





NORWEGIAN INVESTMENTS IN BRAZIL: 2015









Foreword

This is the third year in a row in which we conduct an investment mapping exercise on behalf of Innovation Norway, the Norwegian Embassy in Brazil and the Norwegian Consulate General in Rio de Janeiro.

Over the past two months, our team has been in contact with over 80 relevant companies in both Brazil and Norway after sending out a simple questionnaire, with an overall response rate of more than 70% for 2015. This is a significant increase over previous years, and we hereby reiterate our appreciation for the time and effort of those who have contributed with figures and general input.

The base year for this report (2014) has been a turning point for Brazil on several fronts. In the political landscape, 2014 was an election year and the incumbent candidate, Dilma Roussef, narrowly secured a second mandate as president (only to almost immediately see her approval ratings free falling to record lows, currently standing at around 8%).

Economic growth, after peaking at 7.6% five years ago came to an abrupt halt in 2014, with a meagre 0.1% annual GDP increase. It was also towards the end of 2014 that the steep downfall in international oil and commodity prices started to bite commodity-exporting countries.

Moreover, 2014 marked the start of the largest corruption investigation in Brazil's history (dubbed locally as operation "Lava-Jato", or "Car Wash" in English), which has engulfed the national oil giant Petrobras and all major EPC companies in the country. The scandal is still sending shockwaves through business and political circles, and deeply affecting both confidence and investment, not least in the oil & gas and maritime sectors.

This unique combination of extreme economic and non-economic circumstances has placed Brazil in a very challenging position, and the economic and political crises are only reinforcing each other. However, as could be expected due to economic "leading and lagging effects", the figures in this year's report (based on 2014 numbers) still do not reflect any major shifts in Brazil-bound investments or reduction of commitment by Norwegian players.

Moreover, an annual average of well over one billion dollars of Norwegian investments only confirms that the Brazilian market is just too big to be ignored, despite the circumstances. What is more, difficult times can translate into opportunities for those willing invest over the long term, and through economic cycles. Therefore, next years' figures should be even more telling in that sense.

Despite a natural historical focus on oil & gas and maritime investments, Norwegian players as a whole have increasingly enjoyed a presence in Brazil within varied sectors such as Agriculture, Media and Renewables. Several of them also enjoy deep local knowledge and strong enough balance sheets locally to withstand challenging times ahead; cheap buying opportunities will also arise for players willing to be more aggressive and counter-cyclical. Those investors should be in a good position to reap the benefits when the tide once again turns in their favor.

Rio de Janeiro, November 2015

On behalf of the Inventure Management Team,

Guilherme Kessler Åsmund Heir







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1. This Year's Key Highlights

Norwegian investments in Brazil: significant and still growing

- Accumulated Norwegian investments in Brazil, including asset transfers, exceeded USD 24.6 billion by the end of 2014; the figure totals USD 16.7 billion when excluding the effects of asset transfers.
- Annual investments rose 32% to USD 1.4 billion in 2014; this is the highest investment figure of the past four years if we exclude the one-off effect of Hydro's 2011 acquisition of Vale's aluminium business.
- In addition to those numbers, the Norwegian government's pension fund held investments in Brazil that amounted to USD 10.8 billion in 2014, including for example a 0.61% ownership of Petrobras (valued at USD 297 million).
- Norwegian companies with in-house Research & Development teams in Brazil invested over USD 20 million in R&D projects in 2014, led by large players such as Statoil, Aker Solutions and Hydro.

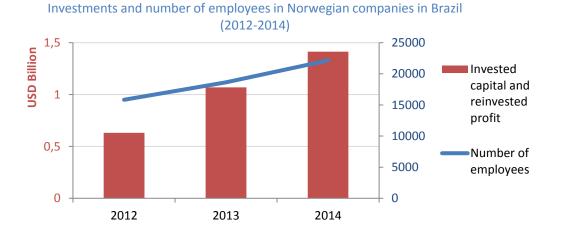
Oil & Gas, Offshore and Maritime-related companies still dominate but "newer sectors", such as Renewable Energies and Online Media, are gaining traction

- The combined **Oil & Gas, Offshore and Maritime sectors** have concentrated **over half of all inbound Norwegian investments into Brazil**, with nearly **USD 800 million in 2014**.
- **Out of 86 surveyed companies**, **68%** (or 58 companies) have been identified as belonging to the combined **Oil & Gas, Offshore and Maritime sectors**.
- The Renewable Energy Sector alone, led by Statkraft and Umoe Bioenergy, invested over USD 91 million in 2014; the two companies employed over 2,100 people in Brazil in 2014.
- **Telenor and Schibsted**, through the joint venture **SnT Classifieds**, have invested significantly in the path to become the undisputed market leader in the market of online classified advertising.

Norwegian companies are a significant source of employment in Brazil

• Over 22,100 people are employed by Norwegian companies in Brazil, a jump of 40% since 2012. The top-10 companies in terms of staff numbers account alone for nearly 19,000 of all reported employees in 2014.

Chart 1: Investments and number of employees in Norwegian companies in Brazil (2012-2014)









2. Looking Ahead: Investment Trends

- Although beyond the scope of the data collection for this report, **2015 is likely to be a turning point** for some of the key indicators herein that had experienced a growing trend until 2014:
 - Number of established subsidiaries in Brazil: we can identify in 2015 a significant number of companies cutting costs and starting to wind-down formal presence in Brazil. This is especially so among smaller entities that had established local sales offices without a long-term business plan for Brazil. This movement should accelerate in 2016 for those lacking scale/significant operations in Brazil as headquarters face investor pressure to cut costs globally –though there should be a time lag for the data to become apparent due to the complexity of liquidation procedures in Brazil. As the other side of the same coin, we foresee that most of those companies will still keep a lower risk, lighter footprint in Brazil through sales agents and/or local partners.
 - Number of employees: discounting the impact of potential further acquisitions, total employee figures likely peaked in 2014 and started to fall in 2015. Companies have faced increased pressure to cut costs in most of the relevant sectors comprised in this report, which are exposed both to commodity prices globally and the economic downturn in Brazil. General unemployment figures in Brazil are rising quickly in 2015, with close to a million jobs lost in the past 12 months alone, which is set to further aggravate in 2016.
 - **Reinvestment of profits:** although symbolic compared to capital transfers, this indicator is also likely to fall further, at least in comparative terms, with deteriorated market conditions and new large capital investment injections occurring in 2015 and 2016.
- When it comes to total investment trends, historically driven by capital transfers, the forecasting exercise becomes trickier. The overall capital transfer figures are highly dependent on the top-10 largest investors. As such, one-off investments can easily blur the trends, as was the case with Hydro's nearly USD 4.9 billion acquisition of Vale's aluminium business in 2011. In 2015, regardless of specific financing arrangements (which normally also involve local financing), we can already point out large investments such as Statkraft's further stake in Desenvix (valued at BRL 500 million) and Statoil's second phase development of Peregrino (total investments expected to reach USD 3.5 billion until 2020).
- For 2016 and beyond there should be potential for further large deals for companies willing to take advantage of the downturn, not least due to the depreciated Brazilian currency, as could be the case for heavyweights such as Yara, Statkraft, Hydro and Statoil.
- There might also be upward pressure on overall investment figures going forward as a significant number of companies are likely to have to strengthen the balance sheets of their local subsidiaries. In other words, until they can generate enough cashflow through local operations, further capital transfers might be needed to help withstand difficult times and keep up the required levels of investments to establish, maintain and scale up operations in Brazil.

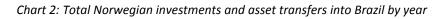


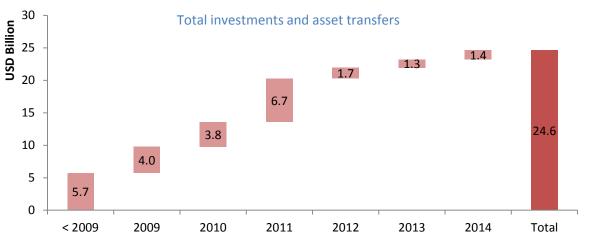




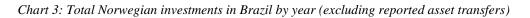
3. Investment Analysis: Overall Figures

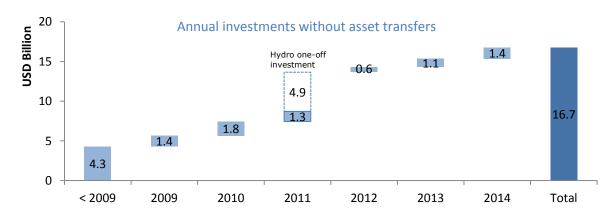
 Over the past five years (2010-2014), total Norwegian investments and asset transfers into Brazil have amounted to USD 14.9 billion¹; the total figure goes up to USD 24.6 billion when also considering pre-2010 investments.





- Asset transfers, included in the definition of total investments until last year's report, have meant mostly the transfer of offshore rigs, production units and offshore support vessels into Brazilian waters. However, their market values are highly cyclical and have not always been duly reported by the respondents. So the following figures, as further indicated in the appendices, only include capital injections and reinvested profits (the chart above was kept for comparison purposes with previous reports).
- As such, when discounting the effects of asset transfers, the following yearly breakdown emerges:





¹ Total investments and asset transfers, as depicted in Chart 2, include capital investments, reinvested profit plus asset transfers; please see appendices for more on methodology and definitions.







- *Chart 3* shows that when eliminating the one-off effect of Hydro's 2011 acquisition of Vale's aluminium business for USD 4.9 billion, the year of 2014 actually emerges as the highest in terms of capital investment inflows and reinvested profits in the past four years, with a 32% increase over 2013 figures. This means Norwegian investments are still considerable and even increasing in 2014.
- Of the total USD 11.1 billion invested over the past five years, 97% of that (ie, USD 10.8 billion) represents capital injections (equity or long term loans) from abroad, and the remaining 3%, equivalent to over USD 300 million, are due to reinvested earnings in Brazil.

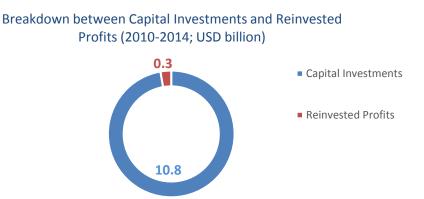


Chart 4: Investment breakdown, excluding asset transfers

 The small proportion of reinvested earnings – when compared to capital investments injected from abroad – is likely due to the fact that the bulk of investment comes from a relatively small number of large players. Often, these companies are also involved in capital-intensive industries undergoing investment phases locally, both for organic growth and to fund acquisitions.

3.1 Largest Investors

Displayed below are the top Norwegian Investors in Brazil by volume in 2014, in random order. Further below we briefly illustrate some of their recent investments and operations in Brazil.









3.1.1 Selected Investments by Top 2014 Investors²



Yara: the fertilizer giant doing business in Brazil since 1977 acquired, in 2014, a 60% stake in the local producer Galvani S/A to secure phosphate fertilizer capacity in the northeast of Brazil, based on a total enterprise value (ie, 100%) of USD 318 million. The company also completed a USD 40 million investment in a new 750 thousand tons capacity facility outside of São Paulo, the most modern mixing plant in Brazil, with the creation of 90 new jobs. Integration of the acquired Bunge's fertilizer division, ahead of schedule, also realized synergies of USD 55 million locally.



Schibsted & Telenor: through a joint venture called SnT Classifieds, announced in November 2014 the creation of an expanded 50-50% joint venture with Naspers, thereby creating the largest online classifieds platform in Brazil. The merger of bomnegocio.com and OLX.com.br, now led by Andries Oudshoorn, is undergoing integration, and the number of new ads per day has already more than doubled, while visits per month are over 150% higher on the newly combined site. Operations in Brazil are still on an investment stage, which in this specific segment means considerable cash injections– mostly for online marketing and IT purposes– to boost user growth until profitability is reached.



Statoil: in partnership with China's Sinochem, the oil company has been preparing the further development of its major production asset outside of Norway, Peregrino field (off the coast of Rio de Janeiro), which has recently surpassed the 100 million barrels mark in terms of production in Brazil. Total investment for this second phase development is estimated at USD 3.5 billion spread until the end of this decade, with 21 new wells to be drilled, in addition to a third wellhead platform (Peregrino C).



Jotun: following its trademark organic growth strategy, the company has built an industrial plant outside of Rio de Janeiro, its first in Latin America, with investments estimated at approximately USD 37 million. Established in Brazil in 1998, Jotun is the world's biggest supplier of protective coatings for ships, and has been involved with some major offshore projects in Brazil, including Petrobras' P-61, P-74, as well as a maintenance contract with Transpetro comprising its whole fleet.



Umoe Bioenergy: the green energy arm of the family office led by Jens Ulltveit-Moe has been a major investor in ethanol and sugar cane-based electricity production in Brazil. Umoe Bioenergy has invested in 45 thousand hectares of arable land reserves, mechanized agricultural operations and a mill with a crushing capacity of 2.6 million tons. The company is currently led by Knut Karlsen in Brazil, and has conducted significant recent investments to optimize operations and scale-up sugar cane production during the market downturn, recently converting over USD 70 million of loans into equity; it employs over 1.6 thousand people out of Sandovalina in São Paulo state.



DOF: as an early entrant and a major supplier of offshore services and vessels in the Brazilian market, the group has invested in building vessels locally, also securing local investment (mainly via BNDES) and export credits in both Brazil and Norway. Brazilian operations in 2014 accounted for 25% of the group's worldwide revenue, with approximately USD 400 million. DOF Brasil has 11 Brazilian-flagged vessels, and over 1,500 employees locally. DOF Brasil took delivery, in 2014, of the locally built Skandi Urca AHTS vessel (Vard yard in Niterói), with two more to be delivered until next year (Skandi Angra and Paraty, which have secured 8 and 4 year contracts with Petrobras).

² Information comprised in this section is based solely on publicly available data, such as annual reports and financial/industry-specific news outlets (and hence without the direct contribution or involvement of the companies mentioned herein). Investment figures may go beyond the investment figures reported within the scope of this report (which considers equity injections, reinvested earnings and long term inter-company loans, but not commercial funding, which is used to fund some of the transactions herein). Financial figures mentioned in this section may also be spread over the years (and as such do not relate only to disbursements made in 2014).







This is in addition to two pipe-laying vessels being built at the new Vard shipyard in Recife (plus two others in Norway) in a joint venture with Technip, for a total construction value of USD 1.1 billion).



Aker Solutions (& Akastor): the split of the "old" Aker Solutions into two independent companies (which created Akastor in mid-2014, with the allocation of about 20% of the old balance sheet and with figures representing 37% of Ebitda) also had significant restructuring implications in Brazil, where the group has been present since the 1970s and in 2014 employed over 1,500 people. Both the new Aker Solutions and Akastor have been responsible for significant investments in local production. This includes the Akastor/MHWirth drilling package plant in Macaé, whose construction began in 2014 (total investment estimated at USD 100 million) as well as Aker Solution' new subsea equipment plant in São José dos Pinhais. The latter shall focus on delivering the order book including 100 wet x-mas trees and eight manifolds to Petrobras, with investments in the new plant estimated at over USD 110 million.



PGS: with over USD 157 million of revenues in Brazil in 2014, PGS's local operations amount to over a tenth of its global footprint. Among recent projects, in addition to multi-client seismic acquisitions, PGS has installed an OptoSeis Marine system for Petrobras on parts of the Jubarte field offshore Brazil. Delivered as a turnkey system, Jubarte's OptoSeis is the world's first PRM system installed at water depths greater than 1,000 meters.



Hydro: Brazilian operations are the main global source of bauxite for the group, and hosts the world's largest alumina refinery. Brazil is the country where the company has the most employees
 more than 6,000 if long-term contractors are included. A new research department for Bauxite & Alumina is under establishment at Alunorte in Pará. Alunorte has been the target of the bulk of Hydro Brazil investments in 2014, absorbing close to NOK 500 million, including on ensuring competitive power cost for the Brazilian operations and maturing long term energy options.



Statkraft: the company operates 10 hydropower stations in Brazil, in addition to four wind power plants and a biomass facility. Statkraft has invested heavily expanding its operations in Brazil. In April 2014, it took over control of SN Power in Brazil and, in early 2015, became the majority owner of Desenvix with over 80% of its shares through a BRL 500 million acquisition.



Vard: out of the group's 10 shipyards globally, two are located in Brazil (Vard Niterói and Vard Promar), with a local capacity of up to 30,000 tons per year. Vard Promar, a greenfield investment of over USD 150 million in the Northeast of Brazil, has ramped up operations in 2014, hiring 600 extra employees and launching the first vessel, an LPG carrier for Transpetro. The group is also working on the construction of four PLSVs for the joint venture DOF-Technip, a cooperation between VARD's Norwegian and Brazilian teams (two of these vessels will be delivered from Vard Promar in Brazil and two from Vard Søviknes in Norway).







3.1.2 Spotlight on Research and Development Initiatives

In the past decade, Brazil has seen a positive development on many official science & technology indicators, with an increase in R&D budget, the number of researchers, post-graduate fellowships, publications, and, although to a lesser degree, patents. Public-private initiatives have been a key R&D driver. Among those companies with in-house research teams in Brazil, one example of a successful project involving collaboration between different Norwegian companies and a local player is illustrated further below:



Statoil

- USD 17 million in R&D expenditure in 2014
- 26 active R&D Projects
- 16 external R&D partners, among others: GE, ONIP, Schlumberger, Sintef, USP and UFRJ
- 11 in-house R&D staff members
- Collaborating with 110 external researchers and students

Improved Pipeseparator for multiple-wells (Statoil-Aker Solutions-Petrobras)

The Project started in Q4 2014 through a partnership with Petrobras and Aker Solutions (within the framework of ANP's 1% R&D clause). The Pipeseparator is based on a Statoil proprietary technology for subsea oil-water separation for single wells, developed in conjunction with FMC and first implemented in Petrobras' Marlim Field. The objective of this project is mainly the separation of oil and water in deepwater fields, and re-injection of the produced water into the reservoir, while the oil and gas is transported to topsides.

L AkerSolutions^{*}

- USD 2.6 million in R&D expenditure in 2014
- 5 active R&D Projects
- 3 external R&D partners: UTFPR, Senai and UFPR
- 30 in-house R&D staff members
- Collaborating with 3 PhDs and 4 MsC Mechanical Engineers

New developments:

Aker Solutions is inaugurating a complete new R&D center of 800m² in Paraná, including a Hyperbaric Chamber for Qualifications in Q4 2015. Focus on Convectional Products (including XMT, Manifolds, Control Systems) and Subsea Processing (Pump, Power, etc.)

Reasearch and Development organizations

In addition to in-house initiatives, large Norwegian research organizations such as Sintef and IRIS have been present in Brazil, mostly catering for demands of the oil & gas industry. Sintef, through Instituto Sintef do Brasil, had the largest presence in 2014 with a team of 26 people and 7 active projects with customers such as Petrobras, Statoil, Sinochem, GeoPark and Bureau Veritas. Further collaboration between Norwegian and Brazilian researchers is expected through new calls for projects being structured jointly by the Research Council of Norway and Brazil's Finep.









3.2 Sector Breakdown

- As has been the case for the past 5 years, the combined Oil & Gas, Offshore and Maritime sectors have concentrated over half of all inbound Norwegian investments into Brazil. In 2014 the investment figure for these combined key sectors was approximately USD 800 million.
- Out of 86 surveyed companies, 68% (or 58 companies) have been identified as belonging to this offshore-related group, which employs 10,000 people as a whole in Brazil.

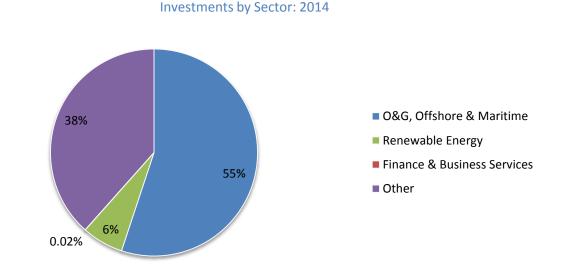


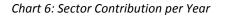
Chart 5: Investments per sector in 2014

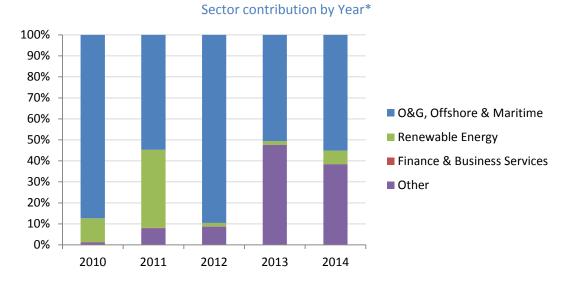
- The remaining "non-offshore" sectors, even if representing only a third of the total number of companies (28 out of 86), employ more than 50% of all people working in the Norwegian-related firms in Brazil: i.e., nearly 12,000 out of a total of 22,100 who could be identified as comprising the payroll of all 86 surveyed companies.
- The Renewable Energy Sector alone, led by large companies such as Statkraft and Umoe Bioenergy, invested over USD 90 million in 2014; the two companies alone employed over 2,000 people in Brazil in 2014, an increase of 20% when compared to 2013 figures.
- Telenor and Schibsted, through the joint venture SnT Classifieds, have invested heavily in the path to become the undisputed market leader in the market of online classified advertising.











*Excluding the one-off effect of Hydro's 2011 acquisition of Vale's aluminium business

- The remaining sectors, including Media, Agriculture, Aluminium & Mining are represented, among others, by heavyweights such as Hydro, Yara and Schibsted/Telenor. For the purposes of this report, they had to be bundled together due to the fact that some of these sectors are dominated by a single company, so if the data had been broken down its confidentiality would be undermined.
- These sectors account for over a third of total 2014 investments. Nineteen companies have invested in excess of USD 540 million, which is 7% higher than in 2013 (even if in relative terms it lost some share of the total when compared to the previous year), employing around 9,800 people in Brazil.

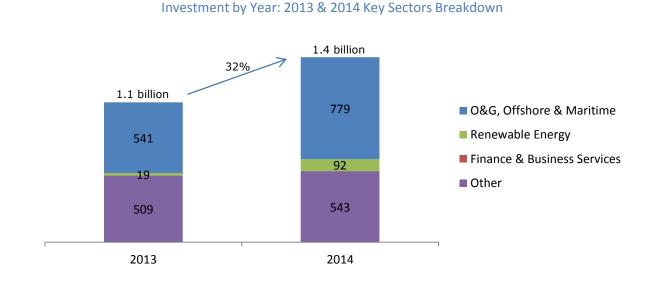


Chart 7: Key Sectors Breakdown: 2013 & 2014





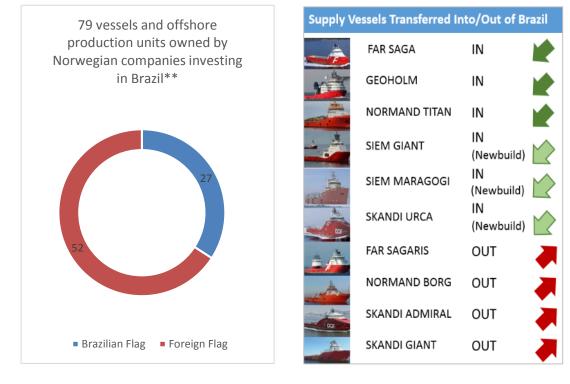


• Finally, Finance and Business Services have experienced a more stable trend, although attracting a negligible share of total investments in any given year. This is traditionally not a labor nor capital intensive segment, especially considering that most of these firms are small in Brazil and focus on sales or high added value activities, while using the structure in Norway to structure products and services (as is the case with the Investment Banks, for instance, which tend to adopt a "boutique" setup in Brazil).

Chart 8: Vessels & Offshore Installations

VESSELS AND OFFSHORE INSTALLATIONS IN 2014*

As mentioned in Section 3 and further detailed in the appendices, "Asset Transfers" are no longer included as part of the definition of total investments as from this year's report. Nonetheless, we have decided to provide a simple illustration on the number of Norwegian-related offshore rigs, production units and offshore support vessels in Brazilian waters in 2014. For the first time since this mapping started, more Norwegian-owned ships went out than came into Brazil in a single year; four ships ended their contracts and left Brazilian waters, whereas three vessels came in (in addition to three newbuilds that were delivered to Norwegian owners by Brazilian shipyards in 2014). We expect to see a steep downfall in the Norwegian fleet in 2015 and 2016.



*Source: annual reports and publicly available data

** See appendix for the definition of a Norwegian company investing in Brazil







3.3 Corporate Demographics

- There has been a steep climb in number of employees in recent years. The mapping of employees started in 2012, when the number was 15,800. It climbed to 18,600 in 2013 and 22,100 in 2014, a rise of 40% in just two years. The rise is due to a general expansion ranging from 300-800 employees among most of the 10 companies employing more than 400 employees. Yara stands out, as its workforce grew significantly with the acquisitions of Bunge in 2013 and Galvani S/A in 2014. Most of the smaller companies have remained about the same size since 2012.
- According to the current methodology, 86 companies have been identified in Brazil for the base year of 2014. This figure is pretty much stable when compared to 2013, although there have been a few new entrants (e.g. Petrostreamz and Cubility) while some others have formally ended operations in Brazil and left. This is the case, for instance, with Norske Skog, which in Q1 2014 sold its remaining 49% stake in the Pisa newsprint plant to Chile's Papeles Bio Bio (for an estimated USD 37 million).
- In addition to companies formally established in Brazil, over 70 companies are estimated to be
 present in Brazil via sales agents (therefore not fulfilling the requirements to be fully
 considered for the purposes of this report). With the ensuing market downturn, this entry
 mode is only expected to rise as compared to full establishment. Establishment through agent
 normally involves less risks and fixed costs, although upside is also limited.

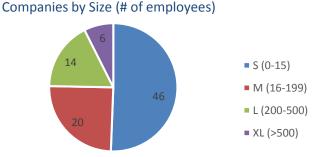


Chart 9: Companies by Number of Employees

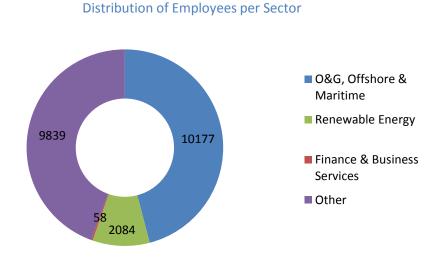
 Small companies (those with a maximum of 15 employees, but whose median number of employees is actually below 5) account for over half the 86 surveyed companies. However, in terms of investments, these small companies, despite their number, have invested only about 1% of the total figures. Eighty-seven percent of all reported historical investments has been made by large companies (with currently 200 employees or more), even if they account for only about 25% of all Norwegian companies present in Brazil (as could be expected from a few heavyweight, household names).







Chart 10: Employees per Sector



- When it comes to the breakdown of employees per sector, the combined offshore sector comes in with about 45% of the total number of employees. Renewable Energies already employ over 2,000 people in Brazil, a steep climb from 2013. Here, again, the largest companies blur the picture, and the top-10 account for 19,000 employees; in other words, 12% of the companies (ie, the largest ones) concentrate over 85% of all employees.
- In total, only 177 out of all employees have been reported as being long-term Norwegian expatriates in Brazil, although the number of Norwegians can be relatively high in smaller companies, especially those in early stages.







4. APPENDICES

4.1 DEFINITIONS AND FRAMEWORK

For the purposes of this report, a non-conventional method for classifying investments is used. The traditional OECD definition of Foreign Direct Investments (FDI), whose measurement and reporting are heavily dependent on national statistics, would underestimate Norwegian-related investment figures in Brazil. This is so because a significant proportion of funds are actually channeled through «holding-friendly» jurisdictions where Norwegian companies hold subsidiaries and/or investment vehicles.

In fact, due to lack of quality data for FDI statistics, «Statistisk Sentralbyrå» (Statistics Norway) decided to discontinue their statistical coverage of Norwegian direct investment flows to foreign countries from 2011³.

As further explained below, the main difference in definition between traditional FDI flows and the investments calculated in this report is a result of the adoption of a broader definition herein, which also comprises interests originating from foreign subsidiaries of Norwegian companies, as opposed to only funds coming directly from Norway.

The total value of Norwegian investments in Brazil is, for the purposes of this report, defined as:



The calculations were made using data collected directly from companies defined as Norwegian investors in Brazil, public information, and own estimates where applicable.

The calculations do not include transactions made by Norwegian individuals without presence in Brazil, bilateral aid, and portfolio investments⁴ made by the Norwegian Government Pension Fund Global, «Oljefondet».

³ See Statistisk sentralbyrå, Statistics Norway, Direct investment transactions, available at:

https://www.ssb.no/en/utenriksokonomi/statistikker/dit/aar/2012-01-26

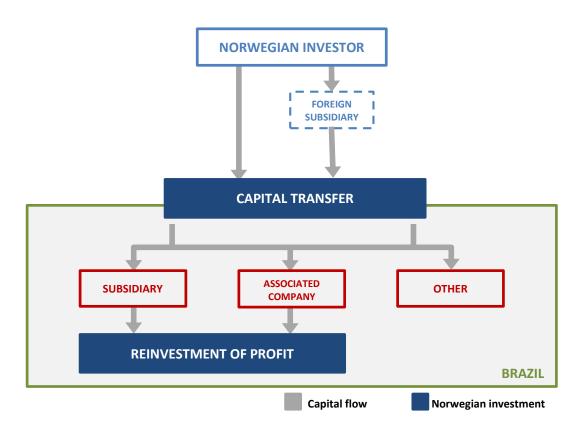
⁴ For the purpose of this paper, a portfolio investment is hereby understood to be a passive investment in securities.







4.1.1 DEFINITION: NORWEGIAN INVESTMENT



A financial model was developed to determine which investments to include in the calculations, and how to estimate them. The total value of Norwegian investments is hereby being defined as capital transfer + reinvestment of profit.

Any investment had to meet the following three criteria in order to be included:

- The investment origin must be a *Norwegian investor*, although the transaction itself could be made via a country other than Norway.
- The *investment type* must be either (1) transfer of equity or liability or (2) reinvestment of profit.
- The investor must own 10% or more of the *investment recipient*, or the Norwegian investor must have a permanent presence in Brazil.







4.1.2 DEFINITION: THE NORWEGIAN INVESTOR

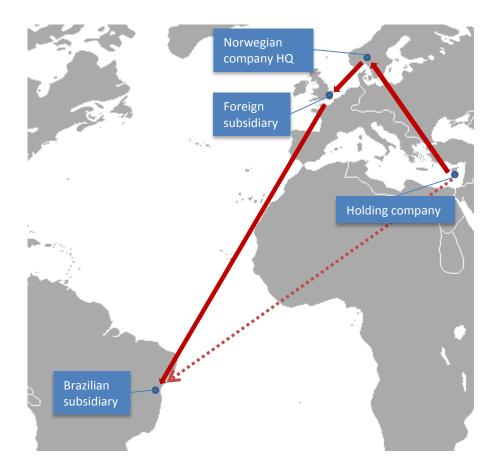
A Norwegian investor is an individual, an incorporated or unincorporated public or private enterprise, a government, a group of related individuals, or a group of related incorporated and/or unincorporated enterprises that have an investment enterprise in Brazil (a subsidiary, an associate company or partnership, or other substantial assets in Brazil).

To be classified as a Norwegian Investor the company must meet following criteria:

- The company has its operational headquarters in Norway; and
- The company is registered in the Norwegian company registry, Brønnøysundregisteret

Once these criteria are satisfied and the investor is identified as a "Norwegian investor", all flows of capital from this investor into Brazil thus satisfy the definition of a Norwegian investment, regardless of the origin of the final investment transaction.

The following picture shows cash flow that is considered Norwegian. As long as the company has their headquarters in Norway and is registered in Brønnøysundregisteret it does not matter that the money comes from a holding company registered outside of Norway. Also, the investment is considered Norwegian even if it comes from foreign subsidiaries of the Norwegian company. As the picture shows, the money does not necessarily have to go through the headquarters in Norway.



Investments made by Norwegian individuals with no local presence in Brazil do not meet the definitions of the model and are not included in the report.





4.1.3 DEFINITION: THE INVESTMENT TYPE

The investment must reflect the objective of obtaining a **long-term interest** by a Norwegian investor in a Brazilian enterprise, and the investment type must fall within one of the following categories:

1. Capital transfer: Flows of equity and liability

The aggregated flow of equity and liability from the Norwegian investor to the Brazilian enterprise. This can be an initial transaction related to establishment or acquisition, or additional capital transfers at later stages.

2. Reinvestment of profit

This is the Norwegian investor's share of the profit that is reinvested in Brazil (not repatriated out of Brazil). A simplified definition has been used in order to avoid excessive complexity related to data collection and calculations: Reinvested income is defined as net income minus dividends distributed to owners.

The calculated investment includes both the initial transaction between the two entities and all subsequent transactions between them and among affiliated enterprises; both incorporated and unincorporated.

4.1.4 DEFINITION: INVESTMENT RECIPIENT

The investment recipient must belong to one of the following categories:

1. Subsidiary

The Norwegian investor owns *more than 50%* of the shares or voting power of the company.

2. Joint venture / Associated company

The Norwegian investor, its subsidiaries and its other associated enterprises own **at least 10% and maximum 50%** of the shareholder's voting power in the company. This corresponds with IMF's definition of an FDI, which defines stakes of less than 10% as a financial investment rather than FDI.

3. Other - Mobile assets

Mobile assets such as vessels, aircrafts and offshore installations operating within Brazil for *at least one year*.

4.1.5 DEFINITION: ASSET TRANSFERS

Asset transfer mean the deployment of assets such as vessels and offshore installations for more than 12 months of operation in Brazil.

Asset transfers are considered in the calculations of this report only when expressly indicated.

4.1.6 DEFINITION: BROAD INDUSTRY SECTORS

Norwegian investments in Brazil span over a variety of industries and entities. These have been grouped into four broad sectors, mainly due to concern of the confidentiality of the companies. Some sectors are dominated by a single company, which would have led to the undermining of confidentiality had the data had been further broken down.







The broad sectors are: 1) Oil & Gas, Offshore & Maritime; 2) Renewable Energies; 3) Finance and Business Services and 4) Other (incl. Agriculture, Aluminium, Media, etc.).

Norway also has substantial economic activity in Brazil through bilateral aid and portfolio investments by the Government Pension Fund Global. These activities are not included in the calculations, as previously noted, since aid and portfolio investment activities do not meet the defined investment criteria.

4.2 SOURCES AND METHODOLOGY

Norwegian companies established in Brazil were identified, and approached with a questionnaire⁵ where they were asked to contribute with information regarding investments and company structure in Brazil. The answers from the survey and information from public sources cover most of the investments. Estimates may have been made based on other sources and best-of-knowledge analysis.

When applicable the exchange rate (USD/BRL) used in the report has been fixed at 2.66 (Banco Central do Brasil, 24.12.2014).

4.3 NORWEGIAN ECONOMIC ACTIVITY NOT COUNTED AS INVESTMENTS

Two very large Norwegian financial dispositions directed towards Brazil are not defined as investments according to the criteria of this report. Nonetheless we will discussed them briefly because of their size and because they complete the picture of the capital flow between Norway and Brazil. These two activities are:

1. Bilateral Aid and The Amazon Fund

The fund has received large media interest due to the significant amount of money it has destined towards combating the deforestation of the Amazon forest. This support is not included in the report's investment numbers as it is seen as donations rather than investments.

2. The Government Pension Fund Global

The dispositions of the fund are seldom covered by media, mainly because the fund does not discuss individual investments in public. The fund's Brazilian investments are not included in the report's investment numbers as they are considered passive portfolio investments.

4.3.1 BILATERAL AID AND THE AMAZON FUND

Norway entered into a results-based climate and forest partnership with Brazil in 2008. The Norwegian government pledged to support Brazil with up to USD 1 billion by 2015, based on result in achieving reduced deforestation in the Amazon. Norwegian result-based support is transferred to the Amazon Fund, which is managed by the BNDES.

Brazil has been extremely successful in curbing deforestation in the Amazon, and has as a result received large-scale support from Norway. The deforestation figures for the 2014 forest year indicates a reduction in deforestation of almost 75% compared to the Amazon Fund's original reference level. The projects supported by the Amazon Fund are in line with Brazil's overall plan to reduce deforestation, while also promoting sustainable development in the Amazon region. The projects have broad scope. They can range from supporting indigenous peoples to continue to take care of the forest, land planning at the municipal and state level, sustainable and more efficient agricultural practices,

⁵ See last page







improved fire protection, enforcement of legislation, knowledge and technological development. By 2014 Norway's combined contribution was NOK 5.45 billion. By the end of 2015 Norway will have fulfilled its pledge of supporting Brazil with USD 1 billion.

4.3.2 THE GOVERMENT PENSION FUND GLOBAL

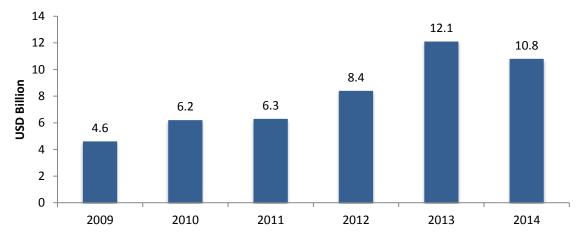
Total investment in Brazil by year-end 2014 by the Government Pension Fund Global was USD 10.8 billion, or about 1.2% of the total value of the fund.

The government pension fund global held by year-end 2014 state bonds worth USD 6.1 billion in Brazil, which constitutes 1.5% of the value of all the bonds in the pension fund's portfolio. The total value of the bonds owned is up 17% from 2013.

Other investments decreased. After a significant increase in the investments in stock in Brazil the last couple of years the government pension fund global reduced its Brazil-related portfolio in 2014. Per year-end 2014 the portfolio value in Brazil was USD 4.7 billion, which translates to 0.9% of the fund's total value. This is down from USD 5.5 billion in 2013.

The largest single investments were a 0.41% equity holding in the bank Itau Unibanco, worth USD 298 million, and a 0.61% share in Petrobras worth USD 297 million.





Pension Fund Holdings per Year

4.3.3 DATA RELIABILITY & AGGREGATION

The identified capital investments are considered the most reliable source of investment information as the amount of capital transferred is easily available information relevant for a company's financial department.

Numbers on reinvestments are considered as having a lower reliability, as such information would require more work to be calculated by the respondents. Many respondents did not provide numbers







on reinvestments, which can also indicate that most companies are not yet in a position to make profits in Brazil.

Transfer of assets is a weaker indicator, and hence has not been used unless clearly stated, as the response rate is very low for such items and the estimated values can vary deeply depending on market cycles and valuation methodologies.

All results are reported as aggregate values. Specific information on any given company is obtained exclusively from public sources (with the exception of the Research & Development Section), as the financial information provided by the surveyed companies is kept strictly confidential.

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Sample Questionnaire Sent Out to Target Companies 4.3.4

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