	APP	Mojokerto	1.2m	Woodfree coated, Woodfree uncoated
Pindo Deli	APP	Karawang	1.284m	Woodfree Coated, Woodfree uncoated
Indah Kiat	APP	Serang	1.55m	Containerboard Boxboard
Lontar Papyrus	APP	Jambi	800,000 138,000	Pulp Tissue
Aspex Kumbong	Panwell Industry	Bogor	420,000	Newsprint
Fajar Surya	Private	Bekasi	700,000	Containerboard
Pakerin	Private	Mojokerto	470,000	Containerboard
Surabaya Agung	Private	Dryiorejo	304,000	Boxboard Printing and Writing
Surya Pamenang	Gadung Garam	Kediri	150,000	Cartonboard

Source: Lockwood Post





The challenges of entry into the RGMs

The RGMs we've selected as most promising for the FP&PP industry - Colombia, Indonesia, Mexico, Thailand, Turkey, South Africa and Vietnam - are all fundamentally different markets and they vary in their economic development, business cultures, local industry and forest resources. Companies must develop country-by-country entry strategies, depending on the opportunity in question.

The above countries are also more challenging than the BRICs. Most big pulp and paper companies have already established operations or at least sales offices in one or more of the BRICs - for instance, International Paper has industrial operations in all of them. Consequently, these companies are already familiar with the local business culture, legislation and challenges. But very few companies have industrial operations in the RGMs studied in this report. Some of the risks of entering these markets are listed in Box 1.

These challenges can seem daunting. However, risks are inherent to all businesses wherever they are located, and there are a number of measures that companies can implement to mitigate these issues. Some of the most important ones are:

- ▶ **Clear strategy** regarding the RGMs and the linkage to overall corporate strategy. Not all companies must establish operations in the RGMs - first and foremost, top management and the board need to be clear about why a sizable investment, for instance, in China or Mexico, is needed.
- ▶ **Understanding** that these are long-term investments and achieving profitable operations in these countries is a marathon, not a quarter-by-quarter sprint.
- ▶ **Respect of local cultures** and development of necessary contacts and relationships. Localizing management and tailoring products and services whenever possible is one way of demonstrating respect for local cultures.
- ▶ **Careful risk and tax management**, guidelines regarding corruption, sustainability and communications policies - these "soft" issues often do not get early-enough attention when planning the investment, until it might be too late.

A sound entry strategy and efficient execution, careful risk management, long-term business approach, understanding and respect of local culture go a long way to mitigate the risks listed in Box 1.



Box 1

The challenges of investing in the RGMs

We have listed the main challenges of either a greenfield investment or an acquisition below. These issues also apply also to the local industry to a large extent, and not just multinational companies – however, obviously the local industry has the advantage compared with foreign companies due to contacts, market knowledge etc.

- ▶ **Reliability of the available data** on markets and fiber sources. These are usually based on national statistics, which vary in terms of reliability from country to country.
- ▶ **All financial figures** should be treated with caution until thoroughly verified through extensive due diligence. Only Mexico, South Africa and Turkey have adopted IFRS – the other countries studied in this report are in the process of migrating toward it. Despite the adoption of IFRS, extensive due diligence is needed.
- ▶ **Fraud and corruption** are a serious problem in these countries – although it must be noted that these are universal problems. See Box 2 for more details.
- ▶ **Tax issues**, such as transfer pricing and repatriation of profits, are generally more complicated in RGMs than in Western markets.
- ▶ **Sustainability issues** are increasingly important also in these countries. Non-governmental organizations and various environmental groups are vigilantly following pulp and paper companies especially – key issues are land ownership, wood plantations and effluent treatment. Non-compliance or even the perception of non-compliance can easily lead to damaging media attention and reputation risks and even purchasing boycotts by big consumer product companies.
- ▶ Many of these countries are in regions where **natural disasters** are much more likely to occur than in the West. Earthquakes, tsunamis, draughts and floods can seriously disrupt production, so pre-emptive planning and action are necessary.
- ▶ **Availability of competent personnel** is also a challenge – especially in a green-field project. Sending expatriates with their families to remote locations, for instance in Colombia or Vietnam, might require substantial remuneration packages and careful planning. For example, personal tax issues, work permits and contract management vary from country to country, and the administrative work is often substantial – many multinational companies nowadays outsource these services. There are also local cultural issues to be considered. Local managers are often resentful of Western expats with salaries several times their own.
- ▶ There is always the possibility of **social unrest and turbulence**. Although all of the above countries are now considered reasonably safe, things may change – contentious issues such as increases in fuel and food prices can easily erupt in riots in many of the RGMs. But the developed economies themselves are not immune to these either – the huge unemployment in Europe, especially among young people might represent a risk for major social unrest in European countries.
- ▶ **The legal systems** in the RGMs vary in terms of the protection they offer to an outside investor. The playing field is not always level against a local competitor or a business partner.

Box 2

Tackling fraud and corruption

Constant pressure for higher performance often places individuals in situations where the temptation to do the wrong thing can be overwhelming. This is especially true when times are tough and meeting the ever-increasing targets becomes more difficult. The financial crisis and difficult market situation – especially in the developed economies – has, during recent years, increased this pressure.

A recent EY fraud survey, which interviewed over 3,000 board members and executives across the world, found that 70% of all respondents felt that they were under increasing pressure to deliver the expected performance. A staggering 57% agreed that bribery and corrupt practices are widespread in their country (*Navigating today's complex business risks – Europe, Middle-East, India and Africa Fraud Survey*, EY 2013). Some examples of unethical conduct are listed below.

- ▶ **Sales executives** – feeling the pressure for ever higher sales – may use unsavory tactics such as very expensive business gifts to secure a deal.
- ▶ **Financial executives** report revenues or cost reductions earlier than they should be, in order to meet short-term financial targets.
- ▶ **Local environmental protection agency officers** may demand bribes, such as expensive business trips with their families in order to renew or grant permits.
- ▶ **Local tax officials** may either demand a bribe or accept a bribe in order to overlook certain non-compliance issues.
- ▶ **Legal system and courts** may be corrupt, leading to weak contract enforcement and long processing in the courts, unless unsavory tactics are used.

Unfortunately, these examples of unpleasant practices are common throughout the world, as shown in Figure 8.

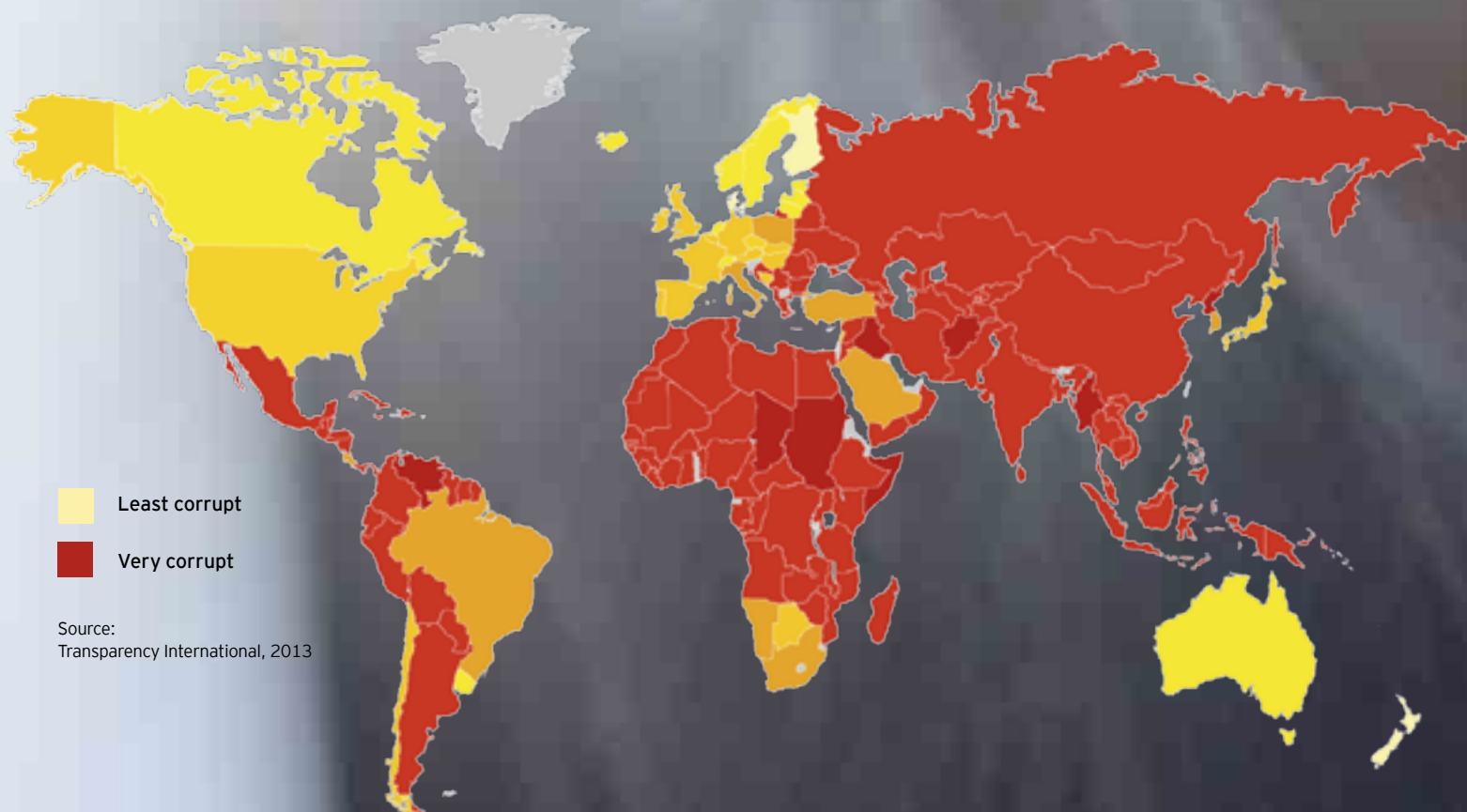
Although fraud and corruption are a global problem, and this is a serious issue also in all the developed countries, the problem is more severe in RGMs. This is an issue that needs to be taken into account right from the start when contemplating an investment in these countries. Some of the steps to be considered are:

- ▶ Strong commitment and consistent communication from the top regarding company values and policies about unethical conduct
- ▶ Exhaustive due diligence processes
- ▶ Careful selection of the local management team – with competitive remuneration packages
- ▶ Establishing a strong finance and accounting team
- ▶ Ensuring that internal controls and internal audit processes are up to the task
- ▶ Regular and extensive compliance reporting

Quite often these issues “take the back seat” when a company is considering a major investment in a foreign country. This may expose the company in the future to unnecessary risks and loss of reputation.

None of the RGMs studied in this report perform well in country comparisons regarding fraud and corruption. However, they are close to the global average and unethical conduct happens in all countries. This should not deter any Western or RGM executives from a particular investment or transaction, provided that these issues are taken seriously and that the necessary steps are taken.

Figure 8
Global perceptions of corruption



Main conclusions and recommendations

There has been a global shift in the world economy, and this applies also to the FP & PP industry. For several years now the leading Western companies have invested in the BRIC countries (Brazil, Russia, India and China). These efforts are likely to be continued despite the challenges – the local market shares of Western companies are still extremely low for instance in China, and the Chinese operations' share of total revenues is less than 5%. The BRIC markets are all different, but one thing they have in common – establishing major operations in any of them is extremely challenging and time-consuming.

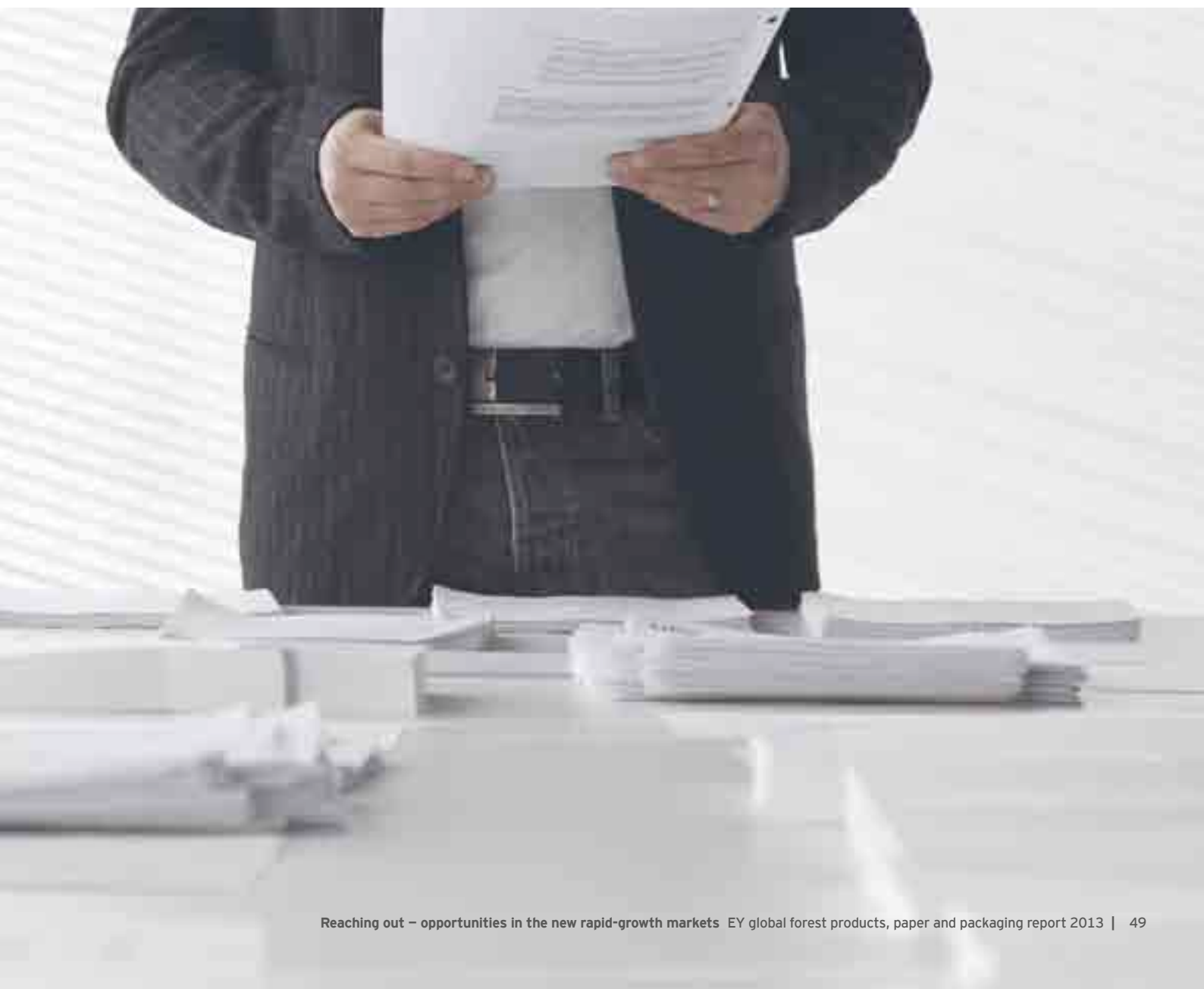
But there are altogether 25 countries which we in our Rapid-growth Markets Forecast classify as RGMs, each considered to have the right mix of population and demographics, natural resources, stability and deregulation etc. All of these factors combined have led to significantly higher GDP growth than the global average and increased foreign investments. Therefore, many international companies are now searching for new pockets of growth – outside the BRICs.



The paper industry needs to renew itself, and many international companies are now searching for new pockets of growth in the new RGMs.

In addition, there are a number medium-sized paper companies that have concluded that they simply do not have the resources and time to invest in the BRICs, and therefore some of the other RGMs could be more attractive. It should be noted that interest in the “other RGMs” applies not only to Western companies, but also to companies operating in the RGMs - globalization is today a two-way street.

In this study, we’ve identified 7 countries out of the 25 that merit further interest by the top management of the leading companies of the industry. These are (not in any order of attractiveness) Mexico, Colombia, South Africa, Turkey, Thailand, Vietnam and Indonesia. The criteria were past and forecast economic performance, population trends, market size for pulp and paper, proximity to bigger markets, forest resources, societal stability and local industry structure.



It should be noted, that there are a number of other countries that could also be interesting investment destinations – for instance, Malaysia or Argentina. However, for the sake of clarity and scope we decided to focus on only seven markets. The main features of these markets – each different in their own way – are depicted in Figure 8.

We have decided not to prioritize these markets in any way. It is obviously up to individual companies to evaluate which of the above countries are more attractive than others. But, in our view, it is certainly worth the effort to analyze these markets, the investment and acquisition possibilities and follow their development should opportunities arise.

The home markets of Western Europe and North America are under intense restructuring and this will continue for many years to come. The BRIC markets are growing rapidly, but it has proved to be a very difficult and time-consuming process to establish any significant presence there. The RGMs are likely to be challenging as well, but careful planning, understanding of local cultures and long-term approach go a long way to mitigate them. The industry has to renew itself and the seven RGMs studied in this report provide alternative pockets of growth which is clearly needed.

Selection criteria:

- Past and forecasted long-term GDP growth
- Sizable and growing population
- Size of the domestic market for pulp and paper per grade
- Significant forest and recycled fiber sources
- Relative stability of the local government
- Proximity to bigger markets
- Local pulp and paper industry structure

Figure 8

The main features of the selected RGMs





TURKEY

- 80 million consumers
- Excellent geographics
- Big domestic market
- Privately owned industry

THAILAND

- Big market
- Good infrastructure
- Growing middle class
- Position between India and Southeast Asia
- Main players: Siam Cement, Advance Agro, smaller privately owned

VIETNAM

- Projected GDP growth
- Fiber resources
- Proximity to South China
- Investment and export needs
- Main players: Vietnam Paper, Nine Dragons, Siam Cement

INDONESIA

- Huge forest resources
- Population 240 million people
- Stable government
- A number of independent producers
- Main players: APP and APRIL

SOUTH AFRICA

- Strong growth
- Africa's long-term prospects
- Main players: SAPPI, Mondi, Nampak

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