

Financial Sustainability of Publicly Traded European Electric Utilities



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This thesis explores the financial sustainability of electric utilities and the challenges they faced from 2009 to 2019. The main goal of the study was to find whether the finances of the selected companies in the study had deteriorated during a decade following a global financial crisis and an operating environment dominated by increased pressure to decarbonise Europe's energy mix.

The decades predating the timeframe of the study are covered as they provide an important background on the liberalisation and integration of the European electricity market that preceded the period covered by this research. It is followed by an overview of the fluctuations in electricity demand and prices as well as an analysis of the selected companies' financial statements with an emphasis on key ratios pertaining to financial liabilities and solvency. Market capitalisation and credit rating evolution shed light on investor and creditor confidence in the industry at large and, finally, the financial impact of disruption and the transition to green energy is studied in the final chapter of the thesis, with particular emphasis on asset impairment and the outlook of energy markets in Europe.

The key metrics analysed confirm that the period from 2009 to 2019 was defined by a market with weak demand compounded by increased regulatory pressure to update the European energy mix with investment-intensive renewable capacity. The debt sustainability of electric utilities declined over this challenging decade as credit rates confirm but the end of the period saw positive signs and, while the future holds challenges for the energy sector, it also holds promise with the advent of electric vehicles and other technologies with the potential for increased demand for electricity.

Keywords Sustainability of financial liabilities of electric utilities. Credit ratings. Disruptive megatrends in European energy markets.

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1 Introduction

European electric utilities serve one of the most important sectors of the continent's economy. Electricity is a commodity private consumers and companies alike cannot live without. As such, the sector has always been regarded as strategically vital by nation-states who have, historically, kept the industry directly or indirectly under their ownership and strict regulation. Security of electricity supply was a priority at a national level for many decades and little cooperation between European states existed. The European Union (EU) brought about changes in the strategic planning and market philosophy for the generation, distribution and trade of electricity, capitalising on the privatisation and market liberalisation trends in the eighties and nineties seen in the Nordics and the United Kingdom (Schülke 2010, 13). The creation of a common market where publicly traded companies could access new markets and own generation assets beyond their borders, trade electricity and, most importantly, sell electricity to consumers across the continent completely changed the landscape and the market potential for electric utilities.

This change revolutionised the ownership structure of European power grids, with energy colossi aggressively expanding across the continent and buying local subsidiaries in European countries. The EU's pressure for increased privatisation of previously state-owned companies was received differently across the continent. The capital structures of electric utilities changed to a different extent in different countries as did their expansionist drive to new markets. National government ownership still prevails, to a varying degree, in many companies. This paradigm shift is an important background to the subject of this thesis, it will be covered prior to the main research to provide a better overview of the changes to the industry's structure that followed liberalisation.

This study will focus on the financial stability and solvency figures of a select group of European electric utilities from 2009 to 2019. This decade is a particularly interesting period as it coincided with the fallout from the global financial crisis of 2008 that sent shockwaves through the global financial ecosystem and resulted in increased scrutiny on debt

sustainability and credit worthiness across the board (Bateman 2018, 9). The economic environment during the decade, particularly electricity demand and price fluctuations will be explored.

Consolidated financial statements are an invaluable source of information for the financial figures of the main players in the electricity generation market. Solvency ratios and market capitalisation will help gauge both the companies' solvency, dependence on debt and investor confidence on the industry at large. Credit ratings and their evolution from 2009 and 2019 will be essential to corroborate any findings from the studied entities' books.

Another noteworthy megatrend during this period was the disruption caused by renewable energy technology and the socio-political pressure to decarbonise and improve the environmental sustainability of Europe's power grid, evidenced by an increase in investment on renewable energy (Frankfurt School-UNEP Centre 2016, 12). Renewable energy presents an opportunity but also heavy investment needs for an industry that had mainly been focused on expanding to new markets, regardless of the generation asset types that were being acquired. The financial impact of these investments as well as the ripple effects on the value of outdated assets will be studied. To conclude, a look at future trends and what they forebode for the industry past 2019 shall also be considered and compared to the challenges and opportunities of the 2010s.

2 Research Question

This research will be centred around the sustainability of the sector's debt and the declining value of outdated generation assets during a paradigm shift in the energy industry.

Legislation and public concern have changed the business and legal environments in the sector as increasing pressure is mounting on electric utilities to transition to cleaner energy generation. The financial impact of this shift is immense and will require European companies to manage their assets and investments carefully in their efforts to update their generation capacity and meet stricter environmental requirements.

Quantitative easing (QE) has been employed by central banks to stimulate the economy by reducing interest rates thus making borrowing more accessible. Despite their dependence on cash for their capital-intensive operations involving mergers and acquisitions (M&A) and high capital expenditure, upon preliminary research, it was evident electric utilities have not contracted more debt simply due to the ease of access to credit. QE's main goal has been to incentivise spending from households and benefit smaller businesses.

This research will focus on relevant ratios such as the equity ratio, debt-to-equity ratio, market capitalisation to equity ratio and the impact of megatrends on asset values. Credit ratings from the major ratings agencies will provide a useful gauge for the sector's credit worthiness and financial health. These ratings will be compared industrywide to ascertain whether creditworthiness trends are specific to a few poorly performing companies or common across the industry.

Data on electric power consumption and electricity prices will be factored into the analysis as well as the impact of the EU Emissions Trading Scheme (ETS). Regulatory pressure and state participation in the energy sector are still a reality after the liberalisation of the markets since the mid-1990s. Regional differences exist, such as partial state ownership of energy companies and the prevalence of national champions, such as the coal industry in some regions. This research will be focused on a quantitative analysis of financial statements and comparison to macroeconomic trends in a heavily interconnected energy market.

The more apt research question is which factors have weighed more heavily on the financial sustainability of European Electric Utilities from 2009 and 2019. The multivariate analyses in this research will attempt to identify patterns and the most challenging megatrends facing the industry's financial performance and the sustainability of its debt.

3 Sample

Seventeen publicly traded electric utilities from EU countries were selected as the sample for this research. These are E.ON, RWE, Energie Baden-Württemberg (EnBW), Verbund, Ørsted (formerly known as Dong Energy from 2009 to 2017), Fortum, Enel, Iberdrola, Energias de Portugal (EDP), Scottish and Southern Energy (SSE), Centrica, Drax, Public Power Company (PPC), Engie (formerly known as GDF Suez from 2009 to 2014), Energie de France (EDF), Polska Grupa Energetyczna (PGE) and České Energetické Závody (ČEZ). The main selection criteria for the type of companies are the following:

- Publicly traded entity
- Company which owns assets for electric power generation and commercialises it to consumers, either industrial or domestic

Some of the companies in the sample are also in the gas utilities market. Transmission System Operators (TSOs) were excluded as their position in the electric supply value chain is fundamentally different. A very conspicuous omission from the sample is Vattenfall, a major player in the European energy market fully owned by the Swedish government but not publicly traded. There are significant local players across Europe which could have been included in the sample, but these are owned, partly or entirely, by the companies covered by this research. Unbundling these smaller national companies from the financial statements of the parent company would prove quite challenging.

The timeframe for the financial analysis spans from 2009 and 2019, a period defined by the aftermath of an economic slowdown caused by the global financial crisis of 2007-2008, the resulting sovereign debt crises within the European Union which affected some of the companies with significant state ownership and an almost unprecedented disruptive pressure caused by the drive towards cleaner energy generation which has deteriorated the value of nuclear and fossil fuel powerplants, demanding heavy investment on cleaner energy generation and the loss of asset value.

3.1 Regions

The sample will be divided in six cohorts to analyse trends in specific regions/countries.

These cohorts are Germany and Austria, the Nordics, Southern Europe, the United Kingdom (UK), France and Eastern Europe. Companies where the local state holds majority stakes will be emphasised, as these will also constitute a cohort of their own for further analysis.

3.1.1 Germany and Austria

This cohort will include the German companies E.ON, RWE, EnBW and Verbund, an Austrian firm. E.ON and RWE are global players with assets across Europe and beyond which have swapped assets over the years and expanded aggressively. EnBW is focused on the federal state of Baden-Württemberg in Germany whereas Verbund is an Austrian company in which the national government owns a majority stake of 51 percent (Verbund n.d.)

3.1.2 Nordics

The Nordics cohort is composed of Fortum, a Finnish company in which the state holds a 50,76 percent majority stake (Fortum n.d.) and Ørsted, in which the Danish State is a 50,1 percent majority stakeholder (Ørsted 2020).

3.1.3 Southern Europe

Southern Europe is composed of Enel, an Italian company, Iberdrola from Spain, EDP from Portugal and PPC, where the Greek State holds a 51,1 percent majority stake.

3.1.4 United Kingdom

The United Kingdom cohort is composed of three companies, namely SSE, Centrica and Drax, all of which were technically within the EU during the timeframe covered by this research.

3.1.5 France

The two French utilities in the sample are EDF and Engie. True to the French tradition of *service public*, the majority shareholder in both cases is the French state with the share of public ownership in the former being 83,68 percent (EDF n.d.) and in the latter being 67,81 percent (Engie n.d.).

3.1.6 Eastern Europe

The last regional cohort includes PGE, from Poland and ČEZ from the Czech Republic. The Polish State holds 57,39 percent of PGE's shares (PGE n.d.) whereas the Czech Republic holds 69,78 percent of ČEZ's shares (ČEZ n.d.).

4 Sources

The bulk of the data used in this research is from the sample companies' annual reports, specifically IFRS compliant consolidated financial statements. As they are all publicly traded, they are legally obliged to publish their financial statements on a yearly basis, statements which are audited by reputable accounting firms, making them an essential source of data for this research.

As the main focal point will be centred on debt and financial liabilities, the *Big Three* credit rating agencies, namely S&P Global Ratings, Moody's and Fitch Group will provide a reliable source of information in the form of credit ratings for the companies in this study. These ratings reflect credit worthiness and debt sustainability.

Academic research on the EU's electric utilities is widely available from various sources, particularly regarding the post-liberalisation period of energy markets and its impact on the ownership of powerplants and energy generation capacity on the continent. The wave of M&A that followed this liberalisation had long lasting effects which are analysed by economists such as Richard Gilbert, David Newbery and the IFRI's Researcher Christian Schülke.

5 Liberalisation of European Electricity Markets

A stable energy supply was a priority for national governments in the twentieth century, who created state or region/municipality companies, owned power generation assets as well as transmission infrastructure and made decisions with regards to energy policy at a national level. Electricity supply markets were regarded as natural monopolies in their respective countries and electricity sold to consumers within their own territory.

The EU strives to create Pan-European infrastructure and cross-border cooperation in many sectors. The energy sector, vital to economic activity and a traditional pillar of national economies, is no exception. Its importance and impact on the lives of its citizens keep the industry under scrutiny and regulatory pressure. The potential for an integrated power grid where consumers, domestic and industrial alike, can freely choose their electricity supplier was a goal of the EU, often resisted by some national governments which saw it as a danger to their natural monopolies and a gateway for predatory foreign M&A. The first EU Electricity Directive entered into force on 19 December 1997 (Council Directive 96/92/EC 1996) which set the stage for liberalisation across the bloc. A second directive (Council directive 2003/54/EC 2006) was agreed on in 2003, addressing shortcomings of its predecessor, particularly with regards to the unbundling of transmission assets and network access. The unbundling of TSOs from retailer ownership would facilitate access to transmission networks and limit protectionism and an unfair market advantage for local incumbents. A third package was introduced in 2009 (Council Directive 2009/72/EC) which defined further rules for network unbundling and specified the scope of The European Network of Transmission System Operators for Electricity (ENTSO-E). ENTSO-E has brought about further cooperation between TSOs across the continent and facilitated the creation of a Pan-European electricity grid, allowing electric utilities to reach consumers all over the continent without owning transmission grids. TSOs are still natural monopolies in most European countries, with the exceptions of Germany and the United Kingdom, where multiple TSOs are present in different regions.

Europe's market liberalisation has been gradual and marked by varying degrees of acceptance to privatisations in different countries. Whereas some states had already taken

steps to liberalise electricity markets, as was the case with the United Kingdom and Sweden, others were opposed to the liberalisation of a sector that is regarded as a vital public service, such as France.

Liberalisation set the stage for a wave of M&A across Europe that has significantly changed the ownership landscape of power generation and supply. With open markets across borders, a few electric utilities have raked up generation assets and expanded their customer base significantly. Despite efforts by the EU to scrutinise these gigantic deals, national antitrust and competition authorities prevail as the watchdogs, with local legislation and interests prevailing (Newbery D. 2007). In the context of a continental power grid, this lack of coordinated legal oversight can lead to monopolies of a different kind to the ones eliminated by EU directives.

This wave of mergers required massive transactions and resulted in changes in the buying companies' book value. The object of this research is not to evaluate potential overpriced deals and whether assets were evaluated correctly on balance sheets. Tracking changes in ownership and the impact of M&A on consumer prices and monopolisations is addressed in various research papers. This research will focus on the proportion of debt and other financial liabilities to asset value and equity as well as market capitalisation of the companies in the sample. It is still useful to investigate regional differences in market policies and their different stances on liberalisation. The following sub-chapters will explore the regional cohorts of the sample more closely.

5.1 Germany and Austria

Federalism and regionalism defined the German market prior to liberalisation with a mixture of "private, mixed economy and public companies" (Heddenhausen 2007, 14) composing the energy sector in Europe's biggest economy. Transmission grids were commissioned at a state level and their ownership structure was more complex than in other EU member states due to more vertically integrated companies. Unbundling of transmission assets was a particular challenge in the country as private utilities involved in the generation and retail sector were also involved in transmission grid development and ownership. Germany is still

home to four different TSOs whereas all other current EU countries have a single TSO, a testament to the country's state and regional mixed economic model.

Germany's three representatives in this thesis are the aforementioned E.ON, RWE and EnBW.

EnBW's area of operation is primarily the German federal state of Baden-Württemberg, which holds a significant share of EnBW through its subsidiary NECKARPRI GmbH (EnBW n.d.). It is the smallest company by asset value of all three German entities.

E.ON was created when German companies VEBA and VIAG merged in 2000 and that M&A policy was extended beyond national borders where the German giant acquired the assets of various companies across Europe and the United States with examples such as Powergen in the United Kingdom or Skydraft in Sweden. E.ON also has a significant presence in the gas utility sector as a result of its acquisition of Ruhrgas in 2003 and further expansion into the market across Europe. In 2016, E.ON spun off its fossil fuel assets into a company called Uniper, the impact of which will be observed on its book value in chapter seven.

RWE, originally from Essen, is an energy giant founded in 1898. Its focus has always been strongly in the electricity market even though it has been active in gas utilities as well. Like its domestic competitor E.ON, RWE expanded to other markets via acquisitions of companies such as Innogy in the United Kingdom in 2003 and Essent in the Netherlands in 2009, both of which have since been acquired by no other than E.ON.

Austria is a considerably smaller market than its Germanic neighbour to the North and home to Verbund, the only Austrian company covered in this research. Verbund has effectively untapped the potential of hydropower from the Alpine nation's rivers, making its assets sustainable from an environmental standpoint. Besides the Austrian market, its main base, it owns plants in the German state of Bavaria and in Romania (Verbund n.d.). The Austrian Power Grid (APG), the country's TSO, is still a subsidiary of Verbund but fully compliant with the EU's unbundling regulations.

5.2 Nordics

The Nordic countries have enjoyed a gradual market liberalisation that predates EU directives. Norway was the first to liberalise and incentivise power trading across the region as early as 1991, followed by Sweden in 1996 with Finland and Denmark joining later. By 2000 the region had cross-border cooperation and traded power with various electric utilities present in the region which consumers could choose from. Although economically liberal and focused on consumer rights, true to Nordic style, major companies dedicated to electric power generation are, at least partly, state owned. Vattenfall, one of Europe's major electric power producers is still fully owned by the Swedish government and not traded in any stock exchange.

Fortum is Finland's major electric utility company and the 3rd largest power generator in the Nordic countries (Fortum n.d.) Its markets are in its home region, the Baltics, Poland, Russia and the United Kingdom. It also has a foothold in Germany via its subsidiary Uniper, formerly owned by E.ON.

Ørsted, Denmark's largest energy company, is present in multiple markets in Europe, North America and Asia. It relies heavily on renewable energy, having set the ambitious target of generating 99 percent of its energy from renewable sources by 2025 (Ørsted n.d.). The company claims to be the world's most sustainable energy company, having transitioned to clean energy from being Europe's most coal-intensive energy producer (Ørsted n.d.). The Danish company entered the Copenhagen stock exchange in 2016, making it the only entity in this study which was not a publicly traded company from 2009 to 2019.

5.3 Southern Europe

Southern European countries, particularly Italy and Spain, are home to strong electric utility companies. Enel and Iberdrola are amongst the best performing firms in the sector on the continent as will be demonstrated by their steady and stable growth in asset value. Protectionism and resistance to privatisation have been common in the region. One example was the political turmoil in the wake of the bid for Spanish energy giant Endesa by E.ON in

2007, staunchly opposed by national authorities and the Spanish government. E.ON eventually backed away from the deal which benefited Italian Enel and the Spanish company Acciona, both of which, allegedly, were in better terms with Spanish authorities (Forbes 2007). The sovereign debt crises in the wake of the 2007-2008 financial crisis put further pressure on Southern Europe's states to sell their shares in state-owned companies. Portugal's EDP was also at the centre of a speculative furore in 2011, with no other than E.ON, when a state-owned 21 percent stake in the company was up for grabs. The German giant lost yet another bid in Southern Europe, this time to China Three Gorges (Reuters 2011).

Greece is the only country in this study with a company from the region in which the national government has a controlling stake. The company in question is PPC, of which the Hellenic state controls a 51,12 percent stake, making it heavily exposed to Greece's highly risky sovereign debt.

Enel, Iberdrola and EDP have a global reach with all of them holding assets in Europe and beyond whereas PPC is limited to the Greek market.

5.4 United Kingdom

Prior to liberalisation and privatisation, British electric generation and transmission was in the hands of the now extinct Central Electricity Generating Board (CEGB). Margaret Thatcher's government opened the way to liberalisation as early as 1983, with the Energy Act of 1983 (Energy Act 1983) which abolished monopoly rights on generation, paving the way for private energy generation and retail. Privatisation of the British energy sector continued well into the 1990s, creating a diverse market with national players and subsidiaries owned by foreign companies. Liberalisation of the British power industry was already under way prior to the European Union's directives mandating it across the bloc.

SSE is the biggest British company by asset value in this research, it is focused on the British and Irish market, not owning significant assets overseas.

Centrica focuses on electricity and gas retail in the British market. Drax, the smallest British company in this research, owns assets in the United Kingdom and the United States.

5.5 France

Liberalisation and privatisation of sectors that constitute a *service public* are a hot topic in France. State ownership and regulation are expected in the industry by the public, labour unions and politicians. The French government still holds significant majority stakes in EDF and Engie, the French companies concerned in this study, with privatisation resulting in strife and opposition by unions and left leaning political parties. Protests by EDF workers in 2004, when the French government finally started planning to make a 30 percent share of the company available to investors, resulted in power blackouts across the nation with EDF's total output being reduced by twelve percent (Nuclear Engineering 2004).

EDF is the biggest company by asset value concerned in this study and a true utilities giant. Despite domestic resistance to its privatisation and public scrutiny, the French firm has not been shy in foreign markets. It holds assets globally through local subsidiaries and investments in other companies. It also held 45 percent of Baden-Württemberg's EnBW until 2010.

Engie changed to its current name from GDF Suez in 2015, a company that originated from the merger between Gas de France and Suez, which operated the Suez Canal until its nationalisation by the Egyptian government in 1956. Like EDF, it is present across the globe, having benefited from liberalisation in Europe and acquiring companies such as Electrabel and Tractebel in Belgium.

5.6 Eastern Europe

Eastern European countries' power supply was firmly in the hands of the state prior to the fall of communism. It was a pillar of progress for communist regimes and a driver of progress, often used propagandistically. With the fall of the iron curtain, Eastern Europe liberalised its economies and, eventually, many countries in the region entered the European

Union in the 2000s. Political tensions with regards to freedom of the press and general freedoms often make the news regarding Poland's and Hungary's unwillingness to adhere to the EU's values. The same has been true for energy policy, with Eastern European countries resisting what they perceive as attacks on their economies. Coal, a national champion for the Polish economy, should prove hard to phase out at the same pace as in Western Europe due to political resistance and its significance to the national economy. Hard coal and lignite accounted for 75 percent of Poland's energy production in 2019 (International Trade Administration 2020). Regional utilities have the double pressure of local resistance to a quick phasing out from fossil fuels and the prospect of owning low value assets that could financially cripple them in a not so distance future. The Czech Republic is also heavily dependent on coal and fossil fuels for its power generation needs. Poland and the Czech Republic are the only Eastern European countries represented in this research with the Polish PGE and the Czech ČEZ making up the studied companies.

6 Electricity Prices and Demand

Chart one shows the average price in euros per kilowatt-hour (kWh) in the EU-28 from 2009 to 2019. The prices do not include taxes or levies.

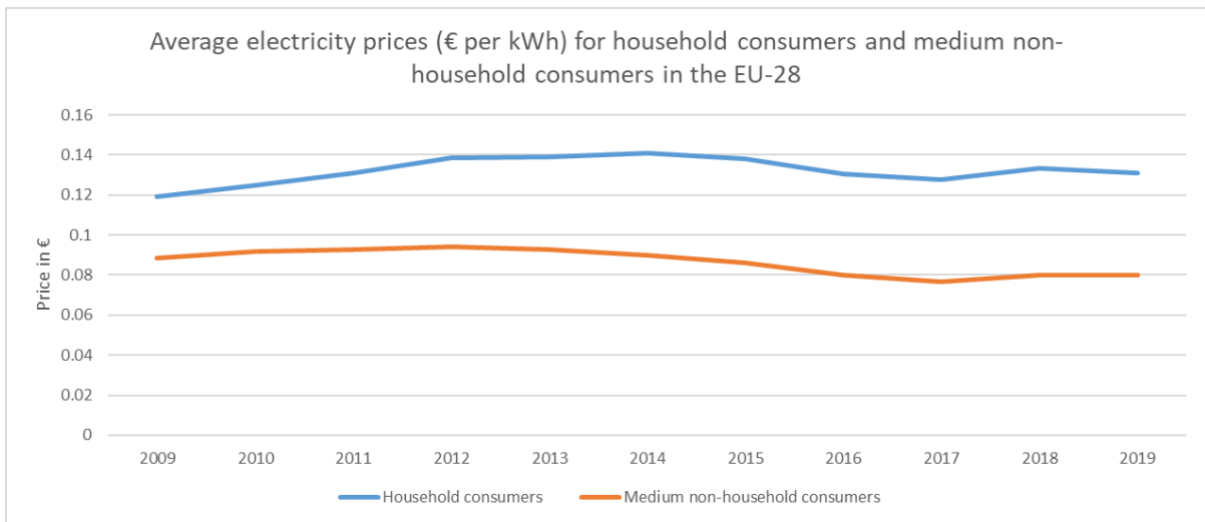


Chart 1: Average Electricity prices (€ per kWh) for household consumers and medium non-household consumers in the EU-28 (Eurostat n.d.)

Chart two shows the available power for consumption and the total consumption from the industry sector, transport sector, commercial sector and households in Gigawatt-hour (GWh).

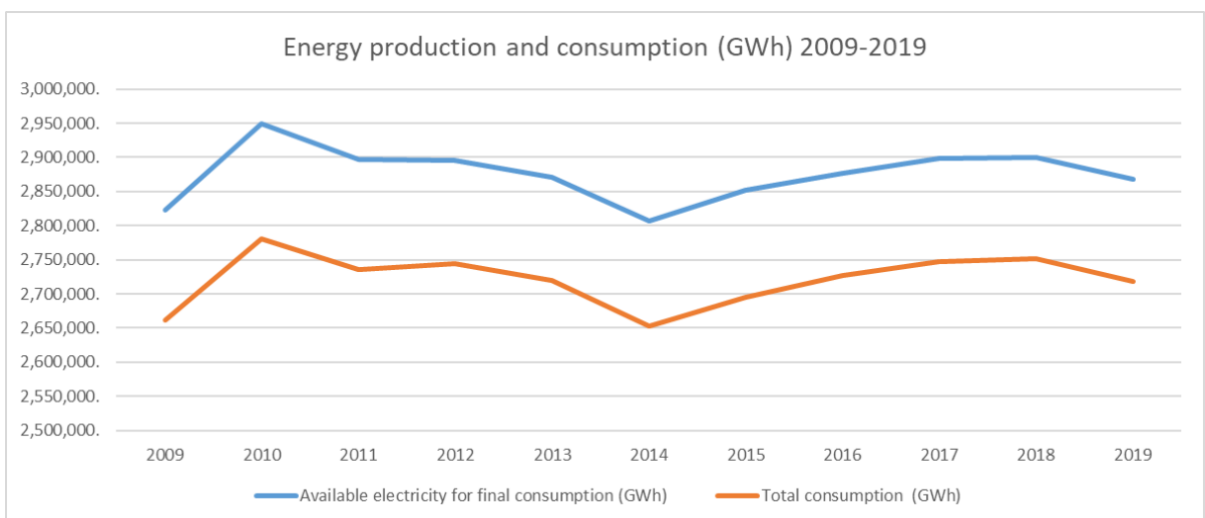


Chart 2: Energy production and consumption (GWh) 2009-2019 (Eurostat n.d.)

Unlike many markets in which supply and demand can elucidate a clear picture on price behaviour, the energy sector requires a multivariant analysis that would go beyond the scope of this research. Commodity prices, favourable conditions for renewable power generation such as wind, river flows and solar light would have to be factored in but so is the fact generated power cannot be stored for later consumption, an operational limitation inherent to the industry. Charts three and four detail the relationship between price and consumption for household and non-household consumers.

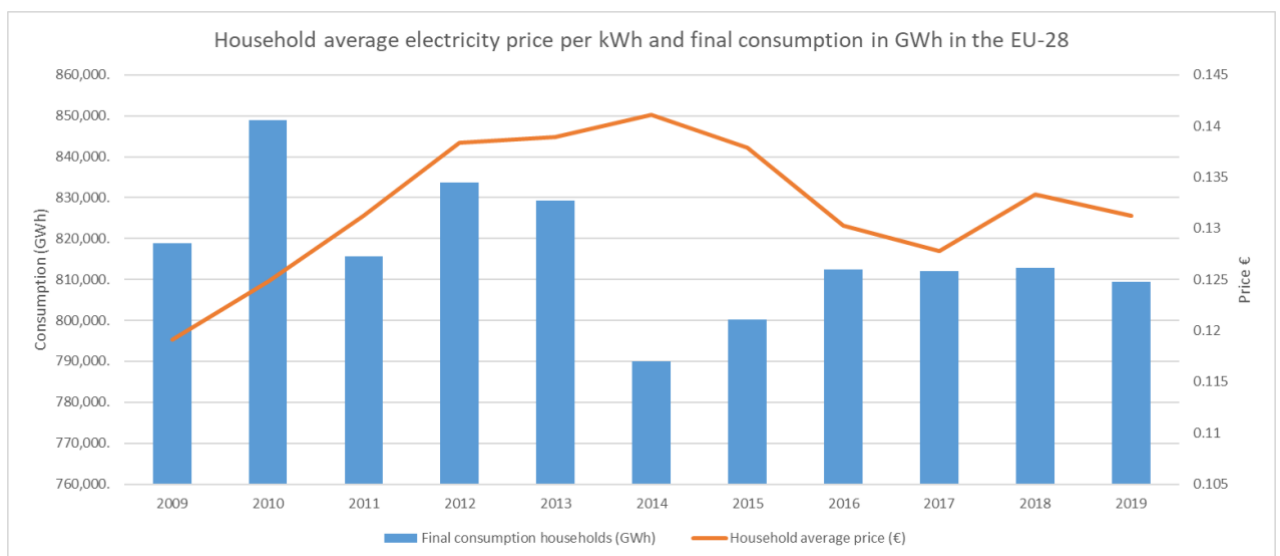


Chart 3: Household average electricity price per kWh and final consumption in GWh in the EU-28 (Eurostat)

Electricity prices for households saw an increase from 2009 to 2014, the year with the lowest demand for the commodity. The price decreased from then until 2017 whereas demand has largely remained the same from 2016 to 2019. The correlation between price and final consumption is $r = -0.352$. The consumption pattern for non-household consumers also saw a decrease in demand in 2014 and a recovery from that year until 2018. The correlation between consumption and price is $r = -0.350$. Consumption patterns are similar for both consumer groups and so is their effect on price, both correlations are relatively low. Further analysis would have to be undertaken to determine the other factors governing price fluctuations in a technically challenging interconnected system with different generation technologies, where companies hold generation assets across different countries.

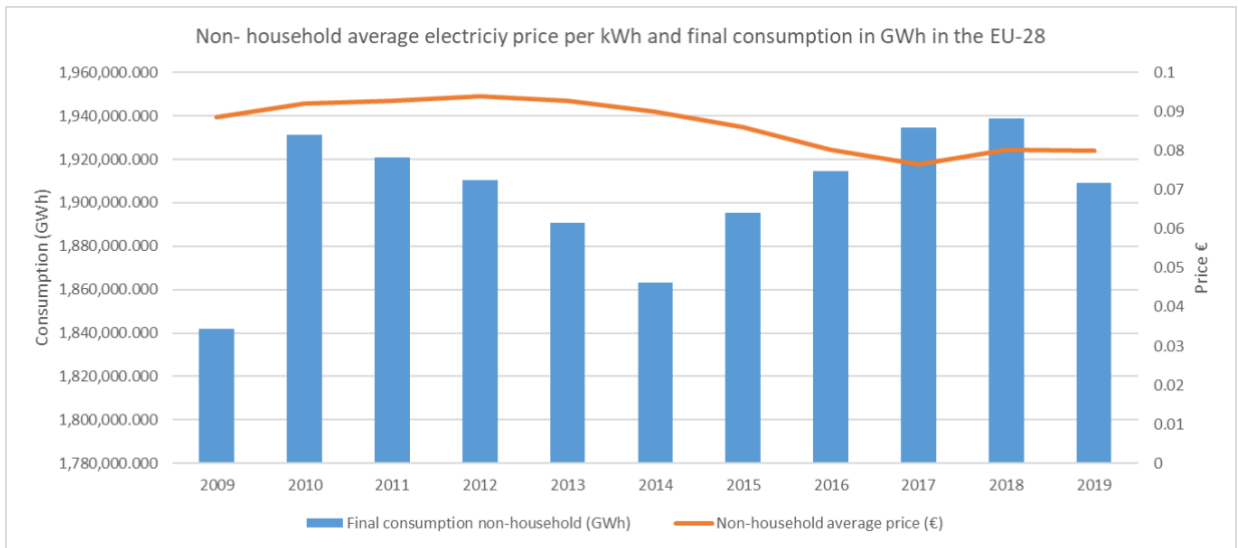


Chart 4: Non-household average electricity price per kWh and final consumption in GWh in the EU-28 (Eurostat)

7 Equity Ratio and Gearing Ratio

Debt to equity ratio, henceforth defined as gearing ratio constitutes one of the most important indicators to gauge the financial liabilities of the studied companies. It measures the proportion of an entity's debt and financial liabilities to its equity. The used formula is the following:

$$\text{Gearing Ratio} = \frac{\text{Debt and Financial liabilities}}{\text{Equity}}$$

The Equity ratio, on the other hand, is a simple proportion of a company's equity to its total assets, its formula is the following:

$$\text{Equity Ratio} = \frac{\text{Equity}}{\text{Total Assets}}$$

To analyse regional trends and establish discernible patterns, the previously stated regional cohorts will be used for a better comparison. Although the legal and regulatory environments are largely the same in the EU, local governments and regional trends should be taken into consideration. An analysis of a separate cohort, namely companies where a state holds a stake equal or higher to 50,1 percent will also be looked at.

7.1 Germany and Austria

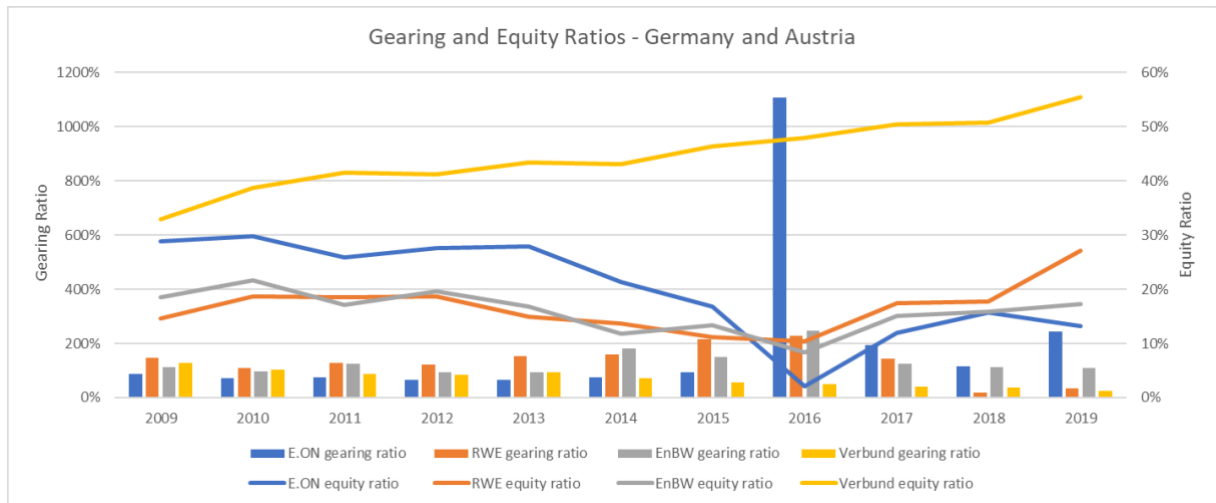


Chart 5: Gearing and Equity Ratios for Germany and Austria

The data in chart five shows the evolution of gearing and equity ratios in Germany and Austria. E.ON's restructuring in 2016, which saw nearly half of its asset value cut due to the separation of its traditional generation assets under a completely new company, i.e. Uniper, had a severe impact on its gearing ratio for that year. The pattern for German companies' equity ratios is quite similar whereas gearing ratios fluctuated significantly for E.ON and RWE, in no small part due to the German giants' asset swaps and restructuring during the period. Chart six tracks the changes in total asset value of each company during the same timeframe. EnBW's and Verbund's asset value did not suffer dramatic changes throughout the decade, as both operate in a far smaller market area with lower exposure to risk and have significant state control. In contrast, E.ON and RWE lost significant book value as a result of divestments from various markets, asset swaps and restructuring.

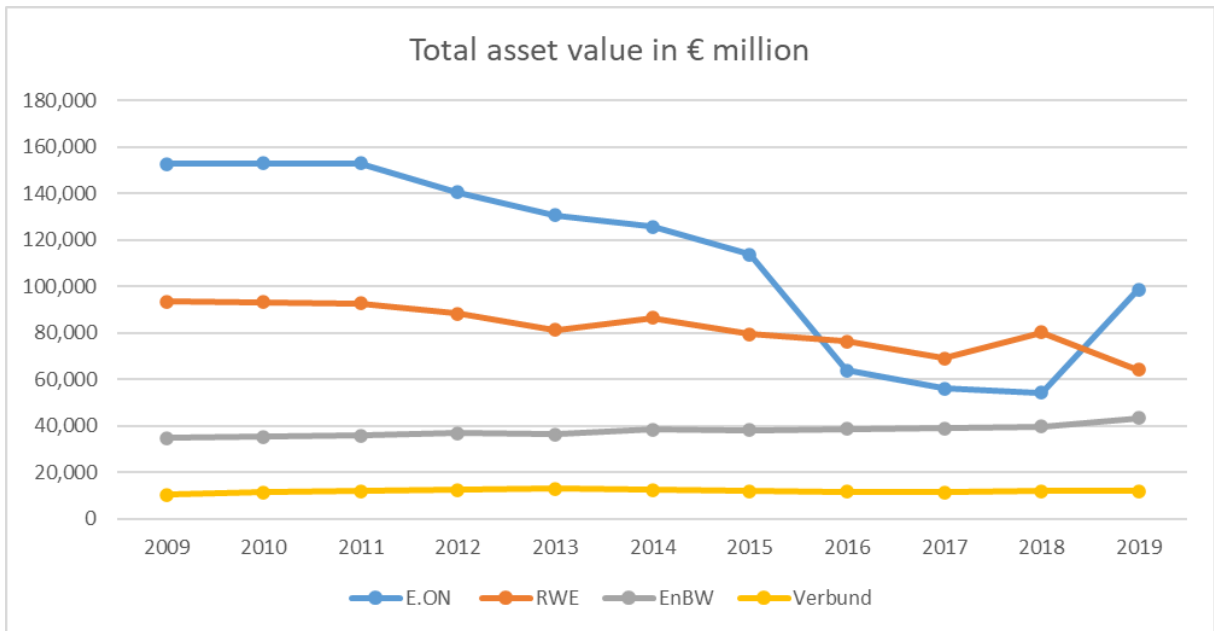


Chart 6: Total asset value in € million E.ON, RWE, EnBW and Verbund

7.2 Nordics

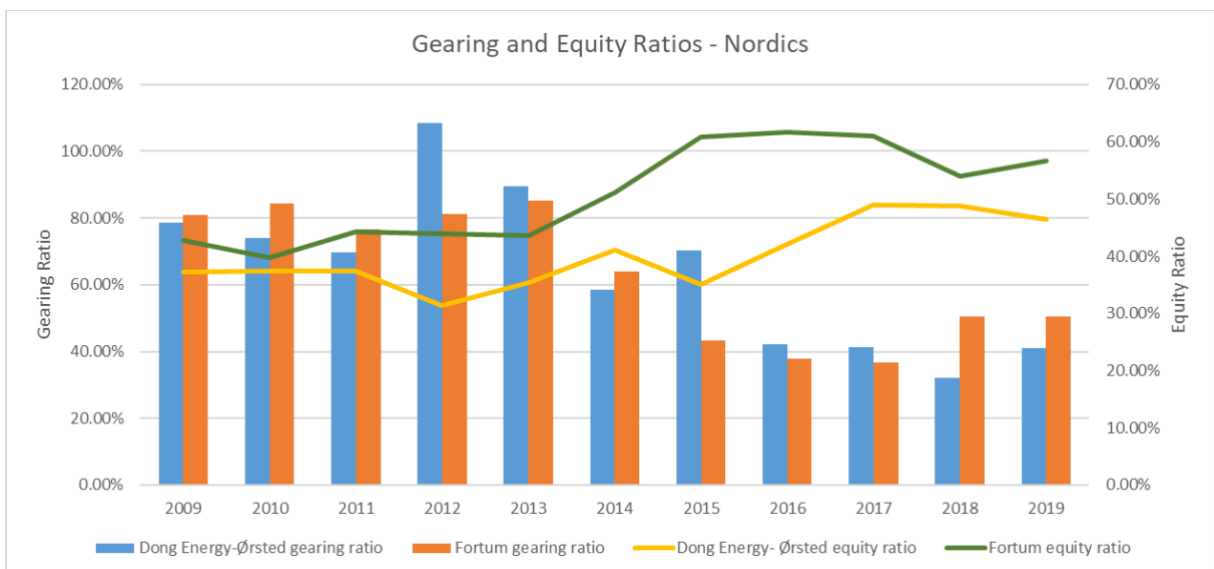


Chart 7: Gearing and Equity Ratios for the Nordics

As is often the norm in Nordic countries, both Ørsted and Fortum show good signs of fiscal discipline as evidenced in chart seven. Both have reduced their gearing ratio from 2009 to 2019, thus decreasing the share of debt to equity. Their equity ratios have also increased over time. Having the state as a majority shareholder in both companies could be a possible

cause for the fiscal discipline, which will be investigated more deeply in sub-chapter 6.7, where the cohort of companies with majority state ownership will be analysed.

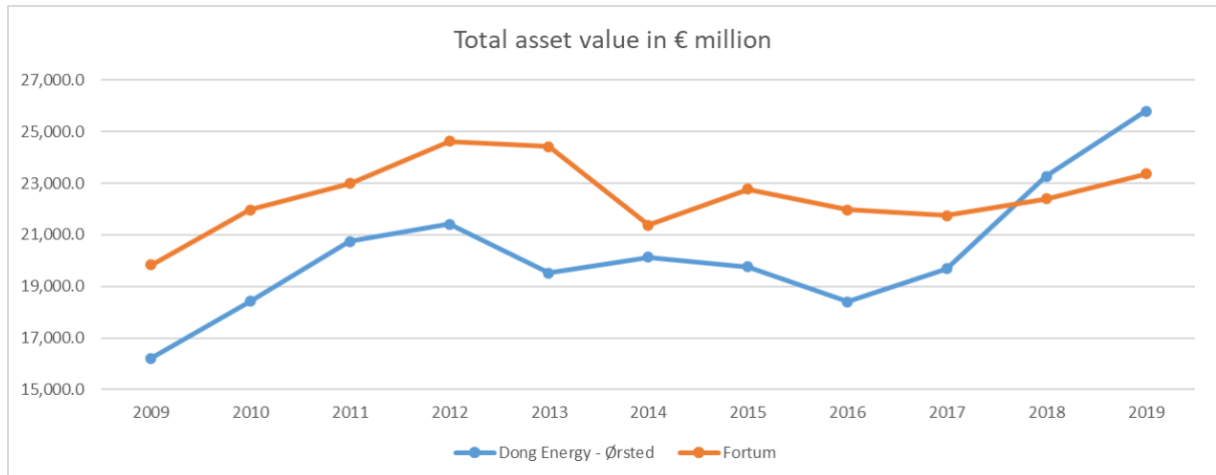


Chart 8: Total asset value in € million Dong Energy- Ørsted¹ and Fortum

Asset value increased from 2009 to 2019 for both Nordic energy giants, with the period between 2012 and 2016 evidencing a decrease in value similar to the trend in the previously analysed Germanic cohort.

7.3 Southern Europe

Southern European companies have improved their gearing and equity ratios except for Greece's PPC, which operates exclusively in the Hellenic market. EDP had the highest gearing ratio in the region during the period even though it managed to lower it to better levels. Equity ratios, except for Iberdrola, decreased from 2017 to 2019.

1. Currency conversions from Danish Krone (DKK) to Euro (€) executed with the exchange rate at the end of each year.

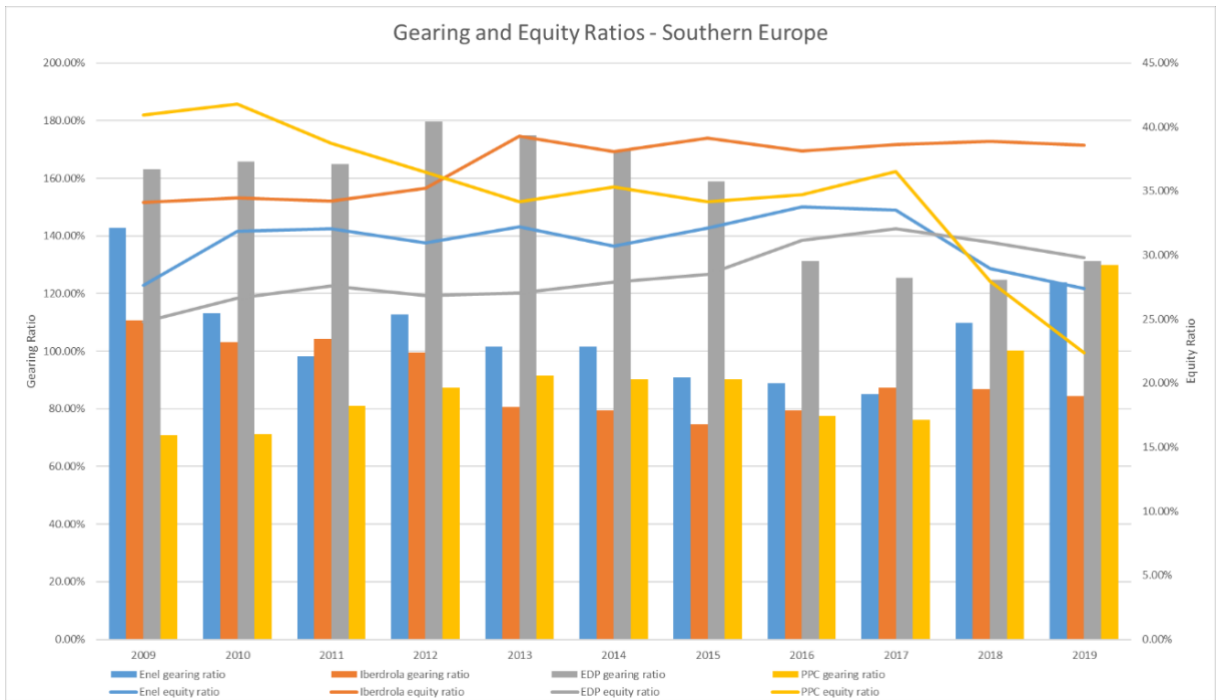


Chart 9: Gearing and Equity Ratios for Southern Europe

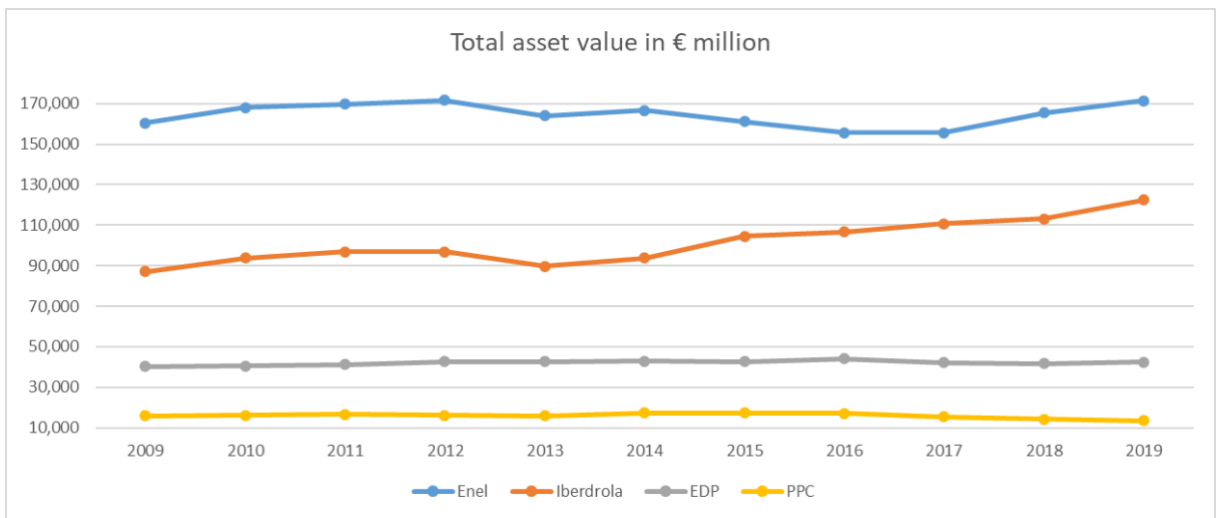


Chart 10: Total asset value in € million Enel, Iberdrola, EDP and PPC

The decrease in asset value observed in the previous cohorts from 2012 to 2016 is also seen with Enel, albeit much less severe than the Germanic giants E.ON and RWE, a more suitable frame of reference in Enel’s case, given the size of the companies involved.

Iberdrola also saw a decrease in asset value in 2012-2013 but got back to growth for the remainder of the period concerned by this research. EDP and PPC are dwarfed by the other companies in the region by asset value. Their changes in asset value were low during this period. EDP's grew by 5,21 percent whereas PPC's shrunk by 14 percent.

7.4 United Kingdom

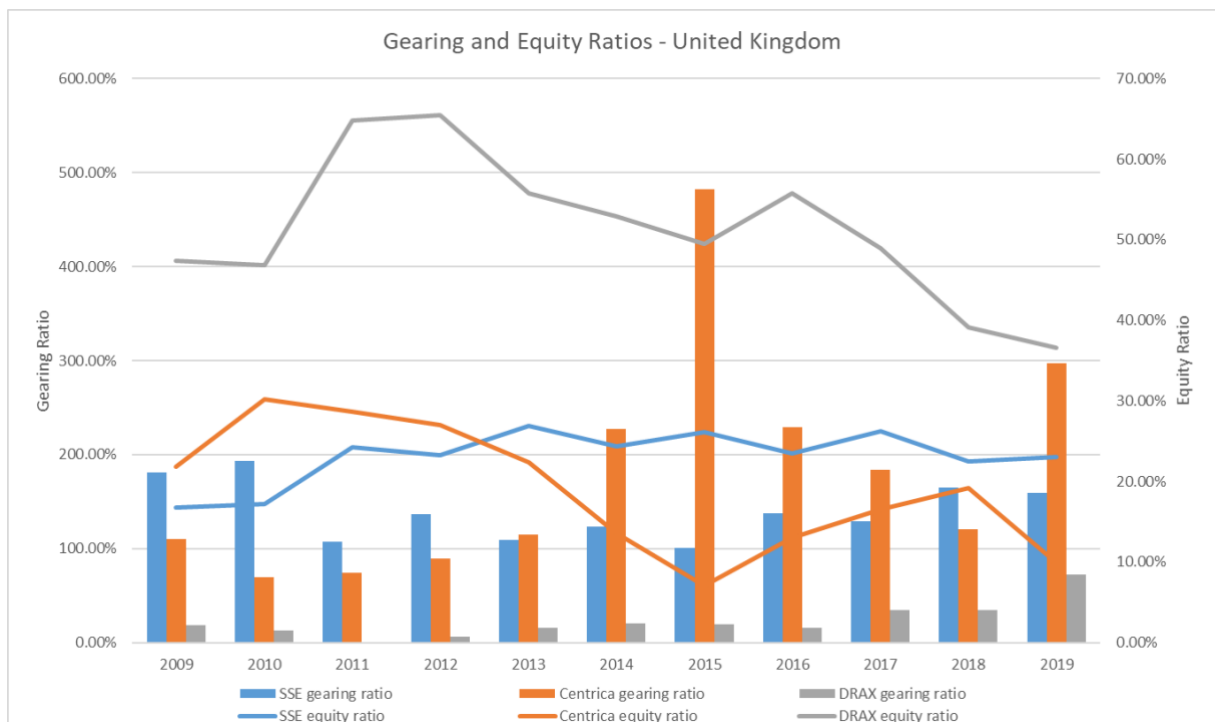


Chart 11: Gearing and Equity Ratios for the United Kingdom

British companies in this study differ considerably in size as is observable in chart 12. Drax, with very strong gearing and equity ratios saw a deterioration in both as it progressively doubled in asset value, suggesting a potential link between strong growth and dependency on credit to finance it. Gearing and Equity ratios, for both Centrica and SSE are generally high throughout the period, particularly Centrica's, although it did not suffer considerable fluctuations in total asset value, despite seeing it shrink by 6,6 percent from 2009 to 2019.

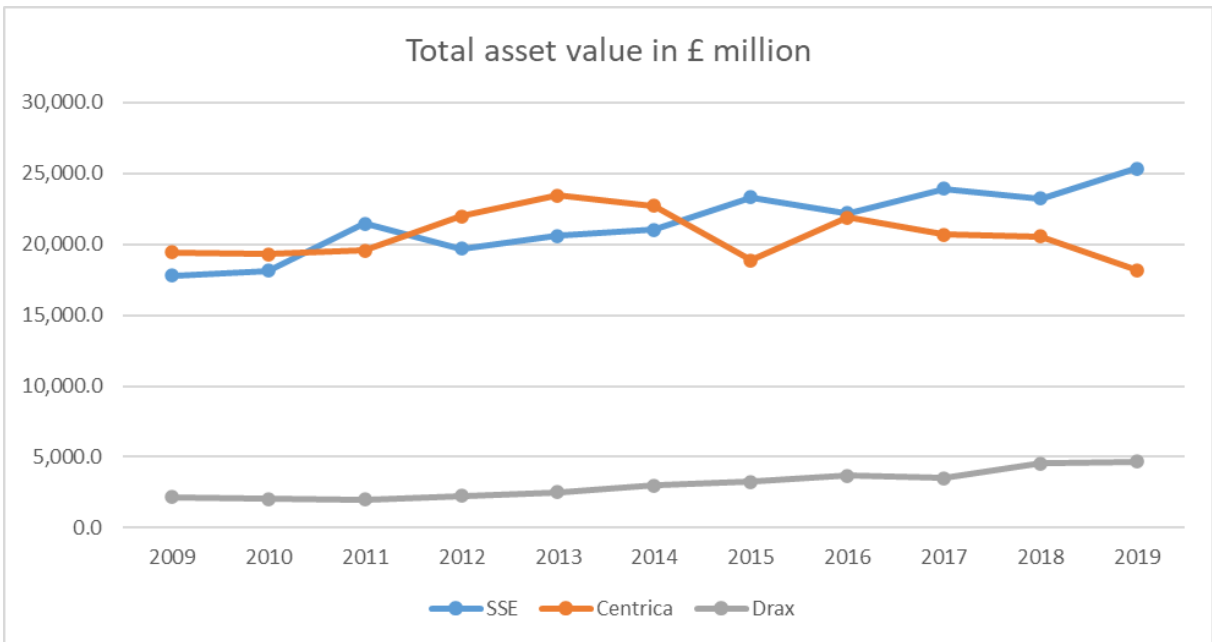


Chart 12: Total asset value in £ million SSE, Centrica and Drax

7.5 France

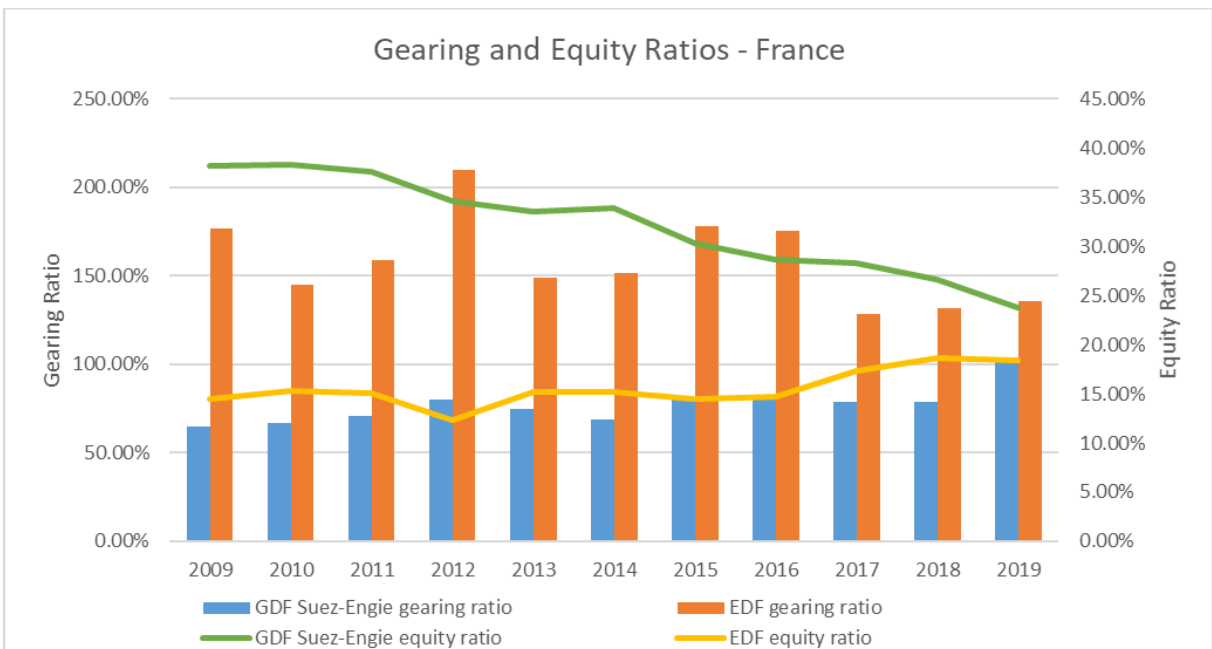


Chart 13: Gearing and Equity Ratios for France

France’s EDF and Engie saw a different trend from 2009 and 2019, with the latter losing both total asset value and equity ratio whilst increasing its gearing ratio, whereas EDF grew during the period and improved its gearing and equity ratios over time.

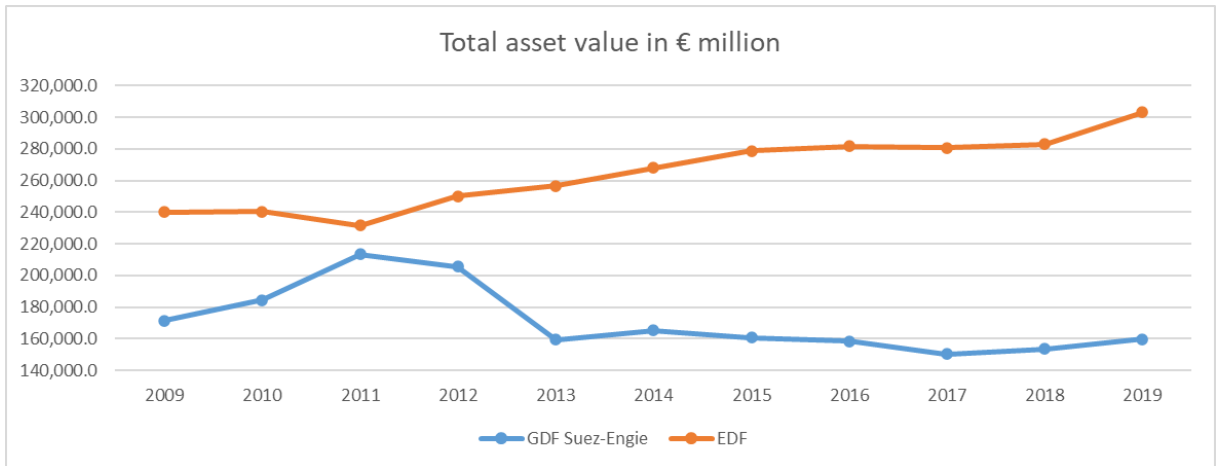


Chart 14: Total asset value in € million EDF and GDF Suez-Engie

7.6 Eastern Europe

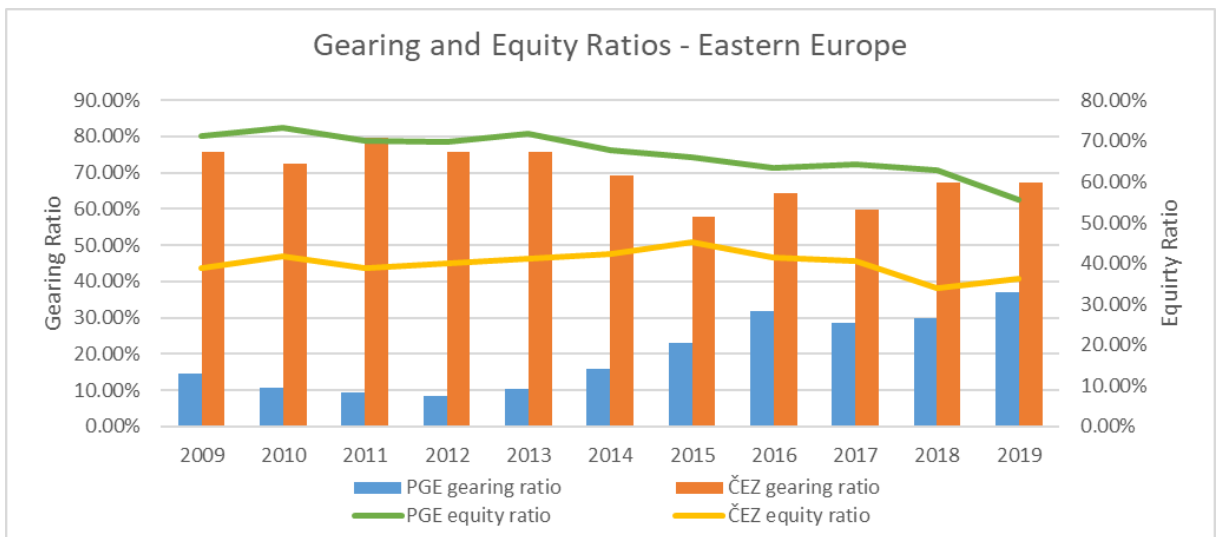


Chart 15: Gearing and Equity Ratios for Eastern Europe

Poland's PGE maintained solid gearing and equity ratios between 2009 and 2019, even though the trend was negative for both indicators. Its total asset value also grew during the period, evidencing a similar trend to the UK's Drax which saw its debt ratios increase as it grew in asset value. ČEZ also grew in asset value from 2009 to 2019 although it had a considerably higher gearing ratio than PGE. It was able to improve its gearing ratio although its equity ratio deteriorated.

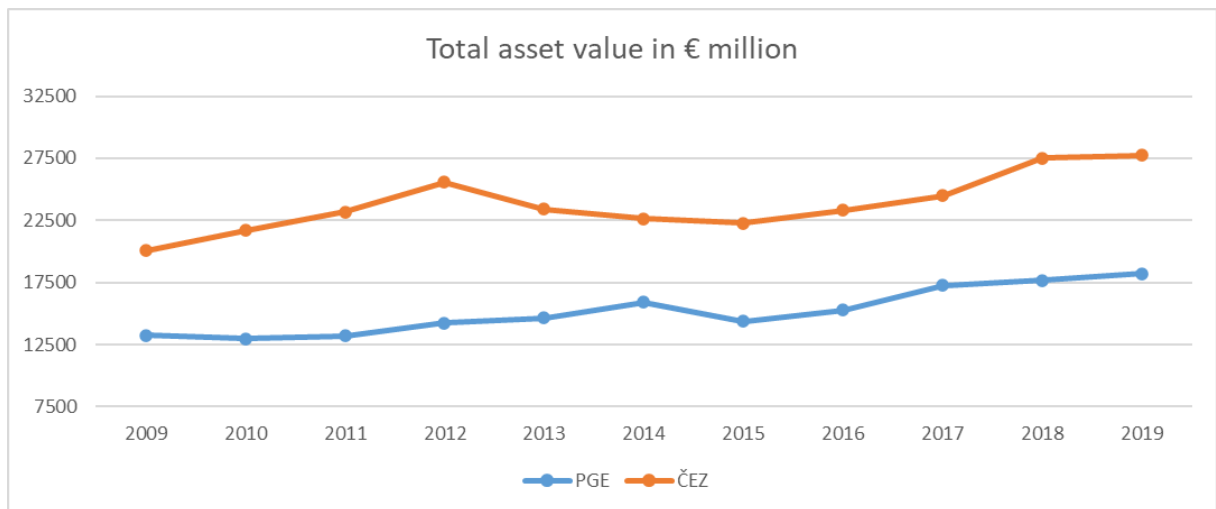


Chart 16: Total asset value in € million for PGE² and ČEZ³

7.7 Companies with and without majority state control

This previously unmentioned cohort investigates the gearing ratios and equity ratios of companies analysed in previous regional cohorts. The selection criterion is a minimum of 50,1 percent state ownership of the company. A comparison will also be made to the remainder of the sample.

2. Currency conversions from Polish Złoty (PLN) to € executed with the exchange rate at the end of each year.
3. Currency conversions from Czech Koruna (CZK) to € executed with the exchange rate at the end of each year

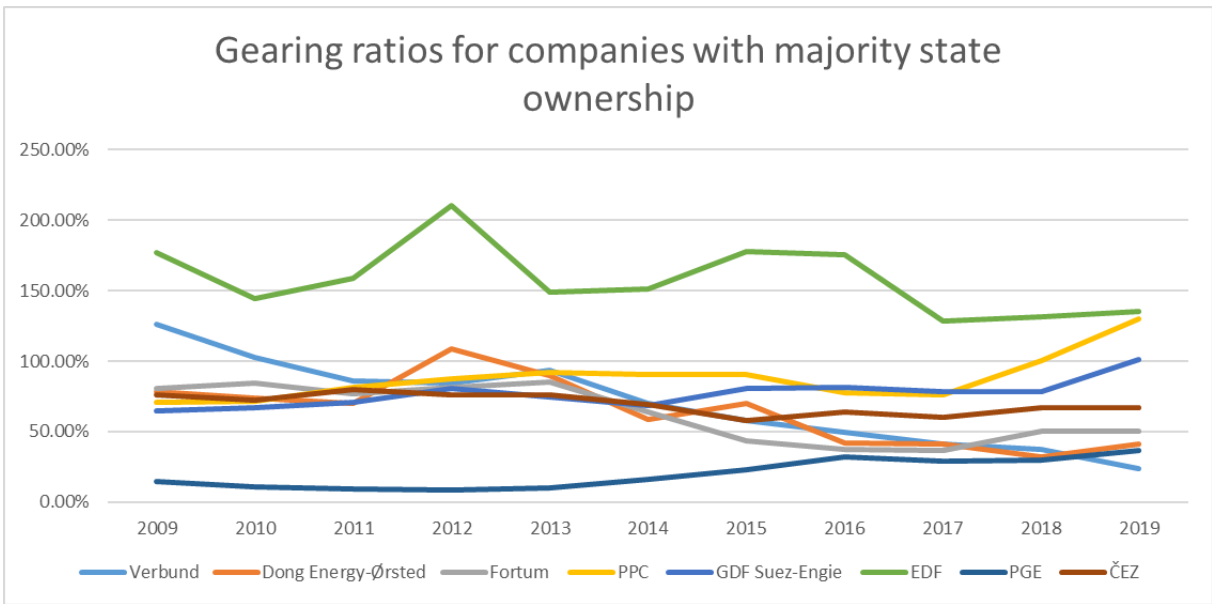


Chart 17: Gearing ratios for companies with majority state ownership

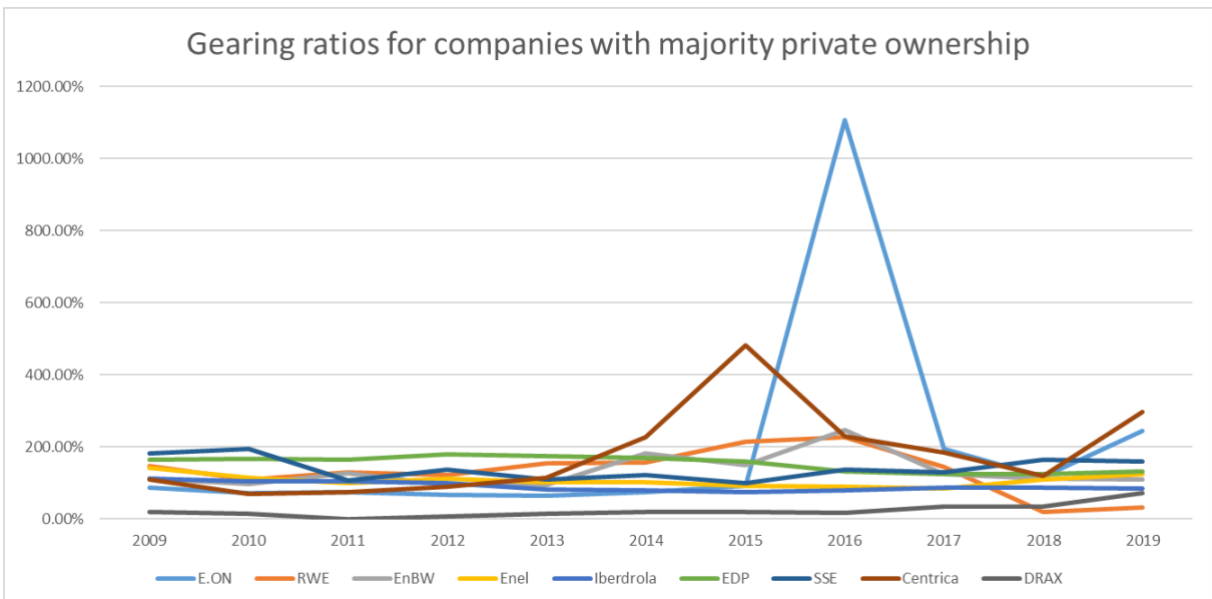


Chart 18: Gearing ratios for companies with majority private ownership

As can be observed from the charts above, companies with majority state ownership have generally lower gearing ratios than their majority privately owned counterparts. Apart from EnBW, the nine companies in the second group have no significant local state shareholders. The average gearing ratio between 2009 and 2019 for companies in chart 17 was 76,19 percent whereas the companies in chart 18 averaged a gearing ratio of 128,61 percent. The same disparity in fiscal performance can be observed from charts 19 and 20. Equity ratios for

the state majority ownership cohort averaged 40,65 percent compared to 26,96 percent in the majority privately owned cohort during the same timeframe.

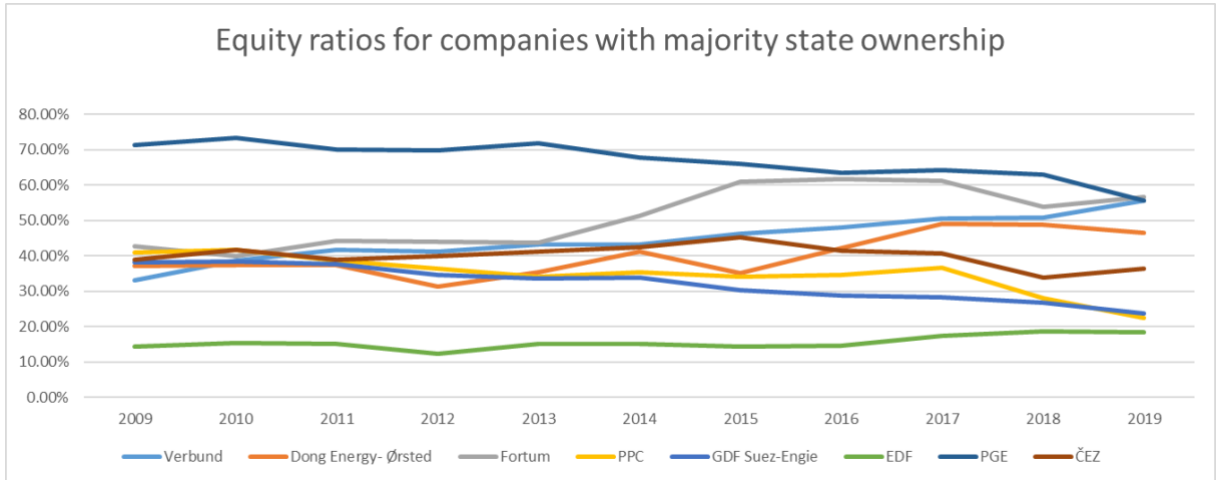


Chart 19: Equity ratios for companies with majority state ownership

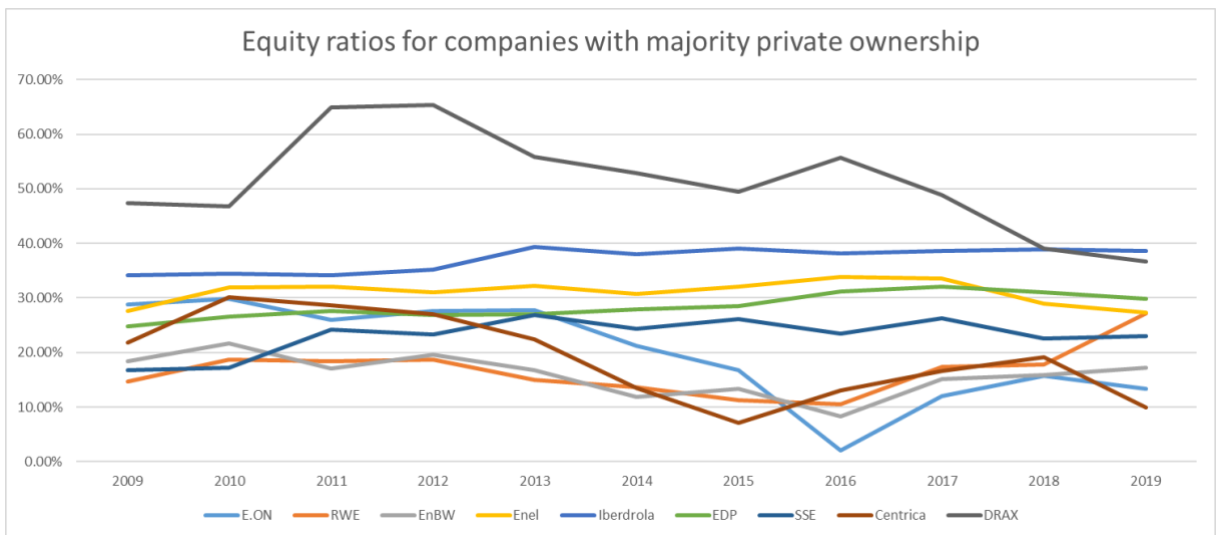


Chart 20: Equity ratios for companies with majority private ownership

The disparity may be attributable to states' fiscal conservatism and discipline as well as higher scrutiny from taxpayers. Regional disparities also exist, and they will be analysed in the following sub-chapter.

7.8 Regional averages for equity and gearing ratios

Regional averages can be seen in the table below. The best performing region is Eastern Europe. The Nordics, traditionally fiscally conservative, have strong indicators as well. Both regions, however, are represented by companies where the local state has a majority stake, which, as seen in the preceding sub-chapter appears to influence fiscal discipline.

Germany and France are home to some of the biggest companies in the sample, with vast a subsidiary network across the continent. Their indicators are poorer than other regional averages, but their combined asset value is also significantly higher than some of the best performing companies in these categories.

| Region | Gearing ratio average | Equity ratio average |
|---------------------|-----------------------|----------------------|
| Germany and Austria | 133,27% | 24,34% |
| Nordics | 63,47% | 45,50% |
| Southern Europe | 109,42% | 32,87% |
| United Kingdom | 114,93% | 31,11% |
| France | 117,49% | 23,85% |
| Eastern Europe | 44,77% | 53,47% |

Table 1: Regional averages for gearing and equity ratios

8 Market Capitalisation

The total market capitalisation of European electric utilities fell from 410,712.16 million euros, in 2009, to 371,384.74 million euros, in 2019. Share value in this industry deteriorated during this period, with the most accentuated fall occurring in 2011. As seen in chart 21, the total share market capitalisation was lower than the combined financial liabilities of the seventeen companies during many years of this period. Total financial liabilities fell from 336,377.95 million euros, in 2009, to 331,772.48, in 2019 but, the ratio of financial liabilities to market capitalisation was unsatisfactory, averaging at 101 percent for this timeframe, an indicator unlikely to impress potential investors.

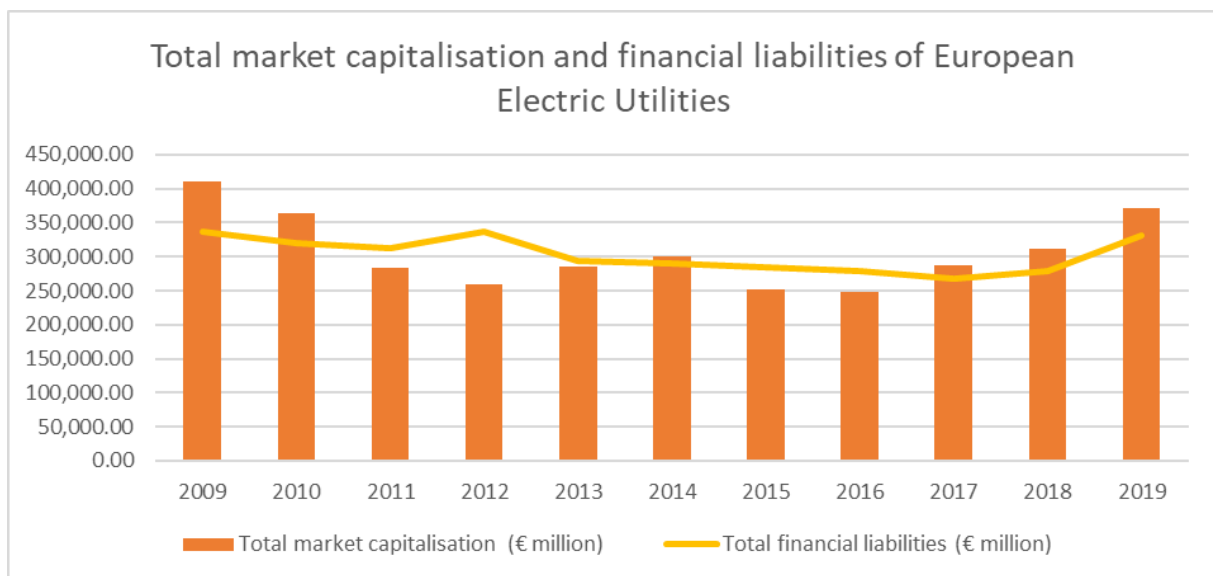


Chart 21: Total market capitalisation and financial liabilities of European Electric Utilities⁴

Chart 22 details the changes in total asset and equity value, in addition to capitalisation and liabilities. Although some of the entities analysed earlier in this study lost considerable book value, the total asset value remained almost unchanged. Assets rose by six percent from 2009, whereas equity rose by two percent.

4. Currency conversions to € executed with the exchange rate at the end of each year for all other currencies

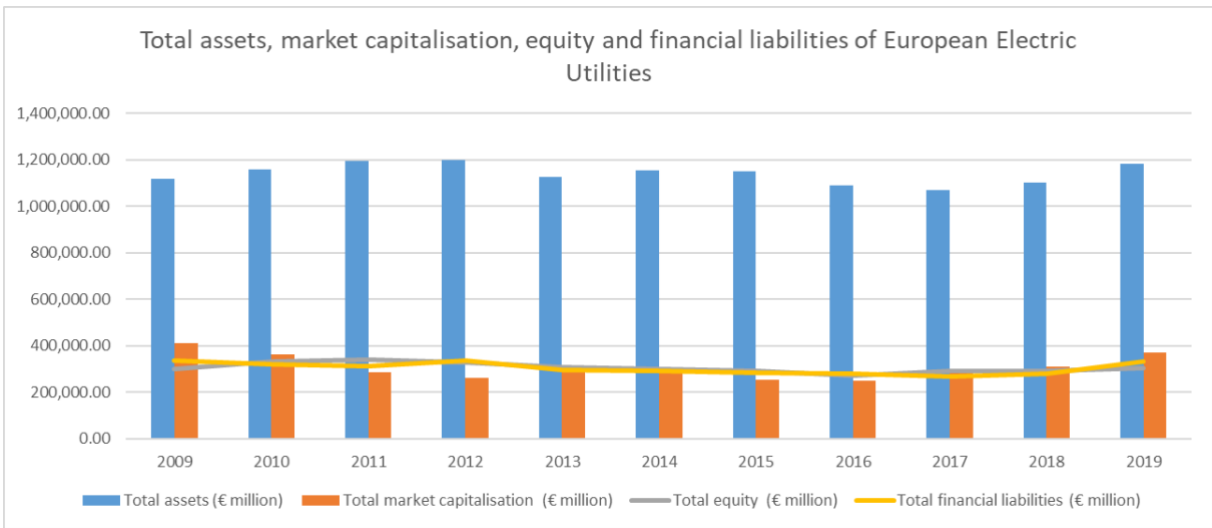


Chart 22: Total assets, market capitalisation, equity, and financial liabilities of European Electric Utilities⁵

8.1 Germany and Austria

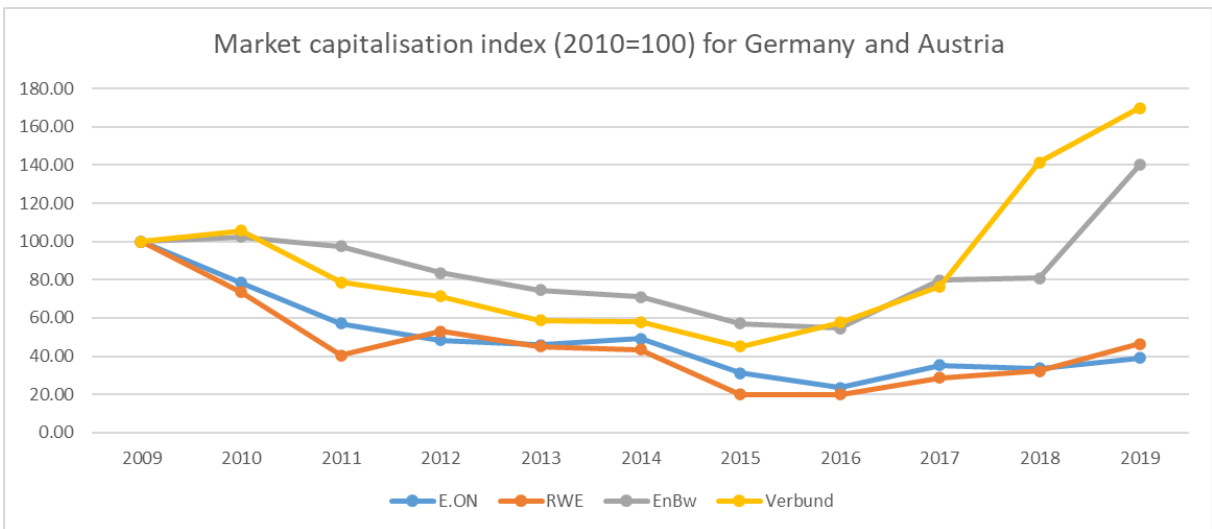


Chart 23: Market capitalisation index (2010=100) for Germany and Austria

5. Currency conversions to EUR executed with the exchange rate at the end of each year for all other currencies

E.ON and RWE's performance in the financial markets is no surprise, considering the previously observed negative changes to their book value and poor performance. EnBW and Verbund, on the other hand, improved their market capitalisation by 2019 despite the poor results in the mid-2010s.

8.2 Nordics

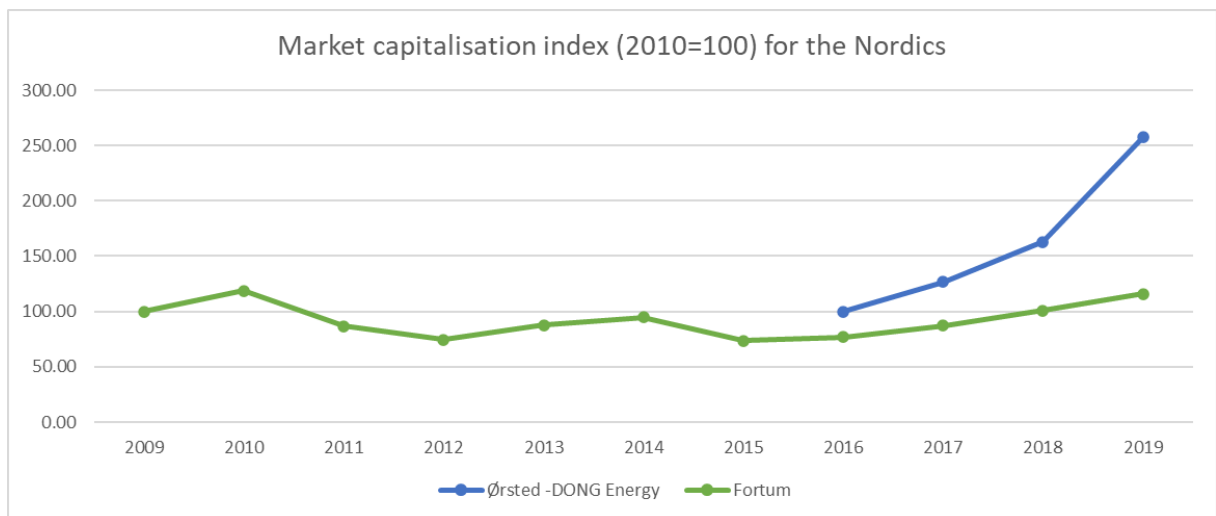


Chart 24: Market capitalisation index (2010=100 for Fortum and 2016=100 for Ørsted) for the Nordics

Ørsted entered the financial markets in 2016 and saw a steady rise in its capitalisation in the following three years. Despite the negative change from 2011 to 2017, Fortum's capitalisation was almost sixteen percent higher in 2019 than in 2009.

8.3 Southern Europe

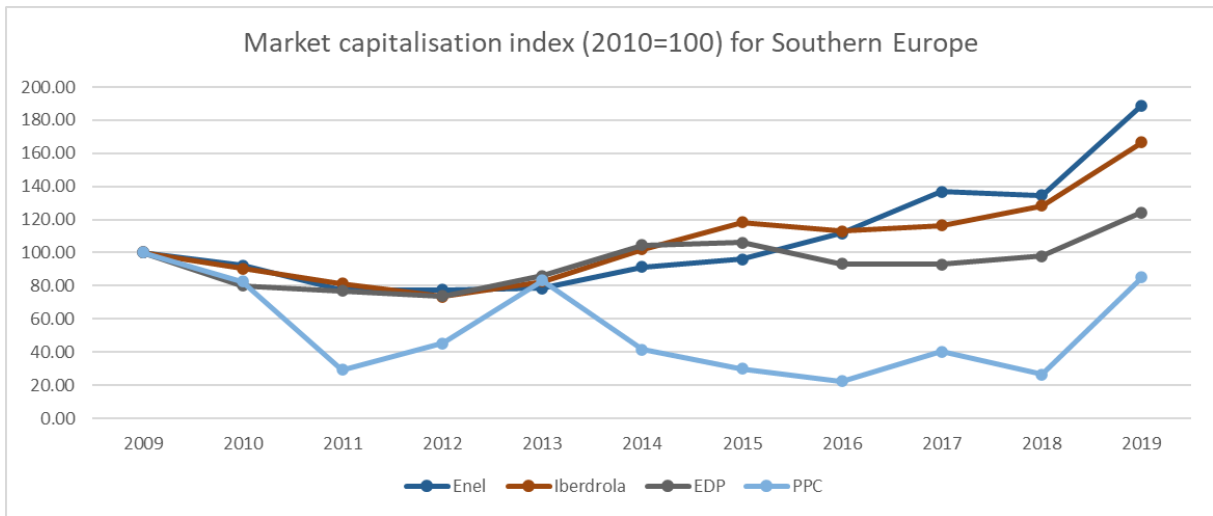


Chart 25: Market capitalisation index (2010=100) for Southern Europe

The observed growth in asset value and satisfactory indicators for Enel and the Iberian companies is also reflected in their market performance with all three having grown from 2009 to 2019. PPC’s woes are also evidenced in the markets, despite its improvement in 2019.

8.4 United Kingdom

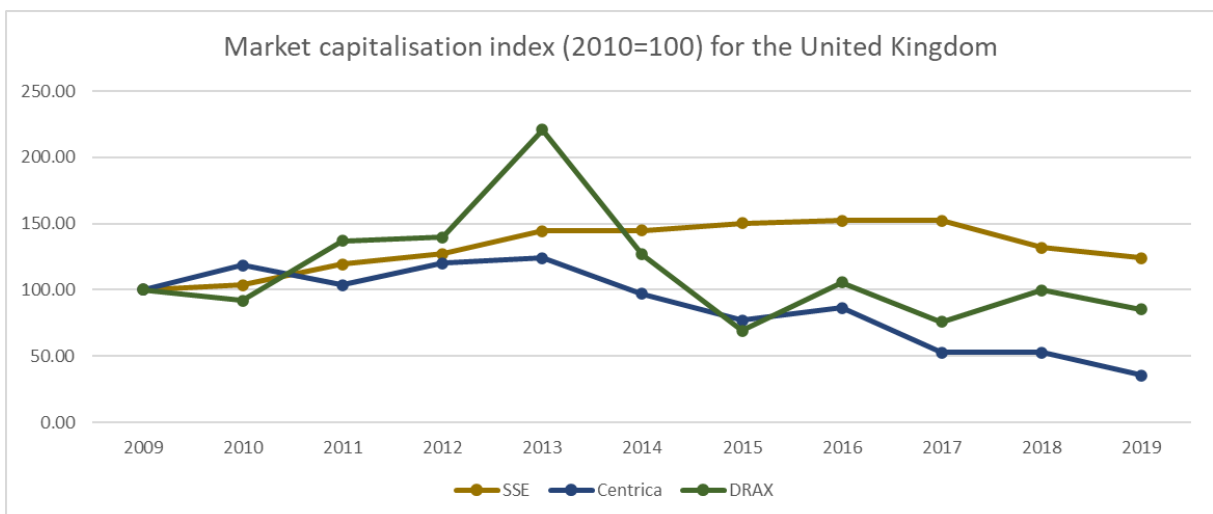


Chart 26: Market capitalisation index (2010=100) for the United Kingdom

With the exception of SSE, British companies fared poorly in financial markets. Centrica's poor results are again visible through this indicator, as it lost nearly 65 percent of its market capitalisation from 2009 to 2019.

8.5 France

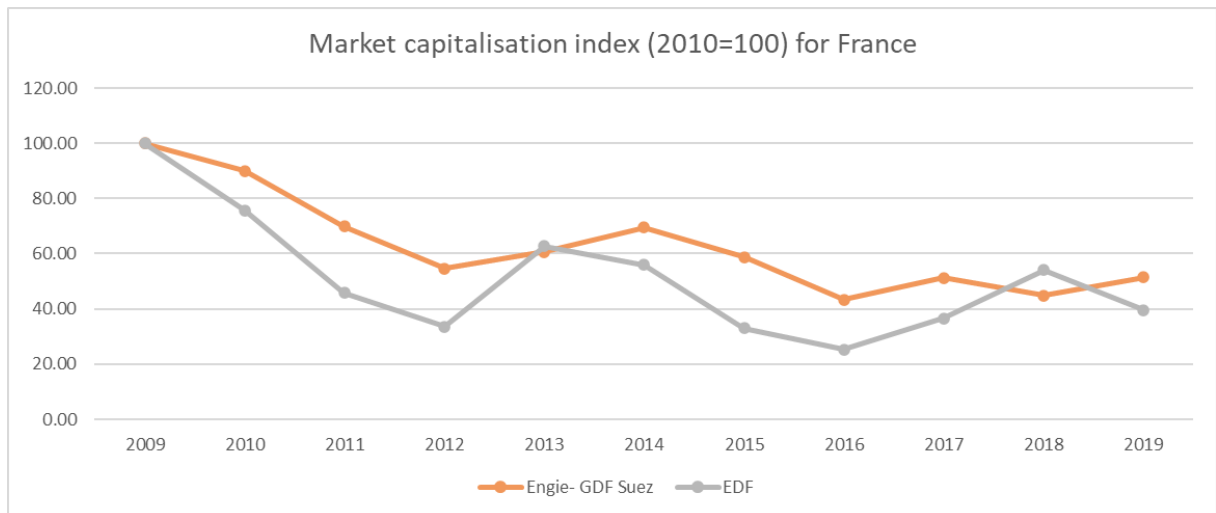


Chart 27: Market capitalisation index (2010=100) for France

The French giants did not perform well in financial markets, as evidenced by chart 27. Despite EDF's increase in asset value, its capitalisation fell by more than 60 percent. Both companies are heavily controlled by the French state and subject to public scrutiny, as emphasised in previous chapters, factors which may dissuade potential investors.

8.6 Eastern Europe

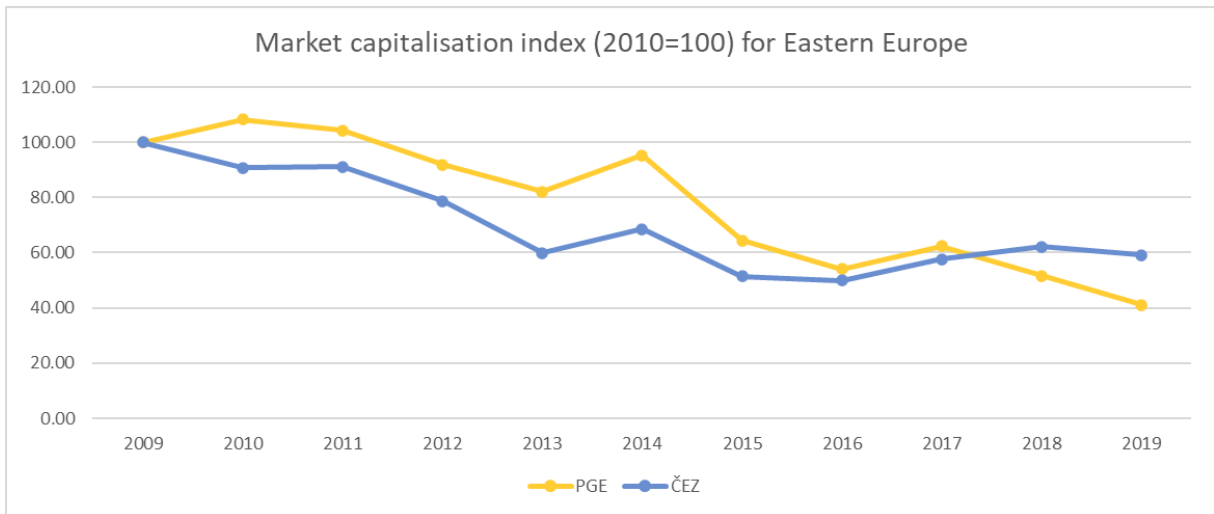


Chart 28: Market capitalisation index (2010=100) for Eastern Europe

The Eastern European cohort's results for the period were negative in the financial markets. PGE lost nearly 60 percent of its market value whereas ČEZ lost almost 41 percent.

8.7 Key takeaways

The German and French giants were amongst the worst performers in this category. The Nordics and Southern Europe were amongst the best performing areas whereas British and Eastern European companies, with the exception of SSE, all lost market value.

The combined asset value of these seventeen companies totals a staggering 1.182 trillion euros. This figure reflects the weight of the sector in the European economy, regardless of their performance in financial markets.

9 Credit Ratings

This chapter will cover the evolution of credit ratings by S&P, Moody's and Fitch. These ratings are an invaluable indicator of debt and financial sustainability for the industry as a whole and the companies involved.

9.1 Rating

The table below ranks each of the *Big Three's* long-term credit ratings and a normalised score from one to nineteen with a lower numeric score reflecting a higher credit rating. This scoring system will be used to compare the different agencies' ratings more effectively.

| S&P | Moody's | Fitch | Score | Investment Grade |
|------|---------|-------|-------|----------------------------------|
| AAA | Aaa | AAA | 1 | Prime |
| AA+ | Aa1 | AA+ | 2 | High grade |
| AA | Aa2 | AA | 3 | |
| AA- | Aa3 | AA- | 4 | |
| A+ | A1 | A+ | 5 | Upper medium grade |
| A | A2 | A | 6 | |
| A- | A3 | A- | 7 | |
| BBB+ | Baa1 | BBB+ | 8 | Lower medium grade |
| BBB | Baa2 | BBB | 9 | |
| BBB- | Baa3 | BBB- | 10 | |
| BB+ | Ba1 | BB+ | 11 | Non-investment grade speculative |
| BB | Ba2 | BB | 12 | |
| BB- | Ba3 | BB- | 13 | |
| B+ | B1 | B+ | 14 | Highly speculative |
| B | B2 | B | 15 | |
| B- | B3 | B- | 16 | |
| CCC+ | Caa1 | CCC+ | 17 | Substantial risk |
| CCC | Caa2 | CCC | 18 | Extremely speculative |
| CCC- | | | 19 | Default imminent |

Table 2: Credit ratings from S&P, Moody's and Fitch and their normalised score

9.2 Germany and Austria

| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|-------------------------------|------|------|------|------|------|------|------|------|------|------|------|
| E.ON S&P | 6 | 6 | 6 | 7 | 7 | 7 | 8 | 8 | 9 | 9 | 9 |
| E.ON Moody's | 6 | 6 | 7 | 7 | 7 | 7 | 8 | 8 | 9 | 9 | 9 |
| E.ON yearly average | 6 | 6 | 6,5 | 7 | 7 | 7 | 8 | 8 | 9 | 9 | 9 |
| RWE S&P | 6 | 6 | 7 | 8 | 8 | 10 | 9 | 10 | 10 | | |
| RWE Moody's | 6 | 6 | 7 | 7 | 8 | 10 | 9 | 10 | 10 | 10 | 10 |
| RWE Fitch | | | | | | | | 9 | 9 | 9 | 9 |
| RWE yearly average | 6 | 6 | 7 | 7,5 | 8 | 10 | 9 | 9,67 | 9,67 | 9,5 | 9,5 |
| EnBw S&P | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| EnBw Moody's | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 7 | 7 |
| EnBw Fitch | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| EnBw yearly average | 6,33 | 6,33 | 7 | 7 | 7 | 7 | 7 | 7 | 7,33 | 7 | 7 |
| Verbund S&P | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 9 | 8 | 7 | 6 |
| Verbund Moody's | 6 | 6 | 6 | 6 | 8 | 8 | 8 | 9 | 9 | 8 | 8 |
| Verbund yearly average | 6,5 | 6,5 | 6,5 | 6,5 | 7,5 | 8 | 8 | 9 | 8,5 | 7,5 | 7 |

Table 3: Credit ratings for Germany and Austria 2009-2019

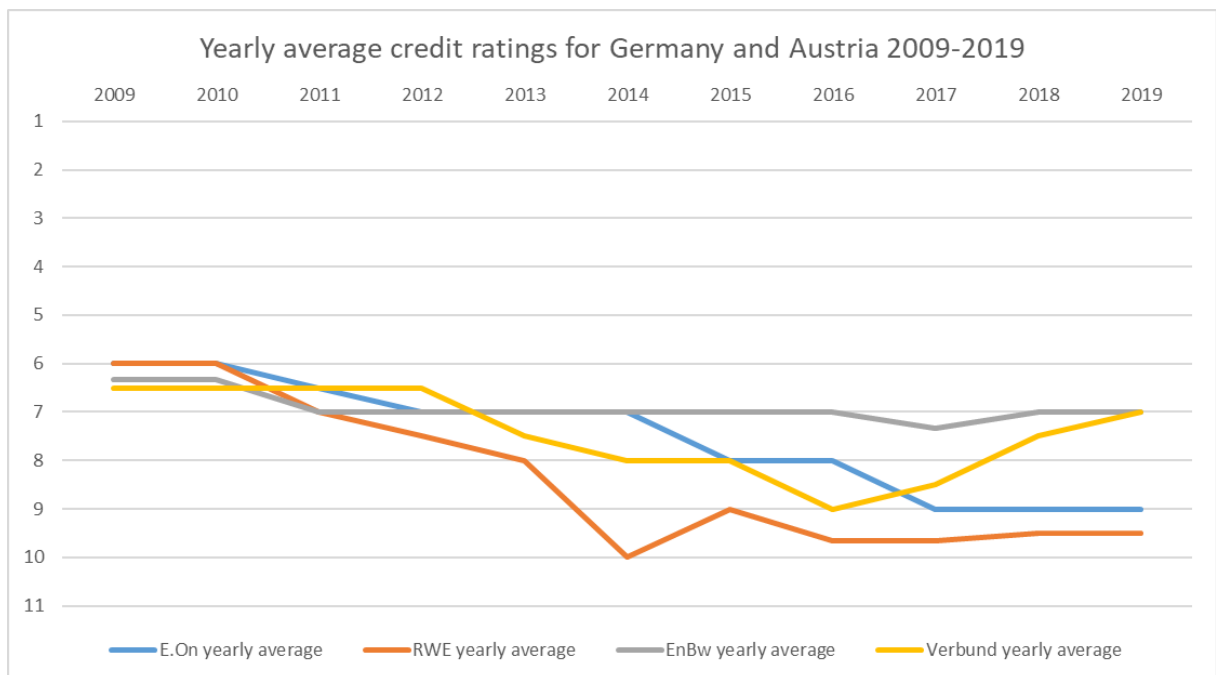


Chart 29: Yearly average credit ratings for Germany and Austria 2009-2019

As can be seen in table 3 and chart 29, the credit ratings for the German companies and Austria's Verbund deteriorated over time, with the worst trend coinciding with the mid-2010s. Once again, as seen with previous indicators, at the end of the period, both E.ON and RWE have the worst indicators, scoring lower than their smaller counterparts. The end of the decade saw an improvement in credit ratings compared to the mid-decade trend.

9.3 Nordics

| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|------------------------------|------|------|------|------|------|------|------|------|------|------|------|
| Ørsted - Dong Energy S&P | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| Ørsted - Dong Energy Moody's | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| Ørsted - Dong Energy Fitch | | | | | | 8 | 8 | 8 | 8 | 8 | 8 |
| Ørsted - Dong yearly average | 7,5 | 7,5 | 7,5 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| Fortum S&P | 6 | 6 | 6 | 7 | 7 | 7 | 8 | 8 | 8 | 9 | 9 |
| Fortum Moody's | 6 | 6 | 7 | 7 | 7 | 7 | 8 | 8 | 9 | 9 | 9 |
| Fortum Fitch | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 9 | 9 |
| Fortum yearly average | 6,33 | 6,33 | 6,67 | 7 | 7 | 7 | 8 | 8 | 8,33 | 9 | 9 |

Table 4: Credit ratings for the Nordics 2009-2019

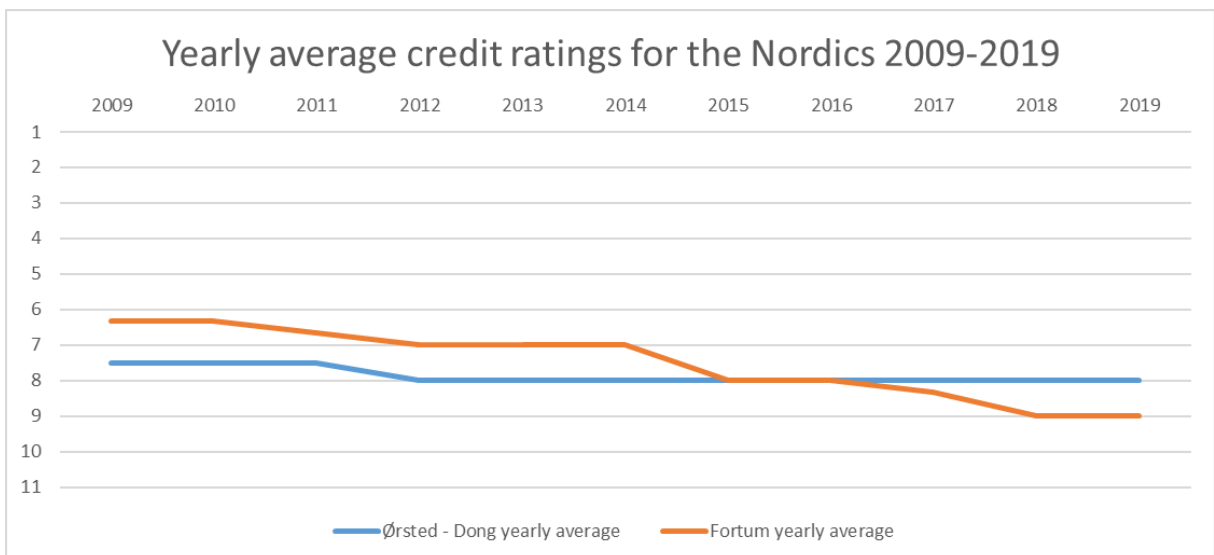


Chart 30: Yearly average credit ratings for the Nordics 2009-2019

Ørsted and Fortum's credit ratings also saw a negative evolution, with the latter's registering a bigger downgrade. Ørsted's credit ratings remained stable for the period, albeit almost always at a low medium investment grade with all agencies.

9.4 Southern Europe

The South of Europe shows a similar trend to the cohorts analysed above. Ratings saw a downgrade from 2009 to 2019, with the mid-decade values improving towards the end of the period. Greece's PPC, for which only S&P credit ratings can be found, is the worst performing company in the whole sample in this metric. It is not surprising given a majority stake of the company is owned by the Hellenic State, entangling its financial liabilities with Greece's highly unsustainable sovereign debt. Enel's and Iberdrola's ratings had very similar levels and a comparable evolution over time whereas EDP's did not manage to recover to an upper medium investment grade, despite improvements, after its downgrade in 2011-2012. It is also worth mentioning that Portugal, another highly indebted state at the beginning of the 2010s, sold its remaining 21 percent share of EDP in 2011, as previously mentioned. EDP's credit rating saw an improvement in the following years.

| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|---------------------------------|------|------|------|------|------|------|------|------|------|------|------|
| Enel S&P | 7 | 7 | 7 | 8 | 9 | 9 | 9 | 9 | 8 | 8 | 8 |
| Enel Moody's | 6 | 6 | 7 | 7 | 7 | 7 | 8 | 8 | 9 | 9 | 9 |
| Enel Fitch | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 7 |
| Enel yearly average | 6,67 | 6,67 | 7 | 7,67 | 8 | 8 | 8,33 | 8,33 | 8,33 | 8 | 8 |
| Iberdrola S&P | 7 | 7 | 8 | 9 | 9 | 9 | 9 | 8 | 8 | 8 | 8 |
| Iberdrola Moody's | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| Iberdrola Fitch | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| Iberdrola yearly average | 7 | 7 | 7,33 | 8,33 | 8,33 | 8,33 | 8,33 | 8 | 8 | 8 | 8 |
| EDP S&P | 7 | 7 | 9 | 11 | 11 | 11 | 11 | 11 | 11 | 10 | 10 |
| EDP Moody's | 7 | 7 | 10 | 11 | 11 | 10 | 10 | 10 | 10 | 10 | 10 |
| EDP Fitch | 7 | 7 | 8 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 |
| EDP yearly average | 7 | 7 | 9 | 10,7 | 10,7 | 10,3 | 10,3 | 10,3 | 10,3 | 10 | 10 |
| PPC S&P | 10 | 11 | 18 | 18 | 18 | 15 | 19 | 19 | 19 | 17 | 16 |

Table 5: Credit ratings for Southern Europe 2009-2019

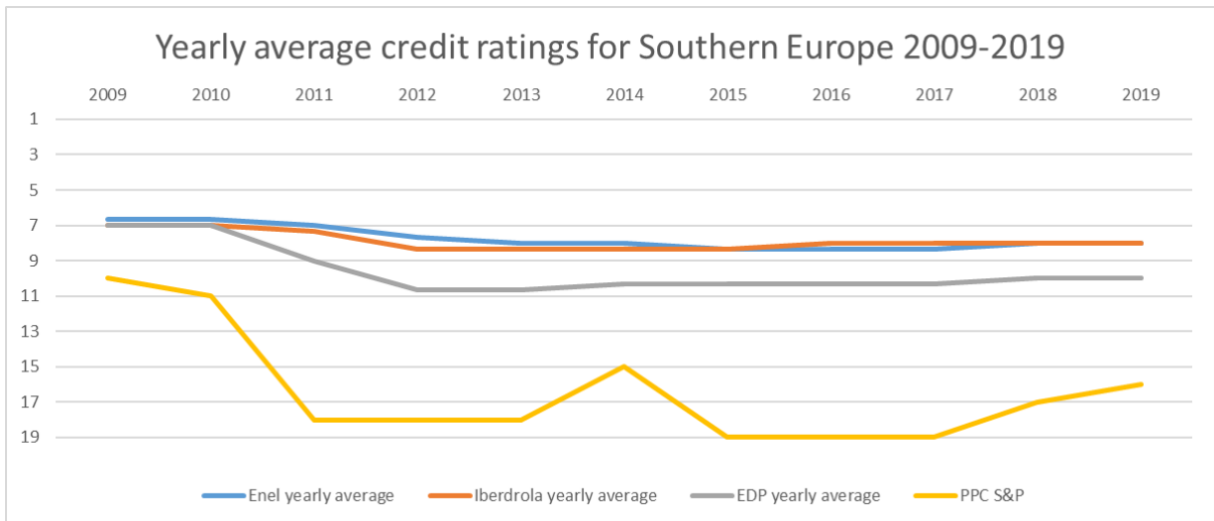


Chart 31: Yearly average credit ratings for Southern Europe 2009-2019

9.5 United Kingdom

SSE and Centrica maintained stable credit ratings even though the downgrades observed in other regions were also seen in the British companies. DRAX, with a lower credit rating than its competitors, only has credit ratings available from 2017 onwards.

| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|--------------------------------|------|------|------|------|------|------|------|------|------|------|------|
| SSE S&P | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 |
| SSE Moody's | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 |
| SSE yearly average | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 |
| Centrica S&P | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 9 |
| Centrica Moody's | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 |
| Centrica yearly average | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8,5 |
| DRAX S&P | | | | | | | | | 11 | 11 | 11 |
| DRAX Fitch | | | | | | | | | 11 | 11 | 11 |
| DRAX yearly average | | | | | | | | | 11 | 11 | 11 |

Table 6: Credit ratings for the United Kingdom 2009-2019

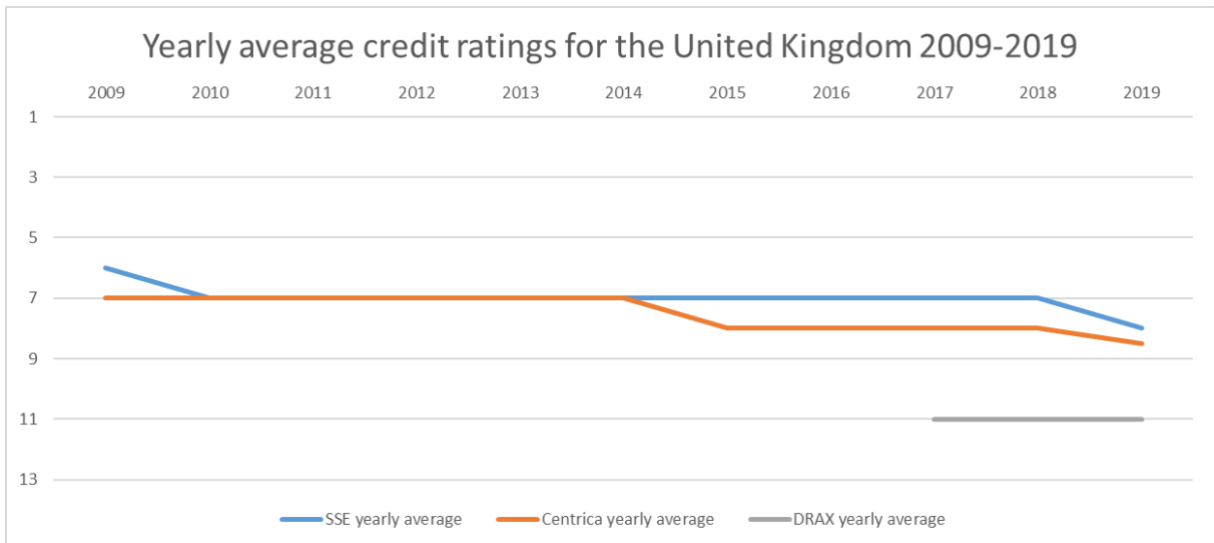


Chart 32: Yearly average credit ratings for the United Kingdom 2009-2019

9.6 France

As can be seen in the table and chart below, Engie and EDF had the best credit ratings from 2009 to 2019 in the entire sample of this study. The evolution of ratings is comparable to the industry at large, both French giants saw their ratings downgraded from 2009 levels by the end of the decade. It is worth noting that EDF's and Engie's financial liabilities are largely tied to those of the French state due to significant state ownership of both entities. France's S&P credit rating ranged from AAA to AA from 2009 and 2019 (Trading Economics n.d.). This situation is the reverse of PPC's case, whose liabilities are tied to those of the Greek sovereign debt. PPC's indicators, such as its gearing and equity ratios, are significantly better than EDF's, which has the highest credit rating of all companies concerned in this research. This exemplifies a stark contrast between countries with a tradition of public ownership of utilities and services with different means. Rating agencies exert strong influence over financial markets and their verdicts can pressure states to sell their patrimony in the interest of appeasing investors and creditors. There are other factors behind the ratings of both companies and this topic would require deeper research that is out of line with the topic of this thesis.

| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|--------------------------------|------|------|------|------|------|------|------|------|------|------|------|
| Engie- GDF Suez S&P | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 |
| Engie- GDF Suez Moody's | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 |
| Engie- GDF Suez Fitch | | | | | | | | | 6 | 6 | 6 |
| Engie- GDF Suez yearly average | 5 | 5,5 | 5,5 | 5,5 | 5,5 | 5,5 | 5,5 | 6,5 | 6,33 | 6,33 | 6,33 |
| EDF S&P | 5 | 5 | 4 | 5 | 5 | 5 | 5 | 7 | 7 | 7 | 7 |
| EDF Moody's | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 7 | 7 | 7 | 7 |
| EDF Fitch | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 7 | 7 | 7 | 7 |
| EDF yearly average | 4,67 | 4,67 | 4,33 | 4,67 | 4,67 | 4,67 | 5,33 | 7 | 7 | 7 | 7 |

Table 7: Credit ratings for France 2009-2019

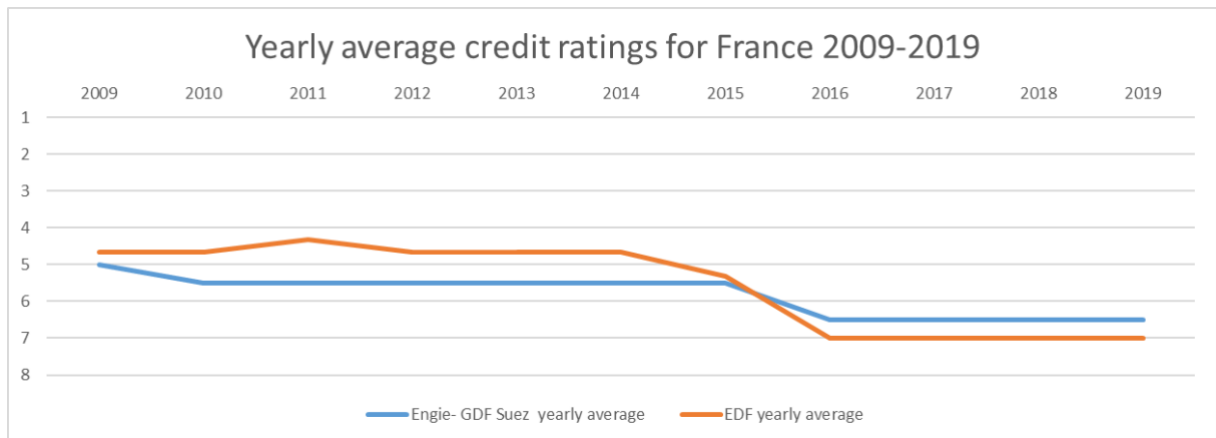


Chart 33: Yearly average credit ratings for France 2009-2019

9.7 Eastern Europe

PGE's and ČEZ's credit ratings followed the same downward trend as the rest of its European counterparts. Both had stable ratings for the same period despite the downgrades by Moody's, the only agency to change their ratings for the Eastern European firms.

| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|
| PGE Moody's | | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 |
| PGE Fitch | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| PGE yearly average | 8 | 7,5 | 7,5 | 7,5 | 7,5 | 8 | 8 | 8 | 8 | 8 | 8 |
| ČEZS&P | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| ČEZ Moody's | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 8 | 8 | 8 | 8 |
| ČEZ Fitch | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| ČEZ yearly average | 6,67 | 6,67 | 6,67 | 6,67 | 6,67 | 6,67 | 7 | 7,33 | 7,33 | 7,33 | 7,33 |

Table 8: Credit ratings for Eastern Europe 2009-2019

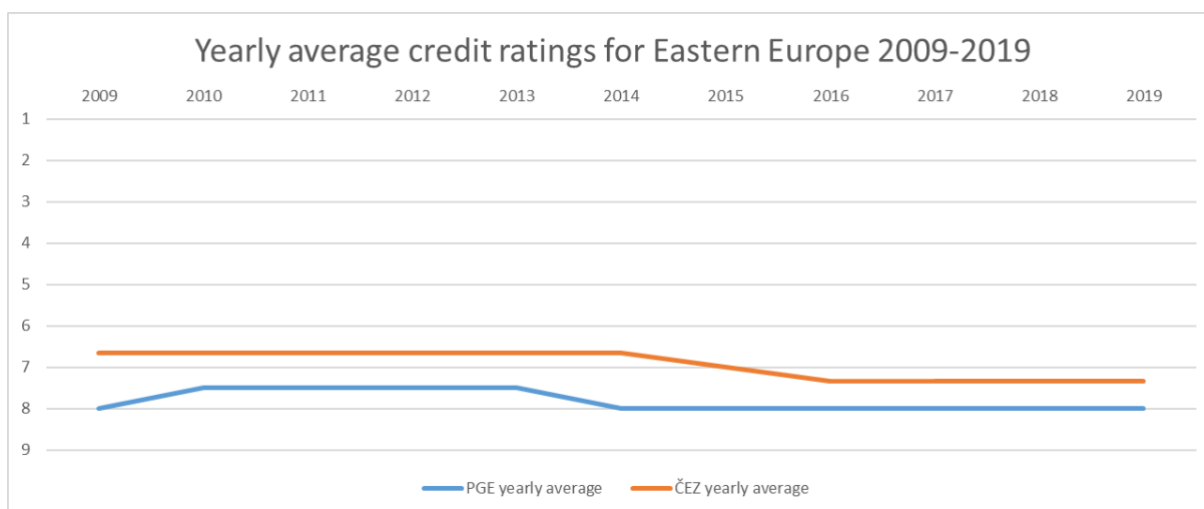


Chart 34: Yearly average credit ratings for Eastern Europe 2009-2019

9.8 Credit rating trends

In this sub-chapter, demand for electricity over the timeframe of this study, energy prices, companies' key ratios as defined in chapter six, market capitalisation and other relevant data will be analysed against the evolution of credit ratings.

The downward trend at a European level can be observed in chart 35 where the average rating for all seventeen companies is displayed on a yearly basis. The average for all three rating agencies is also calculated. Unsurprisingly, all agencies' ratings are quite similar, with S&P being the least positive of the *Big Three* while Moody's ratings are generally more positive.

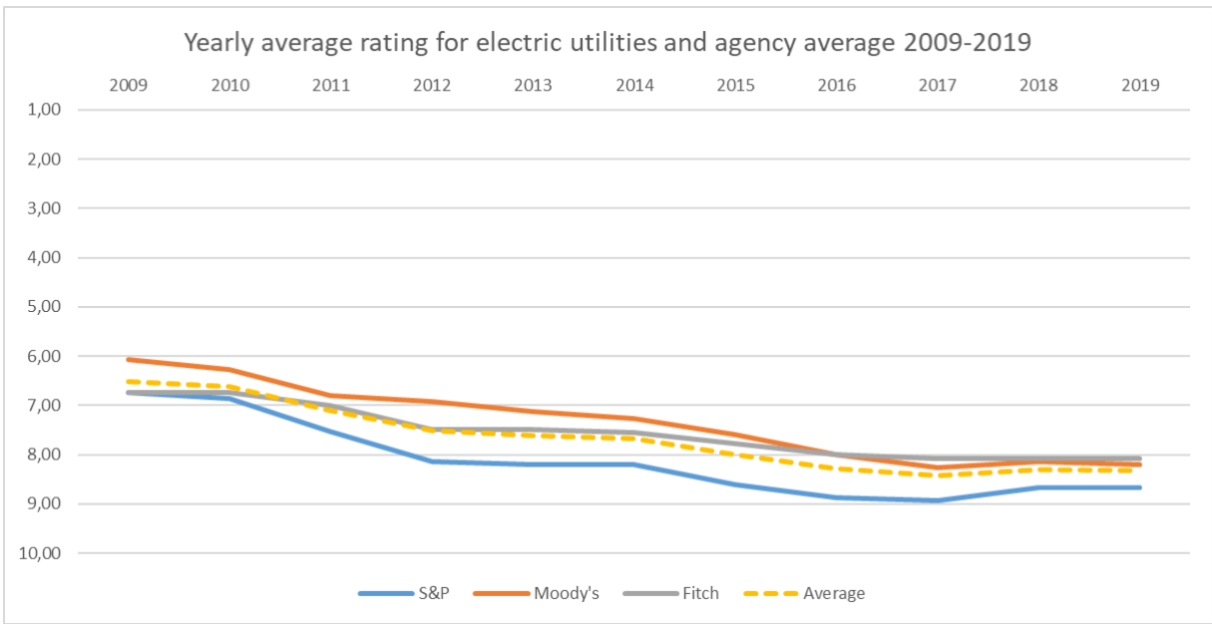


Chart 35: Yearly average rating for electric utilities and agency average 2009-2019

9.8.1 Electricity consumption and prices

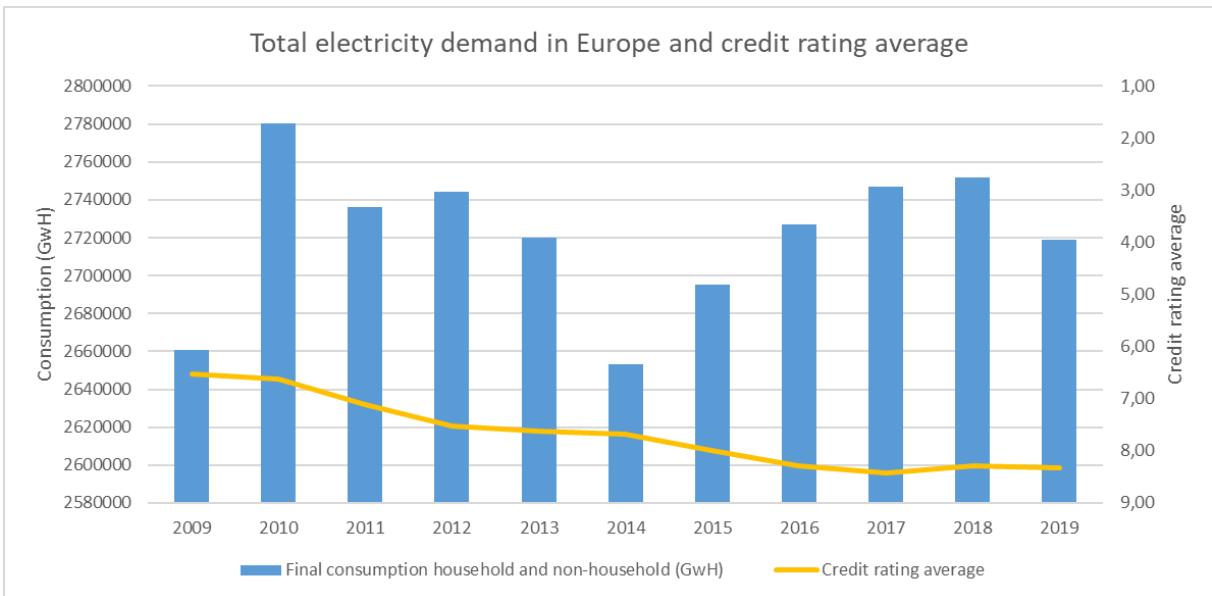


Chart 36: Total electricity consumption in Europe and credit rating average

The chart above compares the evolution of demand for electricity for household and non-household consumers and credit ratings. Although the average ratings saw a further drop from 2014 onwards, the year when consumption plummeted, until 2017, the drop was not that significant, and demand should not be seen as the sole driver of poor performance for the industry, although it did affect its profitability.

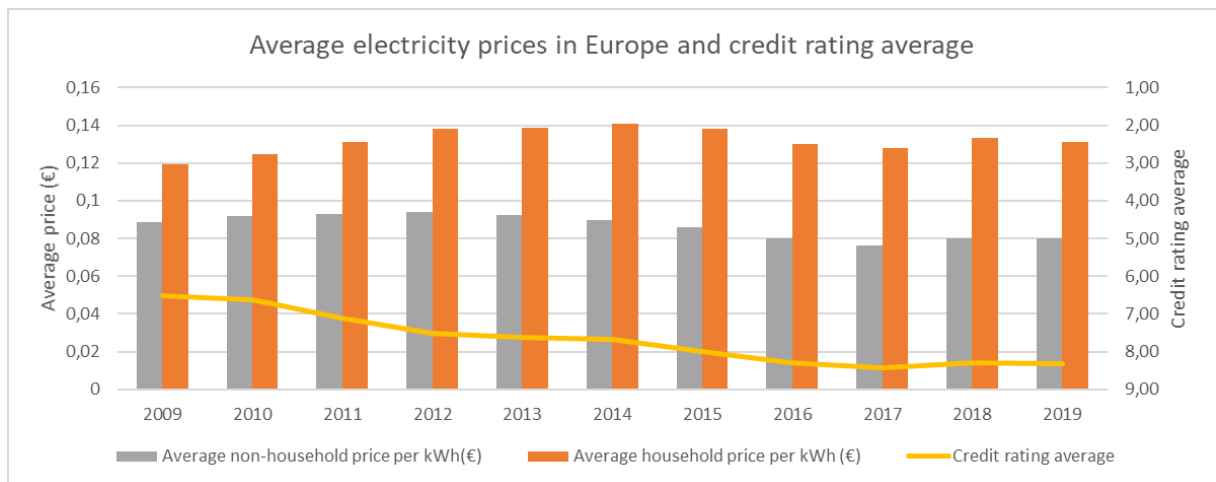


Chart 37: Average electricity prices in Europe and credit rating average

The evolution of prices in the energy sector, observed in chart 37, is determined by several factors which affect generation such as the price of commodities for fossil-fuel powerplants and the conditions for generation of renewables such as wind patterns, solar light, and others. A collapse in demand does not have a significant effect on prices as was already observed in chapter five.

9.8.2 Market Capitalisation

When comparing the evolution of market capitalisation to credit ratings, a discernible pattern is more apparent than in the case of demand and price. Both credit ratings and market capitalisation are reflections of the industry's outlook and confidence by investors and creditors alike. Chart 38 illustrates the relation between the two metrics and the tendency for improvement or deterioration. As the market capitalisation of electric utilities

started to improve at the end of the decade, so did the credit rating average stabilise at a higher average.

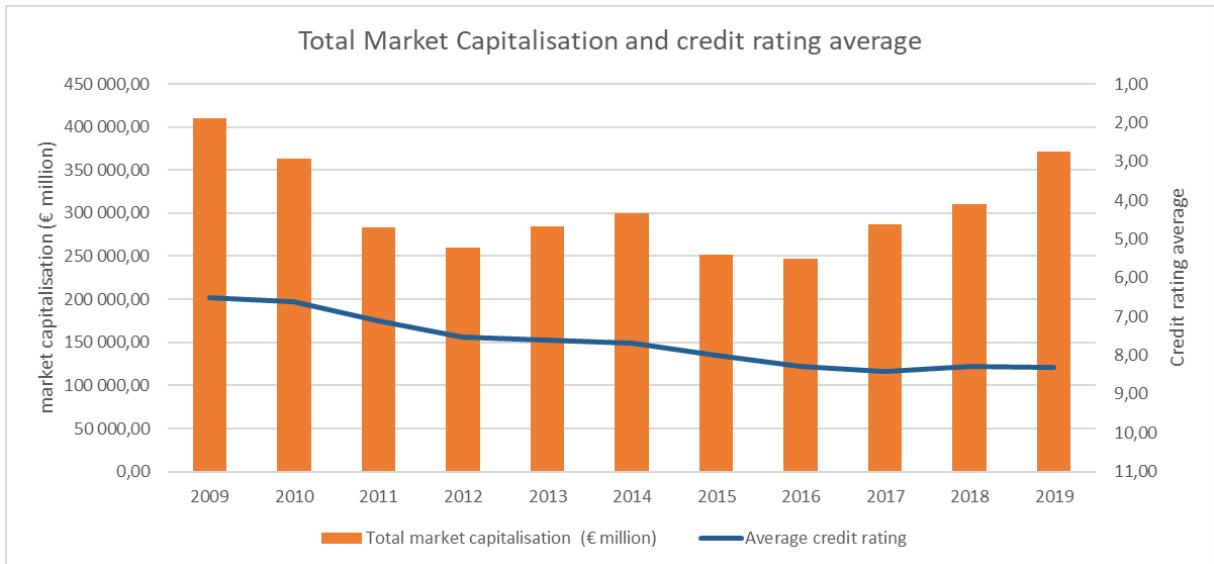


Chart 38: Total Market Capitalisation and credit rating average

9.8.3 Gearing and Equity Ratios

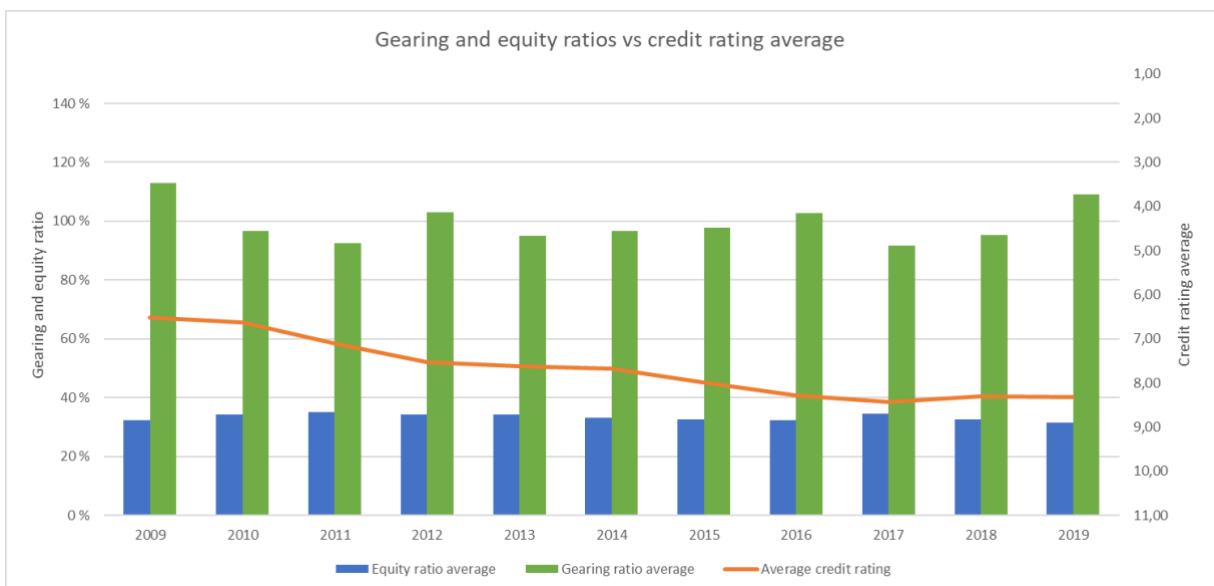


Chart 39: Gearing and equity ratios vs credit rating average

Gearing and equity ratios are compared to the evolution of credit ratings in the chart above. The sector's equity ratio remained largely unchanged, ranging from 32 percent to 35 percent whereas gearing ratios fluctuated more. Although gearing ratio values were below 100 percent for most of the decade, they are still high and reflect an industrywide tendency for an equity dangerously close to its financial liabilities.

9.8.4 Total asset value and total financial liabilities

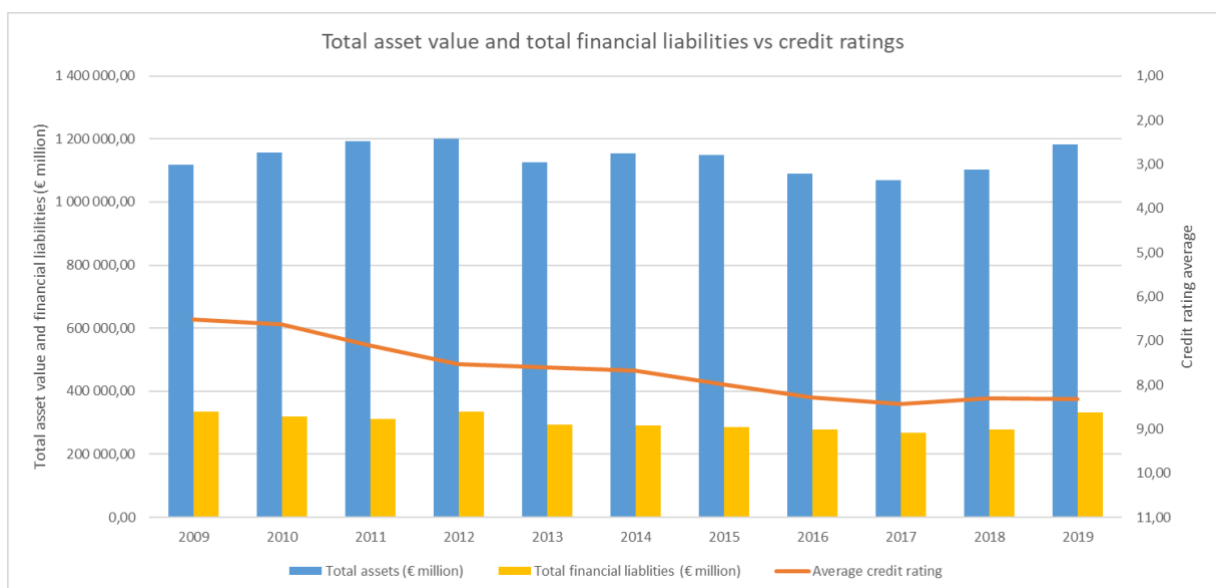


Chart 40: Total asset value and total financial liabilities vs credit ratings

The total financial liabilities of the studied electric utilities were lower in 2019 than in 2009 and had a tendency for decreasing throughout the period. Total asset values were marginally higher at the end of the decade even though there were fluctuations and downward trends. The proportion of debt to equity is the most worrying indicator for electric utilities from an accounting standpoint, not the total debt.

Asset value and, above all, asset quality warrant further investigation as there are several factors driving down their value which will be covered at greater length in the following chapter.

10 Asset impairment, green bonds, and an uncertain future

The value of power generation assets is threatened by public and political pressure as well as technological advancements. The steady growth of capacity from cleaner and renewable energy sources deteriorated the value of fossil fuel and nuclear powerplants in the 2010s. This is reflected in companies' accounts as asset impairments and write-downs or write-offs. Investment in renewable energy capacity, such as wind or solar power, whose output to price ratio is considerably lower than more established non-renewable generation technology, puts further strain in electric utilities firms' finances.

A fall in demand for electricity during the mid-2010s, as was observed in chapter five, paired with fluctuating commodity prices created further challenges for the industry.

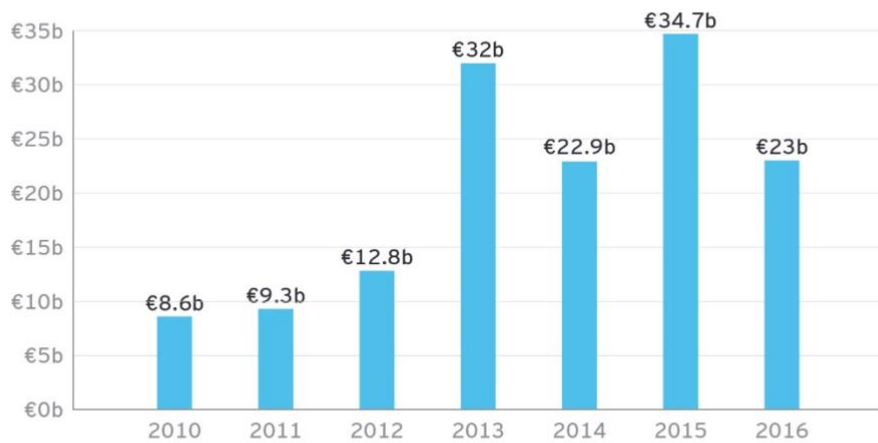
The future of power generation and consumption is uncertain. Whereas demand for electricity is likely to increase significantly due to the adoption of electric vehicles (EVs), improvements in battery technology may fundamentally change generation needs by electric utilities and the distribution network. Consumers themselves may also assume a different role in the power grid, as they too will be able to generate power domestically through renewable sources such as solar panels. Electric utilities may not only need to rethink their generation capacity and technology, but also their business models and revenue streams if they are to weather the storm of disruption facing them.

10.1 Asset impairment, Equity Investment and Green Bonds

A report by Ernst and Young details the value of asset impairments from 2010 to 2016, with the record being registered in 2015 at 34,7 billion euros (Ernst and Young 2018). The accounting firm identifies the price of commodities such as oil, coal and gas, regulatory pressure to decarbonise and modernise power generation, a fall in demand for electricity and financing conditions as the main drivers of asset impairment.

Chart 41 details the impairments registered in Europe from EY's sample. As can be seen on chart 42, most of the impairments involved generation assets.

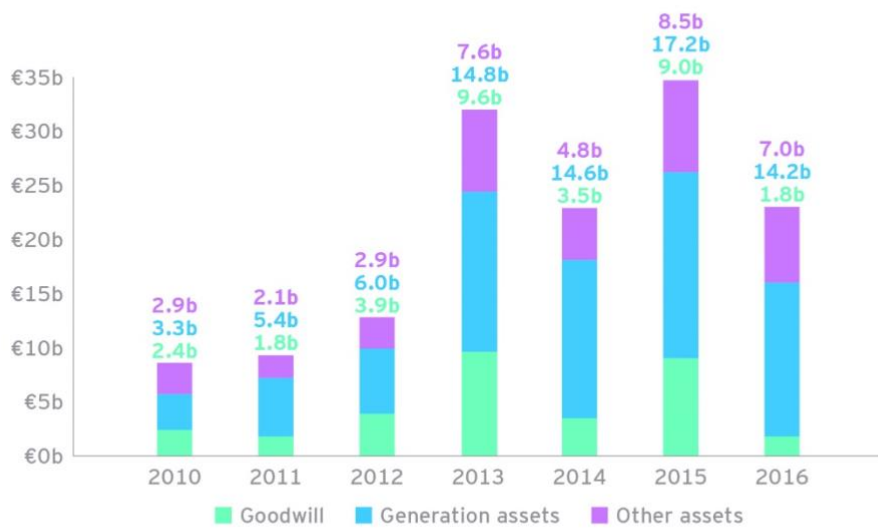
POWER AND UTILITIES
Impairment by years: 2010-16



Source: EY, Benchmarking European Power and Utilities asset impairments 2017
© 2018 EYGM Limited. All rights reserved. ED None.

Chart 41: Power and Utilities impairments by years: 2010-2016 (Ernst and Young 2018)

POWER AND UTILITIES
Impairment by type: 2010-16



Source: EY, Benchmarking European Power and Utilities asset impairments 2017
© 2018 EYGM Limited. All rights reserved. ED None.

Chart 42: Power and Utilities Impairment by type: 2010-2016 (Ernst and Young 2018)

These impairments were compounded by the need for capital expenditure on renewable generation assets, many of which required debt financing during a period defined by an economic slowdown, low electricity demand and uncertainty. A report by the European Commission on the clean energy finance landscape identifies electric utilities as an important source of equity investment in Renewable Energy (European Commission 2016, 49). In 2014, nine European Utilities alone (SSE, Iberdrola, Enel, E.ON, RWE, EDP, EDF, Dong Energy and Vattenfall) invested a total of 11,9 billion American Dollars in renewable energy assets (Frankfurt School-UNEP Centre 2016, 46).

The green bond is a relatively new financial instrument which has been adopted by many entities involved with the energy sector to guarantee their investors are assured of their environmental, social and governance (ESG) commitments.

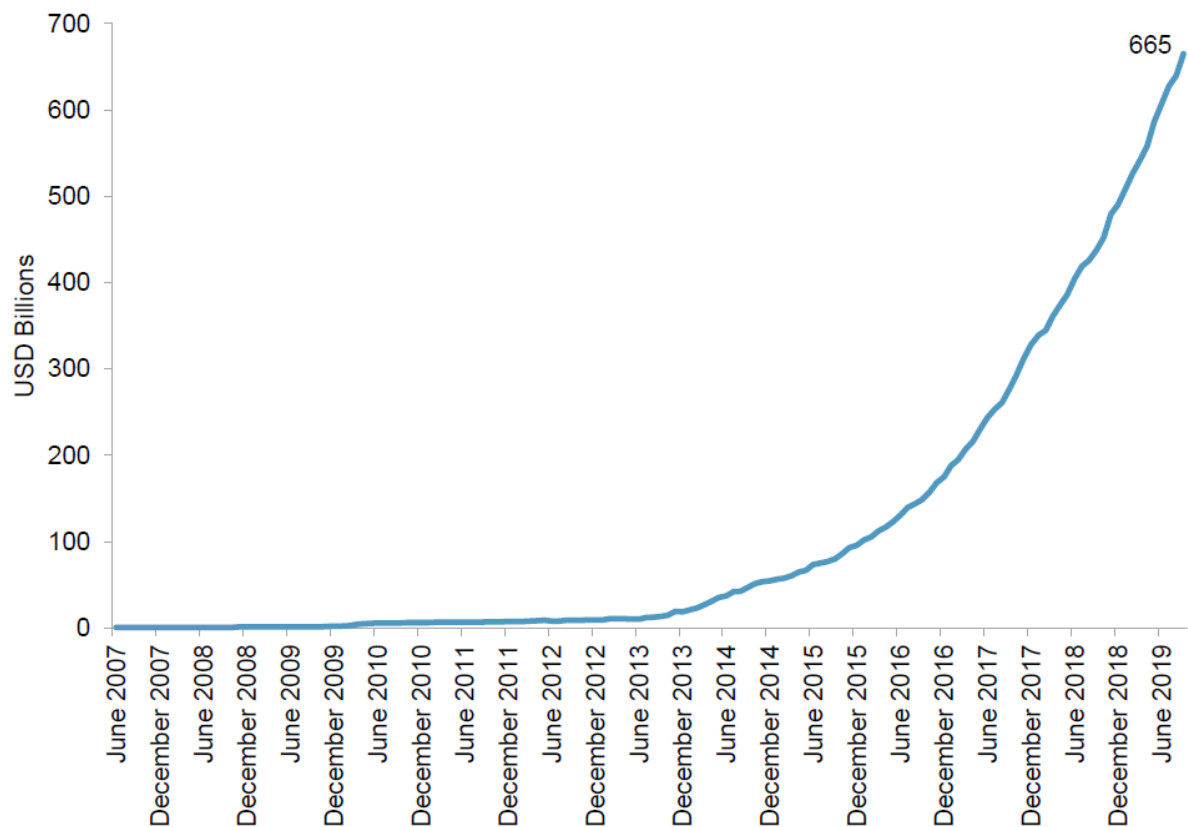


Chart 43: Global green bond market size (Soe, Xie, Luke et Horan 2019, 4)

The chart above shows the exponential growth of the global green bond market since 2013, further evidencing increased societal pressure on companies and investors alike to gear their spending and operations towards sustainability. For European Electric Utilities, green bonds have been a common instrument to finance their renewable energy projects and decarbonisation efforts. A couple of examples are EDF, which has issued 6,9 billion EUR in green bonds since November 2013 (EDF n.d.), and SSE which issued its first green bond in 2017 for 600 million EUR followed by 650 million EUR a year later and a third in 2019 for 350 million Pound Sterling (SSE n.d.).

10.2 Future disruption, uncertainty and opportunities

The power sector is one the most heavily scrutinised industries by the public and regulators alike, both from a consumer's rights standpoint and ESG. The human impact on the acceleration of global warming and damage to ecosystems has been recognised in Europe and is almost unanimously seen as a major threat to human life on the continent. Countries in Europe have different energy mixes and political divisions around the transition towards cleaner generation. However disputed it may be, EU legislation and policy are aimed at a gradual decarbonisation and transition to renewable power generation. In 2005, the EU introduced the Emissions Trading System (ETS), which imposes a cap on carbon dioxide emission allowances per entity and allows these entities to trade emission allowances. Exceeding allowances results in fines and a subsequent increase in costs. This policy effectively incentivised the power industry to move away from fossil fuel intensive generation, such as coal, towards new power sources. Unpredictable demand and the inability to stock electricity as other commodities makes the price on carbon emissions a challenging cost to forecast. Electric Utilities are a major stakeholder in the EU's European Green Deal, which aims to make the continent climate-neutral by 2050. The industry is already reinventing itself in many respects and will have to continue navigating new business and legal environments which will challenge its sustainability and require intensive capital expenditure and calculated divestments.

The future of transportation remains highly uncertain as well. Although EVs look like a potential winner, fuel cells are also poised to compete for significant market share. The power grid's role will be essential in this transformation regardless of the market share, but the chosen investments may prove challenging. Should electric utilities prepare for increased demand to charge EVs or should they instead focus on electrolysis when overproducing electricity to supply hydrogen for fuel cells? Should they invest in both options and to what degree? These uncertainties will have to be navigated by electric utilities, but the projections of increased demand are an encouraging trend they should welcome and prepare for. A study by Deloitte insights projects a growth in demand for EVs alone will range from 180 TWh to 840 TWh (Schlaak et Trüby 2021, 8).

Battery technology and self-generation are other potential disruptors to the power industry. The role of TSOs may come into question should power storage capacity become a sustainable and price efficient technology. Long and costly transmission grids may be dismantled in favour of high-capacity batteries. Electric generation patterns, particularly peak production for higher demand and the resulting price fluctuation, could change fundamentally if electricity could be stored for later consumption. Generation asset value could again come under pressure and require write-downs and divestments. Self-generation and the consumer's role in the power grid will also change generation needs and put customers in an unprecedented position in the value chain, not only as consumers, but also as energy producers. Solar panels and other domestic power generation methods enable the public to generate their own energy and lessen their dependence on utilities companies for power supply.

The 2010s brought about an accelerated pace of change and transition towards renewables requiring heavy investment and a fall in demand which challenged profitability for electric utilities. Future megatrends bring opportunity but also considerable risk to the energy sector giants who will have to place their bets carefully as investment needs will constantly require capital expenditure and access to finance.

11 Conclusions

In the decade between 2009 and 2019, European electric utilities were disrupted by adverse economic conditions following the global financial crisis, a paradigm shift in generation technology and regulatory pressure demanding heavy investment on renewables as well as increasing pressure to decarbonise the European energy mix. This environment put the sector's finances under strain, requiring fiscal discipline and restructuring. Regional differences do play a role in some regards, but the European power grid's interdependence goes beyond its physical connections, the sector is characterised by a common regulatory environment and similar market dynamics.

Quantitative easing has been disregarded in this study as it does not appear to have influenced further indebtedness by the industry. The proportion of financial liabilities to equity, i.e. gearing ratio, was already high at the beginning of the period covered by this study, as shown in chapter seven, an indicator creditors and investors were likely to want improved rather than aggravated by an easier access to finance.

M&A during the period were not analysed in the research. Focusing on the consolidated financial reports, credit ratings and industry-wide trends provided a more data-orientated method to look at financial performance through ratios used in financial accounting.

11.1 Main conclusion

The European energy sector underwent several transformations in the past thirty years, from a sector that was firmly in the hands of nation-states, through vertically integrated companies considered to serve natural monopolies at a national level, to a liberalised Pan-European market dominated by a small number of energy giants, which have raked up generation assets through local subsidiaries continent-wide. Whereas the nineties and 2000s were dominated by liberalisation and very intense M&A activity, the 2010s were defined by increased regulatory pressure to update the European energy mix to an environmentally sustainable power grid. Chapter five covers market liberalisation across the continent in depth.

As was explored in chapter ten, the heavy investment on renewable generation observed in the 2010s was compounded by the depreciation of older generation assets the new installed capacity is eventually meant to replace. Fossil fuel powerplants were still a necessity between 2009-2019 to cover demand in a technically difficult market to supply. This crossroads for the industry, where the means of production for the commodity it supplies was severely disrupted and an economic crisis that slowed demand were the main challenges to its financial sustainability and capacity to pay back its financial liabilities.

This research focused on finding the main factors and trends challenging the financial sustainability of European Electric Utilities between 2009 and 2019. The financial sustainability of electric utilities was weaker at the end of the decade as the studied indicators in this thesis show. The trends across different cohorts are strikingly similar, confirming the sector's interdependence.

11.2 Electricity demand and price

As the data shown on chapter six revealed, energy demand was unstable and difficult to predict in the 10-year period concerned. Not only did the drop in demand lead to a subsequent drop in revenues but it also put into question the total capacity of the European power grid and the need for some older generation assets.

Energy prices did not fluctuate significantly. At any rate, a study of variable costs inherent to power generation such as the price of commodities, carbon-taxes and other cost drivers would be a more adequate analysis to look at their financial impact. This would require extensive data mining not entirely in line with the scope of this study.

11.3 Gearing and equity ratios

Gearing and equity ratios, covered in chapter seven, constitute two of the most important metrics in this study as they are indicators of financial sustainability and solvency. Gearing ratios throughout the 2010s averaged 99%, with differences across regional cohorts. This value suggests an industry which can barely finance its spending through equity and has a constant need for credit. Ideal ratios vary across industries hence it is difficult to gauge the sector's performance by merely reading this figure. Asset value in the electric utilities sector requires analysis which takes into consideration variable profit drivers, the production of a commodity which cannot be stocked, and asset lifetimes governed by complex regulatory and technical factors.

The indicators for companies with majority state ownership, on average, are better than their private counterparts in both metrics. Fiscal discipline appears to be higher in companies with stricter public oversight where taxpayer scrutiny and state funds are involved except for France, which has the lowest equity ratio average and second highest gearing ratio in the sample. The French propensity for statism in important infrastructure and vital economic sectors seems to be confirmed by these results.

Company size, the markets in which they operate, and their assets vary across the sample, as do creditors' and investors' confidence in their future performance and stability. These two ratios are important technical metrics to consider but the megatrends which disrupted the sector can shed more light on its performance than mere ratios.

11.4 Market Capitalisation and financial markets

The 2010s were not a good decade for the companies in this sample, as the data in chapter eight reveal. Although the end of the period saw a recovery in total market capitalisation, the trend was negative for most of the time concerned. The total market capitalisation of the industry was 1,4% lower in 2019 than it was in 2009. It is worth noting that market capitalisation was affected by the Ørsted's entrance into capital markets in 2016, with a capitalisation that more than double from 2016 to 2019.

An interesting development during the period was the rise in the green bond market, a financial instrument increasingly more used by utilities to assure investors of their commitment to decarbonisation and environmental sustainability. Bonds are an alternative to credit and the commitment to guarantee investors their money will be dedicated to sustainable investments showcases the pressure that the industry is under to focus on greener investments.

11.5 Credit ratings

Credit rating evolution in the 2010s was negative sector-wide, with every company in the sample registering a downgrade, at least from one of the *Big Three* rating agencies, from 2009 to 2019, as can be observed in chapter nine. The financial crisis of 2008 brought about increased scrutiny both on the financial sector and the credit worthiness of big corporations and sovereign debt. The electricity sector was no exception and the economic slowdown experienced during the decade as well as the uncertain outlook for the industry's market and heavy investment needs did not go unnoticed by rating agencies.

The impact of exposure to sovereign debt was observed in France's Engie and EDF, whose fiscal indicators are not amongst the best performing in the sample, and Greece's PPC. In the case of the latter, exposure to Greece's sovereign debt appears to have severely downgraded its investment grade whereas the French companies had the best ratings in the sample.

The evolution of the ratings suggests a deterioration of electric utilities' financial sustainability, the subject covered by this research. Although regional disparities were again observed, the trend across the industry was similar in most cohorts, showing the interdependencies and connections of the sector through yet another metric.

12 Recommendations

The power industry remains a vital sector in the European economy and its future holds promise as the technological disruption that has changed its operating environment is also ripe with opportunities with a revolution in mobility powered by EVs and fuel cells on the horizon. Demand is likely to increase significantly and new business opportunities from EV infrastructure could be an excellent market for utilities. Conservatism and inactivity in a rapidly changing market architecture could bode poorly for some of the companies in this study, as insistence on fossil fuel plants and a resistance to change in the role of the consumers in the power grid will place them under fire from an increasingly environmentally conscious public.

Electric utilities navigated the tumultuous 2010s with their finances and balance sheets in a weaker position at the end of the decade, but they appear to have adapted to their new reality and, for the most part, are placing their bets on more sustainable investments and transitioning to new realities. The end of the decade saw a recovery in market capitalisation, a stabilisation in credit ratings and, overall, the combined asset value of the companies in this research was slightly higher at the end of the decade. The impact of the COVID-19 pandemic is not analysed in this research as it does not cover the timeframe concerned. The sector was yet again greeted with an economic crisis at the turn of the decade that will test its financial stability. Whatever the fallout of future crises may be, electric utilities are an essential stakeholder for Europe's economy and society at large. It is no surprise more than half of the companies studied remain, in part, in the hands of their local states, despite EU mandates to liberalise the electricity market. The financial health and sustainability of electric utilities is a matter of public interest due to the sector's importance, any defaults on debt would likely cost taxpayers.

Future research on the financial sustainability of European electric utilities concerning a different timeframe could pay closer attention to the proportion of renewable and clean energy of their generation assets.

Differences between regional cohorts will shed light on the reliance on fossil fuel powerplants across different regions on the continent. It would be elucidating to investigate the generation asset types of utilities across different markets and ascertain whether some companies are taking advantage of local preferences for fossil fuel powerplants. The ETS' efficiency should be investigated in greater detail to ensure that it accounts for the very complex ownership structures of local subsidiaries by Europe's energy giants. Any loopholes in the scheme could be exploited to offshore emissions in coal and gas friendly local legislatures. Analysing the evolution of dark spread and spark spread trends, metrics which measure the profitability of coal and natural gas plants, would also be instrumental for determining the financial sustainability of these older assets.

Differences in the energy mixes of EU countries are an interesting research topic. This study did not focus on the proportion of renewables in the energy mixes of different EU states and their financial impact with regards to capital expenditure or the lifecycle of renewable generation assets. The evolution of costs for renewable generation assets and their longevity could be further studied and compared to the financial sustainability of fossil fuel powerplants. The findings will clarify the evolution of costs for both types of generation assets and whether advances in renewable energy generation have brought its prices down and whether the increased regulatory pressure, among other factors, is making fossil fuel generation financially unsustainable.

The possibilities for research in this topic are very diverse and could focus on financial metrics that span a longer period than the one concerned in this study, looking more closely at the periods of high M&A activity in the 1990s and early 2000s and whether the deals between European electric utilities reflected the real asset values of the acquired companies. The impact of the ETS and other regulatory trends can be explored in greater depth by analysing dark and spark spreads following major regulatory changes and possible findings on their impact on fossil fuel powerplants. From a technical standpoint, the different levels of development and coverage in transmission grids across the continent could also reveal interesting findings electric utilities could consider prior to entering new markets.

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Appendix 1: Key financial figures 2009-2019 E.ON

| | 31/12/2009 | 31/12/2010 | 31/12/2011 | 31/12/2012 | 31/12/2013 | 31/12/2014 | 31/12/2015 | 31/12/2016 | 31/12/2017 | 31/12/2018 | 31/12/2019 |
|--|------------|------------|------------|------------|------------|----------------------|----------------------|------------|------------|------------|------------|
| Total Liabilities (€ million) | 108 681 | 107 296 | 113 259 | 101 607 | 94 340 | 98 977 | 94 616 | 62 412 | 49 242 | 45 806 | 85 481 |
| Total Assets (€ million) | 152 636 | 152 881 | 152 872 | 140 426 | 130 725 | 125 690 | 113 693 | 63 699 | 55 950 | 54 324 | 98 566 |
| Equity (€ million) | 43 955 | 45 585 | 39 613 | 38 819 | 36 385 | 26 713 | 19 077 | 1 287 | 6 708 | 8 518 | 13 085 |
| Liabilities + Equity (€ million) | 152 636 | 152 881 | 152 872 | 140 426 | 130 725 | 125 690 | 113 693 | 63 699 | 55 950 | 54 324 | 98 566 |
| Financial liabilities(€ million) | 37 777 | 32 491 | 29 914 | 25 944 | 23 260 | 19 667 | 17 742 | 14 227 | 13 021 | 9 886 | 31 948 |
| Liquid funds (€ million) | 6 116 | 8 273 | 7 020 | 6 546 | 7 314 | 6 067 | 8 190 | 8 573 | 5 160 | 5 357 | 3 602 |
| Net income/ loss | 8 669 | 6 281 | -1 861 | 2 641 | 2 459 | -3 130 | -6 377 | -16 007 | 4 180 | 3 524 | 1 808 |
| Key ratios | | | | | | | | | | | |
| Equity Ratio | 28,80 % | 29,82 % | 25,91 % | 27,64 % | 27,83 % | 21,25 % | 16,78 % | 2,02 % | 11,99 % | 15,68 % | 13,28 % |
| Gearing ratio | 85,94 % | 71,28 % | 75,52 % | 66,83 % | 63,93 % | 73,62 % | 93,00 % | 1105,44 % | 194,11 % | 116,06 % | 244,16 % |
| E.ON SE (EOAN.DE) Share price € | 29,23 | 22,94 | 16,67 | 14,09 | 13,42 | 14,20 | 8,93 | 6,70 | 9,06 | 8,63 | 9,52 |
| Shares outstanding (million) | 1 905 | 1 905 | 1 905 | 1 907 | 1 908 | 1 933 | 1 952 | 1 952 | 2 167 | 2 167 | 2 293 |
| Market capitalisation (€ million) | 55 683,15 | 43 700,70 | 31 756,35 | 26 869,63 | 25 605,36 | 27 448,60 | 17 431,36 | 13 078,40 | 19 635,19 | 18 694,71 | 21 838,53 |
| Market cap to equity ratio | 127 % | 96 % | 80 % | 69 % | 70 % | 103 % | 91 % | 1016 % | 293 % | 219 % | 167 % |
| Moody's Long term rating | A2 | A2 | A3 | A3 | A3 | A3 | Baa1 | Baa1 | Baa2 | Baa2 | Baa2 |
| Moody's short term rating | P-1 | P-1 | P-2 | P-2 | P-2 | P-2 | P-2 | P-2 | P-2 | P-2 | P-2 |
| Moody's outlook | Stable | Stable | Stable | Stable | Negative | Review for downgrade | Review for downgrade | Negative | Stable | Stable | Stable |
| S&P Long term rating | A | A | A- | A- | A- | A- | BBB+ | BBB+ | BBB | BBB | BBB |
| S&P short term rating | A-1 | A-1 | A-1 | A-2 | A-2 | A-2 | A-2 | A-2 | A-2 | A-2 | A-2 |
| S&P outlook | Stable | Stable | Negative | Stable | Stable | Creditwatch negative | Creditwatch negative | Negative | Stable | Stable | Stable |
| Index total assets (31/12/2009=100) | 100,00 | 100,16 | 100,15 | 92,00 | 85,64 | 82,35 | 74,49 | 41,73 | 36,66 | 35,59 | 64,58 |
| Index equity ratio (31/12/2009=100) | 100,00 | 103,54 | 89,98 | 95,99 | 96,65 | 73,80 | 58,27 | 7,02 | 41,63 | 54,45 | 46,10 |
| Index gearing ratio (31/12/2009=100) | 100,00 | 82,93 | 87,87 | 77,76 | 74,38 | 85,66 | 108,21 | 1286,22 | 225,86 | 135,04 | 284,09 |
| Index market capitalisation (31/12/2009=100) | 100,00 | 78,48 | 57,03 | 48,25 | 45,98 | 49,29 | 31,30 | 23,49 | 35,26 | 33,57 | 39,22 |
| Index Financial liabilities (31/12/2009=100) | 100,00 | 86,01 | 79,19 | 68,68 | 61,57 | 52,06 | 46,97 | 37,66 | 34,47 | 26,17 | 84,57 |

Sources for financial statements for each year

2009: [E.ON Company Report 2009](#) Consolidated Balance Sheet - Page 54-55

2010: [E.ON Annual Report 2010](#) Consolidated Balance Sheet - Page 58-59

2011: [E.ON Annual Report 2011](#) Consolidated Balance Sheet - Page 70-71

2012: [E:ON Annual Report 2012](#) Consolidated Balance Sheet – Page 98-99

2013: [E:ON Annual Report 2013](#) Consolidated Balance Sheet – Page 98-99

2014: [E:ON Annual Report 2014](#) Consolidated Balance Sheet – Page 100-101

2015: [E:ON Annual Report 2015](#) Consolidated Balance Sheet – Page 100-101

2016: [E:ON Annual Report 2016](#) Consolidated Balance Sheet – Page 110-111

2017: [E:ON Annual Report 2017](#) Consolidated Balance Sheet – Page 112-113

2018: [E:ON Annual Report 2018](#) Consolidated Balance Sheet – Page 116-117

2019: [E:ON Annual Report 2019](#) Consolidated Balance Sheet – Page 106-107

Appendix 2: Key financial figures 2009-2019 RWE

| | 31/12/2009 | 31/12/2010 | 31/12/2011 | 31/12/2012 | 31/12/2013 | 31/12/2014 | 31/12/2015 | 31/12/2016 | 31/12/2017 | 31/12/2018 | 31/12/2019 |
|--|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Total Liabilities (€ million) | 79 721 | 75 660 | 75 574 | 71 765 | 68 982 | 74 544 | 70 440 | 68 412 | 57 068 | 65 851 | 46 744 |
| Total Assets (€ million) | 93 438 | 93 077 | 92 656 | 88 202 | 81 119 | 86 316 | 79 334 | 76 402 | 69 059 | 80 108 | 64 192 |
| Equity (€ million) | 13 717 | 17 417 | 17 082 | 16 437 | 12 137 | 11 772 | 8 894 | 7 990 | 11 991 | 14 257 | 17 448 |
| Liabilities + Equity + Provisions (€ million) | 93 438 | 93 077 | 92 656 | 88 202 | 81 119 | 86 316 | 79 334 | 76 402 | 69 059 | 80 108 | 64 192 |
| Financial Liabilities (€ million) | 20 146 | 19 000 | 21 923 | 19 946 | 18 688 | 18 566 | 19 080 | 18 183 | 17 201 | 2 764 | 5 734 |
| Cash and cash equivalents (€ million) | 3 074 | 2 476 | 2 009 | 2 672 | 3 905 | 3 171 | 2 522 | 4 576 | 3 933 | 3 523 | 3 192 |
| Income (€ million) | 3 831 | 3 602 | 2 170 | 1 704 | -2 443 | 2 057 | 284 | -5 484 | 2 315 | 1 073 | 9 156 |
| Key ratios | | | | | | | | | | | |
| Equity Ratio | 14,68 % | 18,71 % | 18,44 % | 18,64 % | 14,96 % | 13,64 % | 11,21 % | 10,46 % | 17,36 % | 17,80 % | 27,18 % |
| Gearing ratio | 146,87 % | 109,09 % | 128,34 % | 121,35 % | 153,98 % | 157,71 % | 214,53 % | 227,57 % | 143,45 % | 19,39 % | 32,86 % |
| RWE AG (RWE.DE) common Share price € | 67,96 | 49,89 | 27,15 | 31,24 | 26,61 | 25,65 | 11,71 | 11,82 | 17,00 | 18,97 | 27,35 |
| Number of shares outstanding (average) | 533 131 | 533 559 | 538 971 | 614 480 | 614 745 | 614 745 | 614 745 | 614 745 | 614 745 | 614 745 | 614 745 |
| Market capitalisation in common shares (€ million) | 36 231,58 | 26 619,26 | 14 633,06 | 19 196,36 | 16 358,36 | 15 768,21 | 7 198,66 | 7 266,29 | 10 450,67 | 11 661,71 | 16 813,28 |
| Market cap to equity ratio | 264 % | 153 % | 86 % | 117 % | 135 % | 134 % | 81 % | 91 % | 87 % | 82 % | 96 % |
| Moody's Long term rating | A2 | A2 | A3 | A3 | Baa1 | Baa3 | Baa2 | Baa3 | Baa3 | Baa3 | Baa3 |
| Moody's short term rating | P-1 | P-1 | P-2 | P-2 | P-2 | P-2 | P-2 | P-3 | P-3 | P-3 | P-3 |
| Moody's outlook | Negative | Negative | Negative | Negative | Stable | Stable | Negative | Negative | Stable | Stable | Stable |
| S&P Long term rating | A | A | A- | BBB+ | BBB+ | BBB- | BBB | BBB- | BBB- | | |
| S&P short term rating | A-1 | A-1 | A-2 | A-2 | A-2 | A-2 | A-2 | A-3 | A-3 | | |
| S&P outlook | Negative | Negative | Negative | Stable | Stable | Stable | Negative | Stable | Stable | | |
| Fitch Long term rating | | | | | | | | BBB | BBB | BBB | BBB |
| Fitch short term rating | | | | | | | | F3 | F3 | F2 | F2 |
| Fitch outlook | | | | | | | | Negative | Stable | Stable | Stable |
| Index total assets (31/12/2009=100) | 100,00 | 99,61 | 99,16 | 94,40 | 86,82 | 92,38 | 84,91 | 81,77 | 73,91 | 85,73 | 68,70 |
| Index equity ratio (31/12/2009=100) | 100,00 | 127,47 | 125,58 | 126,94 | 101,92 | 92,90 | 76,37 | 71,24 | 118,28 | 121,23 | 185,15 |
| Index gearing ratio (31/12/2009=100) | 100,00 | 127,47 | 125,58 | 126,94 | 101,92 | 92,90 | 76,37 | 71,24 | 118,28 | 121,23 | 185,15 |
| Index market capitalisation (31/12/2009=100) | 100,00 | 73,47 | 40,39 | 52,98 | 45,15 | 43,52 | 19,87 | 20,06 | 28,84 | 32,19 | 46,41 |
| Index Financial liabilities (31/12/2009=100) | 100,00 | 94,31 | 108,82 | 99,01 | 92,76 | 92,16 | 94,71 | 90,26 | 85,38 | 13,72 | 28,46 |

Sources for financial statements for each year

2009: [RWE Annual Report 2009](#) Consolidated Balance Sheet- Page 142

2010: [RWE Consolidated Financial Statements 2010](#) Consolidated Balance Sheet- Page 164

2011: [RWE Annual Report 2011](#) Consolidated Balance Sheet- Page 128

2012: [RWE Annual Report 2012](#) Consolidated Balance Sheet- Page 132

2013: [RWE Annual Report 2013](#) Consolidated Balance Sheet- Page 138

2014: [RWE Annual Report 2014](#) Consolidated Balance Sheet- Page 120

2015: [RWE Annual Report 2015](#) Consolidated Balance Sheet- Page 96

2016: [RWE Annual Report 2016](#) Consolidated Balance Sheet- Page 94

2017: [RWE Annual Report 2017](#) Consolidated Balance Sheet- Page 90

2018: [RWE Annual Report 2018](#) Consolidated Balance Sheet- Page 90

2019: [RWE Annual Report 2019](#) Consolidated Balance Sheet- Page 100

Appendix 3: Key financial figures 2009-2019 EnBW

| | 31/12/2009 | 31/12/2010 | 31/12/2011 | 31/12/2012 | 31/12/2013 | 31/12/2014 | 31/12/2015 | 31/12/2016 | 31/12/2017 | 31/12/2018 | 31/12/2019 |
|--|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Total Liabilities (€ million) | 28 290,6 | 27 621,6 | 29 687,3 | 29 586,5 | 30 057,8 | 33 766,5 | 33 068,7 | 35 319,1 | 32 922,0 | 33 335,7 | 35 843,0 |
| Total Assets (€ million) | 34 698,3 | 35 239,8 | 35 820,7 | 36 769,9 | 36 140,5 | 38 312,1 | 38 158,2 | 38 535,3 | 38 784,9 | 39 609,0 | 43 288,1 |
| Total Equity (€ million) | 6 407,7 | 7 618,2 | 6 133,4 | 7 183,4 | 6 082,7 | 4 545,6 | 5 089,5 | 3 216,2 | 5 862,9 | 6 273,3 | 7 445,1 |
| Liabilities + Equity (€ million) | 34 698,3 | 35 239,8 | 35 820,7 | 36 769,9 | 36 140,5 | 38 312,1 | 38 158,2 | 38 535,3 | 38 784,9 | 39 609,0 | 43 288,1 |
| Financial liabilities (€ million) | 7 184,3 | 7 320,9 | 7 739,8 | 6 761,2 | 5 772,1 | 8 265,6 | 7 568,2 | 7 928,9 | 7 258,8 | 6 996,2 | 8 190,9 |
| Cash and cash equivalents (€ million) | 1 470,8 | 1 878,3 | 2 776,6 | 2 583,3 | 2 421,2 | 3 179,2 | 3 501,1 | 3 991,6 | 3 213,3 | 2 249,4 | 1 363,8 |
| Group net profit (€ million) | 768,2 | 1 170,5 | -842,3 | 473,5 | 51,0 | -450,7 | 158,2 | -1 797,2 | 2 054,1 | 334,2 | 734,2 |
| Key ratios | | | | | | | | | | | |
| Equity Ratio | 18,47 % | 21,62 % | 17,12 % | 19,54 % | 16,83 % | 11,86 % | 13,34 % | 8,35 % | 15,12 % | 15,84 % | 17,20 % |
| Gearing ratio | 112,12 % | 96,10 % | 126,19 % | 94,12 % | 94,89 % | 181,84 % | 148,70 % | 246,53 % | 123,81 % | 111,52 % | 110,02 % |
| EnBW Energie Baden-Württemberg AG (EBK.DE) Share price € | 40,00 | 40,92 | 39,00 | 30,15 | 26,85 | 25,59 | 20,62 | 19,70 | 28,78 | 29,20 | 50,50 |
| Number of shares outstanding (weighted average) | 244 257 | 244 257 | 244 257 | 270 855 | 270 855 | 270 855 | 270 855 | 270 855 | 270 855 | 270 855 | 270 855 |
| Market capitalisation (€ million) | 9 770,28 | 9 995,00 | 9 526,02 | 8 166,28 | 7 272,46 | 6 932,53 | 5 583,68 | 5 334,49 | 7 793,85 | 7 908,97 | 13 678,18 |
| Market cap to equity ratio | 152 % | 131 % | 155 % | 114 % | 120 % | 153 % | 110 % | 166 % | 133 % | 126 % | 184 % |
| Moody' long term rating | A2 | A2 | A3 | A3 | A3 | A3 | A3 | A3 | Baa1 | A3 | A3 |
| Moody's outlook | Stable | Stable | Negative | Negative | Negative | Negative | Negative | Negative | Stable | Stable | Stable |
| S&P Long term rating | A- | A- | A- | A- | A- | A- | A- | A- | A- | A- | A- |
| S&P outlook | Negative | Negative | Stable | Stable | Stable | Stable | Stable | Stable | Negative | Stable | Stable |
| Fitch Long term rating | A | A | A- | A- | A- | A- | A- | A- | A- | A- | A- |
| Fitch outlook | Stable | Stable | Stable | Stable | Stable | Stable | Stable | Stable | Stable | Stable | Stable |
| Index total assets (31/12/2009=100) | 100,00 | 101,56 | 103,23 | 105,97 | 104,16 | 110,41 | 109,97 | 111,06 | 111,78 | 114,15 | 124,76 |
| Index equity ratio (31/12/2009=100) | 100,00 | 117,06 | 92,72 | 105,79 | 91,14 | 64,25 | 72,23 | 45,19 | 81,86 | 85,76 | 93,13 |
| Index gearing ratio (31/12/2009=100) | 100,00 | 85,71 | 112,55 | 83,95 | 84,64 | 162,18 | 132,63 | 219,88 | 110,43 | 99,47 | 98,12 |
| Index market capitalisation (31/12/2009=100) | 100,00 | 102,30 | 97,50 | 83,58 | 74,43 | 70,96 | 57,15 | 54,60 | 79,77 | 80,95 | 140,00 |
| Index Financial liabilities (31/12/2009=100) | 100,00 | 101,90 | 107,73 | 94,11 | 80,34 | 115,05 | 105,34 | 110,36 | 101,04 | 97,38 | 114,01 |

Sources for financial statements for each year

2009: [EnBW Annual Report 2009](#) Consolidated Balance Sheet- Page 127

2010: [EnBW Annual Report 2010](#) Consolidated Balance Sheet- Page 125

2011: [EnBW Annual Report 2011](#) Consolidated Balance Sheet- Page 118

2012: [EnBW Annual Report 2012](#) Consolidated Balance Sheet- Page 146

2013: [EnBW Annual Report 2013](#) Consolidated Balance Sheet- Page 135

2014: [EnBW Annual Report 2014](#) Consolidated Balance Sheet- Page 101

2015: [EnBW Annual Report 2015](#) Consolidated Balance Sheet- Page 101

2016: [EnBW Annual Report 2016](#) Consolidated Balance Sheet- Page 103

2017: [EnBW Annual Report 2017](#) Consolidated Balance Sheet- Page 119

2018: [EnBW Annual Report 2018](#) Consolidated Balance Sheet- Page 140

2019: [EnBW Annual Report 2019](#) Consolidated Balance Sheet- Page 127

Appendix 4: Key financial figures 2009-2019 Verbund

| | 31/12/2009 | 31/12/2010 | 31/12/2011 | 31/12/2012 | 31/12/2013 | 31/12/2014 | 31/12/2015 | 31/12/2016 | 31/12/2017 | 31/12/2018 | 31/12/2019 |
|--|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Total Liabilities (€ million) | 6 935,53 | 6 918,58 | 6 929,91 | 7 287,93 | 7 262,09 | 6 966,85 | 6 319,68 | 6 008,69 | 5 592,78 | 5 763,78 | 5 270,62 |
| Total Assets (€ million) | 10 345,22 | 11 290,98 | 11 859,31 | 12 387,33 | 12 808,63 | 12 247,30 | 11 762,99 | 11 538,19 | 11 283,60 | 11 704,80 | 11 838,63 |
| Equity (€ million) | 3 409,69 | 4 372,40 | 4 929,40 | 5 099,39 | 5 546,54 | 5 280,45 | 5 443,32 | 5 529,50 | 5 690,83 | 5 941,02 | 6 568,01 |
| Total Liabilities + Equity (€ million) | 10 345,22 | 11 290,98 | 11 859,31 | 12 387,33 | 12 808,63 | 12 247,30 | 11 762,99 | 11 538,19 | 11 283,60 | 11 704,80 | 11 838,63 |
| Financial liabilities (€ million) | 4 310,46 | 4 496,22 | 4 233,69 | 4 321,06 | 5 176,98 | 3 706,85 | 3 129,50 | 2 719,68 | 2 355,55 | 2 226,36 | 1 567,38 |
| Cash and cash equivalents (€ million) | 125,98 | 488,98 | 333,24 | 121,67 | 83,29 | 41,68 | 28,89 | 27,96 | 28,59 | 39,35 | 44,64 |
| Profit/loss (€ million) | 752,848 | 484,382 | 465,815 | 499,036 | 645,288 | 180,545 | 250,327 | 459,551 | 301,566 | 476,245 | 640,713 |
| Key ratios | | | | | | | | | | | |
| Equity Ratio | 32,96 % | 38,72 % | 41,57 % | 41,17 % | 43,30 % | 43,12 % | 46,27 % | 47,92 % | 50,43 % | 50,76 % | 55,48 % |
| Gearing ratio | 126,42 % | 102,83 % | 85,89 % | 84,74 % | 93,34 % | 70,20 % | 57,49 % | 49,18 % | 41,39 % | 37,47 % | 23,86 % |
| VERBUND AG (VER.VI) Share price € | 29,71 | 27,88 | 20,74 | 18,76 | 15,52 | 15,30 | 11,86 | 15,20 | 20,15 | 37,24 | 44,74 |
| Weighted average of share in circulation | 308 200 | 347 415 | 347 415 | 347 415 | 347 415 | 347 415 | 347 415 | 347 416 | 347 416 | 347 416 | 347 416 |
| Market capitalisation (€ million) | 9 156,62 | 9 685,93 | 7 203,65 | 6 517,51 | 5 390,14 | 5 313,71 | 4 120,34 | 5 280,72 | 6 998,70 | 12 937,77 | 15 543,39 |
| Market cap to equity ratio | 269 % | 222 % | 146 % | 128 % | 97 % | 101 % | 76 % | 96 % | 123 % | 218 % | 237 % |
| Moody' long term rating | A2 | A2 | A2 | A2 | Baa1 | Baa1 | Baa1 | Baa2 | Baa2 | Baa1 | Baa1 |
| Moody's outlook | Negative | Negative | Stable | Stable | Negative | Negative | Stable | Stable | Positive | Positive | Positive |
| S&P long term rating | A- | A- | A- | A- | A- | BBB+ | BBB+ | BBB | BBB+ | A- | A |
| S&P outlook | Negative | Stable | Stable | Negative | Negative | Stable | Stable | Stable | Stable | Stable | Stable |
| Index total assets (31/12/2009=100) | 100,00 | 109,14 | 114,64 | 119,74 | 123,81 | 118,39 | 113,70 | 111,53 | 109,07 | 113,14 | 114,44 |
| Index equity ratio (31/12/2009=100) | 100,00 | 117,49 | 126,11 | 124,90 | 131,38 | 130,81 | 140,40 | 145,40 | 153,02 | 154,00 | 168,33 |
| Index gearing ratio (31/12/2009=100) | 100,00 | 81,34 | 67,94 | 67,03 | 73,83 | 55,53 | 45,48 | 38,91 | 32,74 | 29,64 | 18,88 |
| Index market capitalisation (31/12/2009=100) | 100,00 | 105,78 | 78,67 | 71,18 | 58,87 | 58,03 | 45,00 | 57,67 | 76,43 | 141,29 | 169,75 |
| Index Financial Liabilities (31/12/2009=100) | 100,00 | 104,31 | 98,22 | 100,25 | 120,10 | 86,00 | 72,60 | 63,09 | 54,65 | 51,65 | 36,36 |

Sources for financial statements for each year

2009: [Verbund Annual Report 2009](#) Consolidated Balance Sheet- Page 93

2010: [Verbund Annual Financial Report 2010](#) Consolidated Balance Sheet- Page 117

2011: [Verbund Annual Report 2011](#) Consolidated Balance Sheet- Page 97

2012: [Verbund Annual Report 2012](#) Consolidated Balance Sheet- Page 75

2013: [Verbund Annual Report 2013](#) Consolidated Balance Sheet- Page 73

2014: [Verbund Annual Report 2014](#) Consolidated Balance Sheet- Page 77

2015: [Verbund Annual Report 2015](#) Consolidated Balance Sheet- Page 133

2016: [Verbund Annual Report 2016](#) Consolidated Balance Sheet- Page 139

2017: [Verbund Annual Report 2017](#) Consolidated Balance Sheet- Page 159

2018: [Verbund Annual Report 2018](#) Consolidated Balance Sheet- Page 165

2019: [Verbund Annual Report 2019](#) Consolidated Balance Sheet- Page 171

Appendix 5: Key financial figures 2009-2019 Ørsted-Dong Energy

| | 31/12/2009 | 31/12/2010 | 31/12/2011 | 31/12/2012 | 31/12/2013 | 31/12/2014 | 31/12/2015 | 31/12/2016 | 31/12/2017 | 31/12/2018 | 31/12/2019 |
|---|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Total Liabilities (DKK million) | 75 744,00 | 86 031,00 | 96 333,00 | 109 578,00 | 94 129,00 | 88 381,00 | 95 721,00 | 78 989,00 | 74 684,00 | 89 460,00 | 103 298,00 |
| Total Assets (DKK million) | 120 552,00 | 137 339,00 | 154 073,00 | 159 594,00 | 145 672,00 | 149 914,00 | 147 457,00 | 136 489,00 | 146 521,00 | 174 575,00 | 192 860,00 |
| Equity (DKK million) | 44 808,00 | 51 308,00 | 57 740,00 | 50 016,00 | 51 543,00 | 61 533,00 | 51 736,00 | 57 500,00 | 71 837,00 | 85 115,00 | 89 562,00 |
| Total liabilities + Equity (DKK million) | 120 552,00 | 137 339,00 | 154 073,00 | 159 594,00 | 145 672,00 | 149 914,00 | 147 457,00 | 136 489,00 | 146 521,00 | 174 575,00 | 192 860,00 |
| Bank and Bond Loans (DKK million) | 35 206,00 | 37 903,00 | 40 227,00 | 54 195,00 | 46 156,00 | 36 057,00 | 36 401,00 | 24 183,00 | 29 636,00 | 27 296,00 | 36 840,00 |
| Cash (DKK million) | 4 499,00 | 4 147,00 | 2 342,00 | 3 586,00 | 2 894,00 | 6 034,00 | 4 965,00 | 2 931,00 | 4 203,00 | 3 515,00 | 7 148,00 |
| Profit/Loss (DKK million) | 1 138,00 | 4 464,00 | 4 250,00 | -5 126,00 | -1 591,00 | -2 310,00 | -9 543,00 | 7 935,00 | 19 425,00 | 19 496,00 | 7 235,00 |
| Key ratios | | | | | | | | | | | |
| Equity Ratio | 37,17 % | 37,36 % | 37,48 % | 31,34 % | 35,38 % | 41,05 % | 35,09 % | 42,13 % | 49,03 % | 48,76 % | 46,44 % |
| Gearing ratio | | 73,87 % | 69,67 % | 108,36 % | 89,55 % | 58,60 % | 70,36 % | 42,06 % | 41,25 % | 32,07 % | 41,13 % |
| Ørsted A/S (DNNGY) Share price DKK | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 267,60 | 338,70 | 435,70 | 689,00 |
| Number of shares (million) | | | | | | | | 420 381 | 420 381 | 420 045 | 419 985 |
| Market capitalisation (DKK million) | | | | | | | | 112 493,96 | 142 383,04 | 183 013,61 | 289 369,67 |
| Market cap to equity ratio | 0 % | 0 % | 0 % | 0 % | 0 % | 0 % | 0 % | 196 % | 198 % | 215 % | 323 % |
| Moody' long term rating | Baa1 | Baa1 | Baa1 | Baa1 | Baa1 | Baa1 | Baa1 | Baa1 | Baa1 | Baa1 | Baa1 |
| Moody's outlook | Stable | Stable | Stable | Stable | Stable | Stable | Stable | Stable | Negative | Stable | Stable |
| S&P long term rating | A- | A- | A- | BBB+ | BBB+ | BBB+ | BBB+ | BBB+ | BBB+ | BBB+ | BBB+ |
| S&P outlook | Stable | Stable | Stable | Negative | Negative | Stable | Stable | Stable | Stable | Stable | Stable |
| Fitch long term rating | | | | | | | | BBB+ | BBB+ | BBB+ | BBB+ |
| Fitch outlook | | | | | | | | Stable | Stable | Stable | Stable |
| Index total assets (31/12/2009=100) | 100,00 | 113,93 | 127,81 | 132,39 | 120,84 | 124,36 | 122,32 | 113,22 | 121,54 | 144,81 | 159,98 |
| Index equity ratio (31/12/2009=100) | 100,00 | 100,51 | 100,83 | 84,32 | 95,19 | 110,43 | 94,39 | 113,34 | 131,91 | 131,17 | 124,94 |
| Index gearing ratio (31/12/2009=100) | 100,00 | 94,02 | 88,67 | 137,91 | 113,97 | 74,58 | 89,55 | 53,53 | 52,51 | 40,82 | 52,35 |
| Index market capitalisation (31/12/2016=100) | | | | | | | | 100,00 | 126,57 | 162,69 | 257,23 |
| Index Financial liabilities (31/12/2009=100) | 100,00 | 107,66 | 114,26 | 153,94 | 131,10 | 102,42 | 103,39 | 68,69 | 84,18 | 77,53 | 104,64 |
| DKK to EUR | 7,44 | 7,455 | 7,4294 | 7,4493 | 7,46245 | 7,4468 | 7,4635 | 7,41375 | 7,4453 | 7,499 | 7,4764 |
| Total assets (€ million) | 16 203,23 | 18 422,40 | 20 738,28 | 21 424,03 | 19 520,67 | 20 131,33 | 19 757,08 | 18 410,25 | 19 679,66 | 23 279,77 | 25 795,84 |
| Market cap (€ million -rate at each year's end) | | | | | | | | 15 173,69 | 19 123,88 | 24 405,07 | 38 704,41 |
| Equity (€ million) | 6 022,58 | 6 882,36 | 7 771,83 | 6 714,19 | 6 906,98 | 8 263,01 | 6 931,87 | 7 755,86 | 9 648,64 | 11 350,18 | 11 979,29 |
| Profit/Loss (€ million) | 152,96 | 598,79 | 572,05 | -688,12 | -213,20 | -310,20 | -1278,62 | 1070,31 | 2609,03 | 2599,81 | 967,71 |
| Financial liabilities (€ million) | 4731,99 | 5084,24 | 5414,57 | 7275,18 | 6185,10 | 4841,95 | 4877,20 | 3261,91 | 3980,50 | 3639,95 | 4927,51 |

Sources for financial statements for each year

2009: [Dong Energy Annual Report 2010](#) Consolidated Balance Sheet- Page 70-71

2010: [Dong Energy Annual Report 2010](#) Consolidated Balance Sheet- Page 70-71

2011: [Dong Energy Annual Report 2011](#) Consolidated Balance Sheet- Page 62-63

2012: [Dong Energy Annual Report 2012](#) Consolidated Balance Sheet- Page 45

2013: [Dong Energy Annual Report 2013](#) Consolidated Balance Sheet- Page 54

2014: [Dong Energy Annual Report 2014](#) Consolidated Balance Sheet- Page 51-52

2015: [Dong Energy Annual Report 2015](#) Consolidated Balance Sheet- Page 51-52

2016: [Dong Energy Annual Report 2016](#) Consolidated Balance Sheet- Page 51-52

2017: [Ørsted Annual Report 2017](#) Consolidated Balance Sheet- Page 66

2018: [Ørsted Annual Report 2018](#) Consolidated Balance Sheet- Page 75

2019: [Ørsted Annual Report 2019](#) Consolidated Balance Sheet- Page 69

Appendix 6: Key financial figures 2009-2019 Fortum

| | 31/12/2009 | 31/12/2010 | 31/12/2011 | 31/12/2012 | 31/12/2013 | 31/12/2014 | 31/12/2015 | 31/12/2016 | 31/12/2017 | 31/12/2018 | 31/12/2019 |
|---|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Total Liabilities (€ million) | 11 350,0 | 13 222,0 | 12 837,0 | 13 807,0 | 13 758,0 | 10 440,0 | 8 904,0 | 8 422,0 | 8 466,0 | 10 332,0 | 10 129,0 |
| Total Assets (€ million) | 19 841,0 | 21 964,0 | 22 998,0 | 24 628,0 | 24 420,0 | 21 375,0 | 22 767,0 | 21 964,0 | 21 753,0 | 22 409,0 | 23 364,0 |
| Equity (€ million) | 8 491,0 | 8 742,0 | 10 161,0 | 10 821,0 | 10 662,0 | 10 935,0 | 13 863,0 | 13 542,0 | 13 287,0 | 12 077,0 | 13 235,0 |
| Total liabilities + Equity (€ million) | 19 841,0 | 21 964,0 | 22 998,0 | 24 628,0 | 24 420,0 | 21 375,0 | 22 767,0 | 21 964,0 | 21 753,0 | 22 409,0 | 23 364,0 |
| Interest bearing liabilities (€ million) | 6 859,0 | 7 382,0 | 7 770,0 | 8 777,0 | 9 098,0 | 6 984,0 | 6 007,0 | 5 107,0 | 4 885,0 | 6 093,0 | 6 688,0 |
| Liquid funds/cash or cash equivalents (€ million) | 890,0 | 556,0 | 731,0 | 963,0 | 1 254,0 | 2 009,0 | 8 202,0 | 5 155,0 | 3 897,0 | 584,0 | 1 433,0 |
| Profit/Loss (€ million) | 1 351,0 | 1 354,0 | 1 862,0 | 1 503,0 | 1 212,0 | 3 161,0 | 4 142,0 | 504,0 | 882,0 | 858,0 | 1 507,0 |
| Key ratios | | | | | | | | | | | |
| Equity Ratio | 42,80 % | 39,80 % | 44,18 % | 43,94 % | 43,66 % | 51,16 % | 60,89 % | 61,66 % | 61,08 % | 53,89 % | 56,65 % |
| Gearing ratio | 80,78 % | 84,44 % | 76,47 % | 81,11 % | 85,33 % | 63,87 % | 43,33 % | 37,71 % | 36,77 % | 50,45 % | 50,53 % |
| Fortum (FORTUM.HE) Share price € | 18,97 | 22,53 | 16,49 | 14,15 | 16,63 | 17,97 | 13,92 | 14,57 | 16,50 | 19,10 | 22,00 |
| Average number of shares (million) | 888 367 | 888 367 | 888 367 | 888 367 | 888 367 | 888 367 | 888 367 | 888 367 | 888 367 | 888 312 | 888 312 |
| Market capitalisation (€ million) | 16 852,32 | 20 014,91 | 14 649,17 | 12 570,39 | 14 773,54 | 15 963,95 | 12 366,07 | 12 943,51 | 14 658,06 | 16 966,76 | 19 542,86 |
| Market cap to equity ratio | 198 % | 229 % | 144 % | 116 % | 139 % | 146 % | 89 % | 96 % | 110 % | 140 % | 148 % |
| Moody' long term rating | A2 | A2 | A2 | A2 | A2 | A2 | Baa1 | Baa1 | Baa1 | Baa2 | Baa2 |
| Moody's outlook | Stable | Stable | Stable | Negative | Negative | Negative | Stable | Stable | Negative | Negative | Negative |
| S&P long term rating | A | A | A | A- | A- | A- | BBB+ | BBB+ | BBB+ | BBB | BBB |
| S&P outlook | Stable | Stable | Negative | Negative | Negative | Negative | Stable | Stable | Negative | Negative | Negative |
| Fitch long term rating | A- | A- | A- | A- | A- | A- | BBB+ | BBB+ | BBB+ | BBB | BBB |
| Fitch outlook | Stable | Stable | Stable | Negative | Negative | Negative | Stable | Stable | Negative | Stable | Negative |
| Index total assets (31/12/2009=100) | 100,00 | 110,70 | 115,91 | 124,13 | 123,08 | 107,73 | 114,75 | 110,70 | 109,64 | 112,94 | 117,76 |
| Index equity ratio (31/12/2009=100) | 100,00 | 93,00 | 103,24 | 102,67 | 102,02 | 119,54 | 142,28 | 144,07 | 142,73 | 125,93 | 132,37 |
| Index gearing ratio (31/12/2009=100) | 100,00 | 104,53 | 94,66 | 100,41 | 105,63 | 79,06 | 53,64 | 46,69 | 45,51 | 62,46 | 62,56 |
| Index market capitalisation (31/12/2009=100) | 100,00 | 118,77 | 86,93 | 74,59 | 87,66 | 94,73 | 73,38 | 76,81 | 86,98 | 100,68 | 115,97 |
| Index Financial Liabilities (31/12/2009=100) | 100,00 | 107,63 | 113,28 | 127,96 | 132,64 | 101,82 | 87,58 | 74,46 | 71,22 | 88,83 | 97,51 |

Sources for financial statements for each year

2009: [Fortum Annual Report 2009](#) Consolidated Balance Sheet- Page 110

2010: [Fortum Annual Report 2010](#) Consolidated Balance Sheet- Page 64

2011: [Fortum Annual Report 2011](#) Consolidated Balance Sheet- Page 34

2012: [Fortum Financials 2012](#) Consolidated Balance Sheet- Page 73-74

2013: [Fortum Financials 2013](#) Consolidated Balance Sheet- Page 60-61

2014: [Fortum Annual Report 2014](#) Consolidated Balance Sheet- Page 134

2015: [Fortum Financial Statements 2015](#) Consolidated Balance Sheet- Page 28

2016: [Fortum Financials 2016](#) Consolidated Balance Sheet- Page 31

2017: [Fortum Financials 2017](#) Consolidated Balance Sheet- Page 35

2018: [Fortum Financial Statements and Operating Financial Review 2018](#) Consolidated Balance Sheet- Page 38

2019: [Fortum Financials 2019](#) Consolidated Balance Sheet- Page 37

Appendix 7: Key financial figures 2009-2019 Enel

| | 31/12/2009 | 31/12/2010 | 31/12/2011 | 31/12/2012 | 31/12/2013 | 31/12/2014 | 31/12/2015 | 31/12/2016 | 31/12/2017 | 31/12/2018 | 31/12/2019 |
|--|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Total Liabilities (€ million) | 116 104 | 114 507 | 115 365 | 118 498 | 111 309 | 115 489 | 109 428 | 103 021 | 103 480 | 117 572 | 124 488 |
| Total Assets (€ million) | 160 457 | 168 052 | 169 805 | 171 656 | 164 148 | 166 634 | 161 179 | 155 596 | 155 641 | 165 424 | 171 426 |
| Shareholders' equity (€ million) | 44 353 | 53 545 | 54 440 | 53 158 | 52 839 | 51 145 | 51 751 | 52 575 | 52 161 | 47 852 | 46 938 |
| Total liabilities + Equity (€ million) | 160 457 | 168 052 | 169 805 | 171 656 | 164 148 | 166 634 | 161 179 | 155 596 | 155 641 | 165 424 | 171 426 |
| Long + short term-loans (€ million) | 63 352 | 60 649 | 53 502 | 59 929 | 53 642 | 51 907 | 47 027 | 46 708 | 44 333 | 52 599 | 58 091 |
| Cash and cash equivalents (€ million) | 4 170 | 5 164 | 7 015 | 9 891 | 8 030 | 13 088 | 10 639 | 8 290 | 7 021 | 6 630 | 9 029 |
| Net income | 6 590 | 5 673 | 5 323 | 2 075 | 4 780 | 772 | 3 372 | 3 787 | 5 329 | 6 350 | 3 476 |
| Key ratios | | | | | | | | | | | |
| Equity Ratio | 27,64 % | 31,86 % | 32,06 % | 30,97 % | 32,19 % | 30,69 % | 32,11 % | 33,79 % | 33,51 % | 28,93 % | 27,38 % |
| Gearing ratio | 142,84 % | 113,27 % | 98,28 % | 112,74 % | 101,52 % | 101,49 % | 90,87 % | 88,84 % | 84,99 % | 109,92 % | 123,76 % |
| ENEL (ENEL.MI) Share price € | 4,05 | 3,74 | 3,14 | 3,14 | 3,17 | 3,70 | 3,89 | 4,19 | 5,13 | 5,04 | 7,07 |
| Number of shares outstanding (millions) | 9 403 | 9 403 | 9 403 | 9 403 | 9 403 | 9 403 | 9 403 | 10 167 | 10 167 | 10 167 | 10 165 |
| Market capitalisation (€ million) | 38 082,15 | 35 167,22 | 29 563,03 | 29 506,61 | 29 845,12 | 34 753,49 | 36 596,48 | 42 579,40 | 52 156,71 | 51 282,35 | 71 886,88 |
| Market cap to equity ratio | 86 % | 66 % | 54 % | 56 % | 56 % | 68 % | 71 % | 81 % | 100 % | 107 % | 153 % |
| Moody' long term rating | A2 | A2 | A3 | Baa2 | Baa2 | Baa2 | Baa2 | Baa2 | Baa2 | Baa2 | Baa2 |
| Moody's outlook | Negative | Negative | Negative | Negative | Negative | Negative | Stable | Stable | Stable | Stable | Positive |
| S&P long term rating | A- | A- | A- | BBB+ | BBB | BBB | BBB | BBB | BBB+ | BBB+ | BBB+ |
| S&P outlook | Stable | Stable | Negative | Negative | Stable | Stable | Positive | Stable | Stable | Stable | Stable |
| Fitch Long term rating | A- | A- | A- | BBB+ | BBB+ | BBB+ | BBB+ | BBB+ | BBB+ | A- | A- |
| Fitch outlook | Stable | Stable | Stable | Negative | Negative | Stable | Stable | Stable | Stable | Stable | Stable |
| Index total assets (31/12/2009=100) | 100,00 | 104,73 | 105,83 | 106,98 | 102,30 | 103,85 | 100,45 | 96,97 | 97,00 | 103,10 | 106,84 |
| Index equity ratio (31/12/2009=100) | 100,00 | 115,27 | 115,99 | 112,03 | 116,45 | 111,04 | 116,16 | 122,24 | 121,24 | 104,65 | 99,06 |
| Index gearing ratio (31/12/2009=100) | 100,00 | 79,30 | 68,80 | 78,93 | 71,07 | 71,05 | 63,62 | 62,20 | 59,50 | 76,96 | 86,65 |
| Index market capitalisation (31/12/2009=100) | 100,00 | 92,35 | 77,63 | 77,48 | 78,37 | 91,26 | 96,10 | 111,81 | 136,96 | 134,66 | 188,77 |
| Index Financial liabilities (31/12/2009=100) | 100,00 | 95,73 | 84,45 | 94,60 | 84,67 | 81,93 | 74,23 | 73,73 | 69,98 | 83,03 | 91,70 |

Sources for financial statements for each year

2009: [Enel Annual Report 2009](#) Consolidated Balance Sheet- Page 166-167

2010: [Enel Annual Report 2010](#) Consolidated Balance Sheet- Page 146-147

2011: [Enel Annual Report 2011](#) Consolidated Balance Sheet- Page 132-133

2012: [Enel Annual Report 2012](#) Consolidated Balance Sheet- Page 136-137

2013: [Enel Annual Report 2013](#) Consolidated Balance Sheet- Page 136-137

2014: [Enel Annual Report 2014](#) Consolidated Balance Sheet- Page 138-139

2015: [Enel Annual Report 2015](#) Consolidated Balance Sheet- Page 160-161

2016: [Enel Annual Report 2016](#) Consolidated Balance Sheet- Page 170-171

2017: [Enel Annual Report 2017](#) Consolidated Balance Sheet- Page 178-179

2018: [Enel Annual Report 2018](#) Consolidated Balance Sheet- Page 188-189

2019: [Enel Annual Report 2019](#) Consolidated Balance Sheet- Page 168-169

Appendix 8: Key financial figures 2009-2019 Iberdrola

| | 31/12/2009 | 31/12/2010 | 31/12/2011 | 31/12/2012 | 31/12/2013 | 31/12/2014 | 31/12/2015 | 31/12/2016 | 31/12/2017 | 31/12/2018 | 31/12/2019 |
|---|------------|------------|------------|------------|------------|------------|-------------|-------------|-------------|-------------|-------------|
| Total Liabilities (€ million) | 57 309,696 | 61 385,600 | 63 808,729 | 62 731,574 | 54 499,000 | 58 037,090 | 63 708,129 | 66 018,831 | 67 955,373 | 69 061,369 | 75 174,341 |
| Total Assets (€ million) | 87 010,994 | 93 700,952 | 97 016,529 | 96 816,375 | 89 787,000 | 93 742,388 | 104 664,182 | 106 706,220 | 110 688,559 | 113 037,923 | 122 369,006 |
| Equity (€ million) | 29 701,298 | 32 315,352 | 33 207,800 | 34 084,801 | 35 288,000 | 35 705,298 | 40 956,053 | 40 687,389 | 42 733,186 | 43 976,554 | 47 194,665 |
| Total liabilities + Equity (€ million) | 87 010,994 | 93 700,952 | 97 016,529 | 96 816,375 | 89 787,000 | 93 742,388 | 104 664,182 | 106 706,220 | 110 688,559 | 113 037,923 | 122 369,006 |
| Bank Borrowings (€ million) | 32 881,361 | 33 335,025 | 34 627,452 | 33 951,981 | 28 452,000 | 28 349,159 | 30 561,029 | 32 331,001 | 37 294,514 | 38 162,006 | 39 875,056 |
| Cash or cash equivalents (€ million) | 2 101,857 | 1 090,619 | 2 091,007 | 3 043,901 | 1 332,000 | 1 805,533 | 1 153,273 | 1 432,686 | 3 197,340 | 2 801,157 | 2 113,279 |
| Key ratios | | | | | | | | | | | |
| Equity Ratio | 34,14 % | 34,49 % | 34,23 % | 35,21 % | 39,30 % | 38,09 % | 39,13 % | 38,13 % | 38,61 % | 38,90 % | 38,57 % |
| Gearing ratio | 110,71 % | 103,16 % | 104,28 % | 99,61 % | 80,63 % | 79,40 % | 74,62 % | 79,46 % | 87,27 % | 86,78 % | 84,49 % |
| Iberdrola, S.A. (IBDRY?P=IBDRY) Share price € | 6,67 | 5,77 | 4,84 | 4,20 | 4,63 | 5,60 | 6,55 | 6,23 | 6,46 | 7,02 | 9,18 |
| No of shares at year-end (millions) | 5 252 | 5 484 | 5 882 | 6 139 | 6 240 | 6 388 | 6 337 | 6 362 | 6 318 | 6 398 | 6 362 |
| Market capitalisation (€ million) | 35 030,84 | 31 642,68 | 28 468,88 | 25 783,80 | 28 891,20 | 35 772,80 | 41 507,35 | 39 635,26 | 40 814,28 | 44 913,96 | 58 403,16 |
| Market cap to equity ratio | 118 % | 98 % | 86 % | 76 % | 82 % | 100 % | 101 % | 97 % | 96 % | 102 % | 124 % |
| Moody' long term rating | A3 | A3 | A3 | Baa1 | Baa1 | Baa1 | Baa1 | Baa1 | Baa1 | Baa1 | Baa1 |
| Moody's outlook | Stable | Negative | Stable | Negative | Negative | Negative | Stable | Positive | Positive | Stable | Stable |
| S&P long term rating | A- | A- | BBB+ | BBB | BBB | BBB | BBB | BBB+ | BBB+ | BBB+ | BBB+ |
| S&P outlook | Stable | Negative | Stable | Stable | Stable | Stable | Positive | Stable | Stable | Stable | Stable |
| Fitch Long term rating | A- | A- | A- | BBB+ | BBB+ | BBB+ | BBB+ | BBB+ | BBB+ | BBB+ | BBB+ |
| Fitch outlook | Stable | Stable | Stable | Negative | Negative | Stable | Stable | Stable | Stable | Stable | Stable |
| Index total assets (31/12/2009=100) | 100,00 | 107,69 | 111,50 | 111,27 | 103,19 | 107,74 | 120,29 | 122,64 | 127,21 | 129,91 | 140,64 |
| Index equity ratio (31/12/2009=100) | 100,00 | 101,03 | 100,28 | 103,14 | 115,14 | 111,58 | 114,64 | 111,70 | 113,10 | 113,97 | 112,98 |
| Index gearing ratio (31/12/2009=100) | 100,00 | 93,18 | 94,19 | 89,98 | 72,83 | 71,72 | 67,40 | 71,78 | 78,83 | 78,39 | 76,32 |
| Index market capitalisation (31/12/2009=100) | 100,00 | 90,33 | 81,27 | 73,60 | 82,47 | 102,12 | 118,49 | 113,14 | 116,51 | 128,21 | 166,72 |
| Index Financial liabilities (31/12/2009=100) | 100,00 | 108,80 | 111,81 | 114,76 | 118,81 | 120,21 | 137,89 | 136,99 | 143,88 | 148,06 | 158,90 |

Sources for financial statements for each year

2009: [Iberdrola Consolidated Financial Statements 2010](#) Consolidated Balance Sheet- Page 10-11

2010: [Iberdrola Consolidated Financial Statements 2010](#) Consolidated Balance Sheet- Page 10-11

2011: [Iberdrola Annual Consolidated Financial Statements 2012](#) Consolidated Balance Sheet- Page 13-14

2012: [Iberdrola Annual Consolidated Financial Statements 2012](#) Consolidated Balance Sheet- Page 13-14

2013: [Iberdrola Results Quarterly Report 2014](#) Consolidated Balance Sheet- Page 44-45

2014: [Iberdrola Independent Audit Report 2015](#) Consolidated Balance Sheet- Page 4-5

2015: [Iberdrola Independent Audit Report 2015](#) Consolidated Balance Sheet- Page 4-5

2016: [Iberdrola Annual Financial Report 2016](#) Consolidated Balance Sheet- Page 5-6

2017: [Iberdrola Annual Financial Report 2017](#) Consolidated Balance Sheet- Page 5-6

2018: [Iberdrola Annual Financial Report 2018](#) Consolidated Balance Sheet- Page 4-5

2019: [Iberdrola Annual Financial Report 2019](#) Consolidated Balance Sheet- Page 4-5

Appendix 9: Key financial figures 2009-2019 EDP

| | 31/12/2009 | 31/12/2010 | 31/12/2011 | 31/12/2012 | 31/12/2013 | 31/12/2014 | 31/12/2015 | 31/12/2016 | 31/12/2017 | 31/12/2018 | 31/12/2019 |
|--|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Total Liabilities (€ million) | 30 282,87 | 29 703,89 | 29 893,80 | 31 196,18 | 31 121,34 | 30 903,87 | 30 415,47 | 30 347,37 | 28 594,79 | 28 726,63 | 29 729,63 |
| Total Assets (€ million) | 40 261,56 | 40 488,85 | 41 280,58 | 42 627,84 | 42 649,90 | 42 873,02 | 42 536,97 | 44 083,75 | 42 075,05 | 41 626,96 | 42 361,65 |
| Equity (€ million) | 9 978,69 | 10 784,96 | 11 386,78 | 11 431,668 | 11 528,56 | 11 969,14 | 12 121,49 | 13 736,37 | 13 480,26 | 12 900,33 | 12 632,01 |
| Total Liabilities + Equity (€ million) | 40 261,56 | 40 488,85 | 41 280,58 | 42 627,84 | 42 649,90 | 42 873,02 | 42 536,97 | 44 083,75 | 42 075,05 | 41 626,96 | 42 361,65 |
| Financial Debt (€ million) | 16 280,98 | 17 891,65 | 18 785,11 | 20 523,23 | 20 160,92 | 20 298,18 | 19 270,54 | 18 026,68 | 16 917,77 | 16 084,90 | 16 571,47 |
| Cash or cash equivalents (€ million) | 2 189,56 | 1 511,22 | 1 731,52 | 1 695,34 | 2 180,12 | 2 614,00 | 1 245,45 | 1 521,25 | 2 400,08 | 1 803,21 | 1 542,72 |
| Key ratios | | | | | | | | | | | |
| Equity Ratio | 24,78 % | 26,64 % | 27,58 % | 26,82 % | 27,03 % | 27,92 % | 28,50 % | 31,16 % | 32,04 % | 30,99 % | 29,82 % |
| Gearing ratio | 163,16 % | 165,89 % | 164,97 % | 179,53 % | 174,88 % | 169,59 % | 158,98 % | 131,23 % | 125,50 % | 124,69 % | 131,19 % |
| EDP (EDP.LS) Share price € | 3,11 | 2,49 | 2,39 | 2,29 | 2,67 | 3,25 | 3,30 | 2,89 | 2,89 | 3,05 | 3,86 |
| Average number of shares issued (millions) | 3 656,5 | 3 656,5 | 3 656,5 | 3 656,5 | 3 656,5 | 3 656,5 | 3 656,5 | 3 656,5 | 3 656,5 | 3 656,5 | 3 656,5 |
| Market capitalisation (€ million) | 11 364,40 | 9 108,34 | 8 742,69 | 8 373,39 | 9 762,86 | 11 883,63 | 12 055,48 | 10 581,91 | 10 549,00 | 11 148,67 | 14 128,72 |
| Market cap to equity ratio | 114 % | 84 % | 77 % | 73 % | 85 % | 99 % | 99 % | 77 % | 78 % | 86 % | 112 % |
| Moody' long term rating | A3 | A3 | Baa3 | Ba1 | Ba1 | Baa3 | Baa3 | Baa3 | Baa3 | Baa3 | Baa3 |
| Moody's outlook | Stable | Stable | Negative | Negative | Negative | Stable | Stable | Stable | Stable | Stable | Stable |
| S&P long term rating | A- | A- | BBB | BB+ | BB+ | BB+ | BB+ | BB+ | BB+ | BBB- | BBB- |
| S&P outlook | Negative | Negative | Negative | Negative | Stable | Positive | Positive | Positive | Positive | Stable | Stable |
| Fitch Long term rating | A- | A- | BBB+ | BBB- | BBB- | BBB- | BBB- | BBB- | BBB- | BBB- | BBB- |
| Fitch outlook | Stable | Stable | Stable | Negative | Negative | Stable | Stable | Stable | Stable | Stable | Stable |
| Index total assets (31/12/2009=100) | 100,00 | 100,56 | 102,53 | 105,88 | 105,93 | 106,49 | 105,65 | 109,49 | 104,50 | 103,39 | 105,22 |
| Index equity ratio (31/12/2009=100) | 100,00 | 107,47 | 111,29 | 108,20 | 109,06 | 112,64 | 114,98 | 125,72 | 129,27 | 125,04 | 120,31 |
| Index gearing ratio (31/12/2009=100) | 100,00 | 101,68 | 101,11 | 110,03 | 107,18 | 103,94 | 97,44 | 80,43 | 76,92 | 76,42 | 80,40 |
| Index market capitalisation (31/12/2009=100) | 100,00 | 80,15 | 76,93 | 73,68 | 85,91 | 104,57 | 106,08 | 93,11 | 92,82 | 98,10 | 124,32 |
| Index Financial liabilities (31/12/2009=100) | 100,00 | 108,08 | 114,11 | 114,56 | 115,53 | 119,95 | 121,47 | 137,66 | 135,09 | 129,28 | 126,59 |

Sources for financial statements for each year

- 2009: [EDP Annual Report 2009](#) Consolidated Balance Sheet- Page 146
- 2010: [EDP Annual Report 2010](#) Consolidated Balance Sheet- Page 161
- 2011: [EDP Annual Report 2011](#) Consolidated Balance Sheet- Page 154
- 2012: [EDP Annual Report 2012](#) Consolidated Balance Sheet- Page 161
- 2013: [EDP Annual Report 2013](#) Consolidated Balance Sheet- Page 175
- 2014: [EDP Annual Report 2014](#) Consolidated Balance Sheet- Page 227
- 2015: [EDP Annual Report 2015](#) Consolidated Balance Sheet- Page 253
- 2016: [EDP Annual Report 2016](#) Consolidated Balance Sheet- Page 269
- 2017: [EDP Annual Report 2017](#) Consolidated Balance Sheet- Page 209
- 2018: [EDP Annual Report 2018](#) Consolidated Balance Sheet- Page 241
- 2019: [EDP Annual Report 2019](#) Consolidated Balance Sheet- Page 231

Appendix 10: Key financial figures 2009-2019 PPC

| | 31/12/2009 | 31/12/2010 | 31/12/2011 | 31/12/2012 | 31/12/2013 | 31/12/2014 | 31/12/2015 | 31/12/2016 | 31/12/2017 | 31/12/2018 | 31/12/2019 |
|--|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Total Liabilities (€ million) | 9 322,85 | 9 430,871 | 10 196,109 | 10 204,653 | 10 416,013 | 11 238,612 | 11 403,033 | 11 190,003 | 9 747,702 | 10 169,641 | 10 531,914 |
| Total Assets (€ million) | 15 784,164 | 16 200,399 | 16 644,804 | 16 059,112 | 15 819,586 | 17 373,361 | 17 314,589 | 17 135,397 | 15 358,241 | 14 112,721 | 13 572,506 |
| Equity (€ million) | 6 461,31 | 6 769,528 | 6 448,695 | 5 854,459 | 5 403,573 | 6 134,749 | 5 911,556 | 5 945,394 | 5 610,539 | 3 943,080 | 3 040,592 |
| Total liabilities + Equity (€ million) | 15 784,16 | 16 200,399 | 16 644,804 | 16 059,112 | 15 819,586 | 17 373,361 | 17 314,589 | 17 135,397 | 15 358,241 | 14 112,721 | 13 572,506 |
| Interest bearing loans and borrowings (€ million) | 4 570,67 | 4 822,798 | 5 228,478 | 5 104,980 | 4 951,231 | 5 530,035 | 5 331,977 | 4 612,004 | 4 269,232 | 3 951,746 | 3 946,942 |
| Cash or cash equivalents (€ million) | 480,04 | 620,449 | 364,495 | 279,427 | 270,278 | 434,511 | 451,670 | 207,034 | 251,596 | 198,576 | 286,917 |
| Key ratios | | | | | | | | | | | |
| Equity Ratio | 40,94 % | 41,79 % | 38,74 % | 36,46 % | 34,16 % | 35,31 % | 34,14 % | 34,70 % | 36,53 % | 27,94 % | 22,40 % |
| Gearing ratio ¹ | 70,74 % | 71,24 % | 81,08 % | 87,20 % | 91,63 % | 90,14 % | 90,20 % | 77,57 % | 76,09 % | 100,22 % | 129,81 % |
| Public Power Corporation S.A. (PPC.AT) Share price € | 4,85 | 4,01 | 1,42 | 2,20 | 4,03 | 2,02 | 1,45 | 1,08 | 1,95 | 1,29 | 4,13 |
| Weighted average number of shares (millions) | 232 | 232 | 232 | 232 | 232 | 232 | 232 | 232 | 232 | 232 | 232 |
| Market capitalisation (€ million) | 1 125,20 | 930,32 | 329,44 | 510,40 | 934,96 | 468,64 | 336,40 | 250,56 | 452,40 | 299,28 | 958,16 |
| Market cap to equity ratio | 17 % | 14 % | 5 % | 9 % | 17 % | 8 % | 6 % | 4 % | 8 % | 8 % | 32 % |
| S&P long term rating | BBB- | BB+ | CCC | CCC | CCC | B | CCC- | CCC- | CCC- | CCC+ | B- |
| S&P outlook | Stable | Negative | Negative | Negative | Negative | Stable | Negative | Negative | Negative | Positive | Stable |
| Index total assets (31/12/2009=100) | 100,00 | 102,64 | 105,45 | 101,74 | 100,22 | 110,07 | 109,70 | 108,56 | 97,30 | 89,41 | 85,99 |
| Index equity ratio (31/12/2009=100) | 100,00 | 102,08 | 94,64 | 89,06 | 83,44 | 86,26 | 83,40 | 84,76 | 89,24 | 68,25 | 54,73 |
| Index gearing ratio (31/12/2009=100) | 100,00 | 100,71 | 114,62 | 123,27 | 129,53 | 127,43 | 127,51 | 109,66 | 107,57 | 141,68 | 183,50 |
| Index market capitalisation (31/12/2009=100) | 100,00 | 82,68 | 29,28 | 45,36 | 83,09 | 41,65 | 29,90 | 22,27 | 40,21 | 26,60 | 85,15 |
| Index Financial liabilities (31/12/2009=100) | 100,00 | 105,52 | 114,39 | 111,69 | 108,33 | 120,99 | 116,66 | 100,90 | 93,40 | 86,46 | 86,35 |

Sources for financial statements for each year

2009: [PPC Annual Report 2009](#) Consolidated Balance Sheet- Page 56-57

2010: [PPC Annual Report 2010](#) Consolidated Balance Sheet- Page 102-103

2011: [PPC Annual Report 2011](#) Consolidated Balance Sheet- Page 90-91

2012: [PPC Annual Report 2012](#) Consolidated Balance Sheet- Page 84-85

2013: [PPC Annual Report 2013](#) Consolidated Balance Sheet- Page 96-97

2014: [PPC Annual Report 2014](#) Consolidated Balance Sheet- Page 68-69

2015: [PPC Annual Report 2015](#) Consolidated Balance Sheet- Page 104-105

2016: [PPC Annual Report 2016](#) Consolidated Balance Sheet- Page 110-111

2017: [PPC Annual Report 2017](#) Consolidated Balance Sheet- Page 126-127

2018: [PPC Annual Report 2018](#) Consolidated Balance Sheet- Page 136-137

2019: [PPC Annual Report 2019](#) Consolidated Balance Sheet- Page 130-132

Appendix 11: Key financial figures 2009-2019 SSE

| | 31/03/2009 | 31/03/2010 | 31/03/2011 | 31/03/2012 | 31/03/2013 | 31/03/2014 | 31/03/2015 | 31/03/2016 | 31/03/2017 | 31/03/2018 | 31/03/2019 |
|--|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Total Liabilities (£ million) | 14 794,4 | 15 006,6 | 16 249,6 | 15 100,9 | 15 047,4 | 15 894,8 | 17 215,1 | 16 969,7 | 17 643,9 | 17 984,8 | 19 501,1 |
| Total Assets (£ million) | 17 769,3 | 18 127,6 | 21 450,4 | 19 685,0 | 20 596,3 | 21 014,3 | 23 295,6 | 22 186,7 | 23 916,4 | 23 215,0 | 25 342,4 |
| Equity (£ million) | 2 974,9 | 3 121,0 | 5 200,8 | 4 584,1 | 5 548,9 | 5 119,5 | 6 080,5 | 5 217,0 | 6 272,5 | 5 230,2 | 5 841,3 |
| Total liabilities + Equity (£ million) | 17 769,3 | 18 127,6 | 21 450,4 | 19 685,0 | 20 596,3 | 21 014,3 | 23 295,6 | 22 186,7 | 23 916,4 | 23 215,0 | 25 342,4 |
| Current and non-current loans and borrowings (£ million) | 5 396,2 | 6 047,0 | 5 606,4 | 6 245,6 | 6 085,0 | 6 295,0 | 6 100,7 | 7 168,8 | 8 082,4 | 8 610,5 | 9 316,1 |
| Cash and cash equivalents (£ million) | 295,9 | 261,7 | 476,9 | 189,2 | 538,7 | 442,5 | 1 512,3 | 360,2 | 1 427,0 | 232,2 | 431,6 |
| Key ratios | | | | | | | | | | | |
| Equity Ratio | 16,74 % | 17,22 % | 24,25 % | 23,29 % | 26,94 % | 24,36 % | 26,10 % | 23,51 % | 26,23 % | 22,53 % | 23,05 % |
| Gearing ratio | 181,39 % | 193,75 % | 107,80 % | 136,24 % | 109,66 % | 122,96 % | 100,33 % | 137,41 % | 128,85 % | 164,63 % | 159,49 % |
| SSE plc (SSE.L) Share price GBX | 1 109,00 | 1 101,00 | 1 261,00 | 1 329,00 | 1 484,00 | 1 469,00 | 1 498,00 | 1 492,00 | 1 476,00 | 1 276,00 | 1 187,00 |
| Number of shares for EPS (millions) | 883,0 | 921,9 | 927,6 | 937,8 | 952,0 | 965,5 | 981,8 | 1 000,0 | 1 009,7 | 1 010,9 | 1 021,7 |
| Market capitalisation (£ million) | 9 264,66 | 9 603,03 | 11 066,57 | 11 791,59 | 13 366,20 | 13 418,72 | 13 914,64 | 14 115,81 | 14 099,89 | 12 203,82 | 11 473,90 |
| Market cap to equity ratio | 311 % | 308 % | 213 % | 257 % | 241 % | 262 % | 229 % | 271 % | 225 % | 233 % | 196 % |
| Moody' long term rating | A2 | A3 | A3 | A3 | A3 | A3 | A3 | A3 | A3 | A3 | Baa1 |
| Moody's outlook | Negative | Stable | Stable | Stable | Stable | Negative | Negative | Negative | Stable | Stable | Stable |
| S&P long term rating | A | A- | A- | A- | A- | A- | A- | A- | A- | A- | BBB+ |
| S&P outlook | Negative | Stable | Stable | Stable | Negative | Negative | Stable | Negative | Negative | Stable | Stable |
| Index total assets (31/03/2009=100) | 100,00 | 102,02 | 120,72 | 110,78 | 115,91 | 118,26 | 131,10 | 124,86 | 134,59 | 130,65 | 142,62 |
| Index equity ratio (31/03/2009=100) | 100,00 | 102,84 | 144,82 | 139,10 | 160,92 | 145,52 | 155,91 | 140,45 | 156,65 | 134,57 | 137,68 |
| Index gearing ratio (31/03/2009=100) | 100,00 | 106,81 | 59,43 | 75,11 | 60,46 | 67,79 | 55,31 | 75,75 | 71,04 | 90,76 | 87,92 |
| Index market capitalisation (31/03/2009=100) | 100,00 | 103,65 | 119,45 | 127,27 | 144,27 | 144,84 | 150,19 | 152,36 | 152,19 | 131,72 | 123,85 |
| Index Financial liabilities (31/12/2009=100) | 100,00 | 104,91 | 174,82 | 154,09 | 186,52 | 172,09 | 204,39 | 175,37 | 210,85 | 175,81 | 196,35 |
| EUR to GBP | 0,9265 | 0,8922 | 0,8852 | 0,8333 | 0,8458 | 0,8267 | 0,7235 | 0,7927 | 0,8551 | 0,8764 | 0,8617 |
| Total assets (€ million) | 19 178,95 | 20 317,87 | 24 232,26 | 23 622,94 | 24 351,27 | 25 419,50 | 32 198,48 | 27 988,77 | 27 969,13 | 26 489,05 | 29 409,77 |
| Market cap (€ million -rate at each year's end) | 9 999,63 | 10 763,31 | 12 501,77 | 14 150,47 | 15 803,02 | 16 231,67 | 19 232,39 | 17 807,26 | 16 489,17 | 13 924,95 | 13 315,43 |
| Total assets (€ million) | 3 210,90 | 3 498,09 | 5 875,28 | 5 501,14 | 6 560,53 | 6 192,69 | 8 404,28 | 6 581,30 | 7 335,40 | 5 967,82 | 6 778,81 |
| Equity (€ million) | 3 210,90 | 3 498,09 | 5 875,28 | 5 501,14 | 6 560,53 | 6 192,69 | 8 404,28 | 6 581,30 | 7 335,40 | 5 967,82 | 6 778,81 |
| Financial liabilities (€ million) | 5 824,28 | 6 777,63 | 6 333,48 | 7 495,02 | 7 194,37 | 7 614,61 | 8 432,20 | 9 043,52 | 9 451,99 | 9 824,85 | 10 811,30 |

Sources for financial statements for each year

- 2009: [SSE Annual Report 2010](#) Consolidated Balance Sheet- Page 80
- 2010: [SSE Annual Report 2010](#) Consolidated Balance Sheet- Page 80
- 2011: [SSE Annual Report 2011](#) Consolidated Balance Sheet- Page 81
- 2012: [SSE Annual Report 2012](#) Consolidated Balance Sheet- Page 93
- 2013: [SSE Annual Report 2014](#) Consolidated Balance Sheet- Page 100
- 2014: [SSE Annual Report 2014](#) Consolidated Balance Sheet- Page 100
- 2015: [SSE Annual Report 2015](#) Consolidated Balance Sheet- Page 117
- 2016: [SSE Annual Report 2016](#) Consolidated Balance Sheet- Page 122
- 2017: [SSE Annual Report 2017](#) Consolidated Balance Sheet- Page 108
- 2018: [SSE Annual Report 2018](#) Consolidated Balance Sheet- Page 148
- 2019: [SSE Annual Report 2019](#) Consolidated Balance Sheet- Page 151

Appendix 12: Key financial figures 2009-2019 Centrica

| | 31/12/2009 | 31/12/2010 | 31/12/2011 | 31/12/2012 | 31/12/2013 | 31/12/2014 | 31/12/2015 | 31/12/2016 | 31/12/2017 | 31/12/2018 | 31/12/2019 |
|---|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Total Liabilities (£ million) | 15 187,00 | 13 456,00 | 13 969,00 | 16 025,00 | 18 189,00 | 19 621,00 | 17 518,00 | 19 050,00 | 17 240,00 | 16 609,00 | 16 359,00 |
| Total Assets (£ million) | 19 442,00 | 19 275,00 | 19 569,00 | 21 952,00 | 23 446,00 | 22 692,00 | 18 860,00 | 21 894,00 | 20 668,00 | 20 557,00 | 18 154,00 |
| Equity (£ million) | 4 255,00 | 5 819,00 | 5 600,00 | 5 927,00 | 5 257,00 | 3 071,00 | 1 342,00 | 2 844,00 | 3 428,00 | 3 948,00 | 1 795,00 |
| Total liabilities + Equity (£ million) | 19 442,00 | 19 275,00 | 19 569,00 | 21 952,00 | 23 446,00 | 22 692,00 | 18 860,00 | 21 894,00 | 20 668,00 | 20 557,00 | 18 154,00 |
| Bank overdrafts, loans and other borrowings (£ million) | 4 680,00 | 4 036,00 | 4 171,00 | 5 328,00 | 6 031,00 | 6 986,00 | 6 468,00 | 6 528,00 | 6 298,00 | 4 754,00 | 5 343,00 |
| Cash and cash equivalents (£ million) | 1 294,00 | 467,00 | 518,00 | 931,00 | 719,00 | 621,00 | 860,00 | 2 036,00 | 2 864,00 | 1 268,00 | 9 859,00 |
| Key ratios | | | | | | | | | | | |
| Equity Ratio | 21,89 % | 30,19 % | 28,62 % | 27,00 % | 22,42 % | 13,53 % | 7,12 % | 12,99 % | 16,59 % | 19,21 % | 9,89 % |
| Gearing ratio | 109,99 % | 69,36 % | 74,48 % | 89,89 % | 114,72 % | 227,48 % | 481,97 % | 229,54 % | 183,72 % | 120,42 % | 297,66 % |
| Centrica plc (CNA.L) Share price GBX | 281,90 | 331,60 | 289,30 | 333,60 | 346,70 | 278,50 | 220,90 | 234,10 | 137,30 | 134,90 | 89,30 |
| Weighted average Number of shares for EPS (millions) | 5 145,0 | 5 191,00 | 5 203,00 | 5 216,00 | 5 186,00 | 5 049,00 | 5 049,00 | 5 361,00 | 5 579,00 | 5 671,00 | 5 758,00 |
| Market capitalisation (£ million) | 13 722,00 | 16 285,56 | 14 240,96 | 16 462,69 | 17 010,75 | 13 303,55 | 10 552,08 | 11 873,65 | 7 247,09 | 7 237,83 | 4 864,75 |
| Market cap to equity ratio | 322 % | 280 % | 254 % | 278 % | 324 % | 433 % | 786 % | 417 % | 211 % | 183 % | 271 % |
| Moody' long term rating | A3 | A3 | A3 | A3 | A3 | A3 | Baa1 | Baa1 | Baa1 | Baa1 | Baa1 |
| Moody's outlook | Stable | Stable | Stable | Stable | Stable | Negative | Stable | Stable | Stable | Stable | Negative |
| S&P long term rating | A- | A- | A- | A- | A- | A- | BBB+ | BBB+ | BBB+ | BBB+ | BBB |
| S&P outlook | Stable | Stable | Stable | Stable | Stable | Negative | Stable | Negative | Negative | Negative | Stable |
| Index total assets (31/12/2009=100) | 100,00 | 99,14 | 100,65 | 112,91 | 120,59 | 116,72 | 97,01 | 112,61 | 106,31 | 105,74 | 93,38 |
| Index equity ratio (31/12/2009=100) | 100,00 | 137,94 | 130,76 | 123,37 | 102,45 | 61,84 | 32,51 | 59,35 | 75,79 | 87,75 | 45,18 |
| Index gearing ratio (31/12/2009=100) | 100,00 | 63,06 | 67,72 | 81,73 | 104,30 | 206,82 | 438,20 | 208,69 | 167,04 | 109,48 | 270,63 |
| Index market capitalisation (31/12/2009=100) | 100,00 | 118,68 | 103,78 | 119,97 | 123,97 | 96,95 | 76,90 | 86,53 | 52,81 | 52,75 | 35,45 |
| Index Financial liabilities (31/12/2009=100) | 100,00 | 86,24 | 89,12 | 113,85 | 128,87 | 149,27 | 138,21 | 139,49 | 134,57 | 101,58 | 114,17 |
| GBP to EUR | 0,8885 | 0,8569 | 0,8368 | 0,8154 | 0,8331 | 0,7788 | 0,735 | 0,8583 | 0,8873 | 0,8969 | 0,85 |
| Total assets (£ million) | 21 881,82 | 22 493,87 | 23 385,52 | 26 921,76 | 28 143,08 | 29 137,13 | 25 659,86 | 25 508,56 | 23 293,14 | 22 920,06 | 21 357,65 |
| Market cap (£ million - rate at each year's end) | 15 444,01 | 19 005,20 | 17 018,36 | 20 189,70 | 20 418,61 | 17 082,12 | 14 356,57 | 13 833,92 | 8 167,58 | 8 069,83 | 5 723,23 |
| Total assets (£ million) | 4 788,97 | 6 790,76 | 6 692,16 | 7 268,83 | 6 310,17 | 3 943,25 | 1 825,85 | 3 313,53 | 3 863,41 | 4 401,83 | 2 111,76 |
| Equity (£ million) | 4 788,97 | 6 790,76 | 6 692,16 | 7 268,83 | 6 310,17 | 3 943,25 | 1 825,85 | 3 313,53 | 3 863,41 | 4 401,83 | 2 111,76 |
| Financial liabilities (£ million) | 5 267,30 | 4 710,00 | 4 984,46 | 6 534,22 | 7 239,23 | 8 970,21 | 8 800,00 | 7 605,73 | 7 097,94 | 5 300,48 | 6 285,88 |

Sources for financial statements for each year

- 2009: [Centrica Annual Report 2009](#) Consolidated Balance Sheet- Page 64-65
- 2010: [Centrica Annual Report 2010](#) Consolidated Balance Sheet- Page 68
- 2011: [Centrica Annual Report 2011](#) Consolidated Balance Sheet- Page 68
- 2012: [Centrica Annual Report 2012](#) Consolidated Balance Sheet- Page 80
- 2013: [Centrica Annual Report 2013](#) Consolidated Balance Sheet- Page 90
- 2014: [Centrica Annual Report 2014](#) Consolidated Balance Sheet- Page 94
- 2015: [Centrica Annual Report 2015](#) Consolidated Balance Sheet- Page 90
- 2016: [Centrica Annual Report 2016](#) Consolidated Balance Sheet- Page 110
- 2017: [Centrica Annual Report 2017](#) Consolidated Balance Sheet- Page 113
- 2018: [Centrica Annual Report 2018](#) Consolidated Balance Sheet- Page 127
- 2019: [Centrica Annual Report 2019](#) Consolidated Balance Sheet- Page 117

Appendix 13: Key financial figures 2009-2019 DRAX

| | 31/12/2009 | 31/12/2010 | 31/12/2011 | 31/12/2012 | 31/12/2013 | 31/12/2014 | 31/12/2015 | 31/12/2016 | 31/12/2017 | 31/12/2018 | 31/12/2019 |
|--|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Total Liabilities (£ million) | 1 134,7 | 1 089,0 | 706,4 | 781,1 | 1 116,5 | 1 402,2 | 1 634,7 | 1 623,7 | 1 797,5 | 2 759,3 | 2 967,2 |
| Total Assets (£ million) | 2 159,4 | 2 047,0 | 2 009,8 | 2 258,4 | 2 526,4 | 2 974,8 | 3 237,1 | 3 668,9 | 3 517,6 | 4 530,3 | 4 682,8 |
| Equity (£ million) | 1 024,7 | 958,0 | 1 303,4 | 1 477,3 | 1 409,9 | 1 572,6 | 1 602,4 | 2 045,2 | 1 720,1 | 1 771,0 | 1 715,6 |
| Total liabilities + Equity (£ million) | 2 159,4 | 2 047,0 | 2 009,8 | 2 258,4 | 2 526,4 | 2 974,8 | 3 237,1 | 3 668,9 | 3 517,6 | 4 530,3 | 4 682,8 |
| Borrowings (£ million) | 189,8 | 127,0 | 7,1 | 90,7 | 216,1 | 319,6 | 320,4 | 321,9 | 589,7 | 608,1 | 1 245,5 |
| Cash and cash equivalents (£ million) | 80,4 | 236,0 | 202,8 | 371,7 | 267,3 | 180,9 | 133,8 | 228,4 | 222,3 | 289,0 | 404,1 |
| Key ratios | | | | | | | | | | | |
| Equity Ratio | 47,45 % | 46,80 % | 64,85 % | 65,41 % | 55,81 % | 52,86 % | 49,50 % | 55,74 % | 48,90 % | 39,09 % | 36,64 % |
| Gearing ratio | 18,52 % | 13,26 % | 0,54 % | 6,14 % | 15,33 % | 20,32 % | 20,00 % | 15,74 % | 34,28 % | 34,34 % | 72,60 % |
| Drax Group plc (DRX.L) Share price GBX | 414,90 | 368,30 | 545,00 | 544,50 | 794,00 | 456,00 | 248,60 | 377,90 | 270,60 | 358,80 | 314,00 |
| Weighted average Number of shares for EPS (millions) | 352,70 | 365,60 | 367,50 | 375,20 | 406,90 | 407,30 | 407,30 | 409,30 | 410,30 | 406,90 | 397,40 |
| Market capitalisation (£ million) | 1 384,48 | 1 273,93 | 1 894,92 | 1 932,85 | 3 056,65 | 1 757,18 | 957,97 | 1 463,38 | 1 050,43 | 1 381,27 | 1 180,58 |
| Market cap to equity ratio | 135 % | 133 % | 145 % | 131 % | 217 % | 112 % | 60 % | 72 % | 61 % | 78 % | 69 % |
| S&P long term rating | | | | | | | | | BB+ | BB+ | BB+ |
| S&P outlook | | | | | | | | | Stable | Stable | Stable |
| Fitch long term rating | | | | | | | | | BB+ | BB+ | BB+ |
| Fitch outlook | | | | | | | | | Stable | Stable | Stable |
| Index total assets (31/12/2009=100) | 100,00 | 94,79 | 93,07 | 104,58 | 117,00 | 137,76 | 149,91 | 169,90 | 162,90 | 209,79 | 216,86 |
| Index equity ratio (31/12/2009=100) | 100,00 | 98,62 | 136,67 | 137,85 | 117,60 | 111,40 | 104,32 | 117,47 | 103,05 | 82,38 | 77,21 |
| Index gearing ratio (31/12/2009=100) | 100,00 | 71,57 | 2,94 | 33,15 | 82,75 | 109,72 | 107,95 | 84,97 | 185,09 | 185,38 | 391,95 |
| Index market capitalisation (31/12/2009=100) | 100,00 | 92,02 | 136,87 | 139,61 | 220,78 | 126,92 | 69,19 | 105,70 | 75,87 | 99,77 | 85,27 |
| Index Financial liabilities (31/12/2009=100) | 100,00 | 66,91 | 3,74 | 47,79 | 113,86 | 168,39 | 168,81 | 169,60 | 310,70 | 320,39 | 656,22 |
| GBP to to EUR | 0,8885 | 0,8569 | 0,8368 | 0,8154 | 0,8331 | 0,7788 | 0,735 | 0,8583 | 0,8873 | 0,8969 | 0,85 |
| Total assets (€ million) | 2 430,39 | 2 388,84 | 2 401,77 | 2 769,68 | 3 032,53 | 3 819,72 | 4 404,22 | 4 274,61 | 3 964,39 | 5 051,06 | 5 509,18 |
| Market cap (€ million -rate at each year's end) | 1 558,22 | 1 486,67 | 2 264,48 | 2 370,43 | 3 669,00 | 2 256,27 | 1 303,36 | 1 704,97 | 1 183,85 | 1 540,04 | 1 388,91 |
| Total assets (€ million) | 1 153,29 | 1 117,98 | 1 557,60 | 1 811,75 | 1 692,35 | 2 019,26 | 2 180,14 | 2 382,85 | 1 938,58 | 1 974,58 | 2 018,35 |
| Equity (€ million) | 1 153,29 | 1 117,98 | 1 557,60 | 1 811,75 | 1 692,35 | 2 019,26 | 2 180,14 | 2 382,85 | 1 938,58 | 1 974,58 | 2 018,35 |
| Financial liabilities (€ million) | 213,62 | 148,21 | 8,48 | 111,23 | 259,39 | 410,37 | 435,92 | 375,04 | 664,60 | 678,00 | 1465,29 |

Sources for financial statements for each year

2009: [DRAX Annual Report 2010](#) Consolidated Balance Sheet- Page 76

2010: [DRAX Annual Report 2010](#) Consolidated Balance Sheet- Page 76

2011: [DRAX Annual Report 2011](#) Consolidated Balance Sheet- Page 84

2012: [DRAX Annual Report 2012](#) Consolidated Balance Sheet- Page 86

2013: [DRAX Annual Report 2013](#) Consolidated Balance Sheet- Page 104

2014: [DRAX Annual Report 2014](#) Consolidated Balance Sheet- Page 122

2015: [DRAX Annual Report 2015](#) Consolidated Balance Sheet- Page 109

2016: [DRAX Annual Report 2016](#) Consolidated Balance Sheet- Page 122

2017: [DRAX Annual Report 2017](#) Consolidated Balance Sheet- Page 124

2018: [DRAX Annual Report 2018](#) Consolidated Balance Sheet- Page 120

2019: [DRAX Annual Report 2019](#) Consolidated Balance Sheet- Page 135

Appendix 14: Key financial figures 2009-2019 Engie - GDF Suez

| | 31/12/2009 | 31/12/2010 | 31/12/2011 | 31/12/2012 | 31/12/2013 | 31/12/2014 | 31/12/2015 | 31/12/2016 | 31/12/2017 | 31/12/2018 | 31/12/2019 |
|--|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Total Liabilities (€ million) | 105 898,6 | 113 940,0 | 133 140,0 | 134 291,0 | 106 121,0 | 109 346,0 | 111 908,0 | 113 052,0 | 107 755,0 | 112 761,0 | 121 756,0 |
| Total Assets (€ million) | 171 425,2 | 184 657,0 | 213 410,0 | 205 498,0 | 159 611,0 | 165 305,0 | 160 658,0 | 158 499,0 | 150 332,0 | 153 702,0 | 159 793,0 |
| Equity (€ million) | 65 526,6 | 70 717,0 | 80 270,0 | 71 207,0 | 53 490,0 | 55 959,0 | 48 750,0 | 45 447,0 | 42 577,0 | 40 941,0 | 38 037,0 |
| Total liabilities + Equity (€ million) | 171 425,2 | 184 657,0 | 213 410,0 | 205 498,0 | 159 611,0 | 165 305,0 | 160 658,0 | 158 499,0 | 150 332,0 | 153 702,0 | 159 793,0 |
| Borrowings and debt (€ million) | 42 272,2 | 47 238,0 | 56 588,0 | 57 209,0 | 39 914,0 | 38 321,0 | 39 155,0 | 36 950,0 | 33 468,0 | 32 179,0 | 38 545,0 |
| Cash and cash equivalents (€ million) | 10 323,8 | 11 296,0 | 14 675,0 | 11 383,0 | 8 691,0 | 8 546,0 | 9 183,0 | 9 825,0 | 8 931,0 | 8 700,0 | 10 159,0 |
| Key ratios | | | | | | | | | | | |
| Equity Ratio | 38,22 % | 38,30 % | 37,61 % | 34,65 % | 33,51 % | 33,85 % | 30,34 % | 28,67 % | 28,32 % | 26,64 % | 23,80 % |
| Gearing ratio | 64,51 % | 66,80 % | 70,50 % | 80,34 % | 74,62 % | 68,48 % | 80,32 % | 81,30 % | 78,61 % | 78,60 % | 101,34 % |
| ENGIE SA (ENGI.PA) Share price € | 30,29 | 27,24 | 21,12 | 15,42 | 17,09 | 19,43 | 16,43 | 12,12 | 14,34 | 12,53 | 14,40 |
| Number of shares (millions) | 2 249,00 | 2 251,00 | 2 253,00 | 2 413,00 | 2 413,00 | 2 435,00 | 2 435,00 | 2 435,00 | 2 435,00 | 2 435,00 | 2 435,00 |
| Market capitalisation (€ millions) | 68 110,97 | 61 317,24 | 47 583,36 | 37 196,40 | 41 250,23 | 47 312,05 | 40 007,05 | 29 512,20 | 34 905,73 | 30 498,38 | 35 064,00 |
| Market cap to equity ratio | 104 % | 87 % | 59 % | 52 % | 77 % | 85 % | 82 % | 65 % | 82 % | 74 % | 92 % |
| Moody' long term rating | Aa3 | A1 | A1 | A1 | A1 | A1 | A1 | A2 | A2 | A2 | A2 |
| Moody's outlook | Stable | Stable | Stable | Negative | Negative | Stable | Stable | Stable | Stable | Stable | Stable |
| S&P long term rating | A | A | A | A | A | A | A | A- | A- | A- | A- |
| S&P outlook | Positive | Stable | Stable | Stable | Negative | Stable | Stable | Negative | Negative | Stable | Stable |
| Fitch Long term rating | | | | | | | | | A | A | A |
| Fitch outlook | | | | | | | | | Stable | Stable | Stable |
| Index total assets (31/12/2009=100) | 100,00 | 107,72 | 124,49 | 119,88 | 93,11 | 96,43 | 93,72 | 92,46 | 87,70 | 89,66 | 93,21 |
| Index equity ratio (31/12/2009=100) | 100,00 | 100,19 | 98,40 | 90,65 | 87,67 | 88,56 | 79,38 | 75,01 | 74,09 | 69,68 | 62,27 |
| Index gearing ratio (31/12/2009=100) | 100,00 | 103,55 | 109,28 | 124,54 | 115,67 | 106,15 | 124,50 | 126,03 | 121,85 | 121,84 | 157,08 |
| Index market capitalisation (31/12/2009=100) | 100,00 | 90,03 | 69,86 | 54,61 | 60,56 | 69,46 | 58,74 | 43,33 | 51,25 | 44,78 | 51,48 |
| Index Financial liabilities (31/12/2009=100) | 100,00 | 111,75 | 133,87 | 135,33 | 94,42 | 90,65 | 92,63 | 87,41 | 79,17 | 76,12 | 91,18 |

Sources for financial statements for each year

2009: [GDF Suez Annual Report 2009](#) Consolidated Balance Sheet- Page 288-289

2010: [GDF Suez Annual Report 2010](#) Consolidated Balance Sheet- Page 288-289

2011: [GDF Suez Annual Report 2011](#) Consolidated Balance Sheet- Page 262-263

2012: [GDF Consolidated Financial Statements 2012](#) Consolidated Balance Sheet- Page 19-20

2013: [GDF Consolidated Financial Statements 2013](#) Consolidated Balance Sheet- Page 28-29

2014: [GDF Suez Annual Report 2014](#) Consolidated Balance Sheet- Page 198-199

2015: [GDF Suez Annual Report 2015](#) Consolidated Balance Sheet- Page 190-191

2016: [Engie Consolidated Financial Statements 2016](#) Consolidated Balance Sheet- Page 28-29

2017: [Engie Consolidated Financial Statements 2017](#) Consolidated Balance Sheet- Page 30-31

2018: [Engie Consolidated Financial Statements 2018](#) Consolidated Balance Sheet- Page 32-33

2019: [Engie Consolidated Financial Statements 2019](#) Consolidated Balance Sheet- Page 34-35

Appendix 15: Key financial figures 2009-2019 EDF

| | 31/12/2009 | 31/12/2010 | 31/12/2011 | 31/12/2012 | 31/12/2013 | 31/12/2014 | 31/12/2015 | 31/12/2016 | 31/12/2017 | 31/12/2018 | 31/12/2019 |
|---|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Total Liabilities (€ million) | 205 368,0 | 203 656,0 | 196 800,0 | 219 406,0 | 217 931,0 | 227 379,0 | 238 701,0 | 240 278,0 | 232 054,0 | 230 523,0 | 247 494,0 |
| Total Assets (€ million) | 240 035,0 | 240 559,0 | 231 707,0 | 250 118,0 | 256 801,0 | 267 989,0 | 278 941,0 | 281 640,0 | 280 752,0 | 283 169,0 | 303 284,0 |
| Equity (€ million) | 34 667,0 | 36 903,0 | 34 907,0 | 30 712,0 | 38 870,0 | 40 610,0 | 40 240,0 | 41 362,0 | 48 698,0 | 52 646,0 | 55 790,0 |
| Total liabilities + Equity (€ million) | 240 035,0 | 240 559,0 | 231 707,0 | 250 118,0 | 256 801,0 | 267 989,0 | 278 941,0 | 281 640,0 | 280 752,0 | 283 169,0 | 303 284,0 |
| Financial liabilities (€ million) | 61 315,0 | 53 412,0 | 55 477,0 | 64 501,0 | 57 789,0 | 61 458,0 | 71 632,0 | 72 565,0 | 62 507,0 | 69 296,0 | 75 537,0 |
| Cash and cash equivalents (€ million) | 6 982,0 | 4 829,0 | 5 743,0 | 5 874,0 | 5 459,0 | 4 701,0 | 4 182,0 | 2 893,0 | 3 692,0 | 3 290,0 | 3 934,0 |
| Key ratios | | | | | | | | | | | |
| Equity Ratio | 14,44 % | 15,34 % | 15,07 % | 12,28 % | 15,14 % | 15,15 % | 14,43 % | 14,69 % | 17,35 % | 18,59 % | 18,40 % |
| Gearing ratio | 176,87 % | 144,74 % | 158,93 % | 210,02 % | 148,67 % | 151,34 % | 178,01 % | 175,44 % | 128,36 % | 131,63 % | 135,40 % |
| Electricité de France S.A. (EDF.PA) Share price € | 41,56 | 31,03 | 18,80 | 13,81 | 25,68 | 22,83 | 13,48 | 9,68 | 10,42 | 13,80 | 9,93 |
| Average weighted number of shares (millions) | 1 824,31 | 1 848,40 | 1 847,32 | 1 847,34 | 1 852,52 | 1 858,47 | 1 859,99 | 1 980,63 | 2 660,24 | 2 968,33 | 3 029,51 |
| Market capitalisation (€ millions) | 75 818,37 | 57 346,70 | 34 729,58 | 25 502,57 | 47 582,08 | 42 419,53 | 25 072,64 | 19 172,52 | 27 719,73 | 40 962,91 | 30 076,93 |
| Market cap to equity ratio | 219 % | 155 % | 99 % | 83 % | 122 % | 104 % | 62 % | 46 % | 57 % | 78 % | 54 % |
| Moody' long term rating | Aa3 | Aa3 | Aa3 | Aa3 | Aa3 | Aa3 | A1 | A3 | A3 | A3 | A3 |
| Moody's outlook | Stable | Stable | Stable | Negative | Negative | Negative | Negative | Stable | Stable | Stable | Stable |
| S&P long term rating | A+ | A+ | AA- | A+ | A+ | A+ | A+ | A- | A- | A- | A- |
| S&P outlook | Stable | Stable | Negative | Stable | Stable | Negative | Neagtive | Stable | Negative | Negative | Negative |
| Fitch Long term rating | A+ | A+ | A+ | A+ | A+ | A+ | A | A- | A- | A- | A- |
| Fitch outlook | Stable | Stable | Stable | Stable | Negative | Negative | Stable | Stable | Stable | Stable | Stable |
| Index total assets (31/12/2009=100) | 100,00 | 100,22 | 96,53 | 104,20 | 106,98 | 111,65 | 116,21 | 117,33 | 116,96 | 117,97 | 126,35 |
| Index equity ratio (31/12/2009=100) | 100,00 | 106,22 | 104,31 | 85,02 | 104,80 | 104,92 | 99,89 | 101,69 | 120,10 | 128,73 | 127,37 |
| Index gearing ratio (31/12/2009=100) | 100,00 | 81,83 | 89,86 | 118,74 | 84,06 | 85,56 | 100,65 | 99,19 | 72,57 | 74,42 | 76,55 |
| Index market capitalisation (31/12/2009=100) | 100,00 | 75,64 | 45,81 | 33,64 | 62,76 | 55,95 | 33,07 | 25,29 | 36,56 | 54,03 | 39,67 |
| Index Financial liabilities (31/12/2009=100) | 100,00 | 100,22 | 96,53 | 104,20 | 106,98 | 111,65 | 116,21 | 117,33 | 116,96 | 117,97 | 126,35 |

Sources for financial statements for each year

2009: [EDF Financial Report 2010](#) Consolidated Balance Sheet- Page 8-9

2010: [EDF Financial Report 2010](#) Consolidated Balance Sheet- Page 8-9

2011: [EDF Consolidated Financial Statements 2011](#) Consolidated Balance Sheet- Page 3

2012: [EDF Consolidated Financial Statements 2012](#) Consolidated Balance Sheet- Page 4

2013: [EDF Consolidated Financial Statements 2013](#) Consolidated Balance Sheet- Page 6-7

2014: [EDF Consolidated Financial Statements 2014](#) Consolidated Balance Sheet- Page 6-7

2015: [EDF Consolidated Financial Statements 2015](#) Consolidated Balance Sheet- Page 4

2016: [EDF Consolidated Financial Statements 2016](#) Consolidated Balance Sheet- Page 4

2017: [EDF Consolidated Financial Statements 2017](#) Consolidated Balance Sheet- Page 4

2018: [EDF Consolidated Financial Statements 2018](#) Consolidated Balance Sheet- Page 4

2019: [EDF Consolidated Financial Statements 2019](#) Consolidated Balance Sheet- Page 4

Appendix 16: Key financial figures 2009-2019 PGE

| | 31/12/2009 | 31/12/2010 | 31/12/2011 | 31/12/2012 | 31/12/2013 | 31/12/2014 | 31/12/2015 | 31/12/2016 | 31/12/2017 | 31/12/2018 | 31/12/2019 |
|--|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Total Liabilities (PLN million) | 15 598,046 | 13 791,166 | 17 589,371 | 17 582,124 | 17 103,045 | 21 317,000 | 20 879,000 | 24 699,000 | 25 753,000 | 28 104,000 | 34 513,000 |
| Total Assets (PLN million) | 54 447,798 | 51 473,939 | 58 762,631 | 58 253,935 | 60 751,308 | 66 201,000 | 61 296,000 | 67 474,000 | 72 106,000 | 75 905,000 | 77 650,000 |
| Equity (PLN million) | 38 849,752 | 37 682,773 | 41 173,260 | 40 671,811 | 43 648,263 | 44 884,000 | 40 417,000 | 42 775,000 | 46 353,000 | 47 801,000 | 43 137,000 |
| Total liabilities + Equity (PLN million) | 54 447,798 | 51 473,939 | 58 762,631 | 58 253,935 | 60 751,308 | 66 201,000 | 61 296,000 | 67 474,000 | 72 106,000 | 75 905,000 | 77 650,000 |
| Loans & borrowings, financial liabilities, etc. (PLN million) | 5 619,658 | 4 020,028 | 3 913,718 | 3 479,524 | 4 489,498 | 7 115,000 | 9 354,000 | 13 570,000 | 13 276,000 | 14 321,000 | 15 944,000 |
| Cash and cash equivalents (PLN million) | 7 712,823 | 2 730,423 | 4 052,238 | 4 795,493 | 5 951,964 | 6 282,000 | 3 104,000 | 2 669,000 | 2 552,000 | 1 281,000 | 1 313,000 |
| Key ratios | | | | | | | | | | | |
| Equity Ratio | 71,35 % | 73,21 % | 70,07 % | 69,82 % | 71,85 % | 67,80 % | 65,94 % | 63,39 % | 64,28 % | 62,97 % | 55,55 % |
| Gearing ratio | 14,47 % | 10,67 % | 9,51 % | 8,56 % | 10,29 % | 15,85 % | 23,14 % | 31,72 % | 28,64 % | 29,96 % | 36,96 % |
| PGE Polska Grupa Energetyczna S.A. (PGP.F) Share price PLN | 24,50 | 23,19 | 20,70 | 18,21 | 16,28 | 18,89 | 12,79 | 10,45 | 12,05 | 10,00 | 7,96 |
| Average weighted number of shares used to calculate EPS (millions) | 1 513,95 | 1 730,90 | 1 869,76 | 1 869,76 | 1 869,76 | 1 869,76 | 1 869,76 | 1 916,50 | 1 916,50 | 1 916,50 | 1 916,50 |
| Market capitalisation (PLN million) | 37 091,70 | 40 139,57 | 38 704,05 | 34 048,35 | 30 439,71 | 35 319,79 | 23 914,24 | 20 027,43 | 23 093,83 | 19 165,00 | 15 255,34 |
| Market cap to equity ratio | 95 % | 107 % | 94 % | 84 % | 70 % | 79 % | 59 % | 47 % | 50 % | 40 % | 35 % |
| Moody' long term rating | | A3 | A3 | A3 | A3 | Baa1 | Baa1 | Baa1 | Baa1 | Baa1 | Baa1 |
| Moody's outlook | | Stable | Stable | Stable | Negative | Stable | Stable | Stable | Stable | Stable | Stable |
| Fitch Long term rating | BBB+ | BBB+ | BBB+ | BBB+ | BBB+ | BBB+ | BBB+ | BBB+ | BBB+ | BBB+ | BBB+ |
| Fitch outlook | | Stable | Stable | Negative | Negative | Stable | Stable | Stable | Stable | Stable | Stable |
| Index total assets (31/12/2009=100) | 100,00 | 94,54 | 107,92 | 106,99 | 111,58 | 121,59 | 112,58 | 123,92 | 132,43 | 139,41 | 142,61 |
| Index equity ratio (31/12/2009=100) | 100,00 | 102,60 | 98,20 | 97,85 | 100,69 | 95,02 | 92,41 | 88,85 | 90,09 | 88,26 | 77,86 |
| Index gearing ratio (31/12/2009=100) | 100,00 | 73,75 | 65,71 | 59,14 | 71,11 | 109,59 | 160,00 | 219,31 | 198,00 | 207,12 | 255,52 |
| Index market capitalisation (31/12/2009=100) | 100,00 | 108,22 | 104,35 | 91,80 | 82,07 | 95,22 | 64,47 | 53,99 | 62,26 | 51,67 | 41,13 |
| Index Financial liabilities (31/12/2009=100) | 100,00 | 94,54 | 107,92 | 106,99 | 111,58 | 121,59 | 112,58 | 123,92 | 132,43 | 139,41 | 142,61 |
| PLN to EUR | 4,1059 | 3,9636 | 4,4554 | 4,0928 | 4,1503 | 4,1641 | 4,2638 | 4,415 | 4,1748 | 4,2982 | 4,2598 |
| Total assets (€ million) | 13 260,87 | 12 986,66 | 13 189,08 | 14 233,27 | 14 637,81 | 15 898,03 | 14 375,91 | 15 282,90 | 17 271,73 | 17 659,72 | 18 228,56 |
| Market cap (€ million - rate at each year's end) | 9 033,76 | 10 127,05 | 8 687,00 | 8 319,08 | 7 334,34 | 8 481,97 | 5 608,67 | 4 536,22 | 5 531,72 | 4 458,84 | 3 581,23 |
| Total equity (€ million) | 9 461,93 | 9 507,21 | 9 241,20 | 9 937,40 | 10 516,89 | 10 778,80 | 9 479,10 | 9 688,56 | 11 103,05 | 11 121,17 | 10 126,53 |
| Equity (€ million) | 9 461,93 | 9 507,21 | 9 241,20 | 9 937,40 | 10 516,89 | 10 778,80 | 9 479,10 | 9 688,56 | 11 103,05 | 11 121,17 | 10 126,53 |
| Financial liabilities (€ million) | 1 368,68 | 1 014,24 | 878,42 | 850,16 | 1 081,73 | 1 708,65 | 2 193,82 | 3 073,61 | 3 180,03 | 3 331,86 | 3 742,90 |

Sources for financial statements for each year

- 2009: [PGE Consolidated Financial Statements 2009](#) Consolidated Balance Sheet- Page 4-5
- 2010: [PGE Consolidated Financial Statements 2010](#) Consolidated Balance Sheet- Page 4-5
- 2011: [PGE Consolidated Financial Statements 2011](#) Consolidated Balance Sheet- Page 4-5
- 2012: [PGE Consolidated Financial Statements 2012](#) Consolidated Balance Sheet- Page 4-5
- 2013: [PGE Consolidated Financial Statements 2013](#) Consolidated Balance Sheet- Page 4-5
- 2014: [PGE Consolidated Financial Statements 2014](#) Consolidated Balance Sheet- Page 4-5
- 2015: [PGE Consolidated Financial Statements 2015](#) Consolidated Balance Sheet- Page 5
- 2016: [PGE Consolidated Financial Statements 2016](#) Consolidated Balance Sheet- Page 5
- 2017: [PGE Consolidated Financial Statements 2017](#) Consolidated Balance Sheet- Page 5
- 2018: [PGE Consolidated Financial Statements 2018](#) Consolidated Balance Sheet- Page 5
- 2019: [PGE Consolidated Financial Statements 2019](#) Consolidated Balance Sheet- Page 5

Appendix 17: Key financial figures 2009-2019 ČEZ

| | 31/12/2009 | 31/12/2010 | 31/12/2011 | 31/12/2012 | 31/12/2013 | 31/12/2014 | 31/12/2015 | 31/12/2016 | 31/12/2017 | 31/12/2018 | 31/12/2019 |
|---|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Total Liabilities (CZK million) | 323 584 | 316 640 | 366 029 | 381 851 | 378 011 | 362 019 | 330 531 | 369 481 | 371 885 | 468 162 | 449 210 |
| Total Assets (CZK million) | 530 259 | 543 691 | 598 107 | 636 070 | 641 136 | 627 870 | 602 686 | 630 841 | 626 207 | 707 443 | 704 574 |
| Equity (CZK million) | 206 675 | 227 051 | 232 078 | 254 219 | 263 125 | 265 851 | 272 155 | 261 360 | 254 322 | 239 281 | 255 364 |
| Total Liabilities + Equity (CZK million) | 530 259 | 543 691 | 598 107 | 636 070 | 641 136 | 627 870 | 602 686 | 630 841 | 626 207 | 707 443 | 704 574 |
| Loans & Debt (CZK million) | 156 810 | 164 444 | 184 499 | 192 895 | 199 216 | 184 134 | 157 491 | 167 816 | 152 169 | 160 966 | 171 893 |
| Cash and cash equivalents (CZK million) | 26 727 | 22 163 | 22 062 | 17 957 | 25 118 | 20 095 | 13 482 | 11 226 | 12 623 | 7 278 | 9 755 |
| Key ratios | | | | | | | | | | | |
| Equity Ratio | 38,98 % | 41,76 % | 38,80 % | 39,97 % | 41,04 % | 42,34 % | 45,16 % | 41,43 % | 40,61 % | 33,82 % | 36,24 % |
| Gearing ratio | 75,87 % | 72,43 % | 79,50 % | 75,88 % | 75,71 % | 69,26 % | 57,87 % | 64,21 % | 59,83 % | 67,27 % | 67,31 % |
| ČEZ, a. s. (CEZ.PR) Share price CZK | 864,00 | 783,00 | 786,00 | 680,00 | 517,00 | 591,00 | 444,30 | 430,00 | 496,50 | 535,00 | 509,50 |
| Number of shares in circulation (millions) | 533,44 | 533,91 | 534,12 | 534,12 | 534,12 | 534,24 | 534,24 | 534,24 | 534,39 | 534,87 | 535,44 |
| Market capitalisation (CZK million) | 460 887,84 | 418 047,62 | 419 814,39 | 363 198,20 | 276 137,46 | 315 732,89 | 237 360,60 | 229 721,05 | 265 322,15 | 286 152,78 | 272 806,17 |
| Market cap to equity ratio | 223 % | 184 % | 181 % | 143 % | 105 % | 119 % | 87 % | 88 % | 104 % | 120 % | 107 % |
| Moody' long term rating | A2 | A2 | A2 | A2 | A2 | A2 | A3 | Baa1 | Baa1 | Baa1 | Baa1 |
| Moody's outlook | Stable | Stable | Stable | Stable | Negative | Negative | Negative | Stable | Stable | Positive | Stable |
| S&P long term rating | A- | A- | A- | A- | A- | A- | A- | A- | A- | A- | A- |
| S&P outlook | Stable | Stable | Stable | Stable | Stable | Stable | Stable | Stable | Stable | Stable | Stable |
| Fitch Long term rating | A- | A- | A- | A- | A- | A- | A- | A- | A- | A- | A- |
| Fitch outlook | Stable | Stable | Stable | Stable | Stable | Stable | Stable | Stable | Negative | Negative | Stable |
| Index total assets (31/12/2009=100) | 100,00 | 102,53 | 112,80 | 119,95 | 120,91 | 118,41 | 113,66 | 118,97 | 118,09 | 133,41 | 132,87 |
| Index equity ratio (31/12/2009=100) | 100,00 | 107,14 | 99,55 | 102,54 | 105,30 | 108,63 | 115,86 | 106,30 | 104,20 | 86,78 | 92,99 |
| Index gearing ratio (31/12/2009=100) | 100,00 | 95,46 | 104,78 | 100,01 | 99,79 | 91,29 | 76,27 | 84,63 | 78,86 | 88,66 | 88,72 |
| Index market capitalisation (31/12/2009=100) | 100,00 | 90,70 | 91,09 | 78,80 | 59,91 | 68,51 | 51,50 | 49,84 | 57,57 | 62,09 | 59,19 |
| Index Financial liabilities (31/12/2009=100) | 100,00 | 102,53 | 112,80 | 119,95 | 120,91 | 118,41 | 113,66 | 118,97 | 118,09 | 133,41 | 132,87 |
| ČZK to EUR | 26,41 | 25,095 | 25,806 | 24,859 | 27,406 | 27,718 | 27,034 | 27,048 | 25,585 | 25,723 | 25,407 |
| Total assets (€ million) | 20 077,96 | 21 665,31 | 23 177,05 | 25 587,11 | 23 394,00 | 22 652,07 | 22 293,63 | 23 323,02 | 24 475,55 | 27 502,35 | 27 731,49 |
| Market cap (€ million -rate at each year's end) | 17 451,26 | 16 658,60 | 16 268,09 | 14 610,33 | 10 075,80 | 11 390,90 | 8 780,08 | 8 493,09 | 10 370,22 | 11 124,39 | 10 737,44 |
| Total assets (€ million) | 20 077,96 | 21 665,31 | 23 177,05 | 25 587,11 | 23 394,00 | 22 652,07 | 22 293,63 | 23 323,02 | 24 475,55 | 27 502,35 | 27 731,49 |
| Equity (€ million) | 7825,63 | 9047,66 | 8993,18 | 10226,44 | 9601,00 | 9591,28 | 10067,14 | 9662,82 | 9940,28 | 9302,22 | 10050,93 |
| Financial liabilities (€ million) | 5937,52 | 6552,86 | 7149,46 | 7759,56 | 7269,07 | 6643,12 | 5825,66 | 6204,38 | 5947,59 | 6257,67 | 6765,58 |

Sources for financial statements for each year

2009: [ČEZ Annual Report 2010](#) Consolidated Balance Sheet- Page 212

2010: [ČEZ Annual Report 2010](#) Consolidated Balance Sheet- Page 212

2011: [ČEZ Annual Report 2011](#) Consolidated Balance Sheet- Page 202

2012: [ČEZ Annual Report 2012](#) Consolidated Balance Sheet- Page 216

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2019: [ČEZ Annual Report 2019](#) Consolidated Balance Sheet- Page 226