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MATTHIAS SUSTEK

INVESTMENTS IN DISTRESSED ASSETS IN BRAZIL

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INVESTMENTS IN DISTRESSED ASSETS IN BRAZIL

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"*Without realizing it, the individual composes his life according to the laws of beauty even in times of greatest distress.*"

Milan Kundera – The Unbearable Lightness of Being (1984)

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ABSTRACT

Investment in distressed assets, while relatively mature in developed markets, has become more and more common in Brazil in a context of a lingering economic downturn, offering interesting but risky opportunities to domestic and foreign investors. The distressed securities in Brazil are particularly challenging to invest in, a lot of them being deemed worthless in the first place by bigger institutions. Therefore, this research wants to understand how it is possible to create value out of these securities in such a delicate context. However, such subject remains widely unexplored in emerging markets with the literature emphasizing such shortcomings. To cope with the lack of information, this study intends to directly inquire with seasoned professionals in the field of distressed securities in order to obtain the knowledge where it can be found. As a result, the study shows that the market of distressed assets is very singular in Brazil and market participants needed to adapt to the context. Value creation relies on a whole local ecosystem of corporate lawyers, restructuration/turnaround consultants and asset managers. They are able to create value with very special sets of competences, mainly their management of information, their legal expertise and strategic management.

Keywords:

Distressed Assets, Distressed Securities, Financial Distress, Brazil, Investments, Value Creation, Turnaround, Bankruptcy, Restructuring

RESUMO

Investimentos em distressed assets ou ativos podres, embora já relativamente maduros em mercados mais desenvolvidos, se tornaram mais e mais comuns no Brasil num contexto de recessão econômica prolongada, oferecendo oportunidades interessantes mas ariscadas para investidores nacionais e estrangeiros. Pode ser particularmente desafiador investir nessos ativos podres no Brasil muitos deles considerados sem valor por grandes instituções. Por essa razão, essa pesquisa pretende entender como é possivel criar valor com esses ativos num contexto tão delicado. No entanto, esse tema é ainda amplamente inexplorado nos mercados emergentes e com uma literatura que coloca em destaque essas lacunas. Para fazer face a esta ausência de informação, essa pesquisa indaga aos profissionais experientes em ativos podres, para obter os conhecimentos necessários. Como consequência, a pesquisa mostra que o mercado dos ativos podres no Brasil é muito singular e os intervenientes do mercado precisam se adaptar ao contexto. A criação de valor depende de um ecossistema local formado por advogados corporativos, consultores em reestruturação/*turnaround* e gestores de ativos. Eles são capazes de criar valor com um conjunto especial de competências, principalmente a gestão da informação, a experiência jurídica e a gestão estratégica.

Palavras-chave:

Distressed Assets, Ativos Podres, Crise Financeira, Brasil, Investimentos, Criação de Valor, Reestruturação, Recuperação Judicial

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List of Abbreviations

bn	Billion
BRL	Brazilian Reais
CFA	Chartered Financial Analyst
Chapter 11	It refers to the chapter of Title 11 of the US Bankruptcy Code
E&P	Exploration and Production (in the context of Oil and Gas)
GDP	Gross Domestic Product
IAA	*Instituto de Açúcar e Álcool*
m	Million
n.d.	No Date
NPL	Non-Performing Loan
SME	Small and medium-sized enterprises
USD	United States dollars
YoY	Year On Year

I. Introduction

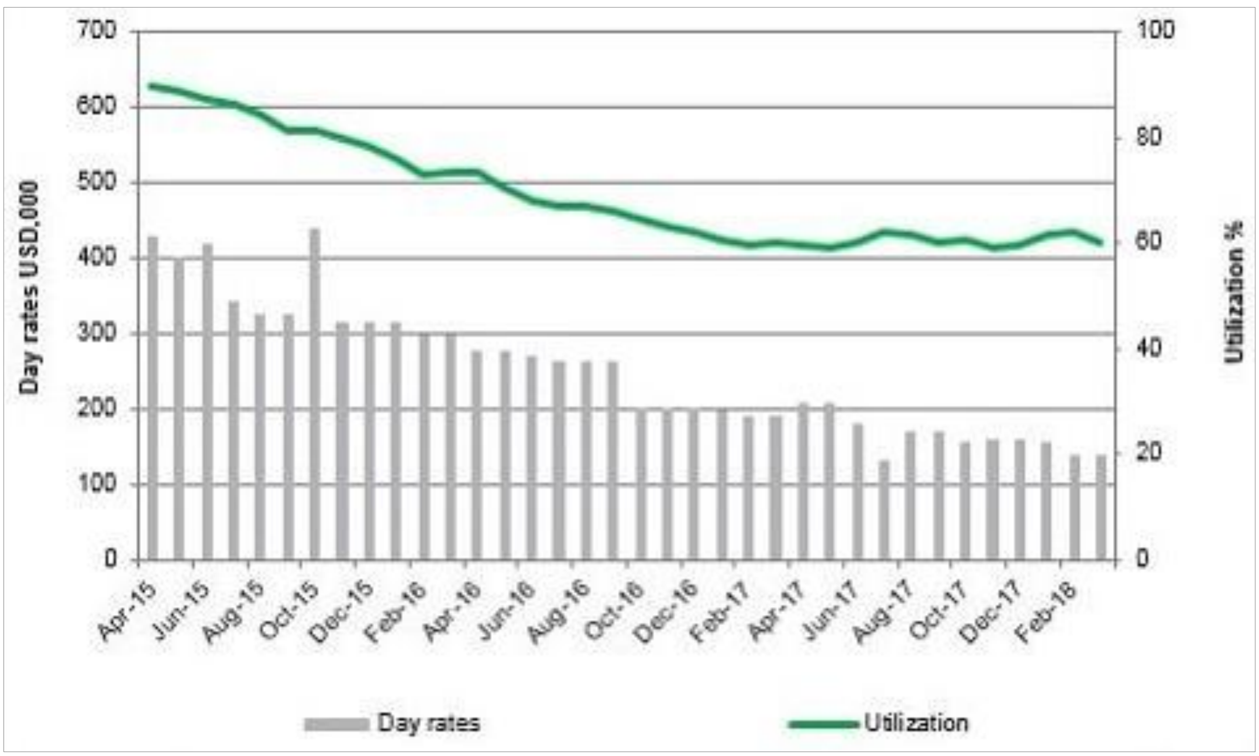
This academic paper looks at investments that are different from the ones traditionally studied in finance in business schools. This type of investments is becoming more and more important, especially in Brazil. These are investments in *distressed assets*, and they are very different from what is found in a normal mutual fund or from the experience an investor gets by simply buying shares or bonds. One of the interviewed professionals interviewed during this research said something that particularly shed light on this difference; there are plenty of very well-known star investors on the financial markets such as Warren Buffet or George Soros. These investors achieved extraordinary performances because they developed singular and successful investor philosophies and they were able to execute these strategies in the best ways. However, if an individual or average investor had bought and sold the same securities at the same time as Warren Buffet did, excluding some transaction costs depending on the scale of the investments, this individual would have earned exactly the same returns as Warren Buffet. It is also what may make these star investors so interesting and appealing. However, for distressed assets, when they are in the hands of anyone (or of a big pension fund for instance), their value is probably nothing or even negative. Therefore, distressed assets are distinct investments where pricing and valuation are very different than what can be seen with normal performing assets. This difference in valuation brings to question what is so special about distressed asset investors and how they are able to create value out of these assets when almost nobody else can.

What is a distressed asset then? It is possible to give a preliminary answer here in the introduction although the answer to that question is also at the core of this research study. Lexicon, the financial dictionary of the Financial Times defines a distressed asset as follows: “An asset that is put on sale, usually at a cheap price, because its owner is forced to sell it. There could be various reasons for this, including bankruptcy, excessive debt and regulatory constraints. Debt itself can be sold on to a new owner at below face value (distressed debt).” (Lexicon/Financial Times, s.d.). First of all, what this definition conveys is that there are some securities – they can be anything from equity of a company, bank or listed debt, receivables, real estate or other physical assets – that end up in financial distress for various reasons – in the definition, the Financial Times mentions “bankruptcy, excessive debt and regulatory constraints” but there can be even more diverse reasons, especially in an emerging market like Brazil. As it is written in the definition, this situation leads to the security being sold to another entity – that often has no direct relationship with the original issuer or owner of the asset - hence creating a secondary market for these distressed securities. On this market, investors accept to incur significant risk (the risk that could not be bared by the initial company or institution that sold the security) and in case of any adverse events - for instance if the company finally goes bankrupt - there may be no more possible recovery and the asset may become completely worthless in the hand of the investor. However, in exchange the seller will generally sell the asset at a significant discount from its face value and this discounted sale is able to make the asset attractive to some investors (Barclay Hedge, s.d.). Therefore, distressed assets, because of their nature, will attract mostly very sophisticated investors such as big investment banks, private equity, hedge funds or specialized investment boutiques. These institutions will be expecting especially high returns from the investments to justify the high risks, but they will also involve themselves very closely with how the asset is managed after they bought into it. They may try to influence how the company whose debt/equity/assets they bought, reorganize or they even may inject capital in order to facilitate the recovery of the asset and in order to maximize their returns (Barclay Hedge, s.d.).

In order to better understand the abstract explanation above, a specific example may be a good illustration. Especially a transversal example that involves distressed equity, distressed debt and even distressed physical assets in Brazil so that it is possible to see how these distressed assets typically appear on the market. A great example of distressed assets can be seen in the offshore drilling industry in Brazil in the past few year; this sector consists of independent contractors such as Brazilian companies like Odebrecht Óleo e Gás S.A. (Odebrecht), Queiroz Galvão Óleo e Gás S.A. (Queiroz Galvão), Schahin Oil & Gas Ltd. (Schahin), Petroserv S.A. etc. or foreign companies such as Transocean Ltd. (Transocean), Noble Corporation plc (Noble), Seadrill Partners (Seadrill) etc. These companies own and operate offshore drilling rigs and drill ships that are able to drill under the seafloor in order to access and exploit the oil reserves at various depth (it could be in midwaters, deep waters or ultra-deep waters deeping on the category of the drilling ship). During the years of economic growth in Brazil, the price of oil was constantly increasing. Moreover, Petrobras S.A (Petrobras), the state-controlled Brazilian oil company, and other Brazilian Exploration and Production (E&P) companies were doing great discoveries of new offshore oil reserves, especially at the pre-salt layer off the eastern coast of Brazil. As a result, Petrobras was constantly contracting more ships for drilling, these contractors were growing quickly, and they were earning very high day-rates for their contracted ships. However, the price of oil plummeted from above USD110 for a barrel of Brent Oil in the summer of 2014 to below USD30 in January 2016 (Macrotrends, 2018) and at the same time Petrobras was having difficulties due to the “Lava Jato” corruption scandal and had to sensibly reduce its capital expenditures. The corruptions scandals often involved the drillers themselves as their parents were the big Brazilian construction company at the core of “Lava Jato”. The conjunction of these two factors was dramatic for the offshore drilling industry in Brazil (World Oil, 2015). On the offshore drilling market, it means that instead of having contracted 81 drilling rigs at the peak of the activity in 2013 (Shinn, After years of plummeting activity, offshore Brazil is looking better again, 2017), Petrobras only needs around 20 rigs today (Shinn, Demand for deepwater rigs in South America to double by 2021, 2018). Figure 1 below shows the evolution of the utilization rate of offshore drilling ship worldwide as well as the day-rate paid for contracting the ships. Some of these companies were listed, they had equity, bank debt, bonds listed on financial markets, receivables to their suppliers and the physical assets such as the rigs. All of these assets took a severe hit on their valuation and became seriously distressed. As a result, even if the Brazilian offshore drillers are not usually listed, it is possible to imagine that their equity value was reduced to almost nothing (Schahin and others went bankrupt); the prices of the bonds of Queiroz Galvão, Odebrecht, Schahin decreased significantly and all defaulted as of today. At the core of this corporate distress, it is the price of the rigs that suffered the most, these rigs were the underlying assets for all equity and debt issued by the companies. At the time the rigs were still being manufactured, the average cost for a rig was around USD650m when, for instance, brand new out of the Samsung shipyards (Lioudis, 2018). In comparison to that, in 2016, Ocean Rig was able to buy the *Cerrado* – a drilling rig previously owned by Schahin and previously contracted by Petrobras – for USD65m “which represents less than 10 percent of the estimated price when it was built over six years ago”, according to the article I quote (Slav, 2016). Therefore, this situation is probably a good way to picture and imagine what distress really means: a boat that was bought for USD650m had basically to be sold for USD65m a few years later, 10% of the original cost.

From that example, it is possible to see than the combination of one external factor (oil prices worldwide) and one internal factor ("Lava Jato" corruption scandal in Brazil) made the crisis very violent for offshore drillers and it created investment opportunities in multiple classes of asset. This severe crisis in the offshore drilling sector also emerged when the rest of the world was rather in a recovery phase, especially in the US. Later on, this paper will tackle the example of the sugar and ethanol sector in Brazil that became the one of the most central themes of Brazilian distressed assets in the past few years. Distressed episodes are often centered around one category of assets, one geography or one sector. In this episode, it was possible to buy the physical assets (the ships) for 90% discounts and it was possible to acquire debt at similar discounts. Some bets from investors already seem to pay off but more time is needed in order to see if the market is going to fully recover to a healthier state.

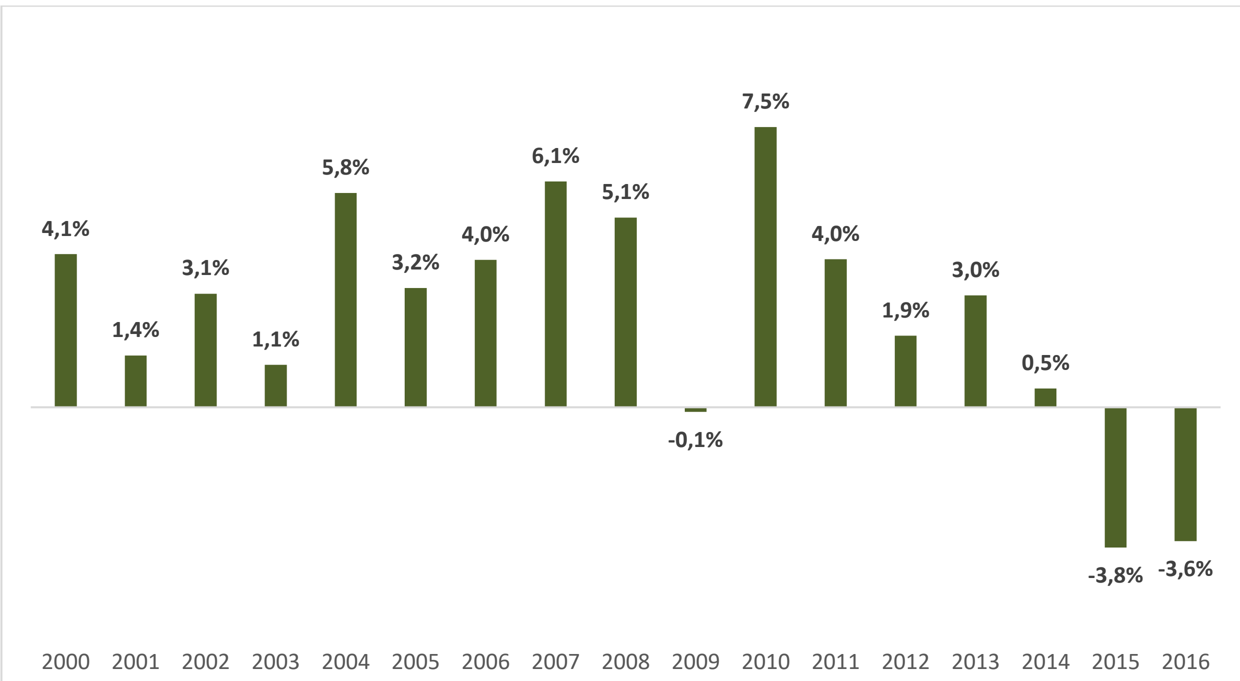
Figure 1: Average day rates and total contracted utilization of drill ships (>7,500ft) worldwide



(IHS Markit, 2018)

It is not only the oil and gas or the sugar and ethanol sectors but lately Brazil has been impacted by the most severe economic crisis of its history. The country went through the 2008-2009 global crisis relatively well with a solid banking sector and it didn't suffer much from the European crisis at the beginning of the 2010 decade and Brazilian growth peaked in 2010 with +7.5 YoY GDP growth. After that, GDP growth declined significantly year after year and Brazil hit recession in 2015 with a -3.8% YoY contraction in GDP in 2015 followed by a similar -3.5% YoY contraction in GDP in 2016. This economic crisis was in fact so severe that it deeply affected Brazil. It happened alongside a serious political crisis that has left the country stuck in a deep institutional crisis blocking any significant reform. And the country is currently in a difficult situation while in front of one of the most uncertain presidential elections, the country ever had that leaves little to no visibility for market participants (The Associated Press, 2018). Figure 2 below shows the growth rates since 2000 (World Bank, 2018).

Figure 2: Brazilian GDP Growth Rate (% Annual)

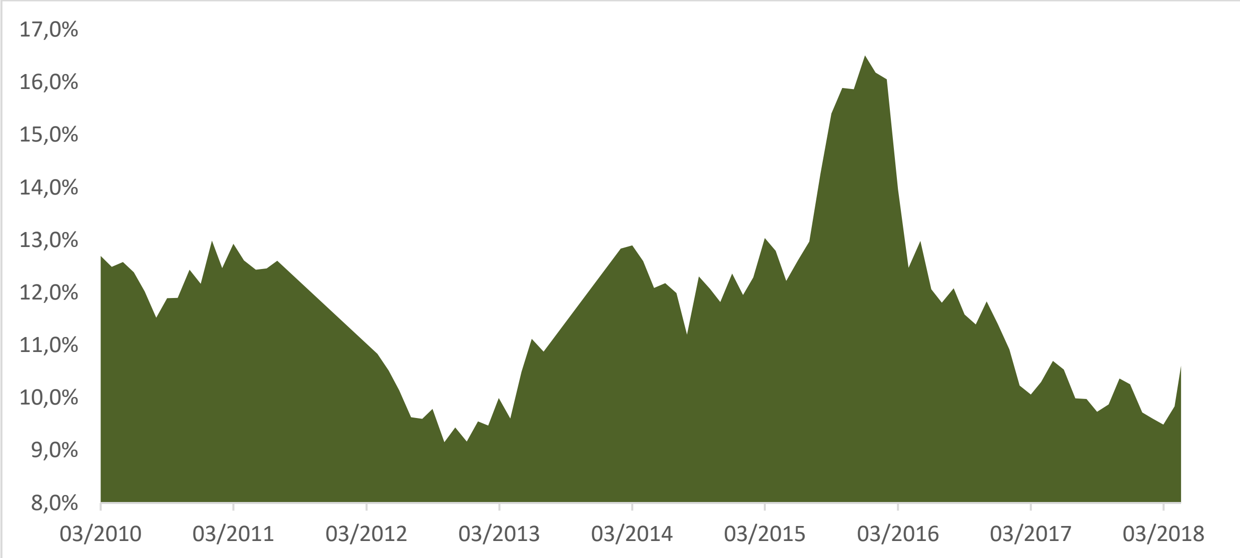


(World Bank, 2018)

Even in these difficult times, one could say that the crisis has created many opportunities in Brazil, and especially for distressed debt investors. With the recession and limited possibilities of a political turnaround, the access to credit for Brazilian companies, especially domestic firms, tightened very significantly (Pearson, 2016). In September 2015, Brazil was downgraded by Standard & Poor's to junk status (Schineller, 2015) with the yield on 10-year Brazilian government bonds peaking at almost 17% (Figure 3 below). Fitch Ratings followed in December 2015 and Moody's was the last agency to downgrade Brazil to junk in February 2016. The downgrade to junk status (for instance for Standard and Poor's internal rating scale, a downgrade from BBB- to BB+) really meant a lot for Brazil because it creates forced divestment by many market participants as "Pension and mutual funds which can only hold investment-grade assets" (The Economist, 2015). The sovereign rating serves as a ceiling for the debt rating of all Brazilian companies while the pension and mutual funds are massive investors, therefore when they divested (or their divestment was anticipated) it tightened even more credit in Brazil, putting a lot of companies in financial distress if they weren't already (The Economist, 2015). With such a high yield on the bonds of the Brazilian federal government, the yield for domestic Brazilian companies or the yield one could have expected from assets in sector that were even more impacted by the crisis (such as oil & gas, mining, sugar and ethanol, agribusiness etc.) were astronomical. As one respondent said in an interview for this study, at that moment, Brazil almost became like a "shelf" where investors interested in distressed assets from Brazil and overseas could come and shop for any asset that could interest them for a very cheap price.

It's already been a few years since the most acute episode of the crisis in Brazil happened; as we see on Figure 3 below, the yield on the 10-year Brazilian government bond have been lowered, hence showing some kind of recovery. Furthermore, the latest forecasts from the World Bank show that growth should slowly pick up in Brazil: +1.0% YoY in 2017, +2.0 YoY in 2018 and +2.3% in 2019 (World Bank, 2018). As a result, it seems that today could be the right moment to look at the effect of the crisis with the benefit of hindsight, therefore justifying the timing of this research.

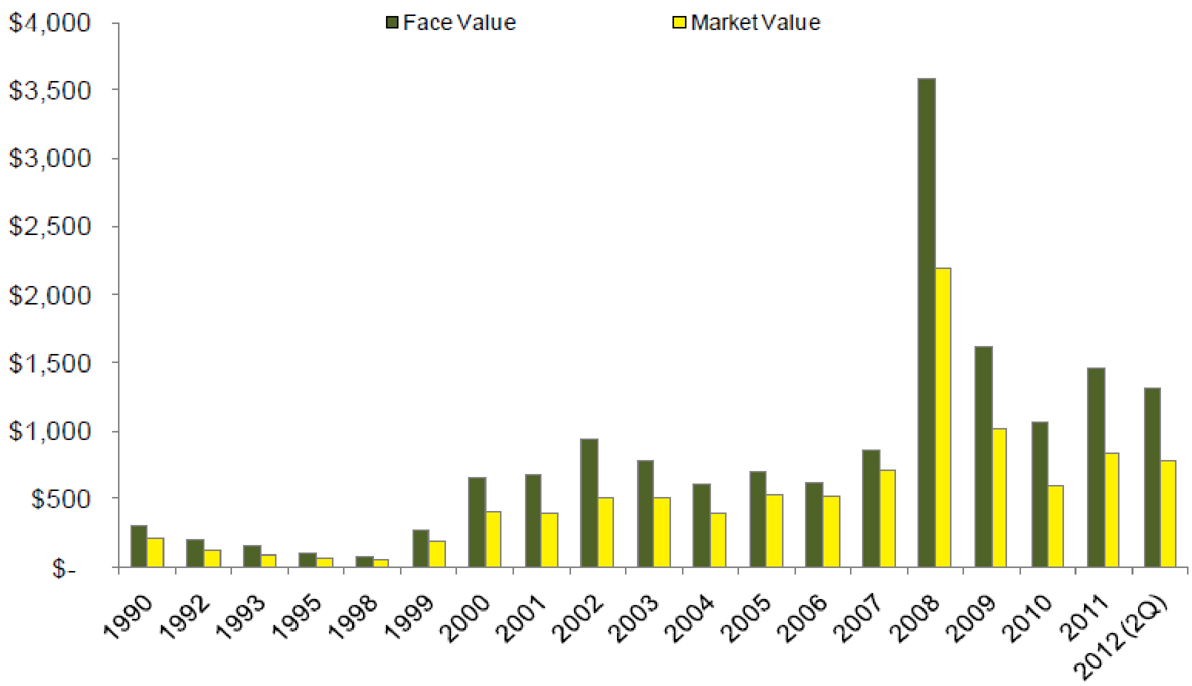
Figure 3: Brazilian Government Bond 10-Year Generic Yield (%, Annual)



(Bloomberg, 2018)

Distressed assets as an asset class have taken off pretty spectacularly worldwide. In 2012, Edward I. Altman, a recognized expert in corporate bankruptcy and distressed assets, testified before the ABI Commission on a potential reform of the Chapter 11 of the Uniform Commercial Code (UCC). During his testimony, Altman declared :“I estimate that there are, today, more than 200 financial institutions investing between $350-400 billion in the distressed debt market in the U.S. and a substantial number and amount operating in Europe and in other markets”. Please see Altman’s number in Figure 3 below (Altman, Testimony before the ABI Commission on the Chapter 11 Reform, 2012). As it is going to be developed later on in the literature review, Altman has been following this market and this asset class since his first studies in the 1990’s and this numbers show how widespread investments in distressed assets have become in the US and other developed markets (namely, in Europe). However, in Brazil, the asset class is at a rather earlier stage in its development; It wasn’t possible to find any recent and well documented number for the market in itself; such data remains rather in the companies related to distressed assets in Brazil.

Figure 4: Size of the US Defaulted and Distressed Debt Market, 1990-2Q 2012 (USDbn)



(Altman, Testimony before the ABI Commission on the Chapter 11 Reform, 2012)

After having explored the general context around distressed assets and having shown why Brazil seems especially relevant to analyze today for distressed assets, it is necessary to look at what is the general problematic when looking at these types of investments in Brazil. First of all, when more traditional investments are analyzed (for instance buying shares in the S&P500), investors rely on good and robust macroeconomics, i.e. if the economy is doing good then investments should be performing good as well: the investors are waiting for the economy to expand in order for their investment to be productive. Therefore, the subject of distressed asset seems to be pretty paradoxical in itself. Investors would be looking for disastrous assets in order to invest and obtain good returns. Furthermore, looking at distressed in Brazil is particularly harsh because all risks are overlapping in a single asset: there are risks due to the economy, risks due to the country (as it is going to be shown later on, country risk can be high or even the legislation around restructuration or reorganization is sometimes slightly faulty), risks due to entire sectors that are going through harsh periods, for instance sectors that are linked to commodities have no choice but to take the global prices which may simply not allow them to make ends meet. Basically, one could sum it all up by saying that the investors are looking at assets that nobody wants to buy: this is investment in distressed assets in Brazil. But does it seem right? How can such an asset be expecting to offer returns that are so attractive?

It is this paradox that I find the most interesting and I want to study and analyze how is it possible to take assets that are basically worth nothing on the mainstream market or at the hands of big financial institutions and create abnormally high returns. How does this asset class work in Brazil? What are the competences that allow asset managers, consultants in turnaround or restructuration or corporate lawyers to create value in situations that seem so desperate?

This research aims at two main objectives. First, and in a more descriptive manner, this study tries to understand and explain how does the whole distressed ecosystem work in Brazil and what are the special characteristics of the Brazilian distressed assets market that make it different from what can be seen in developed economies and other emerging markets. Then, looking at this Brazilian distressed ecosystem, it is possible to analyze how the market participants are able to create value out of these assets that have become close to worthless and what are the key competences of these actors that allow them to operate this transformation.

II. Literature Review

Generally speaking, there is not a lot of academic research on how asset managers are able to create value out of distressed assets or in special situations. Especially looking at geographic areas such Latin America and especially Brazil that are still considered by many market participants as mining fields, there are not many studies. Therefore, in order to establish the literature review, this study tried to broaden its horizons: it looked at the general references on distressed securities and what literature could be found on each type of asset in the US or developed markets and, when possible, in emerging markets or in particular in Brazil.

The study also try to look at what are supposed to be some of the core competences in order to create value out of these assets, especially when such competences are so well documented in academic literature: it is especially the case for bankruptcy law/restructuration and for turnaround management. Even when this literature is mostly abstract or applied to the US or developed market, it can prove useful to try to see what are the main take-away from this research.

First, the literature review will be examining how distressed assets were defined by the pioneering scholars on the subject and showing how different can such definitions be. Afterwards, literature will be reviewed on some asset classes that are developed in Brazil. Furthermore, as stated above, the bankruptcy laws literature will be examined. Finally, this study will examine the wide literature on turnaround management.

A. What is a distressed asset?

This first part of the literature review tries to tackle how academic literature has been looking at what is called in this paper “distressed assets”. This study intends to define this very notion of *distressed*. As said before, the term “distressed assets” doesn’t appear very often in literature but it is used in this research in order to designate the reality of a large array of diverse assets that can be currently seen on the Brazilian market. For instance, it is more common to write about “distressed securities” but it is slightly reductive as in Brazil the distressed is also in physical assets such as real estate, drilling ships, sugar mills or even in assets such as legal claims. Therefore, that’s why the terminology of “distressed asset” was chosen in this dissertation. It is important to look at how the most relevant academic papers have been used and interpreted in emerging markets, Latin America and especially Brazil or what are the papers that already describe these assets in these markets.

One of the mainstream scholars on distressed securities is Professor Edward I. Altman from NYU Stern. He could be called the father of the academic research on distressed securities. He especially looked at distressed debt and high yield debt that are the most representative types of distressed assets in times of crisis. In 1968, Altman had already published his seminal work that defined the “z-score” that is able to measure with some accuracy how likely a company is to go bankrupt with rather simple metrics at a time where financial theory was still in its early stages and data not readily available (Altman, Financial Ratios, Discriminant Analysis and the Prediction of Corporate Bankruptcy, 1968). In his paper, Altman looked at the securities from bankrupt companies and he defined bankruptcy as follows: “In this study, the term bankruptcy will, except where otherwise noted, refer to those firms that are legally bankrupt and either placed in receivership or have been granted the right to reorganize under the provisions of the National Bankruptcy Act” (Note p.589). Under this definition, Altman takes into account a lot of what is being called “distressed assets”. However, distressed assets cannot be simply defined within bankruptcy and it is decisive to analyze deeper and see how else Altman did look at distressed assets.

Altman’s 1968 article is quoted in almost 2000 academic papers (according to the Wiley Online Library). Therefore, Altman has had many followers that built up on his initial studies and conclusions. Among these papers that took some inspiration in Altman’s 1968 fundamental paper, about 40 of these papers try to apply it to a new emerging geography (they especially look at the predictability of bankruptcy in a new geographic area but also at other specific characteristics of financial distress applied to their geographic area) and nine are discussing Brazil: among the one discussing Brazil, eight are tackling Brazilian banks or Brazilian credit unions, they are especially looking at how financial distress can hit banks and credit institutions in the context of a bigger crisis or of a whole financial meltdown. This research doesn’t specifically exam financial distress coming from financial institutions because it represents a completely different problem, it focuses rather on the investable assets on the financial markets and it is not concentrated on the financial meltdown or crisis that brought these assets in distress. However, this study analyze more closely at the one remaining study that quotes Altman's 1968 article in the Brazilian context: The determinants of credit rating: Brazilian evidence (Murciai, Dal-Ri Murcia, Rover, & Borba, 2014).

In this rather recent study, Murcia et al. stress the point that "the great majority of previous studies regarding credit rating have been developed in the US, UK and Australia; therefore, the effect on other markets is still unclear, especially in emerging markets, like Brazil". In their study there is the analyze of a sample of public Brazilian company and their credit rating. The study gathers a series of data for each company and see how strongly correlated any specific characteristic is with the credit rating of the company. Once again, even if this piece of research is linked to the subject, financial distress, it doesn't really tackle our research question, the creation of value for distressed assets in Brazil. However, it does tell us that the subject of financial distress is still broadly unexplored and new in Brazil and also that the Brazilian financial market has some special and unique characteristics: the only two variables that reached a 1% level of significance of correlation with credit rating were leverage and internationalization much more than parameters such as profitability and growth that only explained credit rating with a 10% level of significance. It shows that investors are still very afraid of debt and leverage when it comes to a Brazilian company and that they are afraid of companies that are purely Brazilians and operate on the Brazilian domestic market (Murciai, Dal-Ri Murcia, Rover, & Borba, 2014). Therefore, it shows us how difficult it is to get in debt as a Brazilian company which explains that a business can get quickly to financial distress. As a last note, credit ratings were already mentioned in the introduction and it is no coincidence that they are also in the literature review. In fact, credit ratings offer a possible definition or determinant of a distressed asset. For instance, and as it can be seen in the figure 5 below, the rating agencies offer scales of credit worthiness with the worst ratings being are around CCC/CC/C and D at Standard and Poor's and Fitch Ratings or around Caa/Ca/C at Moody's. These ratings show securities associated with substantial risks and sometimes even in default (Freitas & Minardi, 2013). However, it may not be the easiest way for to characterize whether or not a certain asset is or not in the scope of analysis as "distressed". These ratings agencies will only look at the debt of rather big companies, most of them are being listed. Therefore, this definition can only hold for the distressed from the biggest issuers (although agencies tend to discontinue the coverage of distressed companies) and it doesn't help with all other classes of assets. Consequently, the ratings remain interesting for the study, but their reach is really limited in terms of distressed assets in Brazil.

Figure 5: Ratings by Agency, Interpretation and Numerical Scale

Investment Grade					Speculative Grade				
S&P	Fitch	Moody's	Interpretation	Numeric Scale	S&P	Fitch	Moody's	Interpretation	Numeric Scale
AAA	AAA	Aaa	Very high credit quality	1	BB+	BB+	Ba1	It has speculative elements and it is subject to substantial credit risk	11
					BB	BB	Ba2		12
					BB-	BB-	Ba3		13
AA+	AA+	Aa1	High credit quality	2	B+	B+	B1	It is considered speculative and it has high credit risk	14
AA	AA	Aa2		3	B	B	B2		15
AA-	AA-	Aa3		4	B-	B-	B3		16
A+	A+	A1	Medium-high grade, with low credit risk	5	CCC+	CCC+	Caa1	Bad credit conditions and it is subject to high credit risk	17
A	A	A2		6	CCC	CCC	Caa2		18
A-	A-	A3		7	CCC-	CCC-	Caa3		19
					CC	CC	Ca		20
BBB+	BBB+	Baa1	Moderate Credit Risk	8					
BBB	BBB	Baa2		9	C	C	C	Very close to default or in default	22
BBB-	BBB-	Baa3		10	SD	DDD	-		22
					D	DD			22
					-	D			22

(Freitas & Minardi, 2013)

Another relevant academic research that not only became a classic study but also inspired many other pieces of research is a report written by Altman and commissioned by “The Foothill Group” in order to look at the distress debt market in the US in 1990 (Altman, The Altman/Foothill report on investing in distressed securities : the anatomy of defaulted debt annd equities, 1990). In this report, Altman (1990) looks more closely at distressed securities. In particular, he gives an academic definition of distressed debt that remained classic in finance: a distressed debt has two characteristics (1) a spread of at least 1000 basis points over Treasury bonds and (2) a default rate of 50%. This definition is pretty useful because it no longer depends on the evaluation made by an analyst or any legal process, it is observable through the yield of a certain security (or the yield that ab investor expects) in order to see if a certain asset is in fact distressed. The CFA Institute, “the premier global association for investment management professionals” offers finance classes in order to obtain their CFA certification and their association also produces plenty of research, often with the help of professionals (CFA Institute, 2018). An article published by the CFA Institute tested that Altman’s definition held true for the period after Altman’s report in 1990. The authors conclude from their analysis that the Altman’s definition of distressed holds true over the long term (market liquidity being the reason for some short-term deviation) (González-Heres, Chen, & Shin, 2010). Although Altman's definition seems to hold true today according to that academic paper, it may not be particularly suited for Brazil today since expected returns for distressed assets seems higher than Altman's definition. This questioning will be included in the study to see what actual yield is expected by the investors in Brazil.

One last paper from Edward I. Altman is particularly relevant in the study of distressed assets. In 1998, Altman published a research paper that looked at how returns turned out to be over time for investors in distressed debt in the US. As the market became more and more important and the supply of new distressed securities shrank, it affected performance of distressed debt, especially in the years coming to the study (1997-1998). It is possible to see in the Figure 6 below this decrease in supply(Altman, Market Dynamics and Investment Performance of Distressed and Defaulted Debt Securities, 1998). This analysis made by Altman in this paper appeared particularly interesting. In this study, Altman analyses the group of distressed debt investors or "vultures", He sees that despite the fact that the supply of distressed securities has dropped as seen below, "there still exists an impressive number of investors who specialize in this rather unique asset class", therefore pushing performances down because of the competition for assets. Therefore, the market is becoming more mature with more investors and it is affected by economic cycles. At the end of the day, it seems that there is also an underlying trend that looked as if the market was maturing: i.e. profitability is declining as there are too many buyers on the market. This may question the study about the Brazilian distressed market, how mature is it? Did it reach today the same level of maturity and sophistication as described by Altman for the US in 1998? Are there a lot of buyers for the supply of distressed assets on the Brazilian?

Figure 6: Estimated Face and Market Values of Defaulted and Distressed Debt (1990-1998) (USDbn)

	January 31, 1990		August 31, 1992		August 31, 1993		June 30, 1995		August 31, 1998	
	Face Value	Market Value	Face Value	Market Value	Face Value	Market Value	Face Value	Market Value	Face Value	Market Value
Public Debt:										
Defaulted	$ 25.0	$ 11.4	$ 42.6	$ 20.5	$ 31.5	$ 15.8	$ 16.5	$ 8.3	$ 10.0	$ 5.0
Distressed	50.0	33.0	28.4	16.5	15.6	9.4	13.3	8.0	13.0	7.8
Total Public	**75.0**	**44.4**	**71.0**	**37.0**	**47.1**	**25.1**	**29.8**	**16.3**	**23.0**	**12.8**
Private Debt:										
Defaulted	75.0[1]	46.8	78.8[2]	47.3	75.6[3]	43.4	39.6[3]	23.8	23.0[3]	16.8[4]
Distressed	150.0[1]	112.5	52.5[2]	39.4	37.4[3]	28.1	31.9[3]	23.9	31.2[3]	25.0[5]
Total Private	**225.0**	**159.3**	**131.4**	**86.7**	**113.0**	**71.5**	**71.5**	**47.7**	**54.2**	**41.8**
Total Public & Private	**$300.0**	**$203.7**	**$202.4**	**$123.7**	**$160.1**	**$ 96.6**	**$101.3**	**$ 64.0**	**$ 77.2**	**$ 54.6**

(Altman, Market Dynamics and Investment Performance of Distressed and Defaulted Debt Securities, 1998)

Overall, Altman's contribution to the field is absolutely priceless and he's one of the pioneers in analyzing distressed securities. His intuitions and studies were also well exploited by other researchers and professionals that offer interesting insights for this paper. There are also different definitions for distressed assets according to various circumstances. It wasn't necessary to go through these different definitions in order to obtain a definitive answer on what are these assets, but it is rather to use them as an opener to look at what are really these distressed assets on the Brazilian market. It is also important to note that most of the data and research is about the US market. Researchers that tried to look at Brazil stressed the lack of study on the Brazilian market and It can be interpreted as an invitation for this study.

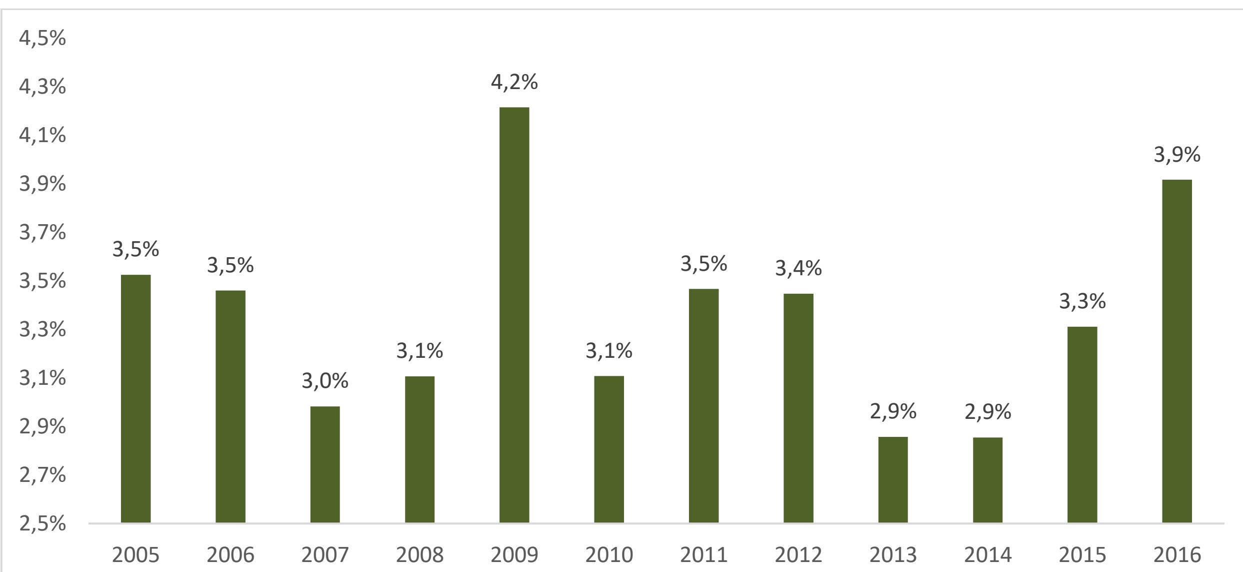
B. What markets are there in Brazil for distressed assets?

This section will try to look at the existing literature about sub-categories of the distressed assets in Brazil. As before, the section will go through existing papers that mostly tackle the subject in the US and developed markets, but it will try to find, when available, references that involve emerging markets or Brazil. The asset classes on focus are non-performing loans, private equity investments and *precatorios*.

Non-Performing Loans

An nonperforming loan (NPL) is defined as " a sum of borrowed money upon which the debtor has not made the scheduled payments for a period of time of usually at least 90 days for commercial banking loans and 180 days for consumer loans" (Investopedia, 2018). In a simpler way, NPLs are loans issued by bank where the creditors haven't been paying for the past 3 to 6 months. There are as many types of NPLs as there are types loans: credit card NPLs, car loan NPLs, mortgage NPLs, SME NPLs and many others. In a way, NPLs are a natural by-product of retail banking; i.e. when bank operate on a market, there will be failures to pay and NPLs will appear on the banks' balance sheet. Therefore, the NPL market is not exclusive to market with lower solvency or to episode of acute crisis, they are pretty much a natural occurrence in an economy with banking. However, when a crisis occurs, NPL ratio at banks (NPLs/Total loans) will probably increase as the income of creditors will be affected and their capacity to pay may be impacted as well. As it can be seen in the figure 7 below, during the recession years in 2015 and 2016, the NPL ratio has increased materially in Brazil. It created a big boom for the industry that is going to be studied in this paper.

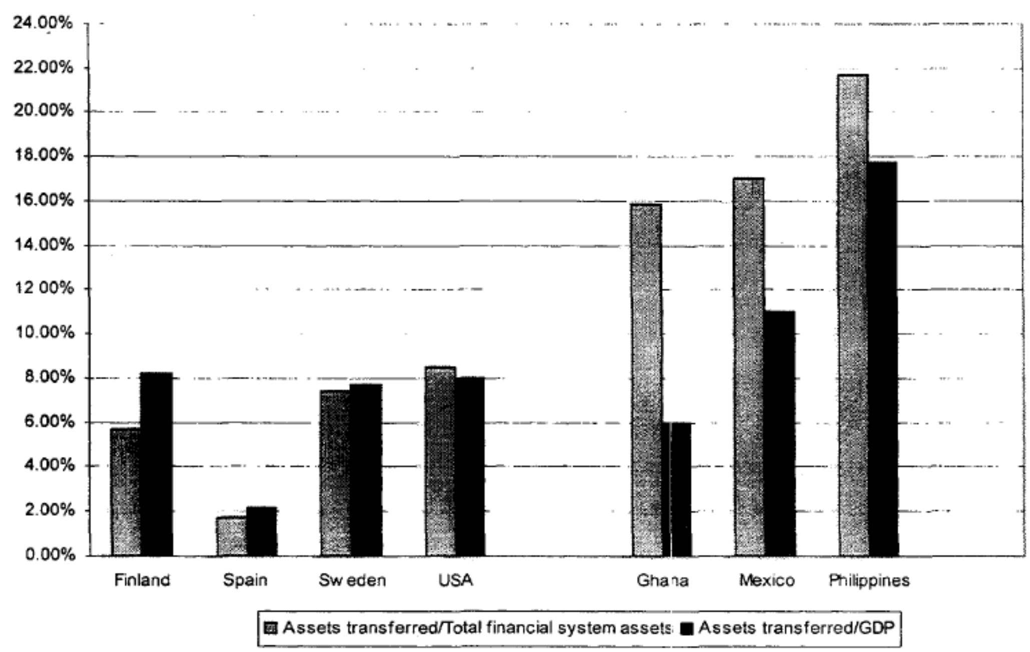
Figure 7: Bank NPLs to total gross loans in Brazil (%)



(World Bank, 2018)

However, big financial institutions and banks are not always equipped or ready to deal with large numbers of NPLs. Therefore, some asset managers have stepped in and have taken an active part in the management of bad debt. They can often take in charge corporate or bank restructuring, liquidate bad loans. In a paper published by the World Bank, the authors look at use of asset management companies in the resolution of banking crises across different countries, developed economies or emerging markets. The figure 8 below presents some of the data compiled inside the study: thanks to this figure, it can be noticed that it is not in the developed markets that these NPLs are important as a % of total financial assets in the economy or as a % of GDP but it is rather in emerging markets especially middle income ones such as the Philippines and Mexico where the NPLs transferred to asset managers represent a relatively big part of the financial system (Klingebiel, 2000). These middle-income countries offer ground for comparison with Brazil and it is possible to imagine that in Brazil, too, the NPL market is relatively important.

Figure 8: Assets transferred to asset management companies



(Klingebiel, 2000)

More than being traded, the NPL market has institutionalized in developed markets as NPLs have become an "established asset class". A research report from Deutsche Bank dating back from 2007 offers a description of the the German NPL. It tackles the subject of how the NPL market established itself as an entire market in Germany and how positively it served retail banks. It is particularly interesting because it may describe with the benefit of hindsight a process that is currently going on in Brazil (even though it is not exactly in the same form because of the Brazilian financial system structure and regulations) (Schäfer, 2007). Therefore, the Brazilian NPL market should be analyzed to see how it is developing and how authoritative are these asset managers that take in charge NPLs in Brazil.

However, there is a very comprehensive study on the valuation of NPLs in Brazil written by Prudente de Toledo (2013). This study looks at the Brazilian consumer loans made to private individuals where interest or principal haven't been paid in the past 360 days and with no guarantees. Using a proprietary database, the author creates a financial model where he estimates the recovery ratio and therefore determine a price for the NPL portfolio. In his introduction, he gives a description of the development of the Brazilian NPL market. Even if the first transaction occurred in the end of the 1990's, the market really expanded in the middle of the 2000's when the liquidity increased on the Brazilian market and the credit base was growing. It is at that time that platforms called "master servicers" emerged on the market, they created a bridge between selling institutions and investors.

NPL gave birth to a whole market worldwide including in Brazil. To come back to the paradox developed in the introduction, it is possible to see that the asset managers that are buying these defaulted loans seem to have a very different valuation from the banks. In the hand of these big financial institutions that issued the loans, it seems that the NPLs are worthless. However, for the investors, they seem to be an opportunity and one could question how these investors are able to unveil a value that seems inaccessible to banks.

Private equity investments in distressed assets

Another established market for distressed asset is private equity. Private equity is not necessarily involved with distressed assets but there are some pretty interesting overlaps between the two. In particular, private equity could play a role in the recovery and turnaround of a financially distressed company.

Private equity firms look at significantly improving the operational and financial performances of the company they acquire in order to maximize their return. Therefore, financially distressed company can become attractive target for them as they are often being sold at significant discount while having challenging operations that offer a good potential for improvements. This subject was already tackled in some academic paper especially A Theory of Private Equity Turnarounds (2007) by Charles Cuny and Eli Talmor. It examines how private equity firms have been able to turnaround failing companies they bought. The authors create an interesting model that looks at the different parameters involved: they look at how buyouts by private equity firms are efficient at turning around companies especially through addressing operational problems, replacing management or changing the incentive structure. They compare the results of these buyouts with alternative solutions. Therefore, although a private equity buyout has costs such a higher cost of capital, high leverage and has a big bargain power over the company, it represents a good framework for a turnaround in many situations (Cuny & Talmor, 2007).

However, the theory above based its results and conclusions on the US private equity market. The US have been the birthplace of private equity and such takeovers have become pervasive and executed by seasoned professionals. How is such a market evolving in Brazil today? Frédéric Augusto Rozeira de Mariz and José Roberto Ferreira Savoia wrote Private Equity in Brazil: A Comparative Perspective in the journal of private equity in 2005. The research is a comparative study between the private equity market in the US and in Brazil. They underline how dependent private equity is of regulation: especially regulation that encourages transparency, brings protection to creditors and encourage pension fund investments. Therefore, their research will encourage this study to look at these aforementioned factors and see if the specificity of these regulations in Brazil is actually affecting distressed assets in the country. However, the whole study suggests that Brazil in the middle of the 2000 decade was moving in a rather good direction thanks to legislation moving forward and more investments, it was basically following what happened in the US market (De Mariz & Savoia, 2005). Is it still the case today after the crisis? Has private equity grown to a mature market Brazil? Are there looking at the distressed assets generating by this Brazilian crisis?

Precatórios

Precatórios are probably a less mature and much more Brazil-specific asset class than the other topics developed above. "The securities, commonly referred to as *precatórios*, are orders issued by courts for government institutions to pay damages, contractual differences, expropriations and other monetary awards" (Hayward, 2009). It is difficult to find estimates of how much the outstanding *precatórios* represent in BRL value. As per to Hayward (2009), for the *precatório* definition, it is estimated by the Brazilian Bar Association that there could be up to USD100bn worth of outstanding *precatorios* (c.6% of the Brazilian GDP in 2009). It can take decades for a *precatorio* to be paid and they sometimes end up being transmitted from one generation to the next. There doesn't seem to be any kind of provisions in the public balance sheets for *precatórios* (Hayward, 2009). In 2000, a constitutional amendment introduced in the Brazilian constitution of 1988, the possibility to sell one's *precatórios*. This created an alternative for the holders of the claim that could get more liquidity, but it also created investment opportunities for distressed assets investors (Martone & Santos, 2018). However, this reform didn't help so much with the underlying problem of *precatórios*: it still can literally take ages to get paid and even if the legal claim can be sold, it will be with a hefty discount that factors in the risks and delays in payment.

Recently, *precatórios* suddenly re-emerged for many investors. Some very famous *precatórios* still outstanding are a legacy of when, in the 1980's *the Instituto de Açúcar e Álcool* (IAA) was fixing the prices of sugar and ethanol below production costs, hence creating a huge prejudice for the sugar and ethanol sector. Later on, the syndicate of sugar and ethanol won a legal battle and therefore got awarded *precatórios* for the government to repay them. This action alone is responsible for the highest fee ever paid to a law firm in the Brazilian history (Brasilagro, 2018). As of today, very few IAA *precatórios* have actually been paid. On the contrary, the sugar and ethanol sector is going through a rough patch today because of an extended period of low sugar prices. Therefore, many sugar and ethanol mills have rediscovered these old *precatórios* on their balance sheet in the past few years when trying to get liquidity. On the other hand, many investors have bought these titles and have entered litigation to put these legal claims forward.

Literature on the subject is scarce but in order to explain the specificity of the Brazilian distress market it was deemed worthwhile to look at academic research on *precatórios*. The most relevant academic paper found aims at analyzing the disclosure of *precatórios* in accounting terms. The authors justify their study by the perception that more than half of *precatórios* are not registered in the public accounts. And what the authors found is fairly interesting, they believe that it is the current legislation itself as well as the non-respect of fundamentals accounting standards that lead to this misrepresentation (Ferreira & Lima, 2012). They believe that this creates a system where both the holder of the *precatórios*, the government and the society suffer from that lack of transparency. Compared to the NPL market, it is a very different market environment: instead of an established asset class with a competitive and organized market. *Precatórios* are a relatively obscure asset. Even owners of *precatórios* are sometimes unaware they actually own these claims. Although being a closely regulated market, the sale of these claims is still not fully institutionalized, and investors are facing a great deal of uncertainty.

At the end of the day, various markets have developed in Brazil around distressed assets. Also, some academics have laid solid foundations for the study of these markets, but they don’t necessarily look at how value is created by the distressed investors on these markets. This is why this study hopes to use this academic knowledge and build on it the analysis of value creation for distressed assets in Brazil.

C. Bankruptcy law and value creation

One significant characteristic of distressed assets and especially in Brazil is that distressed assets are often linked to legal processes, compliance problems or bankruptcy. Sometimes it can be the legal processes themselves than can put a company into financial distress (corruption accusation, lawsuits, family disputes in court etc.). Therefore, distressed asset investors often require legal counsel in their day to day activities – whether it is internalized or not in their organization. For distressed assets, you could even see some kind of legal activism from investors where they would invest in a company or in an asset and bring in legal counsel. This is also why lawyers are so central in this ecosystem of distressed assets here in Brazil. Consequently, this section examines how these themes have been treated in academic literature and pinpoint some specific parts of the research that could help with the analysis.

Even if some challenges remain, the Brazilian bankruptcy law has been moving forward in the right direction and it has allowed for the distress market to expand and attract a wider base of investors, especially foreign investors. It is related in an article written by partners from a Brazilian law firm, Motta, Fernandes Rocha *Advogados*: "the new Brazilian Bankruptcy Law (Law No 11,101 of June 9 2005) significantly modified bankruptcy legislation by aligning it with the principles set out in Chapter 11 of the US Code. It revoked the previous law, Decree-Law No 7,661 of June 21 1945, which had been prepared for a different economic situation and was considered to be inadequate for the needs of the new Brazilian economy." (Cantidiano, Fonseca Lobo, & Kalansky, 2008). This article shows that Brazil is moving forward with its bankruptcy law and that it tries to emulate the US framework that has proven to be successful. Therefore, when looking at other academic papers on this legal aspect it is possible to also look for research on Chapter 11 and its practice in the US. Another important point from this paper is that the legal entity that created an appropriate vehicle for such investments, principally through private equity funds, was only created in the 2000's. (Cantidiano, Fonseca Lobo, & Kalansky, 2008). This article was one of the most relevant article on the legal aspects of bankruptcy law that we could find while reviewing academic literature on the subject. It shows us the genesis of distressed asset markets in Brazil through improvement of the legal framework for investors.

Following this article, this study reviewed more academic research on financial restructuring under Chapter 11 for US companies since there is not much to read on Brazil. Brazilian legislation has been advancing towards Chapter 11. Therefore, this paper looked at a paper on the process of restructuring through Chapter 11 and the outcome of restructuration on the capital structure. The authors especially looked if companies were able to recover after finishing a Chapter 11 reorganization. Therefore, this paper can help see if the whole process is able to create value for the company and therefore for people that could have invested in its equity or in its debt during the process (Heron, Lie, & Rodgers, 2009). Therefore, it is necessary to see in this study if *recuperação judicial* (court-ordered restructuring in Brazil) is able to create value for Brazilian companies that go through it and its investors.

Furthermore, it also seems that often it is not the law itself that can prevent productive restructuring operations but rather the way legal processes are carried on and this is a very important point for the analysis. One academic paper that shows this gap is called “Get in line: Chapter 11 restructuring in crowded bankruptcy courts” by Benjamin Iverson. He looks at the full process that a company has to go through as it is trying to reorganize through Chapter 11. A lot of the process doesn’t depend on the law itself but how it is practiced in court. This paper looks at the US, but the legal process aspect is all the more so important in Brazil. For instance, he finds out that when court are less busy, companies that go through Chapter 11 reorganization in these courts are “less likely to sell assets or obtain debtor-in-possession financing” (Iverson, 2017). What this academic paper shows us is that this study should not only look at bankruptcy law in Brazil but needs to make sense of how the law is implemented in Brazilian courts and what is the experience for companies when they are in a process of “*recuperação judicial*”.

At the end the day, the literature on bankruptcy law underlined that legal processes are key for value creation when investing in distressed assets. It will be a key aspect to examine, including how is the Brazilian bankruptcy law evolving and how does it allow investors to create value with distressed assets: what are the legal competences required for investments in distressed assets? How can one make a difference in such a process? But it is also necessary to see what is the experience that investors have to go through when going to court with distressed assets.

D. Turnaround by distressed investors and value creation

Another aspect already mentioned above is the strategic/operational component of value creation with distressed assets. What is meant by that is that investors can take over the equity/debt/assets of companies in financial distress and by influencing how the company is managed and implementing best practices, they can hope to improve the operational performances of the company. By turning a company over, they can therefore realize a significant return on the equity/debt/assets of the company they took over. The academic research on turnaround management is much more developed than the one on distressed assets in general therefore it gives more opportunity to uncover insights for value creation with distressed assets. It is relevant for the study since it expects that one of the core competencies for distressed investors is the strategic ability to turnaround a business or an asset.

One of the very first authors to develop an academic theory on turnaround management is Charles W. Hofer in 1980 in his paper "Turnaround Strategies". What is very interesting is that the author is very precise on what diagnostic needs to be made when analyzing a company and then measures than need to be implemented in order to solve the underlying problem in the company's operations. He doesn't give general guidance but rather shows that there are very different types of downturns or difficulties for a company and the author shows how each turnaround strategy/tactic is exclusive to each type of difficulties (if you're close or very far from your revenue-cost breakeven, it calls for very different solutions) (Hofer, 1980). For this study, this paper questions what are the types of solutions that require the Brazilian companies in the post 2013 crisis era. Also, it could be interesting to compare what is actually being implemented in distressed businesses in Brazil to Hofer's theories and see how specific Brazil is in terms of turnaround management.

In order to furthermore explore the managerial theories of turnaround strategies, the study looked at more modern approaches to turnaround strategies and how academic research specifically looks at turnaround of financially distressed businesses. One of the most interesting studies that was reviewed is Corporate Financial Distress and Turnaround Strategies: An Empirical Analysis by Sudi Sudarsanam and Jim Lai (2001). The authors of the paper intended to look at the numbers behind corporate turnarounds in order to evaluate what is really effective and why it could be so. In order to do so they look at very different dimensions: operational, asset, managerial and financial. They classified companies between, recovery firms that eventually recovered and succeeded in the turnaround and non-recovery firms that didn't manage to survive corporate financial distress. They quantitatively analyze the difference in results. They concluded that the recovery firms were able to "adopt growth-oriented and external-market focused strategies" while non-recovery firms only engaged in "engage in fire-fighting strategies" (page 1) (Sudarsanam & Lai, 2001). After a few years of recession, it is possible to see such differences between firms. Also, this study concerns British companies and it would have been great to find another paper that looks at Brazil or at least an emerging or Latin American country but unfortunately such a study doesn't seem to exist so far.

Furthermore**,** another paper was one of the most helpful this review came across: Strategies for business turnaround and recovery: A review and synthesis from Schoenberg, Collier and Bowman.

The authors analyze all the relevant literature in turnaround management. It shows the big consistencies between different strategies and what are the must-do for a company that needs to turnaround. This synthesis helps a lot in order to have a conversation with turnaround managers. The authors highlight the limitations of the turnaround management literature so far: one of them is that they focus very heavily on the US and/or Europe but today emerging markets have become very important, especially for the distressed players. Therefore, it opens a clear way for this research on Brazil, especially to look at how investors and asset managers are able to create value from distressed assets with such turnaround strategies (Schoenberg, Collier, & Bowman, 2012).

One last piece of research seemed interesting: it analyzes the role of distressed investors, called "*vulture investors*" in this paper, and how they involve on the market for control of distressed asset. Hotchkiss and Mooradian (1997) analyze a sample of 288 companies that defaulted on their public debt. Their conclusion is pretty interesting for this study as they go much further than authors quoted above: they find that the performances of the firms after the reorganization and restructuring is significantly greater when the distressed investors where involved and gained control of the company. After their analysis, they are able to conclude that distressed investors are able to "add value by disciplining managers of distressed firms" (page 1) (Hotchkiss & Mooradian, 1997). In this study, the authors are able to unveil a driver for value creation by distressed investors by stressing the importance of the change of control for the benefit of the distressed investors. It is often this change of control that allows for the implementation of the right reorganization/restructuring.

After looking at the literature on turnaround and reorganizations implemented by distressed investors, it seems that distressed investors are generally able to create value by taking control of financially distressed firms and implementing a series of strategy/tactics. The studies in this section of the review analyzed companies and strategies applied in the US and other developed markets. Therefore, it seems like a clear invitation for this study to consider, and to show such reorganization/restructuring/turnarounds are made in Brazil and how they are generating values for investors.

At the end of the day, the literature review shed light on many aspects of the study. It was surprising to find so few research papers on distressed itself and even less on it in the Brazilian context. As a response to that, I was able to read that many academic papers felt this lack of research for emerging countries and Brazil in particular.

III. Research Methodology

After having discussed academic literature around distressed asset, various limitations were revealed for the study of this topic in Brazil. This specific topic calls for special research method because of these limitations. This section will lay out a methodology that allows the study to go around such limitations and create academic knowledge on investments in distressed assets in Brazil.

First of all, it is necessary to study what could be the most relevant research method and why this study decided to focus on a more qualitative method through interviews. Secondly, to implement this qualitative method, the methodology needs to lay out a clear study design and data collection procedures that will be used during the study. Thirdly, in order to strengthen the methodology, the validity and the reliability of the study will be reviewed. The last section of the methodology will look at the way the interviews themselves will be incorporated into this study and how the results are going to be exploited for results.

A. Research approach

The hypothesis in this paper is that even if it is difficult to find academic knowledge on distressed assets in Brazil, there are many market participants that seem to understand the market. They've been operating in Brazil often for quite a long time and are achieving positive returns. Our hypothesis is that this knowledge is being retained inside the companies that leverage it for investments or consulting. Therefore, there is not much numerical data openly accessible to be analyzed. Therefore, this study requires the use of a more qualitative approach through interviews.

Shortcomings of other research method

As explained above, other types of research method prove not to be appropriate for this research paper. It is true that a more quantitative approach may have been firstly contemplated as it allows to have more rigor in an analysis on what can exactly create value with distressed assets. In this case, the approach could have been to use data on returns from a sample of different

Brazilian funds and then cross-analyzing the returns (that would amount to value creation) with either some other sets of data (the size of the fund, the way the funds are financed etc.) or some characteristics (assets in the fund, experience of the team etc.). First of all, there is an important lack of numerical data on the subject in Brazil. This is not only the researcher's perspective on the subject, but it is also the general sentiment easily underlined from the literature review where authors would often stress the lack of knowledge on emerging markets, especially Brazil.

This is not only opposed by the lack of data but how is it even possible to quantify the value created by certain types of actors on the Brazilian market? For instance, the value generation doesn't only originate from funds themselves but as exposed earlier in this paper, value generation also comes from corporate lawyers, consultants in restructuring or in strategic/operational turnaround. In fact, investments in distressed assets depend on a whole eco-system of actors. These types of market contributors don't generate returns or other similar sets of data that would be publicly usable by external researchers, but they rather participate to the bigger picture of investments in distressed assets in Brazil. Beyond the lack of data, the way this market works makes it very difficult to go for a quantitative analysis.

Therefore, a quantitative analysis is not possible on this specific subject. Then, if this paper has to study how managers create value out of distressed assets, it needs to look at a more qualitative approach.

Background of the research method

Therefore, a more qualitative method was required in order to go forward in this study. As it's already mentioned above, some knowledge of the subject seems to exist on the market. Following intuition and hypothesis stated in the first paragraph of this methodology, the most direct way to gain knowledge would be to go and ask directly to selected market participants. Thus, conducting interviews seemed like the best possible choice as it means that the researcher can go after the knowledge where it is.

Why should this study focus on interviews? In fact, this qualitative study decided to focus on data that arises from the interviews and the theoretical references from the literature reviews. Since, the subject is unexplored, there are not many data sets apart from that, another support that can be used is the documentation from the companies that are going to be interviewed. However, this support is most often commercial, and it is better reflected from the interviews, there the contribution to the analysis of these commercial documents is going to be secondary compared to the interviews.

In the 9th chapter of their 2006 book, Creswell and Plano Clark (2006) detail study designs for qualitative studies (Creswell & Plano Clark, 2006). Creswell and Plano Clark provide some important guideline that are going to be examined in this section (Figure 9).

Figure 9: Qualitative Data Collection Types, Options, Advantages and Limitations

Data Collection Types	Options Within Types	Advantages of the Type	Limitations of the Type
Interviews	• Face-to-face—one-on-one, in-person interview • Telephone—researcher interviews by phone • Focus group—researcher interviews participants in a group • E-mail Internet interview	• Useful when participants cannot be directly observed. • Participants can provide historical information. • Allows researcher control over the line of questioning.	• Provides indirect information filtered through the views of interviewees. • Provides information in a designated place rather than the natural field setting. • Researcher's presence may bias responses. • Not all people are equally articulate and perceptive.

(Creswell & Plano Clark, 2006)

As it can be seen above, qualitative interviews provide with plenty of options. In this case, the most useful option is a face-to-face in-person interviews as it creates the possibility of a dialogue, especially in the case of distressed assets. It is a rather complicated issue and there are not many market participants. In a face-to-face interview, there are considerable possibilities to learn as much as possible from the contributors (as stated in the advantages, the participants can provide historical information).

Therefore, the research approach of qualitative interviews represents the most solid methodology for this study and it is why it is going to be used in this specific case. For a better understanding, it is necessary to detail the data collection procedure that is going to be implemented in this academic work.

B. Data collection procedure

In this study, the data collection procedure will be designed to ensure the integrity of the study and to best create academic knowledge on the topic. For this study, a framework was needed. The most comprehensive way to objectively collect data through this study was to create a questionnaire.

Preliminary process

One important point to mention before the data collection procedure is that instead of directly starting the study, it was necessary to first do preliminary encounters with market participants to see what the most relevant subject were and to imagine the most relevant data collection procedure for this study. Therefore, before even starting to draft a questionnaire, some preliminary discussions were organized. It was especially the case with colleagues and former colleagues that worked in the sector and two big actors of the sector that were not specialized on a single distressed asset class but were generalist distressed players.

Combined to all the academic research that led to the redaction of the literature review, these open-ended discussions brought the right interrogations and began to provide hypothesis that would help answer the main research question of this paper: how is value created out of distressed assets in Brazil? Thanks to these discussions, it became possible to create a relevant list of question for the study.

Creation of a guideline for questions in interviews

As stated above, as the study must proceed through interviews, it means that a list of questions needs to be designed. The most important step in the study was to create this guideline of questions for interviews. This list of questions needed to be done before the study started as it needed to remain the same during the whole process to ensure there are comparable data collected across all the contributors.

For the creation of these questions, there are several specificities and constraints that needed to be addressed in order for the questionnaire to be both relevant for study and actionable in practice:

- One specificity comes from the fact that people that need to be interviewed in this research don't exactly have similar profiles. As stated along the previous sections of this paper, value creation in the Brazil distressed asset market is not only realized with asset managers but throughout a whole ecosystem of corporate lawyers, restructuration consultants, financing consultants etc. and it is difficult to design a one-size fits all questionnaire in this case. Therefore, even if the list of questions stays the same for the whole study, there has to be some kind of adaptability to the contributor. An adaptation to this, is for the list of questions to first contains a general set of questions asked to every contributor but after these, there are more "specialty" set of questions that are only asked to some contributors according to what they do. For instance, some part of the list of questions concern only a special kind of interviewee – i.e. if the interviewee works around turnaround management, the interview will rely more on the "turnaround management" section of the questionnaire. The list of questions can be found in the annex.

- Who exactly are the contributors for the interviews is going to be detailed below however it was already mentioned that they are successful professionals with a tight agenda. Therefore, the list of questions had to be kept small. Also, contributors have all liberty to answer to any type of question, follow their own line of thoughts, these professionals often have the most insights on the subject therefore it makes more sense to be able to listen as much as possible. The drawback is that sometimes it is difficult to go through all the questions, but it seems natural for this type of interview process. Also, each business is

> unique and the insights one can gain from each interview won't necessarily come from a standardized question list, therefore beyond the question, and when necessary, it was possible to get deeper insights by freely following the discussion with the contributors.

Once the questionnaire was designed, the more difficult part was to select contributors that would be willing to answer the questionnaire.

Selection of contributors

As stated several times above, the contributors this study intends to interview are professionals that are involved with distressed securities. In the first instance, this research was initially meant to look at the asset managers involved with distressed assets however by having some preliminary discussions with them and other actors, it was understood that this whole ecosystem of distressed is much broader than first thought; it is not only the asset managers and investors that create value but it a broader scene of corporate lawyers, turnaround consultants, restructuration experts and financing consultants that are responsible for creating the value in this market. Therefore, instead of only focusing at these asset managers and investment boutiques, this research broadened its horizons in order to have a real look at the bigger picture of distressed assets in Brazil. However, there is part of this ecosystem that is consciously left aside for this study: it would have been possible to interview professionals that work at the companies that are at the origin of the distressed securities – for instance, the company that actually goes into bankruptcy. Instead, this study would rather focus on the actual process of value creation with these types of investments that is on more on the investor side.

More specifically, the market participants were thoroughly researched and there were discussions with different market participants. Thanks to that an excel containing the companies that were potential contributors was established. For each of them an asset sub-category was assigned and other various comments. In distressed assets there are different type of assets, therefore, for instance, it was important to try to get contributors from each asset class, and inside of each asset class to try to have several different contributors when it is possible in order to obtain a real sample for the study.

It has to be said that it is somehow a big leap of faith to try to address such questions and hope that seasoned professionals will be disposed to help this study and give relevant information. It is very understandable that they have a tight schedule and there is also a problem with contacting them. However, the Brazilian corporate world is much more open than what exists for instance in Europe and it may give this study a chance to have access to a wide array of professionals in the area. Therefore, if possible, the sample size should be around 10. According to Creswell and Plano Clarck (2006), the right sample size for a phenomenological qualitative study such as this one should be from 3 to 10 individuals interviewed. However, this study should aim at a number closer to 10 because 3 may not be enough because of the diversity of potential contributors (asset classes, roles etc.). Another approach we rely on is the idea of saturation advanced by Charmaz (2006), she states that a study doesn't need to collect more data once the categories are saturated, i.e. when the newly collected data doesn't bring new insights to the study. Therefore, this study is going to stick with a sample size of around 10 contributors while being attentive that each new contributor is giving new insights to this study (Charmaz, 2006)

Therefore, the parameters to select contributors for the thesis have been laid out. Furthermore, to be comprehensive, it is needed to understand how this research plans to collect data in practice.

Data collection environment - space and time

As stated before, potentials contributors are often very busy so there is no leeway on where they can be interviewed. The interviews happen at the office of the contributors. The fact that the interview happens in the contributors' office doesn't seem to affect the study itself, the set up ends up being the same: they are alone and both of us are sitting at a table in a meeting room, undisturbed. Therefore, the setting is almost the same for all the data collection process.

In terms of timing, ideally an interview would last around 30 minutes. Moreover, the interviews took place between March 2018 and May 2018. It is further explored in the Validity and reliability section how this period may be special for distressed assets or Brazil in general.

Therefore, the study aims at creating an objective data collection procedure that will be the foundation for an objective research.

C. Validity and reliability of the research

As exposed above, the method consists of interviews with professionals of distressed assets. In order to further guarantee the maximal objectivity and consistency in the results, this section is going to establish methods and give disclosure that can ensure the validity and reliability of this study.

Background of the researcher

In order to give appropriate disclosure in this study and ensure validity of the research, this part intends to describe the background of the researcher, especially his link to the subject and contributors to the study. The researcher has worked almost three years in the finance industry generally speaking. Focusing on investments in distressed asset, he worked one year for a fund specialized in high-yield/distressed debt in Mexico City (Mexico) and then worked for the same investment fund from São Paulo (Brazil). The knowledge acquired from this professional experience was put at work in this master thesis but in order to guarantee objectivity in the results, this fund has only been consulted for preliminary discussions but didn’t contribute directly in the study itself.

On the contrary, this previous experience gave the opportunity to focus on the right subjects directly with contributors and market participants in general. The methodology exposed the constraints of data collection and being acquainted with complicated subjects was of significant help. Especially being knowledgeable about the big operations that happened on the Brazilian market (Sugar & Ethanol, Off-shore drilling, Brazilian construction companies, bankruptcy of Oi etc.) helped to create a certain credibility around the project. Working in distressed investing in Brazil gave a first understanding of the most critical subjects on the Brazilian markets: sugar and ethanol sector, *precatórios* etc.

Methods employed to get access to the interviewees

There are no real “gatekeepers” in the case of the interviews intended for this research. After contacting the potential contributors either directly by email (cold call) or by using a referral, the researcher is generally invited to have a meeting with contributors directly at their office. To facilitate the process, the researcher used his academic and work credentials in order to convey professionalism to the potential contributors. Therefore, no problem aroused from interviewing the contributors in their workplace.

Possible bias in the study?

As it should, this study aims at maximal objectivity. In order to do so, this section tries to disclose important factors that could have affected the studies. The background of the researcher was already detailed above so it won’t be repeated in this section. To ensure validity and reliability of the study, this section is not only about disclosure but offers mitigants to the potential issues that are raised.

First, seasoned professionals in the distressed asset world may share the same bias in sharing information, especially giving different meanings for certain words. Therefore, this study tried to use open questions to make sure the questionnaire fostered an open dialogue where a contributor could speak what he/she had on his/her mind.

Also, the interviews took place between March 2018 and May 2018. This period of time was very rich for Brazil: the road to presidential election was very tumultuous with former president Luiz Inácio Lula da Silva turning himself in to the police, possible frontrunners renouncing to run for presidents while this weighed in on the economy with a quickly depreciating real. Could this specific period have influenced the study? It is possible but in order to mitigate the risk, the context was given a very significant importance in the interviews and discussions. Especially the views of the contributors on the current economic context and the incoming elections in Brazil and how they perceived the dynamic in their sector.

Therefore, it is necessary to say that a qualitative study cannot be perfect, but steps have been taken to increase the objectivity in this research. Once data is collected, how does this study plan to use them in the analysis?

D. Exploitation of the data in the study

It is necessary to make sense of the data collected during the interviews and in order to do so some details of the methodology will be laid out in this section.

Contributors

In sum, 11 people have been interviewed. These interviews were made in English, Portuguese and French to foster open conversation with the contributors. It fits with the sample size that was deemed necessary in this methodology. It is slightly higher than what was first intended but it gives the study a wider range of data that can only benefit the research.

Figure 10: Contributors to the study

	Type of contributor	Type of asset	Length of the interview
Contribution #1	Advisory and capital raising	Capital raising for local funds	c.30 minutes
Contribution #2	Turnaround/Restructuration consultant	Companies in financial distress	c.30 minutes
Contribution #3	Corporate lawyer	Companies in financial distress	c.20 minutes
Contribution #4	Corporate lawyer	Companies in financial distress	c.50 minutes
Contribution #5	Asset manager	Distressed real estate	c.50 minutes
Contribution #6	Asset manager	NPL	c.40 minutes
Contribution #7	Turnaround/Restructuration consultant but also private equity investor	Distressed companies and distressed debt	c.20 minutes
Contribution #8	Asset manager	Distressed debt	c.30 minutes
Contribution #9	Asset managers	Several asset classes	c.30 minutes
Contribution #10	Asset manager	Distressed debt and precatorios	c.30 minutes
Contribution #11	Private equity investor	Companies in financial distress	c.30 minutes

It is all the more satisfying as there is a very diverse set of contributors that covers most sub-asset classes.

Data recording procedures and confidentiality issues

The initial project was to transcribe and include all interviews in annex of this paper. The interviews would have been anonymous with all names mentioned censored. However, the contributions were very rich and to further guarantee the anonymity of the contributors and their strategic positioning on the market, the transcriptions of the interviews won't be published alongside this academic paper. This decision is also positive towards compliance with committee for ethical compliance in research involving human beings at FGV (CEPH/FGV) as it reinforces the privacy of the contributors.

During the interviews, the researcher would present its work, its research question with some context to the contributor. The participation to the study was already made clear in the emails the researcher first sent but the researcher would make it clear orally when starting the interview. Furthermore, the researcher would ask for permission to record the interview, also offering the possibility to not record it and instead take notes. Fortunately, all contributors agreed to be recorded which gave a very accurate interviews for the data analysis.

Data analysis and interpretation

During the interviews, the discussions were recorded but in order to make sense of the data, notes were taken in live to be able to highlight accurately the most important data points. Across interviews similar data points could be observed and give common themes. There was a progression from interview to another as it was possible to close down on the most relevant themes as time passed.

Once all the data was collected, the process of data analysis consisted in going through all these notes and complete these notes by going again through the audios of the interviews and using the material often given by the contributors about their activities. The conjunction of all this material revealed convergences and divergences around certain themes along the line of each contributors, asset classes and professions. Some of these themes would have already been mentioned in the literature review and the use of academic papers offers an interesting complement to the material that comes from the data collected in this study.

With the emergence of common themes and narratives from the data collected and the literature review, it became possible in the analysis to group all the information under each common theme and thanks to the associations of data, it is possible to obtain a descriptive analysis for these themes. Afterwards, it is possible to work even more with the data and to interpret it in a more analytical process. Such interpretation involves something that is not necessary pure paraphrasing of what was heard in the interviews but rather to go beyond that and write an analysis can build upon the common themes encountered. This methodology laid out the big principles alongside this research is meant to be written. The common themes announced above are examined in the discussion of the results.

IV. Discussion of Results

The interviews were made and processed according to the methodology presented in the segment above. As shown in the introduction and literature review, the subject this research is looking at is still mostly unexplored, therefore it is necessary to start from the very beginning in a descriptive way on some issues. The finale ambition is to be able to give an answer to the research question raised in the introduction: how are asset managers able to create value out of distressed assets? This section wants to create a path that leads to this answer by first laying the right foundations.

First, it is necessary to discuss what has been learned in the interviews on distressed assets, how these assets can be defined in the lights of the discussions and how different are they in Brazil versus what was seen in the literature review. Secondly, the specificities of the Brazilian market for distressed assets will be laid out in order to understand better how it works in the country. The last section will look at what stood out in the study as the most important competences that allow the Brazilian market to create value out of distressed securities.

A. What are distressed assets?

One of the interesting point of this study is that it looks at the novelty of the market and especially it reflects on how the actors define themselves and their activity. Along this study, many definitions of a distressed asset have been discussed but it is most relevant to see what the opinion of these professionals is and how do they think that something like distressed happens to be different in Brazil. It is mainly the answers to questions such as “What is the definition of a distressed asset for you?”, “Do you think that your asset class/competence is different here in Brazil?” and many other questions. It is a first step to look at how value can be created.

Distressed as a legal status

First, distressed securities can be identified as assets owned or issued by company that fell into the legal status of judicial reorganization or bankruptcy. Many of the contributors to the study identify distressed assets with the assets that are related to companies that either filed for *recuperação* *judicial* (i.e. or court-ordered restructuring; this terminology is first mentioned in the literature review and will be explained in more details in the section C of this chapter), or even filed for bankruptcy. Especially the contributors that work at law firms stuck to this definition, it is, by construction, the type of situations they are involved with.

The corporate lawyers interviewed were particularly involved with assets sales that arose because of the bankruptcy of sugar mills. Because of the low prices of sugar on the global market, many mills and companies couldn't cope because with a high cost structure (they couldn't produce to sell at such low prices) or because of too much leverage (they couldn't generate enough cash to pay their debt, often in dollars). This created opportunities on the market for many potential assets: banks had to sell their debt, the bond of some companies that traded was sold off, companies had to sell terrains, eventually the ownership of companies or mills were put to auction. Therefore, these situations of judicial reorganization or bankruptcy offer many opportunities for investors looking for distressed securities. Distress could then be mainly seen as a legal status. However, there are many distinctions that can be done. It is going to be mentioned later in this part but there are also many companies or managers that prefer not to enter into the process of *recuperação judicial* but prefer to enter into private negotiations that don't involve directly any tribunal or legal institutions. Therefore, distressed assets cannot only be identified with a legal status.

Distressed as a liquidity problem

Furthermore, distressed assets can be rather seen as assets that are facing a liquidity problem, meaning that regardless of its balance sheet, a company is not able to survive if it doesn't have enough cash to meet its coming obligations. These obligations may be just linked to the costs of production, but they generally are more related to debt that needs to be serviced. It is especially the case in Brazil where companies took advantage of prosperous times to obtain cheap financing in dollars and their leverage doubled after the crisis just because of the colossal devaluation of the real: 8 years ago, in the summer of 2010, a USD100m debt represented around BRL180m when today the same debt means a BRL380m burden for a company. Such a definition is one that asset managers had in mind. It involved companies that have either short-term difficulties in their operations, have a lot of potential for improvement or that are just very leveraged at the moment and because of these reasons they may not be able to meet incoming obligations without any refinancing or structural help. Although, they may have cash difficulties, they generally have a healthy business that could either work with a reorganized and more sustainable debt structure or that could work with some improvements in their operations or a slightly better economic situation. This definition is wider that the one just presented before as it should include companies in reorganization or bankrupt, but it includes companies that are not yet in such difficulties but are already preoccupied and could offer interesting opportunities to investors. Such preoccupied companies may be already affected by these problems and offer an opportunity for investors to buy into their equity or debt or even take advantage of asset sales. Such a situation is not specific to Brazil but it is rather the mainstream definition of distressed assets throughout the world. But throughout the interviews, it was possible to see that Brazil has some types of distress of its own that is less common in developed countries and other emerging markets.

Brazilian-specific distress

However, there are distressed assets in Brazil that are not directly linked to financial or economic distress. These types of distressed are closely linked to the specificities of Brazil. Of course, this study doesn't intend to convey the idea that these characteristics are exclusive to Brazil, but these features have been stressed by the contributors as such.

There are two main types of these situations. First, there are cases where the distress is rooted in the family ownership of a certain asset. For instance, it can occur with changes at a family that owns the asset (emergence of conflicts, death of previous owner and inheritance difficulties etc.). A contributor underlined the case, not too rare, of real estate assets where the ownership structure is totally fragmented by successive inheritances that divided the ownership among several generations and several branches of some families that have been refusing to talk for very long times. And this is not specific to real estate but such cases were also reported from several contributors that work with debt renegotiation for Brazilian companies. In fact, these consultants or lawyers mentioned that they personally need to step in and find solutions for these familial problems that can greatly hinder corporate governance at these companies. Of course, it is true that there are family conflicts all around the worlds but as it is going to be treated in the next section, Brazil has a special kind of family capitalism that makes these issues sometimes prevalent at bigger companies and such problems can create distressed investment opportunities at many levels.

Furthermore, another case of Brazilian-specific distress is what could be called of regulatory, juridical or even administrative distress. Such distress has to do not only with the day to day interactions of businesses with the Brazilian administrative structure, but it is also related to, broadly speaking, with the larger legal uncertainties that exist up to the federal level in the country. A contributor mentioned that a real estate project can enter in distress at many stages of its development. When there are some authorization lacking, or some problems with the *matrícula* (land title registration), it can easily stop a project for a long an unpredictable period. Also, a municipality can be at discretion to impose other steps in the process if deemed necessary that can have the same effects. Other asset managers mentioned that if the business you invest in has facilities in some constituency, they can also be vulnerable to local politics, a change in local government can have unexpected results on a business from the experience of contributors. Two other contributors that invest in *precatórios* can particularly talk about such type of regulatory/judicial distress. *Precatórios* were described in detail in the literature review and they are, in their essence, the representation of the legal uncertainty and failure in some parts of Brazilian administrations that some businesses have to deal with. The case was already illustrated with the *precatórios* from the IAA that greatly affected the Brazilian sugar and ethanol companies. Today many companies have to sell their old *precatórios* at discounted prices when, if they had been paid back, it could have been lifesaving. Therefore, such a type of distress creates special opportunities unique to Brazil.

Therefore, at the end of the day, it is necessary to acknowledge that there is no single definition of distress. However, this study is going to use all these types of distress. It showed that these assets are very different from country to country and the definition itself depends of the Brazilian perspective.

B. Brazilian ecosystem of distressed assets

Distressed assets are still being defined, especially in Brazil where things are moving fast. Indeed, Brazil is a very special place for such investments. Therefore, it was deemed necessary for this analysis to first explain what is the Brazilian distressed “ecosystem” and how does it seem to work. As it was examined above, Brazil is a very specific market and it is necessary to explain what are the main features that makes it so special. It is only after the challenges to value creation are analyzed that one can exactly tell what are the necessary competences required to create this value.

Special context of Brazil today

It is interesting for the study to reflect a bit during the interviews on the current situation of Brazil and how it affects/benefits the distressed assets market. It was also useful to know the opinions of the contributors on how it may evolve. There is wide consensus among contributors on today’s Brazil, but opinions differ when it comes to the short-term perspectives.

First of all, it may seem a bit counter-intuitive but not all distressed investors benefited from the situation in Brazil. Two of the contributors bought into distressed real estate, especially in the city of Rio de Janeiro. The prices were hit very by the Brazilian crisis in this city that also relied on the oil industry. But a true recovery in the real estate market in Rio de Janeiro is taking much more time than expected on this market and investors now need to review their return target on the lower end of what they originally expected. These investors were particularly experienced in the real estate so it is unlikely that they lose money even on these investments since they were able to buy them at very low prices, but it proved harder than usual.
In similar situation, companies already went through restructuration and agreed with their creditors (banks and sometimes bondholders) to give them more leeway on payments through very long grace periods and extended maturities. However, many companies that restructured their debt have been caught in the lingering economic situation. Investors and banks had avoided to take haircuts on their debt in the past negotiations, but it may seem more difficult when companies on the brink are being pushed again closer and closer to the edge. Also, investors that specialize in NPLs didn’t necessarily benefit from the crisis. If they had arranged schedule to recover money from consumer loans, the small creditors suffered from the crisis and found themselves without a regular and formal job and this makes the money much more difficult to recover. Therefore, the fact that the economy is not recovering fast but rather stagnate longer creates difficult rather than benefiting

many distressed assets.

On the contrary, other investors were able to create more value in this context. *Precatórios* particularly stands out in the current situation. Many contributors are working with them today: they are an innovative payment or bargain chip in restructuration talks that are led by lawyers/consultants and consultants are now trying to value the one that companies own in order to make the most of it in the current difficulties. It is a hot topic on the market but some contributors admit that just a few years ago they wouldn't know as much on this type of asset that seemed very "esoteric". The difficult economic situation makes it more necessary for companies to sell their *precatórios* on the market, probably at higher discounts, in exchange for liquidities. Other assets that were mentioned are the debt or listed bonds of many Brazilian blue-chip companies. Such bonds were distressed during the first years of the crisis and offered great yields for healthy companies such as Brazilian world-class exporters because, as explained in the literature review, they became rated by agencies as junk or speculative bonds. Therefore, many assets have risen to attention of distressed investors in the period of crisis as opposed to the ones described in the precedent paragraph.

When asked "What role do this type of investment play in the overall portfolio of your investors?", some respondents insisted on the diversifying power of these dynamics. One of the respondents to the study works with many different including real estate, NPLs and *precatórios*. What they can lose on consumer NPLs or real estate, they are able to make up for it through assets like *precatórios*. At the end of the day, good or bad, the crisis created an ocean of opportunities for distressed asset managers in Brazil, but any investment remains very risky, it is the price to pay for the high returns for distressed asset managers in Brazil.

Emerging market

As many Brazilians working in finance are used to say: "*Brasil não é para principiantes*" or, in English, "Brazil is not for beginners". The first and most obvious structural specificity of Brazil is of course its emerging market status. The literature review has shown that the literature focused on the US and developed economy and there is not much on emerging markets like Brazil. Then, it is worth mentioning that market participants in Brazil have to evolve in a challenging context where an extra layer of complexity exists compared to western distressed asset managers. When asked "What are the returns you expect on each investment?", respondents in average said they expected an internal rate of return of around 30% for almost all assets across the board. One respondent investing in real estate is more around the lower range of a 20-30% objective. Another respondent working on the restructuring of companies aims at a return of 60% but this doesn't include the project that will eventually fail. However, in average the expected rate of return for distressed asset managers interviewed in this study stays at around 30%. As seen in the literature review, for Altman, a distressed security has "a spread of at least 1000 basis points over Treasury bonds", with treasury bonds at low single digit levels, such an asset would not fit in the portfolio of one of the contributors. In fact, it seems there is an additional premium for distressed in Brazil, probably compensating many of the risks this paper mentions. The personal experience of the researcher in the area is that the expected return for distressed/speculative assets in Europe is more about 10%. Therefore, Brazil as an emerging market is a different kind of distressed asset market compared to the US or Europe that are studied in the literature.

Family Capitalism

As mentioned above, distress in Brazil can often arise from familial problems. A respondent explained this phenomenon as he sees that the Brazilian industrial fabric partly emerged from family of migrants that came from countries such as Germany, Italy, Portugal, Japan etc.. For this contributor, these families stuck together and generations after generations made these companies well established. It is true that it is impossible to sum up the Brazilian economic system to a family capitalism model as the State is truly influential. But instead of pension funds or fragmented shareholding structure, it is often family offices that control the biggest Brazilian companies or at least control a 20% to 50% that allows them to control the company (Nölke, 2010). This seems all the truer in some particular Brazilian states with SMEs. Andreas Nölke, author of an academic paper "A "BRIC"-variety of capitalism and social inequality: The case of Brazil" makes the following analysis related to big Brazilian companies: "Completely dispersed shareholding is very rare, minority shareholders tend to be disadvantaged by dominating shareholders. Correspondingly, the recent "Corporate Governance"-movement met considerable resistance in Brazil, even if the dominant role of family capitalism has been modernized." (page 8) (Nölke, 2010). Therefore, the role of family in the Brazilian corporate world (whether it is for big blue-chip IBOVESPA-listed companies or more rural SMEs) remains important. This affects how company are managed and, as mentioned above, creates a special type of distressed assets. It can differentiate Brazil from other markets.

Highly bureaucratic

As described in the section below, one type of distressed that is observable in the previous section is the what was called here of regulatory, juridical or even administrative distress. Once again it is rather specific to Brazil. This phenomenon exists in many countries, but Brazil seems to top them all as it is shown in the World Economic Forum's 2017-2018 Global Competitiveness Report. In terms of "Burden of government regulation", Brazil ranks 136 out of 137, in terms of "Efficiency of legal framework in settling disputes", it ranks 110 out of 137, in terms of "Transparency of government policymaking", it ranks 127 out of 137. The effect of taxation on incentives to invest ranks 136 out of 137 and on incentives to work it ranks 137 out of 137 (World Economic Forum, 2017-2018). Of course, not everything is bleak in the Brazilian economy but when it comes to the influence of bureaucracy in the day to day business of companies, it can be sometimes challenging. This is a dimension that needs to be taken into account for any investment in Brazil. Respondents, especially the ones non-Brazilian citizens, emphasized that a lot of experience is needed to cope with these special situations and to be able to anticipate them. This represents a barrier to entry for investors in Brazil as once a professional is acquainted with the Brazilian market and has earned enough experience, he gets a significant edge over the "beginners". It is also what makes investors reliant on corporate lawyers, restructuring consultants etc. because they need to anticipate these aspects and innovate in order to protect their investments. Many respondents stressed how difficult it can be for outsiders or even seasoned professionals to sometimes interact in this context.

Lack of financing

Last but certainly not least, the lack of financing in Brazil is a point that was spontaneously raised by 9 of 11 of the respondents. It is one of the biggest characteristics of the Brazilian distressed market. In this study, it is important to a point out that many contributors mentioned that companies that wouldn't normally enter the scope of distressed fall into this bucket because they have often no other options than to be directly financed by funds at very high rates. Many contributors evoked the Brazilian banking system that is very concentrated in Brazil between a few big actors that are drastically regulated. It is what was stated by Muricia, Rover and Borba (2014) in their paper, leverage is the most influential parameter on credit rating of Brazilian companies, i.e. a high leverage is not very well tolerated by the financial markets in Brazil (Murciai, Dal-Ri Murcia, Rover, & Borba, 2014). This can also be a positive point in times of crisis, as a few contributors mentioned it, the fact that many companies don't have access to credit means that they cannot leverage themselves in prosperous times and go bankrupt in an economic downturn.

In the interviews, the lack financing is one the most noticeable characteristic of Brazil. For instance, one contributor investing in real estate mentioned how in Europe, real estate projects heavily rely on debt financing but in Brazil they are cornered into being funded through equity because of the lack of financing. A few other contributors, especially lawyers and consultants in turnaround and restructuring, mentioned how DIP financing is almost non-existent in Brazil. "Debtor-in-possession financing (DIP financing) is a special kind of financing meant for companies that are financially distressed and in bankruptcy. Only companies that have filed for bankruptcy protection under Chapter 11 in the United States and the CCAA in Canada can utilize it" (Investopedia, s.d.). It makes it difficult to inject fresh money in company when it is needed, therefore the processes to restructure/turnaround companies are different in Brazil because of the lack of financing.

But why is this observation about lack of financing so prevalent in Brazil? Especially for risky assets? It sure doesn't only come from banks, why is there so few people stepping in these special situations. Some of the questions asked to contributors were: "Who are your investors? Do you use proprietary capital? Are they Brazilians?" and "What role do this type of investment play in the overall portfolio of your investors?". These questions initially meant to better understand asset managers in general, but they showed a lot about distressed investment in Brazil. First, proprietary capital is very important to ensure alignment of interest for these risky investments, so most contributors stressed how they invest their own money into their fund. One of the respondents to this study was particularly insightful as he is a consultant that raises financing for Brazilian distressed asset managers. First, foreigners may find it difficult to invest in distressed assets when they combine not only the risk of the asset, but the broader country risk analyzed above. Brazilian investors are rather conservative; therefore, financing relies a lot on private equity and family offices. An academic paper researched this aspect and showed how because of psychological biases, in Brazil, “investors allocate approximately 92% of their resources in low-risk assets. Brazilians investments concentrate investments in fixed-income assets, reinforcing the conservative investor profile.” (page 8). The difference can seem particularly material versus markets like the US as “there is a significant difference between Brazilian and American investors in terms of the allocation of resources. Most American investments are concentrated in financial assets, while most Brazilians investments are concentrated in non-financial assets.” (page 9) (Bono Milan & Eid, 2017). In fact, in the US, investors hold significant part of their portfolios in retirement accounts and mutual funds that can diversify and participate in distressed investments. It may explain why financing for distressed is more common in the US and difficult in Brazil.

Therefore, not only is the definition of distressed evolving and sometimes different in Brazil but such differences come from a market with unique characteristics. Therefore, in order to be able to create value from rather difficult and risky assets, the actors of the Brazilian distressed ecosystems had to adapt. They developed special competences and skills that should be reviewed to understand value creation.

C. Value creation from distressed assets

Different set of processes and competences make distressed investors special. The introduction of this study evoked that traditional players such as banks and bigger institutional funds prove to be deficient while pricing distressed assets and cannot deal with them. This segment intends to exploit element of discussions with seasoned professionals from this market in order to showcase what are these competences and skills that make them so different.

Management of information

As discussions with interviewers revealed, there are barrier to entry for investors in Brazil because of how special this market is in fact. Of course, nobody is using private information or anything similar to that. It is much sharper than that, the professionals that evolve in the universe of Brazilian distressed assets know how to manage information. This study analyzes two types of management of information. First, the formal management of database with large historical datasets that requires a technical knowledge and skills. Secondly, the informal knowledge accumulated after years of work and the ability to develop intuition.

First, some potential questions to contributors were asked if they used some kind of databases and how they managed them. Questions such as “How do you process data for your investments?”, “Did you develop some proprietary software, methods or frameworks?” or “Do you have professional developers that adapt your analysis tools regularly?” proved to be useful. But more generally this study looked at how investors priced what they bought. It is something this study investigated through the following line of questioning: “Who do you generally buy your assets from? (or who are your clients?)”, “Why do you have higher valuation than the rest of the market on these assets (banks, more institutional players)? Does it come from fire sales or that valuations are fundamentally different?” and “How do you value your assets? Did you develop specific methodologies?”. These sets of questions were particularly helpful when interviewing respondents working with NPLs. In the literature review, there is already a valuable academic paper on the pricing of NPLs in Brazil that shows how sets of data can be exploited in order to better price NPL portfolios which allows NPL investors to be competitive (Prudente de Toledo, 2013). This insight was confirmed by interviews with professionals. Especially a contributor that further explained the dynamics in the NPL auctions that occur when a bank is selling an NPL portfolio to investors in auctions. The portfolios are generally bought for a few cents on the real (generally 2-3 cents for defaulted loans without guarantee). A portfolio contains colossal numbers of defaulted loans. It is impossible to analyze it loan by loan therefore investors need to create proprietary valuation methods relying, for instance, on statistics. The strength of their valuation depends on the inputs they have from previous portfolio. Therefore, a fund that has accumulated data on many previous transaction (including the outcome in terms of recuperation of the portfolio previously bought) can use this data to more accurately estimate the recuperation rate of future portfolios in auctions, hence being able to issue more meaningful bids for these assets. It is not the amount of data but more the experience these funds accumulated in order to fine-tune and improve their internal valuation models. This could seem like an extreme example in the Brazilian market but at a time where data analysis is progressing fast in finance, it seems like a great illustration and maybe an inspiration for other types of assets. On the contrary, the bigger institutions don't seem to be able to perform as well such granular analysis. As contributors told us, big Brazilian banks have created in-house departments that try to recycle/recover the NPLs, but they leave their in-house department in competition with external funds in order to achieve the best prices. So far, external funds seem to keep the lead on the market. A value adding competence comes from their ability to manage the data better than some bigger institutions.

As mentioned in the introduced to this segment, another type of management of information is key for professionals according to the interviews. It is not something directly evoked by the professionals but by gathering notes and confronting remarks from different interviews, it is a theme that emerged. Of course, it is more difficult to expose something like that compared to the management of database and proprietary statistical models. A great comparison can come from two different types of assets; first, one of the studied market that has really become institutional is the NPL market in Brazil. On the opposite site, *precatórios* seem more difficult to tackle. Research shows lack of disclosure and data as a feature of the *precatórios* market (Ferreira & Lima, 2012). Therefore, as observed from interviews, successful investors on *precatórios* have to rely on more subjective investment thesis they formulate on the *precatórios* they decide to buy. Furthermore, in order to buy *precatórios* it is necessary to directly connect with holders that are sometimes almost unaware they possess the asset in the first place. As stated before, there is not always information and investors need to improvise and they end up doing things like, for instance, visiting sugar mills in rural northeastern Brazil. Also, *precatórios* depend on judicial processes and this is not an exact science. These rationales don't only involve *precatórios* but can be seen in private equity, restructuring, investment in distressed debt etc.. Therefore, the informal knowledge gained for experience is an essential part of distressed investing; it is very difficult to replicate, and this represents a unique value-accretive competence.

Alternatively, maybe, in the future, one player could replace some parts of what intuition does in order to model the recuperation and time to collect that can be expected for a *precatórios* with statistical models as seen for NPLs.

Therefore, this section showed how important is the ability to find and to process information for investments in distressed assets. This is all the more important as the market works as an ecosystem where many different actors or players work together to create value.

Judicial processes

It was overwhelmingly observed that being able to manage legal processes is key for distressed investing in Brazil. Having a good understanding of them is a necessity. Many of asset managers interviewed were actually formed in law rather than business, finance or management. In some distressed situations, legal expertise completely trumps financial analysis or strategic considerations.

Before discussing the results, it would be useful to lay out for the reader that may not know the full context of the Brazilian bankruptcy laws and also show simple international comparisons that come from the World Bank that display why Brazil is special when it comes to bankruptcy laws.

These laws have been significantly updated and modified in 2005 as mentioned in the literature review. Before this law, bankruptcy and reorganization where led by a rather archaic law from 1945. “the former mechanism known as *concordata*, [....] consisted exclusively of a moratorium and did not provide for debt restructuring” (Cantidiano, Fonseca Lobo, & Kalansky, 2008). Respondents confirmed that the practices from the older legislation may sometimes reappear when, for instance, judges can sometimestake a leading role in restructuration/bankruptcy processes. As shown in the Brazil Insolvency (Bankruptcy) Laws and Regulations Handbook, the 2005 law offers three legal processes for companies in difficulty: *Recuperação Judicial* or court-ordered restructuring: “The goal is to overcome the business crisis situation of the debtor in order to allow the continuation of the producer, the employment of workers and the interests of creditors, leading, thus, to preserving company, its corporate function and develop economic activity. It's a court procedure required by the debtor which has been in business for more than two years and requires approval by a judge." (page 46). An alternative to this process is the *Recuperação Extrajudicial* or extrajudicial restructuring*:* it is simply a "private negotiation that involves creditors and debtors and, as with court-ordered restructuring, also must be approved by courts" (page 46). Lastly, bankruptcy or *falência* is a "court-ordered liquidation procedure for an insolvent business. The final goal of bankruptcy is to liquidate company assets and pay its creditors." (page 46) (Int'l Business Publications, 2016). According to respondents, especially the interviewed corporate lawyers: this law reshaped the legal framework and partly gave birth to the market of distressed assets in Brazil.

Coming to international comparison, in its Doing Business report using data from June 2017, the World Bank devotes a whole chapter to the subject, called "Resolving Insolvency". It ranks the countries for their capacity to resolve cases of insolvency. In figure 11 below, Brazil is compared to the rest of Latin America and especially to a selected set of peers that seems relevant (Mexico, Colombia, Argentina) and also to developed market countries and especially the US that has been mentioned many times in this report and the literature review.

Figure 11: The World Bank's Resolving Insolvency Ranking

	Rank	Recovery Rate (cents on the dollar)	Time (years)	Cost (% of estate)	Outcome (0 as piecemeal sale and 1 as going concern)
Brazil	**80th**	**12.7**	**4.0**	**12.0**	**1**
Mexico	31st	67.6	1.8	18.0	1
Colombia	33rd	66.2	1.7	8.5	1
Argentina	101st	21.5	2.4	16.5	0
Latin America & Caribbean	**107th**	**30.8**	**2.9**	**16.8**	**NA**
US	3rd	82.1	1.0	10.0	1
OECD high income	**24th**	**71.2**	**1.7**	**9.1**	**NA**

(The World Bank, 2017)

Even if the ranking of Brazil doesn't seem dramatic, the country doesn't do very well in this comparison. Its recovery rate is well below the Latin American average, time for recovery is also higher. It makes for it as the cost of the procedure seems decent compared to peers and, even if lengthy, insolvency processes are more likely to give back a going concern (i.e. a company with no short-term difficulties). Countries that have a similar recovery rate (from 10c to 15c) are Syria, Sierra Leone, Madagascar, Malawi, Cambodia, Myanmar and Gabon. Countries that have the same time to recovery at 4 years are Dominica, Mongolia, Benin, Venezuela, Bangladesh, Oman, Slovakia, Chad and Burkina Faso. These countries are often infamous for their deficient rule of law and it seems that Brazil should do better in these categories. Therefore, it seems that, in absolute, insolvency procedures return a rather low value (vs. initial face value of investments) after a very lengthy process. The situation that is conveyed by these numbers absolutely reflects the words of the contributors to this study. They stressed the fact, that the law must be further improved. However, these numbers can reflect the complexity of a process of insolvency in Brazil. That's why legal expertise is so important and indispensable to create real value for distressed assets in Brazil.

Many respondents stressed how the Brazilian laws can make it sometimes challenging; for instance, it is the responsibility of who controls a company to come forward with a restructuration plan. In the US, the debtors have the possibility to come forward with a plan, because they are the ones holding the companies' debt that is at stake in the restructuring. Such situations made the government evoke possible changes, principally in the wake of the Oi case that pushed the current legislation to its limits. Nevertheless, contributors often said that they have to constantly innovate in order to really create value for their client. They have to think out of the box and create new structures that may have never been seen before. Thanks to these innovations, jurisprudence is going forward and supporting processes of insolvency. Such competence is really hard to quantify or to institutionalize. It is, however, probably one of the most important.

Another specificity of Brazil is that, given the difficulties sometimes associated with a process of *recuperação judicial*, it can be better to go towards an extrajudicial restructuring according to the interviews. Respondents evoked many reasons that can motivate it, not only the lengthy procedure but the publicity around such process it not always welcomed. Prestige can be a big factor in the Brazilian corporate world, especially for families. Lawyers, consultants and investors learned to compose with this reality and it is a key for value creation. They learned to accelerate the process and maybe it is where Brazil does better than many.

An interviewed asset manager stressed that they are not betting on the future or anything they are not sure of. They believe it is risky to take a shot in the dark. They rather look for assets that are distressed because of legal issues (inheritance, lack of authorization etc. as developed in the first section of this part). After, buying at a discount, they will put all their legal expertise into such a project and try to recover the asset. This legal problem-solving approach is a big characteristic of distressed. The valuation is much higher for the investor because such an investor has much more legal firepower in its organization.

Therefore, it cannot be stressed enough how legal expertise and the management of legal processes are key in creation value with distressed assets in Brazil. Lawyers are generally an important part of teams for distressed asset managers but in Brazil they have specific responsibilities because of the special feature of the Brazilian market that were exposed in the previous section.

Strategy/Turnaround management competencies

First of all, before discussing directly the turnaround and strategic competences, many respondents insisted on a very special point. When asked “How do you think your company create value?” or “What do you think is core to your organization?”, they will generally not mention first their technical skills and their ability to innovate for their client or else. They reply that the most important points in their line of work is ethics in business and compliance as well as building trust with clients (or counterparts). They underline than the prosperous times in the 2000 decade saw a lot of dubious practices in the Brazilian corporate world, while not illegal or straight corruption they would not always place the client at the center of attentions or so. The respondents interviewed insist that when an investor buys an asset, he wants to build a mutually beneficial relationships with the banks or the companies that are selling them. He wants to create a relationship that is mutually beneficial for the both of them: the company or the bank get rid of a troubled asset and get compensated fairly for the sale while the investor/consultant agrees to take on the risk and process the asset. For the respondents, it is how value is truly created and not by closing one-off deals at the expense of someone else. It is a very important point and it speaks a lot not only for the industry of distressed assets but for the renewal of the corporate world in Brazil.

Coming to turnaround strategies, the literature on how to manage a turnaround is already quite developed but, in the interviews, a real gap is noticeable between what became the model for the operational and strategic turnarounds of companies in these abstract papers and the studies made in developed countries versus the reality of the Brazilian companies that happened to be distressed or entered into *recuperação judicial* or *falência*. As stated above, many companies are familial, and many SMEs were deeply affected by the crisis. These companies took advantage of the more prosperous times and grew a lot. Therefore, contributors mentioned that the degree of professionalization is not always very high. A contributor stressed that management has incredibly evolved in the past decade or two. Finances, accounting, taxes, technologies have become even more challenging and were sometimes neglected when company were booming right before the crisis. The downturn revealed these shortcoming of many companies, especially SMEs. The consultants that come to help or investors that got involved into these companies had to work with the owner or the management to improve operations. Therefore, when contributors were asked "What are your priorities for turning around a Brazilian company? (what kind of operational/strategic features)", they would stress a few points. They need to bring an external point of view to the business by laying down everything, throw away old financials or budgets and redo them with a clean perspective. They often go back to the basics. They implement more objective methods: as one respondent put, they need to turn off the "*achômetro*". In Portuguese, "*eu acho que…"* means "I think that…", *achômetro* means to stop trusting long-standing beliefs and feelings on the business and try to establish measures or establish key performance indicators (KPI) that can be quantified and measured overtime. Sometimes, it can as simple as starting to weight products at different stages to understand where losses could be situated production line or supply chain. There is no single recipe, but these are points mentioned by several contributors and they abide by what the literature mentions but the operational factor is slightly different to implement the turn-around can be different. That's why investors and consultants developed unique competences in the area and reveal big potentials and room for improvement that drive up the value of distressed assets.

Another type of value creating process encountered is the consulting in debt restructuring. These are consultants that are able to negotiate with existing debtholders, banks or bondholders, to give them some breathing space financially. The questions they were asked were "How much leeway do you have to renegotiate debt with creditors? Is negotiation part of value creation?", "How do you find funding for these companies?" and/or "Do different debt renegotiations have common features here in Brazil?". The negotiation can be during a legal process, but it can also anticipate it for the company to never need to file for bankruptcy or for *recuperação judicial*. Their role may overlap with lawyers but beyond that, they are also in charge of finding new financing: bridge financing, debt refinancing etc.. They try to adapt the capital structure of the company so that the company can go back to a going concern. Because of the lack of financing on the market, it is can be challenging to do such operations, once again, it is necessary to innovate and find new structures that can relieve the pressures on the company. It is also necessary to look at uncommon partners, imagine original M&A operations if needed. Once again, they need to carry out complex problem-solving with creative solutions and funding. A contributor specialized in such consulting would also work on operational/strategic turnaround at the same time. Therefore, this ability to organize restructuring operations as well as find new funding are a necessary competence, much harder and more value-accretive than in other markets.

These processes of turnaround - operational, strategic, in the capital structure – are either executed by the companies that buy the difficult assets or external consultants can be contracted to do is on the behalf of the companies in difficulty or investors.

Respondents that were interview in this study as well as their colleagues have adapted to the Brazilian distressed market. They developed a special set of skills and competences that allows them to create value out of distressed assets. At the core of these competences, there is the possibility to see the value that can be created and to see the value left out by other players.

V. Conclusion

The introduction of this paper stressed how paradoxical the value creation from distressed assets seemed to be: on one side these assets were worth nothing or close to nothing and on the other they offered very high returns. The results of the study shed some light on this paradox, it was emphasized how different and challenging the market is in Brazil and that may explain why many bigger players such as large companies or financial institutions fail when they are in front of distressed securities. They lack the competences analyzed in this research and because of that they cannot answer to the specificities of the Brazilian market. As a result, the way they value distressed assets is completely binary: in their perspective, either an asset is priced at more or less face value or this asset is impacted by any type of distress situation and its value takes a material hit, they are not made to assume such risks and often they need to sell it. As a result, these big institutions are obliged to sell securities at very significant discounts and it is thanks to these discounts that returns can be generated.

The competences that appeared in the study are very specific and hard to replicate. They are not competences that one of the bigger players described above could easily obtain. These competences require flexibility and are usually the prerogatives of experienced individuals or small organizations. Each case of distress is a brand-new situation and the competences listed above are not the ability to execute similar tasks efficiently but rather problem-solving in very different situations. There is not even a single player in the distressed universe that can have all of these competencies. More than flexibility, these competences require focus on very particular cases and such focus needs to be supported by flexible resources. It is not something usually possible at a big financial institution.

This explosion of distressed assets has been brought by the past economic crisis in Brazil. And so far, even after a few years have already passed, the short-term economic perspectives don't seem terrific in Brazil. GDP growth hasn't come back as quickly and as strongly as some analysts expected a few years ago while upcoming presidential elections fuel uncertainty for 2018. Brazil still seems to be in the process of cleaning up what the crisis uncovered in the economy and on the political scene. Working on this research was the equivalent of being in the front row seat to witness this consolidation and sanitization in process in the Brazilian economy. And this process may be the first step needed to jumpstart a recovery in Brazil.

Part of this process of cleaning up could bring wider institutional changes. It is the institutional context, as it was studied in the analysis, that sometimes can lead to many of the difficulties that lead to financial distress or it can even hinder economic recovery after the crisis. It is for instance the case for companies that enter in distress because of regulatory or administrative reasons but it is also a difficulty for all companies that have to go through a process of court-ordered restructuring. For instance, before he walked out of the government to prepare for the presidential campaign, the former Minister of Finance Henrique Meirelles announced possible changes in the Brazilian bankruptcy law. This would certainly help companies in recovery. But the challenge comes from the wider difficulties of institutions in Brazil. For Brazil to evolve, radical change is needed and it that may be brought by a renewal of policy makers and politicians. Such process has been ongoing, but it is necessary to wait for the presidential election to truly understand what could be the dynamic for the years to come. The subject of distressed assets is certainly not a purely financial problem but it is the results of structural difficulties and it is just a symptom.

Lastly, many observers call sometimes such funds of “vulture funds” and medias may convey the idea that they can take advantage of desperate at the expense of the broader community. One situation that comes to mind is the one of the Argentinian debt holdouts. Some speculative funds acquired a minority of the Argentinian debt that defaulted in the 2001 crisis. And although 93% of bondholders accepted a restructuration that included a 70% haircut on the initial face value of the debt, they continued a legal battle that lingered for years. While the legal battle happened, the whole country didn’t have a real access to global financial markets. Such a situation put Argentina in a difficult situation where its financial system wasn’t able to work properly. This exemplifies what some observers call “vulture funds”. However, such investors often act as lender of last resorts in critical situations. They accept to assume very high risks and buy at moments where no other buyers are on the market. Especially in a country like Brazil. Often, the financing market is often too shallow and is not always willing to accept to lend to companies that are not the usual Brazilian blue chips companies from the IBOVESPA. Therefore, distressed asset managers sometimes can step in imperfect markets. After, as shown in the study, they deem that one of their core competences is ethic and compliance.

However, as suggested during the study, there were limits in the research. The current context is very particular for Brazil, it is especially difficult with many uncertainties. Especially with this study that relies on a qualitative approach through interviews, it may have affected the results and given a view that is more representative of the current than structural dynamics in the market. This study is also very broad as it cannot rely on many existing research. There are many possible development on the value creation for distressed asset managers. Every single competence analyzed in this paper could be the subject for many more research. If possible, it would be also interesting to be able to find more numerical data on these specific competences, especially in Brazil. For instance, one could look at legal filings for bankruptcies and court-ordered restructurations and analyze such a set of data.

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Appendix 1: Interview Guideline

General guideline of question:

As explained in the methodology, each block of this guideline of questions works independently from the other. Each contributor was asked the general-purpose questions, crisis/politics in Brazil, Value Creation as well as one or two other blocks according to his/her area of expertise.

General purpose questions on fund management

1. Could you present yourself?
2. What type of distressed securities do you work with?
3. For how long have you done so? Here in Brazil?
4. What do you think is your role in the bigger picture of distressed assets in Brazil?
5. What have been your past performances?
6. What is the definition of a distressed asset for you?
7. Who are your investors? Do you use proprietary capital? Are they Brazilians?
8. What role do this type of investment play in the overall portfolio of your investors?
9. What are the returns you expect on each investment? How volatile is it?
10. What is the time frame for your investments?
11. Do you have any restrictions on withdrawals?
12. Do you think that your asset class/competence is different here in Brazil?

Crisis/Politics in Brazil

1. What was the effect of the crisis in Brazil on your activities? Did it create opportunities for you? Have you already benefitted from the economic recovery?
2. How did the demand for your product evolved with the crisis? Did the crisis decrease demand? Increased it?
3. What is the correlation between different assets you deal with?
4. Do you have any expectations from the 2018 elections regarding your business? Do you think it will help?
5. How is your business regulated here in Brazil? What kind of regulations do you face? Is it

a problem for your operations?

Value Creation

1. How do you think your company create value?
2. Could you describe the general process for analyzing and acquiring an asset and then work on this asset and sell it (or the process where you get contracted by an investor/company and help it to turnaround?
3. What do you think is core to your organization?
4. Are you fully integrated or do you externalize any kind of service? Why do you externalize these services?

Asset Valuation

1. Who do you generally buy your assets from? (or who are your clients?)
2. Why do you have higher valuation than the rest of the market on these assets (banks, more institutional players)? Does it come from fire sales or that valuations are fundamentally different?
3. How do you value your assets? Did you develop specific methodologies?

Data processing

1. How do you process data for your investments?
2. Did you develop some proprietary softwares, methods or frameworks?
3. Do you have professional developers that adapt your analysis tools regularly?

Law expertise inside funds

1. Have you integrated some law expertise inside your investing process? How many people does it represent inside your company?
2. How are lawyers and other legal experts involved in the investment process?
3. What law processes/analysis are key to your business and why?
4. How have you integrated the evolution of bankruptcy law? Do you expect any changes? How would they affect you?

Bankruptcy and Restructuration Law

1. In what type of cases have you been involved when it comes to distressed assets?
2. Brazil has bad recovery rates and very long processes vs other Latam countries and developed countries, is it due to Brazilian legislation or are there other factors? (Oi example can illustrate this question)
3. Do you think that in Brazil there is still a problem with the restructuring process and that the legislation prevents investors to create value from these securities?
4. Do you think that the complexity of Brazilian law proves to be an advantage to any local players (being a barrier to entry for others)?
5. How do you think that law counsel can create value for investors or company dealing with distressed assets?

Turnaround management/strategy expertise

1. What are your priorities for turning around a Brazilian company? (what kind of operational/strategic features)
2. What do you exactly aim at doing when turning around a company? What are the key areas of interest?
3. Where does your experience in turnaround management come from?
4. Do you take care of all the process in-house or would you use external consultant for any particular area?

Financial Restructuring

1. How much leeway do you have to renegotiate debt with creditors? Is negotiation part of value creation?
2. How do you find funding for these companies?
3. Do different debt renegotiations have common features here in Brazil?

Other

1. Other important areas that are key for your operations and processes?
2. Do you think that these different functions are complementary? Have synergies together?

Closure of Interview

- Thank the contributor
- Offer to share the final thesis with the contribution