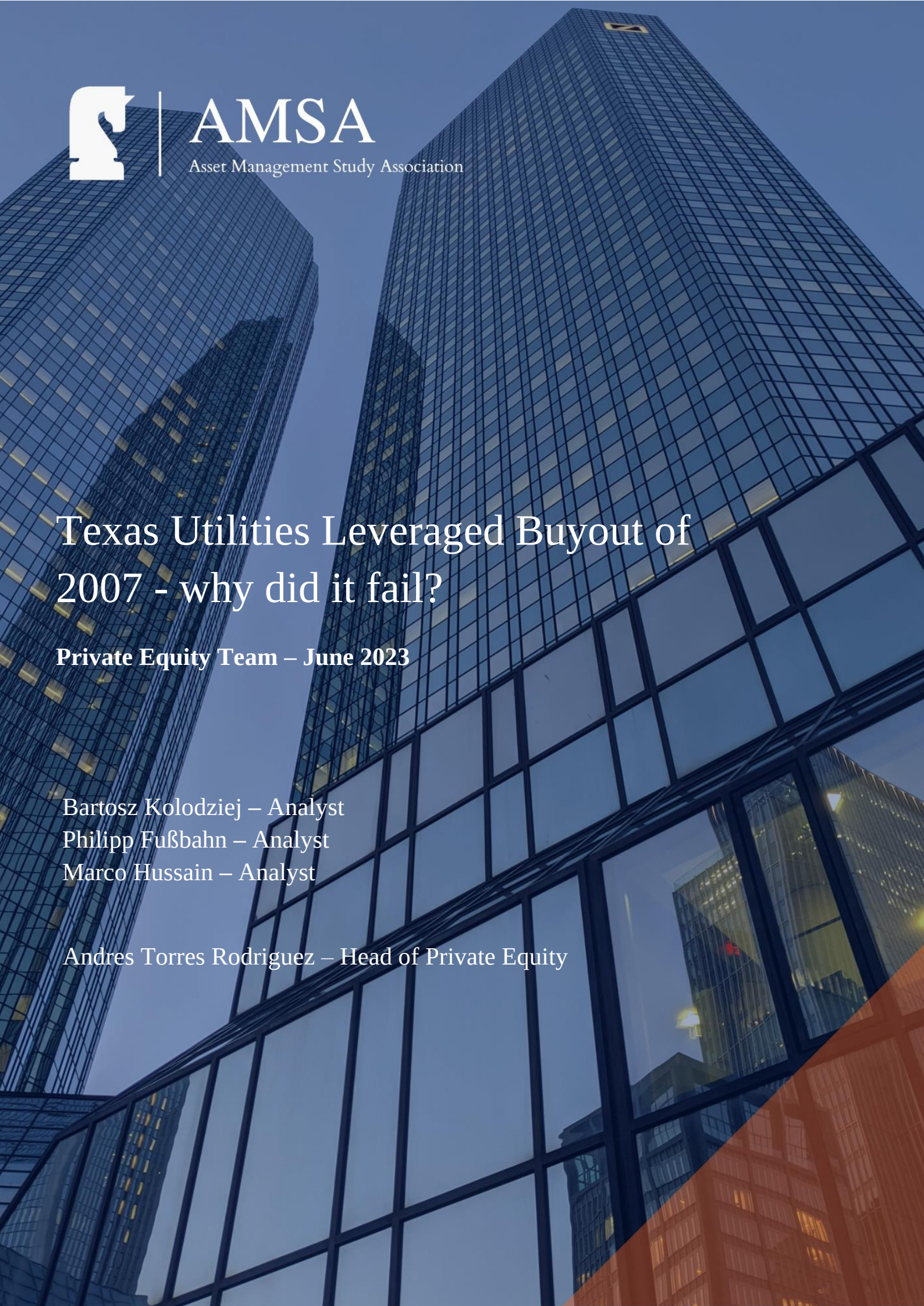

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# Texas Utilities Leveraged Buyout of 2007 - why did it fail?

**Private Equity Team – June 2023**


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# Introduction

On February 26, 2007, Texas power company TXU Corp. agreed to the largest leveraged buyout in history, which turned out to be the biggest flop in history less than a decade later, when on April 29, 2014, Texas power company TXU Corp. filed for bankruptcy.
But how did this deal come about and why did it seem like a good investment at the time of the buyout?

## Key Facts

A total of 6 entities were involved in the leveraged buyout. Leading the way were private equity firms Kohlberg Kravis Roberts & Co. KKR.UL, and Texas Pacific Group TPG.UL.
Credit Suisse Securities and Lazard acted as financial advisers to TXU. Citigroup, Goldman Sachs, JP Morgan, Lehman Brothers and Morgan Stanley acted as advisors to the investment group.
The deal was valued around record breaking $45 billion including $40 billion of debt.
Accordingly, the investor group received around $69.35 per share for TXU, which represents a 15.4% premium to TXU's last stock price before the deal was announced. This premium was justified by a similar buyout which happened one year before. The 15.4-percent premium being paid compares with the 13-percent premium that power company Duke Energy Corp. DUK.N had offered for Cinergy Corp. in 2005. That deal, worth about $9 billion, was completed in 2006.
According to TXU, investors paid 8.5 times EBITDA for TXU, which was ahead of the utilities industry average of 7.9 times EBITDA. The Texas power company TXU Corp. TXU.N thus became Energy Future Holdings Corp.
The afternoon after the deal was announced, TXU's stock price shot up to $67.93, a 13.2% increase.

## Why did it happen?

But how did this deal come about? TXU Corp. had not been the first choice, KKR had previously tried to buy Unisource of Arizona and failed, as did Texas Pacific with their attempt to buy Portland General in Oregon. Both deals were blocked by state regulators.
Buying up an energy company was also not new for either group of investors. Back in 2004, KKR and Texas Pacific were part of a consortium that bought Texas Genco, the second largest energy company in the state. The deal was worth $3.7 billion at the time. In 2006, the consortium sold Texas Genco again to NRG Emergy for a profitable $5.8 billion. The same was planned with TXU, but on a larger scale.
It is interesting to note that KKR has also been involved in the two second-largest leveraged buyouts after TXU. Once when HCA Healthcare was bought for $33 billion in 2006 and in the RJR Nabisco

deal in 1981 for $31 billion, which can later be recognised as the most famous LBO ever in this genre due to the book and subsequent film that the deal spawned.

## Economic outlook at the time of the deal

What was the economic situation and why did the group of investors consider the deal a good deal for them? There was a very good feeling about the general situation in the energy industry in 2007. Demand for electricity was expected to exceed generation capacity in many parts of the country in the coming years, driving up electricity prices. These positive fundamentals also drove up the value of power plants, many of which were nearly worthless during the severe market downturn of 2001-2002, when dozens of new power plants came on line. TXU Corp. also saw its numbers rise, which was the fifth-largest energy company in the US, serving about 2 million customers, at the time of the deal. In the case of Energy Future Holdings, its location in Texas had a significant impact on earnings risk. Because Texas has large natural gas reserves, the distance between the extraction site and the power generation facility is short, which puts downward pressure on already declining natural gas prices in the Texas market. In the deregulated Texas energy market, most customers are free to choose their electricity provider, which promotes competition and allows energy and fuel prices to adjust to market demand rather than prices being set by regulators. Prior to the acquisition, TXU Corp's financial performance was great in the deregulated market when coal and nuclear power were cheaper than natural gas

Natural gas prices were at their peak, giving TXU Corp. substantial profit margins on its coal and nuclear plants. And finally, the deal was made possible by cheap and readily available credit combined with high valuations. The credit boom reached its peak in mid-2007.

Nonetheless, there are also critical voices. "This deal never made sense," Erik Gordon, professor of private equity and law at the University of Michigan, said in an interview. "It could only be done when everyone was hysterically over-optimistic. Investors were basically hedging against natural gas, especially in the Texas market. Thanks to new technological advances and increased production of natural gas from the Eagle Ford shale play, natural gas prices have fallen dramatically, reducing reliance on coal and nuclear energy.

## How were critical voices from politics and environmental activists dealt with?

How were critical voices dealt with? The buyers tried to silence potential critics of the deal from the outset by agreeing to abandon plans for eight of eleven controversial coal-fired power plants that TXU had sought. This move was supported by two major environmental groups, the Environmental Defense Fund and the Natural Resources Defense Council, which had criticised the company's plans. They also promised lower electricity rates for households and price guarantees for customers. Under the agreement, TXU pledged to reduce the number of planned coal-fired power plants from 11 to 3 and make price cuts of 10 per cent that would mean annual savings of about $250 for an average household. TXU said the plan to scale back the expansion of coal-fired power plants would avoid 56 million tonnes of carbon emissions per year. The company said it would invest $400 million in energy conservation and efficiency measures over the next five years. It was a "very smart move by the company to talk to environmental groups in advance," said Barry Abramson, a utilities analyst at Gabelli Asset Management Inc, which owns TXU shares.

# TXU Corporation - Company Overview

## Basic Facts

Texas Utilities Corporation was a Dallas based diversified energy company managing a vast portfolio of competitive and regulated energy businesses located in Texas. Renamed in 1999, branding itself as an global firm operating in 3 different markets (North America, Europe and Australia), TXU took effective action following the 2002 deregulation of the Texas Energy Market after which they remained as the market leader in the state. As of 2006, the company delivered a total of 107,098 GWh of electric energy to just over 3 million recipients, employing around 7000 people (Yumpu, 2007).

## Business Segments

As of 2006, TXU Corporation consisted of 2 primary subsidiaries: TXU Energy Holdings & TXU Electric Delivery. TXU Energy Holdings was then further broken down into TXU Power, TXU Energy retail, TXU Wholesale and TXU DevCo for operational accountability and performance management purposes.

The largest subsidiary of TXU Energy Holdings was TXU Power. This entity accounted for operating 19 different electricity generation facilities in Texas with a total production capacity of 17,605 MW per year (Yumpu, 2007). 14 of the 19 were natural gas power plants, generating the majority of the total MW annual production, with 4 being Coal-fueled and one facility being a Nuclear Power Plant (Yumpu, 2007). Additionally, the majority of the 14 natural gas power plants had the ability to switch the commodity used from natural gas to fuel oil, allowing for readiness when it comes to demand fluctuations. This diversification allowed TXU to take advantage of the higher energy prices, citing their low variable cost as a competitive advantage in the field.

The second subsidiary of TXU Energy holdings was TXU Energy Retail, which focused on out-of-territory customer acquisition and small business customers, with TXU Energy serving 2.1 million retail electricity customers as of the end of 2006 (Yumpu, 2007). Following the 1999 legislation that restructured the electric utility industry in Texas to allow for more competition, this unit was responsible for the 'price-to-beat' rate, which was a quota set to battle the monopolistic state of the market at the time. This price to beat rate was enforced to the point where 40% of the electricity consumed came from other entities other than TXU, which occurred in 2005, allowing the division to run with their own price (Yumpu, 2007). Moreover, the division took charge of marketing initiatives, introducing a 'Pick your Plan' offering that provided savings of over 15% to loyal customers.

TXU Wholesale was the third subsidiary of TXU Energy Holdings, the trading unit of the company, which included managing internal and external customer services. More specifically, the unit dealt with steering the companies fossil fule purchases by monitoring and hedging against the rising commodity prices which were later a downfall of the company.

Lastly we have TXU DevCo, holding the responsibility of developing a sustainable strategy of replacing and building future power plants. Its goal was to maximise the efficiency of electricity production, with plans for a shift to a more sustainable business model listed as part of the 2006 strategical outlook.

The second main subsidiary of TXU Corporation was TXU Electric Delivery. Opposingly to TXU Energy Holdings, this part of the business was responsible for the safe delivery of electric power to end-use customers through its widespread distribution network. As of 2006, Electric Delivery's transmission facilities spanned just over 14,000 miles in Texas alone, being the main energy transmissioner in the state (Yumpu, 2007). In addition, the company also operated 101,000 miles of distribution facilities including overhead primary conductors, overhead secondary conductors and street light conductors and an underground section with the same components listed above (Yumpu, 2007). Alongside the operational spectrum, Electric Delivery focused on 'technology initiatives', investing heavily in improving the operational capabilities of its assets. This included both organic and inorganic channels,

with inhouse development of advanced technology accompanied by joint venture activities with InfrastuX Group.

## Financial and Operational Highlights

As of 2006, TXU Corporation was a mature energy giant with macroeconomic-based upsides such as rising energy prices looming in the near future. With the widespread and diversified business structure, TXU was able to leverage their vertical integration within the supply chain and economies of scale to create a competitive advantage.

**FINANCIAL AND OPERATING HIGHLIGHTS**[2]

| $ millions unless otherwise noted | 2006 | 2005 | % change |
|---|---|---|---|
| **Financial Data** | | | |
| Revenues | $10,856 | $10,662 | 2 |
| Net income available for common stock | $ 2,552 | $ 1,712 | 49 |
| Operational earnings | $ 2,592 | $ 1,628 | 59 |
| Net income available for common stock (per diluted share) | $ 5.46 | $ 2.50 | 118 |
| Operational earnings (per diluted share) | $ 5.55 | $ 3.35 | 66 |
| Dividends declared (per share) | $ 1.670 | $ 1.256 | 33 |
| Cash provided by operating activities | $ 4,954 | $ 2,793 | 77 |
| Normalized operating cash flow | $ 4,976 | $ 2,902 | 71 |
| Normalized free cash flow | $ 2,679 | $ 1,798 | 49 |
| ROIC based on adjusted operational earnings (percent) | 21.7 | 15.5 | 40 |
| EBITDA/interest (ratio) | 6.4 | 4.9 | 31 |
| Debt/EBITDA (ratio) | 2.1 | 3.1 | (32) |
| **Operating Data** | | | |
| Retail electricity sales volumes (GWh) | 52,050 | 58,176 | (11) |
| Total retail electricity customers (thousands) | 2,182 | 2,325 | (6) |
| Electric energy delivered (GWh) | 107,098 | 106,780 | – |
| Electricity points of delivery (thousands) | 3,056 | 3,013 | 1 |
| Employees | 7,262 | 7,615 | (5) |

Figure 1 - Key financial and operational figures of TXU Corporations as of the end of 2006 (Yumpu, 2007)

Figure 1 above shows vital financial and operational data of TXU Corporation embedded in the company's 2006 Annual Report. Without drawing any comparisons with competitors, between the years 2005 and 2006 TXU Corp was able to significantly decrease its production and operational costs, with the operational profit increasing by 59% YoY. Moreover, the company was also able to increase its net income for common stock (net income minus dividends) by 49% for a net income margin of almost 25%, growing by more than 100% in comparison to the year before. From a profitability standpoint, this makes the company highly attractive to outside investors, with the dividends per share also increasing by 33%. Another key financial metric used to evaluate an intrinsic value of a company is the free cash flow, in which TXU saw an impressive 49% growth YoY, showing an ability to pay off

potential debt and dividends. Lastly, the D/EBITDA ratio dropped from 3.1 to 2.1 between 2005 and 2006.

# The Acquisition

## Terms of the Leveraged Buyout - Debtors

A consortium formed by 3 large private equity firms acquired TXU Corporation in 2007 in a deal worth $45 Billion, taking the company private and becoming the largest leverage buyout in history (Hall, 2007). The $45 Billion valuation represented a 17% premium over trading shares, valuing the energy giant at approximately $69.25 per share (Hall, 2007). Crucially, the buyout consisted of primarily debt, which was ought to be payed off in the long run via operational improvements to one of EFH's subsidiaries. The actual structure of the deal can be seen below.

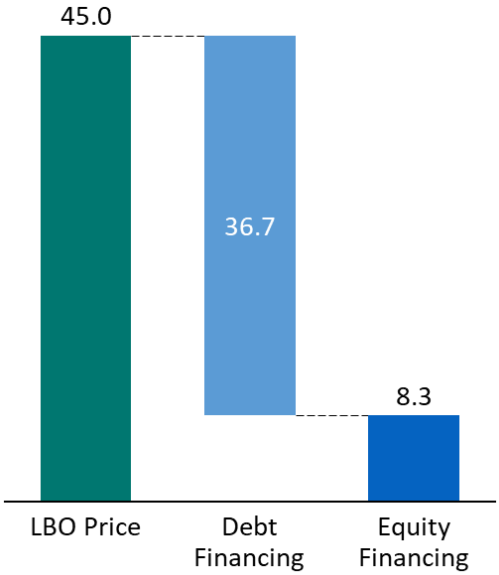


Figure 2 - Debt and Equity Financing as a fraction in the 2007 TXU Corporation LBO

As can be seen above, the majority of the deal was financed through debt. The $37 Billion debt figure can also be broken down further. Out of the total debt of $37 Billion, around $24.4 Billion was financed as senior secured credit facilities, $1.7 Billion in senior unsecured bridge loans and $2.2 Billion in mezzanine debt, with the remaining debt figure being already part of TXU's balance sheet (Thomson, 2007). On paper, this amount of debt taken on by a company with around $10.5 Billion dollars in revenue seems very high, however is usual practice when it comes to leveraged buyouts, where a Debt to Equity ratio of 9 is the average (Flores, 2023). Analysing the debt taken on by TXU as a result of the buyout, the large majority of the new debt taken on was regarded as safe, with the exception of mezzanine debt which only accounts for approximately 6% of the total.

When taking a look at the cash contribution of each of the Private Equity firms, Kohlberg Kravis Roberts (KKR) and Texas Pacific Group capital (TPG) were the primary acquirees as both of the firms put forward around $4.5 Billion compared to Goldman Sachs Capital's $2.25 Billion, totalling to around $8 Billion in cash (Hall, 2007). As previously mentioned, this was an extraordinary sum of money at the time, and showed the firms' commitment to making this deal a successful one. Despite this, the debt to equity ratio of the deal itself was just under 4, which can be considered low.

Next, we can investigate the 15% premium more by taking a look at some of the key financial multiples following the given price of the acquisition.

Table 1: Table showing the key financial multiples breaking down the 15% premium paid for TXU

| **Figure** | **Multiple** |
|---|---|
| EBITDA multiple | 8.4x |
| EV/ EBITDA | 10.7x |
| Debt/ EBITDA | 8.8x |
| Interest Coverage Ratio | 2.2x |

The table above shows a selection of key financial multiples. As seen above, the PE consortium acquired TXU for approximately 8.4x the companies EBITDA, seen as a higher figure than most acquisitions at the time, which could be explained by the anticipation of the indsutryb growth within the next few years. Moreover, the EV/EBITDA multiple of 10.7x, which can be considered substantial when looking at current industry standards. Lastly, the interest coverage ratio at acquisition was 2.2x, forecasting TXU's ability to pay off the interest on the significant amount of debt undertaken by the business as part of the process.

As with most private equity consortium deals, several changes were made to the company as soon as the deal came through. Through the cash contribution towards the overall price of the deal, the consortium acquired votes on the board which lead to significant changes in the managerial positions at the company. Firstly, the former CEO of the company John Wilder was replaced by John F. Young, a former member of Goldman Sachs Capital Partners. Others followed, and soon the entire board was formatted through former executives at the previously mentioned PE firms.

## Terms of the Leveraged Buyout - Creditors

The Debt underwriting for the deal totalled approximately $36.7 Billion. As with every Private Equity takeover, the formed consortium required large banks to lend them the equivalent debt capital which is then transferred onto the acquiree, TXU in this case. The list of banks lending the consortium capital can be seen in the table below.

Table 2: Table showing the debt financing provided per bank and the total debt provided for the TXU LBO

| **Name** | **Debt Financing provided (Billion USD)** |
|---|---|
| Bank of America | 3.75 |
| Citi Group | 3.75 |
| JP Morgan | 3.75 |
| Credit Suisse | 2.25 |
| Lehman Brothers | 2.25 |
| Merril Lynch | 2.25 |
| Royal Bank of Scotland | 2.25 |
| UBS | 2.25 |
| Goldman Sachs | 2.25 |
| Others | 11.95 |
| **Total** | **~36.7** |

As seen above, debt financing was provided by a wide variety of different banks. The largest contribution was seen from a combination between CitiGroup, BoA and JP Morgan, followed by other notable banks. Interestingly, one of the debt providers in this deal was Lehman Brothers, which famously collapsed during the 2008 sub-prime mortgage crisis which wreaked havoc across the US economy.

# Where did it all go wrong?

## The fundamentals of the deal

Arguably the main reason why the buy out failed was due to the structure of the deal. The private equity companies took on a staggering 40 billion dollars of debt in order to finance everything. They also agreed to pay a 15.4% premium over TXU's stock price, paying 69.25$ per share instead of their latest closing price of 60.02$. This left the company with an unhealthy debt to equity ratio, with heavy interest payments limiting their ability to build their retained earnings and invest in their growth (Hall, 2007). It also limited their ability to adapt to the rapidly changing environment of the energy industry. An example of this could have been investing retained earnings to diversify their energy sources which may have aided their chances of survival.

## The external environment

The downside of having a lack of ability to pivot the business according to external factors was further magnified by the overall environment TXU was operating in. Firstly, the state of Texas allows their citizens to choose their electric provider (Texas Regulatory Agency). This incentivises competition with a pure focus on undercutting as citizens simply opt for the cheapest option. This was extremely lucrative for TXU at the time, being one of the cheaper energy providers and having the ability to leverage economies of scale. Nevertheless, technological advances allowed for alternate energy sources such as natural gas to become cheaper (Hoium, 2015). Through a method known as "hydraulic fracturing" competitors could lower their respective variable costs of producing natural gas. Given the regulatory environment in Texas, changes in the prices of energy sources were quickly reflected by their demand from citizens. Therefore, a reduction in the natural gas price meant that many consumers were switching providers to benefit from the cheaper prices. This caused an immediate disadvantage for TXU, given that almost all of their assets were geared towards energy production through nuclear and coal sources (Hall, 2007).

## A bad bet

The private equity companies based the whole leveraged buyout on an assumption that coal/nuclear based energy sources would dominate the market in the long run, allowing TXU to monopolise their energy dealings and grow from increased retained earnings. When agreeing to pay such a high market premium, multiple factors regarding the longevity of coal power, specific market regulations in Texas and technological changes were ignored. This raises questions over the quality of the due diligence conducted from the private equity firms prior to structuring a deal with over 85% debt.

## The impact of the financial crisis 2008 on the deal

A decisive factor in the failure of the deal was the financial crisis of 2008. On one hand, the credit bubble before the financial crisis made it possible to finance the deal at all, through cheap loans, and on the other hand, the financial crisis of 2008 was a decisive factor that the big bet that coal/nuclear-based energy sources would dominate the market in the long run backfired. At the time of the deal, all parties assumed that natural gas prices would continue to rise in the near future, giving coal-fired plants a competitive advantage, but the financial crisis changed everything. Natural gas prices fell from a high of $12.69 in June 2008 to a low of $4.52 in February 2009 (Team, 2022). The crisis triggered a wave of deflation and liquidation that weakened all assets, including oil and gas. In addition, the unemployment rate rose as companies reduced their output, which in turn caused the demand for oil and gas to fall sharply, putting increased pressure on the price.

Power companies were among the hardest hit by the recession. In 2009, total electricity sales in June were already down 7.3% from the previous year. Industrial consumption fell by 14.6%. Lonnie Carter, chief executive of Santee Cooper, South Carolina's state-owned power and water utility, concluded already back then that the recession would have a long-term impact on the industry and argued "power needs will be lower" in the Future (Analysis, 2009).

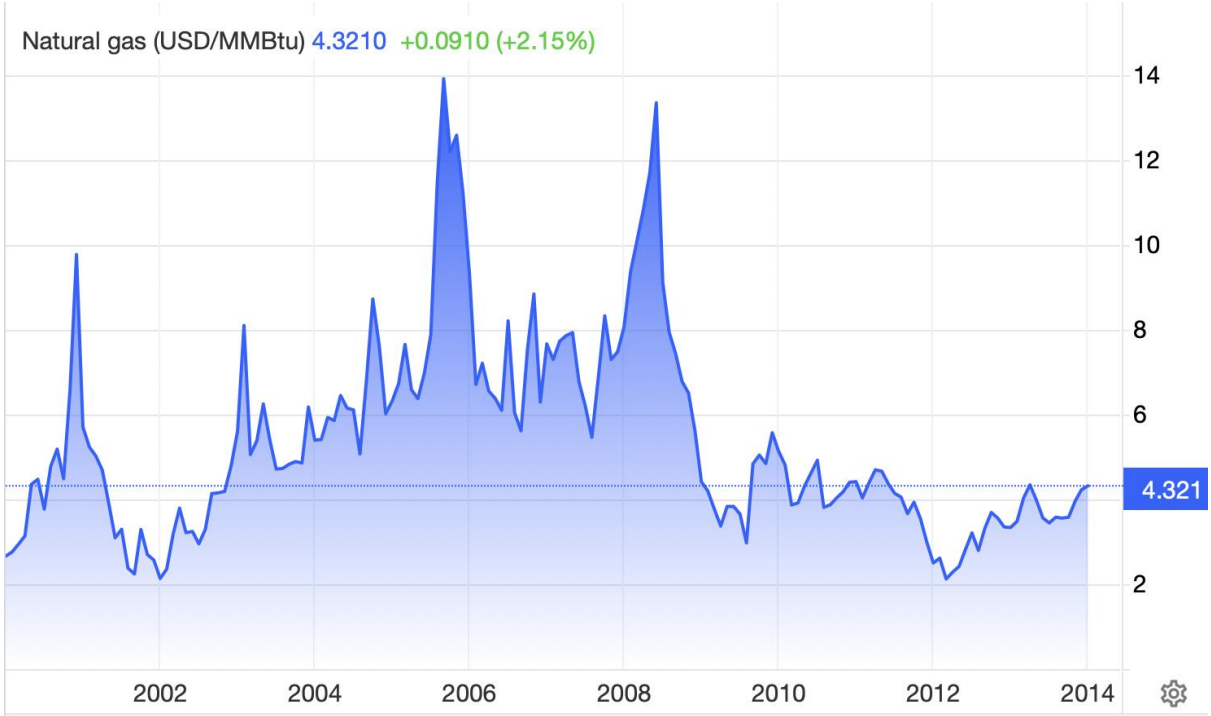


Figure 3- Graph shows the development of the natural gas price with highs before and lows after the beginning of the recession following the financial crisis in 2008.

# The effect of the fall of TXU Corporation

The bankruptcy of TXU Corporation dealt a large blow to both its investors and the Texas energy market. Despite this, the bankruptcy saw some positive spillover effects, with certain individuals and markets taking advantage of the gap in the market. This section breaks down these effects into the aforementioned categories, looking at both quantiative and qualitative impacts.

At the time of the bankruptcy, the position of Energy Future Holdings (formerly known as TXU Corp) was dire. Texas' largest energy provider owed $49.6 Billion to a variety of financial institutions, and with $36.4 Billion in assets, became the 10th largest company to 'file for chapter 11'. In addition, the company's revenues were seeing a decline, with the PE consortium unable to combat the decrease of natural gas prices with cost cutting measures. Warren Buffet, one of the most esteemed institutional investors, suffered major losses as a result of the collapse. Below you can see the key ratios of EFH at the time of the bankruptcy.

Table 3: Table showing financial and liquidity ratios as of 2014 for EFH

| **Figure** | **Multiple** |
|---|---|
| Current Ratio | 0.9x |
| D/E ratio | 10.2x |
| Interest Coverage | 1.5x |
| Cash Ratio | 0.05x |

The fatal financial state of EFH at the time of the bankruptcy can be seen above. With a current ratio of below one, accompanied by the D/E ratio of 10.2, the company struggled for any type of liquidity. Additionally, the cash ratio of only 0.05x shows that EFH only had 5% of short term liabilities covered by their current cash balance, making it understandable as to why the company was forced to file for bankruptcy.

The financial implications of the bankruptcy were significant for a number of different groups of stakeholders. The graph below outlines the losses made by the PE investors as a result of the bankruptcy.

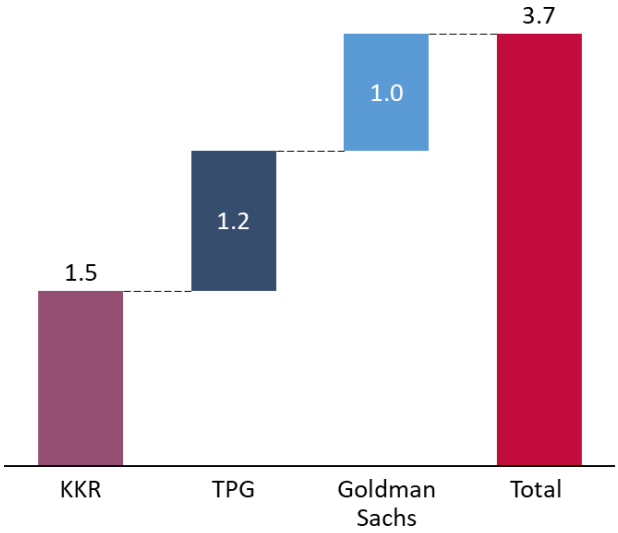


Figure 4 - Graph showing losses made by the 3 major private equity investors as a result of the TXU Corp bankruptcy in 2014 in Billion USD

As can be seen above, losses for the PE consortium amounted to over 3.7 Billion USD, with KKR incurring the largest $1.5 Billion loss, followed by TPG and the GS asset management branch (Sender and Crooks, 2014). These losses signified one of the largest failed LBO's to date, underlining the risks of buyouts involving a significant percentage of debt, and scarred the reputation of the PE industry, affecting deals made in the energy industry to this very day. The failure of the PE consortium also became a symbol for the rash nature of PE deals conducted during the mid 2000s, where the favourable low interest rate environment facilitated buyers to take on large amounts of debt.

Alongside the aforementioned financial losses, many internal stakeholders of EFH were also impacted by the bankruptcy in a number of ways. Firstly, around 10,000 employees were laid off, with the reason cited being the cost cutting measures that had to be taken in order to get the company back into shape after the bankruptcy. This included the entire board of directors, including William Reilly and Charles Duncan who were the names leading the organisation.

Despite the disastrous outcome, there were positives that came out of the bankruptcy of EFH. As a term of the bankruptcy deal, EFH split its power generation and supply business from Oncor, its regulated transmission network. Interestingly, as the only regulated section of EFH's business, which set limits on the amount of debt a company can incur, it was able to proceed with business as usual after the bankruptcy. Secondly, the new owners of EFH, alongside hedge fund Elliot Management, pledged to focus on significantly increasing the company's renewable energy portfolio. To underline this, EFH planned to invest $1 Billion into new solar and wind projects in Texas between the years 2014 and 2019. This investment included a giant 161 MW Amazon Wind Farm Texas, which begun operation in October 2017 (Sender and Crooks, 2014). This was accompanied by offering customers a range of

renewable energy plans, with some giving assurance that 100% of the energy transmitted to the consumers house comes from renewable sources.

# Conclusion

Overall, there were a lot of factors that led to the collapse of TXU, marking the largest failed LBO in history. One could argue that the deal was doomed from the beginning, with the private equity companies accepting a record breaking amount of debt on a company which largely depended on a safe and constant stream of income. Being a prominent player in the energy industry requires heavy expenses on a monthly basis, with the average profit margin only being around 10% (Ross, 2022). A complete change in their capital structure didnt change their high expense business model, it further fueled their dependance on meeting income requirements in order to meet debt obligations.
The external environment throughout the life of the acquisition also played a significant role in its failure. Notably, the acquisition happened to be one year before the 2008 financial crisis. Following its acquisition in 2007, energy prices experienced a steep decline from a high of $12.69 in June 2008 to a low of $4.52 in February 2009. Additionally, the company was heavily invested in coal/nuclear based assets, disregarding other energy forms such as natural gas which competitors leveraged to undercut TXU. Given the pure free market on energy in Texas, the effect of being undercut had a significant impact on their revenues.

Nonetheless, its hard to turn a blind eye on the poor due diligence on behalf of some of the largest private equity firms in the world. Choosing to overpay the fair value of a acquisition and then predominantly financing the deal with debt can only be considered under a specific set of circumstances. A successful LBO requires the acquired company to earn consistent and predictable cash flows that can meet debt obligations. Additionally, if revenues follow a cyclical pattern, buying a company with debt would lead to dire consequences in the event of a recession. TXU ended up being a perfect candidate for a failed LBO, with unpredictable revenue streams due to the Texas market conditions and highly cyclical income due to the quick reflection of gas prices according to the economic climate. These mistakes proved to be an important lesson for private equity firms and led to stricter prerequisites when deciding to proceed with LBO’s. More importantly, it called for more due diligence on exactly how the business produces cash flows, the market it operates in and what risks it may face in the future. Overall, this increased the weariness of using debt in the private equity industry and deal structures pivoted towards favouring larger equity bases.

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