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Readability of token whitepaper and ICO first-day return

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Abstract

We use automated techniques to measure causal reasoning in the whitepaper accompanying an initial coin offering (ICO) and examine the intensity of causal reasoning in the whitepaper against the ICO's first-day return. We find the association between causal reasoning intensity and ICO return to be significant and positive .

1. Introduction

Blockchain ensures delivery-vs-payment by linking transfers of assets with payments and operates via a Proof-of-Work protocol that is maintained by the users of a decentralized network. It allows available open software to create cryptocurrencies on the blockchain with little effort. Tokens are offered for sale to interested investors with potential capital gains to be realized when investors re-sell their holdings on a token exchange. New ventures can raise money in an early stage of their business by initiating an Initial Coin Offering (ICO) process.

An ICO is a new kind of crowd funding. It offers cryptocurrencies rather than proprietary products or services. Interestingly, the main backup-file for investors to ground their investment decision is the ICO, a document providing information regarding the token project whitepaper (details on its content are described in Appendix B). In that regard, the performance of an ICO on the first day of its listing may be significantly affected by the quality of the information included in the whitepaper.

On 4 September 2017, the Chinese central bank (People's Bank of China, PBOC) forbade companies and individuals in China to raise funds through ICOs. Before that date there was no law nor regulation on ICOs in China. After that date, issuers are obliged to operate their registration site outside China. Moreover, exchanges which were originally registered in China, had to move their registration site after that date.

The ban by the Chinese government significantly increased litigation risk for both issuers and investors of ICOs in China and had a negative effect on token exchanges all over the world¹. Following this event, the bitcoin price dropped from 4,600 to 3,500USD in 10 days (a decrease of 31%).

This study focuses on causal reasoning exhibited in the ICO whitepaper as a quality feature of the ICO process. The ICO context is especially attractive to investigate causal reasoning as an information quality feature as the relative lack of ICO-specific knowledge in the cryptocurrency market leverages the need for, and investor reliance on, the content of the ICO whitepaper. The lack of knowledge increases a new venture's incentives for credible causal disclosures in order to reduce information asymmetry among the investment community and maximize the proceeds of the ICO.

We investigate the relationship between the causal reasoning intensity of the ICO whitepaper and the ICO return on the first trading day for ICOs listed after 4 September 2017, and find that a whitepaper with more causal reasoning instances is likely to reduce the perceived uncertainty and information asymmetry of an ICO project and results in a higher first-day return of the ICO.

This study makes contributions in several respects. First, we extend the literature on initial coin offering (ICO) for a blockchain project, by examining the relevance of the ICO whitepaper disclosure and whether causal reasoning in the whitepaper is able to reduce information asymmetry, resulting in a higher ICO first-day return. Second, we add to the literature on causal reasoning in financial disclosure (Koonce, Seybert, &

¹Accordingly, these ICOs are foreign projects and listed on foreign exchanges. However, this is in fact just a way to limit litigation risk, while the founders remain Chinese.

Smith, 2011) by measuring causal reasoning intensity as an overall disclosure characteristic of the whitepaper, over and above its readability quality.

2. Literature review

2.1 Initial Coin Offering

In an Initial Coin Offering (ICO) blockchain-based ventures generally raise capital by selling cryptocurrencies (rather than shares, as in an IPO) to investors on an exchange for cryptocurrencies. Cryptocurrencies represent an asset or utility that is based on a blockchain. Investors from different countries may trade cryptocurrencies through online exchanges that operate nearly without national boundaries.

The ICO is similar to crowd financing and actually many ICO projects raise funds on crowd funding platforms (Zhang et. al., 2019). Unlike other crowd funding projects, ICO projects do not offer retail investors products, services, or dividends, but they offer retail investors an opportunity for capital gains by selling their cryptocurrencies on a cryptocurrencies exchange. In addition, an ICO project becoming public in a token exchange usually only takes a few months. Therefore, ICO projects could shorten the investment period for financial institutions, as the burden of a lengthy IPO procedure can be avoided.

Dastgir *et al.* (2018) find that there is a bidirectional relationship in the left tail (1%, 5%, and 10%) and the right tail (90%, 95%, and 99%) between bitcoin return and its public exposure (measured by the Google Trends search queries). Bijl *et al.* (2016) also find a significant relationship between bitcoin attention and returns. With regard to

uncertainty, it plays a prominent role in shaping investors' sentiment and the confidence in the Bitcoin prices. As suggested by Bloom (2009)², Cheah *et. al.* (2018) estimate an asymmetric GARCH(1,1) specification of S&P 500 and use the estimated volatility as a proxy for uncertainty for Bitcoin market, finding that uncertainty generally has a negative effect on bitcoin markets. These findings suggest that the cryptocurrency market price is likely to be affected by public information. Essentially, a whitepaper is an informational document produced by a company to promote or highlight the features of a solution, product or service. A whitepaper can be extremely influential as a marketing tool to investors. If the founder of the project knows what it is doing, the more likely investors will trust the bright future of the project and purchase the token.

2.2 Causal reasoning disclosure

Causal disclosures, linking corporate events and its roadmap with internal and external causes, motives and facilitating factors, are generally seen as useful by market participants (Baginski *et. al.*, 2004; Zhang *et. al.*, 2019). Causal disclosures may elaborate on issues of vision, strategy, moral, legal, and practical conduct and refer to agency, strategy and plans, responsibilities, difficulties, blame and external constraints. Causal reasoning can be conceived as a broad array of discursive responses to the 'why' and 'how' questions that may arise with regard to the whitepaper milestone, cryptocurrency distribution and cryptocurrency valuation (details in Appendix B).

Moreover, causal reasoning allows a view on the blockchain project's business model

² Bloom (2009) shows that stock market volatility closely mimics news-based uncertainty or macroeconomic/financial uncertainty at aggregate economy level.

and its antecedents, increasing the precision of public information. However, causal reasoning in the ICO whitepaper may not be costless. Since the whitepaper may reveal proprietary information and is released in the early stage of project development, it is possible that the project's business model will be copied by potential competitors. In addition, the selectivity of reported causal relationships may introduce bias akin to impression management or lead to purposeful obfuscation of reported performance. This may increase litigation risk or regulatory sanctions. Yet, some recent research explicitly documents that impression management and information sharing often coincide (Aerts & Yan, 2017; Merkl-Davies, Brennan, & McLeay, 2011; Solomon, Solomon, Joseph, & Norton, 2013). Although managerial impression management behaviour is often portrayed as deceptive self-presentation, impression management devices may also be used more innocently, as a natural tendency to resonate with an audience, or more proactively in order to signal issuers' private information and, by doing so, reduce information asymmetries.

Finally, it should be noted that we introduce causal reasoning intensity as an overall disclosure quality characteristic, and not as a readability characteristic. Causal reasoning intensity is related to disclosure understandability and reader comprehension, as causal frames are likely to create meaning for the reader, whereas readability is about reading ease with no relation to meaning creation. In that sense, the understandability and readability are two different issues with potentially quite different interpersonal consequences. Aerts and Yan (2017) show, for example, that rational explanation adds meaning and transparency by providing causal knowledge. Adding causal inferences

and related explanations tends to lead to longer sentences and more complex textual relations and negatively affects readability as captured by the classic readability measures.

As a key information source for investors, we expect that the causal reasoning in the ICO whitepaper could strengthen its overall information quality, and reduce the information asymmetry. Therefore, we expect that more causal reasoning in the ICO whitepaper is likely to be associated with to a higher ICO return on first-day trading in a token exchange.

3 Data description

Our sample includes ICO data of listed entities from four major tokens exchanges in Asia: Bitfinex, Binance, Huobi Global and OKEx. These four tokens exchanges are the most famous ones in China. The traders on these exchanges are mainly Chinese. Moreover, all founders of these four exchanges are Chinese. In total, we initially identify 244 ICO whitepapers for the period 4 September 2017 to 1 February 2019. We use Java programming to extract and process the whitepaper text files and finally arrive at 211 whitepaper causal reasoning observations.

We use two methods to capture causal reasoning content: a sentence-based approach and a word-based approach. We measure ‘causal reasoning word intensity’ by counting the relative frequency of causal reasoning words in the whitepaper. The identification of the causal reasoning words is based on a list of causal words used by Linguistic Inquiry and Word Count (LIWC), a widely-used text analysis programme. The LIWC

causal words list is included in Appendix A. Causal reasoning word intensity is measured as the number of causal reasoning words scaled by total number of words in the whitepaper. An alternative measure (referred to as ‘causal reasoning sentence intensity’) is based on a sentence as unit of analysis. A causal reasoning sentence is defined as a sentence that includes at least one of the causal words in the LIWC causal words list. Causal reasoning sentence intensity is measured as the number of causal reasoning sentences in the whitepaper scaled by the total number of sentences in the whitepaper (for further details, see Appendix A). If a sentence contains several causal reasoning words, it would still be counted as only one incidence of causal reasoning in the sentence-based measure. Although the word intensity and the sentence intensity measure are correlated (0.439), they may capture somewhat different aspects of how causal language is used in whitepaper. The causal word intensity measure better captures the presence of multiple causal reasoning instances in one sentence or related to a single topic, whereas the causal sentence intensity measure gives more weight to the variety of explained performance outcomes. Documenting both measures would corroborate the robustness of our empirical findings.

4 Empirical results

We model the association between causal reasoning intensity and ICO first day return as follows:

ICO first-day return

$$\begin{aligned} &= \alpha + \beta_1 \text{Causal reasoning} + \beta_2 \text{China Economic policy certainty} \\ &+ \beta_3 \text{First component of readability} + \beta_4 \text{Liquidity percentage} \\ &+ \beta_5 \ln(\text{Market capital}) + \beta_6 \text{Bitcoin return in last month} \\ &+ \beta_7 \text{Exchange} + \sum \gamma_i \text{industry dummy} + \varepsilon \end{aligned}$$

<Baseline Model>

The baseline model is examined using a sample from 4 September 2017 to 1 February 2019. First, we define and measure the ICO first-day return as the close price of a cryptocurrency scaled by the opening price on the first trading day minus 1. Second, in order to ensure that our findings are not specific to any single measure of causal reasoning, and to mitigate the effect of possible measurement error in any given measure, we use two measures to proxy for causal reasoning, namely causal reasoning sentence intensity and causal reasoning word intensity. Causal reasoning sentence intensity is defined as the number of causal reasoning sentences scaled by total number of sentences in the whitepaper. Causal reasoning word intensity is measured as the number of causal reasoning words scaled by total number of words in the whitepaper. Finally, we also control the readability, liquidity, size, cryptocurrency market return, China economic policy certainty, exchange, and industry dummies. Zhang et. al. (2019) find the readability is positively and significantly associated with ICO first day return. We use the first (Eigenvalue: 4.111) principal component of six alternative readability

measures (Guay *et al.*, 2016)³ proxy for readability. According to the factor loading of the first component in Table 1, higher values represent a less readable whitepaper. Liquidity percentage is measured as the number of cryptocurrencies released in the ICO scaled by total amount of cryptocurrencies issued⁴. Ln() stands for natural logarithm. We use market capital to control for the size of a cryptocurrency project, which is defined as the opening price multiplied by total number of a cryptocurrency. Bitcoin has received more attention than the other cryptocurrencies (Dwyer, 2015), and captures 41% of token capitalization (Katsiampa, 2017). Therefore, we apply bitcoin market performance from 30 days before the ICO to 1 day before the ICO to control for market return. Moreover, as we illustrated in ‘Introduction’ part, we study the ICO return after the Chinese central bank strict regulation (4 September 2017) for ICO project. Therefore, the policy may be important for both of ICO issuers and investors. We use China economic policy certainty, which equals to 1 if average China economic policy uncertainty⁵ in the past 3 months before the ICO (Panagiotidis *et. al.*, 2018) is less than 25 percentile value, otherwise 0. Exchange equals to 1 if an ICO is listed in Binance exchange, 2 if an ICO is listed in Bitfinex exchange, 3 if an ICO is listed in Huobi Global exchange, and 4 is an ICO is listed in OKEx exchange. Our industry classifications are based on Token Insight⁶. All non-dummy variables are winsorized at

³Details are shown in Table 1.

⁴According to ERC20 in ethereum, the amount of issued token cannot be changed as the coding is done and the coding is open source to gain the trust of interested parties.

⁵The China economic policy uncertainty constructs a scaled frequency count of articles about policy-related economic uncertainty in the South China Morning Post (SCMP), Hong Kong's leading English-language newspaper. <http://www.policyuncertainty.com/>.

⁶<https://tokeninsight.com/trade/index>

the 99% level.

Table 2 shows the summary statistics of our variables. The mean of ICO first day return is 0.150, with standard deviation 0.871. Moreover, the 1 percentile is -0.995, meaning the cryptocurrency drop 99.50% of value in the first day being listed⁷. The mean of causal reasoning sentences intensity is 0.201, with standard deviation 0.114. the average value of causal reasoning words intensity 0.019, with standard deviation 0.010. The correlation between causal reasoning sentences intensity and causal reasoning words intensity is 0.440. The correlation between the first component of readability and causal reasoning sentences intensity is 0.822, indicating these linguistic measures are somehow related to each other. The correlation between causal reasoning and readability implies adding causal reasoning tends to lead to longer sentences and more complex textual relations and negatively affects readability as captured by the classic readability measures.

Table 4 shows the regression results for the association between ICO first day return and causal reasoning in the whitepaper. Consistent with our prediction, the association between causal reasoning intensity and ICO first day return is positive and significant (with t-value 2.407 for sentence measure, and t-value 2.370 for word measure). These results suggest that causal reasoning as an overall quality measure may reduce the information asymmetry and results in a higher ICO first day return. Consistent with Zhang et. al. (2019), the first component of readability is positively and significantly related to ICO first day return.

⁷For example, the cryptocurrency ‘XZC’ drop 99.5% of value in the first day of listing in Binance exchange.

Table 5 shows the regression results for the association between ICO first-day return and causal reasoning in the whitepaper with intersection term between causal reasoning and economic policy certainty. The relation between the intersection term (CEPC * Causal reasoning) and ICO first day return is positive and significant at 90% level. It implies that investors take into account the causal reasoning in the whitepaper in their first day trading when the macro-economic policy environment is with less uncertainty.

5 Conclusion

6 Reference

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Table 1 Details on readability measures and readability index

Panel A						
Measures of readability						
<i>Flesch Kincaid</i>	$0.39 * (\text{number of words/number of sentences}) + 11.8 * (\text{number of syllables/number of words}) - 15.59$					
<i>LIX</i>	$(\text{number of words} / \text{number of sentences}) + (\text{number of words over 6 letters} * 100/ \text{number of words})$					
<i>RIX</i>	$(\text{number of words with 7 characters or more}) / (\text{number of sentences})$					
<i>FOG</i>	$((\text{average number of words per sentence}) + (\text{number of words of 3 syllables or more})) * 0.4$					
<i>ARI</i>	$4.71 * (\text{number of characters} / \text{number of words}) + 0.5 * (\text{number of words} / \text{number of sentences}) - 21.43$					
<i>SMOG</i>	$1.043 * \text{sqrt}(30 * \text{number of words with more than two syllables} / \text{number of sentences}) + 3.1291$					
Panel B						
Factor	Eigenvalue	Proportion	Cumulative	First factor loadings	Second factor loading	Measures of readability
Factor1	4.111	0.685	0.685	0.401	0.382	<i>Fog Index</i>
Factor 2	1.110	0.185	0.870	0.468	-0.054	<i>Flesch Kincaid</i>
Factor 3	0.647	0.108	0.978	0.401	-0.050	<i>LIX</i>
Factor 4	0.104	0.017	0.995	0.456	-0.256	<i>RIX</i>
Factor 5	0.020	0.003	0.999	0.365	0.620	<i>ARI</i>
Factor 6	0.006	0.001	1.000	0.345	-0.631	<i>SMOG</i>

Table 2 Summary statistics

	Mean	Std. Dev.	P1	P25	P50	P75	P99
ICO first day return	0.150	0.871	-0.995	-0.195	-0.005	0.264	4.897
Causal reasoning words intensity	0.019	0.010	0.000	0.015	0.019	0.021	0.080
Causal reasoning sentences intensity	0.201	0.114	0.000	0.102	0.214	0.290	0.401
Economic policy certainty	0.204	0.404	0.000	0.000	0.000	0.000	1.000
First component of readability	-0.177	1.863	-4.334	-1.247	0.062	1.022	5.637
Liquidity percentage	0.620	0.253	0.100	0.428	0.600	0.846	1.000
Ln(Market capital)	18.945	1.901	13.785	17.852	18.714	19.944	25.534
Bitcoin return in last month	0.144	0.417	-0.491	-0.120	0.000	0.365	1.495

ICO first-day return is defined as the close price of a cryptocurrency scaled by the opening price on the first trading day minus 1. Causal reasoning sentence intensity is defined as the number of causal reasoning sentences scaled by total number of sentences in the whitepaper. Causal reasoning word intensity is measured as the number of causal reasoning words scaled by total number of words in the whitepaper. First principal component of six alternative readability measures (Details in Table 1). Liquidity percentage is measured as the number of cryptocurrencies released in the ICO scaled by total amount of cryptocurrencies issued. Ln() stands for natural logarithm. Market capital is defined as the opening price multiplied by total number of a cryptocurrency. China economic policy certainty equals to 1 if average China economic policy uncertainty in the past 3 months before the ICO is less than 25 percentile value, 0 otherwise. All non-dummy variables are winsorized at the 99% level.

Table 3 Correlation

	A	B	C	D	E	F	G
ICO first day return [A]	1.000						
Causal reasoning words intensity [B]	0.000	1.000					
	0.996						
Causal reasoning sentences intensity [C]	0.022	0.440***	1.000				
	0.755	(0.000)					
First component of readability [D]	-0.046	0.617	0.822	1.000			
	0.484	0.000	0.000				
Economic policy certainty [E]	0.088	0.037	0.028	0.017	1.000		
	0.180	0.588	0.687	0.800			
Liquidity percentage [F]	-0.154	0.122	0.091	0.078	-0.041	1.000	
	0.018	0.076	0.187	0.237	0.538		
Ln(Market capital) [G]	-0.169	-0.032	-0.019	0.000	-0.009	0.097	1.000
	0.010	0.643	0.789	0.995	0.888	0.138	
Bitcoin return in last month [H]	0.085	0.083	-0.050	0.041	-0.184	0.042	0.133
	0.198	0.232	0.469	0.532	0.005	0.522	0.044

ICO first-day return is defined as the close price of a cryptocurrency scaled by the opening price on the first trading day minus 1. Causal reasoning sentence intensity is defined as the number of causal reasoning sentences scaled by total number of sentences in the whitepaper. Causal reasoning word intensity is measured as the number of causal reasoning words scaled by total number of words in the whitepaper. First principal component of six alternative readability measures (Details in Table 1). Liquidity percentage is measured as the number of cryptocurrencies released in the ICO scaled by total amount of cryptocurrencies issued. Ln() stands for natural logarithm. Market capital is defined as the opening price multiplied by total number of a cryptocurrency. China economic policy certainty equals to 1 if average China

economic policy uncertainty in the past 3 months before the ICO is less than 25 percentile value, 0 otherwise. All non-dummy variables are winsorized at the 99% level.

Table 4: Regression results for the association between ICO first-day return and causal reasoning in the whitepaper.

	Model I	Model II
Causal reasoning words intensity	23.661**	
	(2.370)	
Causal reasoning sentences intensity		2.985**
		(2.407)
China Economic policy certainty	0.036	0.044
	(0.189)	(0.224)
First component of readability	-0.165***	-0.223***
	(-3.770)	(-3.334)
Liquidity percentage	-0.200	-0.256
	(-1.006)	(-1.258)
Ln(Market capital)	-0.083**	-0.093**
	(-2.182)	(-2.618)
Bitcoin return in last month	0.241	0.245
	(1.451)	(1.477)
Exchange	0.284***	0.274***
	(4.273)	(4.140)
Constants	0.953	1.128
	(1.237)	(1.630)
<i>N</i>	202	202
<i>Adj. R²</i>	9.73%	9.99%

ICO first-day return is defined as the close price of a cryptocurrency scaled by the opening price on the first trading day minus 1. Causal reasoning sentence intensity is defined as the number of causal reasoning sentences scaled by total number of sentences in the whitepaper. Causal reasoning word intensity is measured as the number of causal reasoning words scaled by total number of words in the whitepaper. First principal component of six alternative readability measures (Details in Table 1). Liquidity percentage is measured as the number of cryptocurrencies released in the ICO scaled by total amount of cryptocurrencies issued. Ln() stands for natural logarithm. Market capital is defined as the opening price multiplied by total number of a cryptocurrency. China economic policy certainty equals to 1 if average China economic policy uncertainty in the past 3 months before the ICO is less than 25 percentile value, 0 otherwise. All non-dummy variables are winsorized at the 99% level.

Table 5: Regression results for the association between ICO first-day return and causal reasoning in the whitepaper with intersection term between causal reasoning and economic policy certainty.

	Model I	Model II
Causal reasoning words intensity	14.470	
	(1.647)	
	0.101	
CEPC * Causal reasoning words intensity	46.730*	
	(1.660)	
Causal reasoning sentences intensity		2.564**
		(2.372)
CEPC * Causal reasoning sentences intensity		3.828*
		(1.792)
China Economic policy certainty (CEPC)	-0.859*	-0.765**
	(-1.859)	(-2.166)
First component of readability	-0.208***	-0.235***
	(-3.233)	(-3.334)
Liquidity percentage	-0.192	-0.191
	(-0.968)	(-0.984)
Ln(Market capital)	-0.092**	-0.110***
	(-2.530)	(-3.269)
Bitcoin return in last month	0.298*	0.262
	(1.699)	(1.573)
Exchange	0.273***	0.281***
	(4.256)	(4.177)
Constants	1.271*	1.527**
	(1.755)	(2.409)
<i>N</i>	202	202
<i>Adj. R²</i>	11.61%	13.16%

ICO first-day return is defined as the close price of a cryptocurrency scaled by the opening price on the first trading day minus 1. Causal reasoning sentence intensity is defined as the number of causal reasoning sentences scaled by total number of sentences in the whitepaper. Causal reasoning word intensity is measured as the number of causal reasoning words scaled by total number of words in the whitepaper. First principal component of six alternative readability measures (Details in Table 1). Liquidity percentage is measured as the number of cryptocurrencies released in the ICO scaled by total amount of cryptocurrencies issued. Ln() stands for natural logarithm. Market capital is defined as the opening price multiplied by total number of a cryptocurrency. China economic policy certainty equals to 1 if average China economic policy uncertainty in the past 3 months before the ICO is

less than 25 percentile value, 0 otherwise. All non-dummy variables are winsorized at the 99% level.

Appendix A: Details for causal reasoning measures

For each whitepaper, we apply two methods to measure causal reasoning content: a word-based approach and a sentence-based approach. We measure ‘causal reasoning word intensity’ by counting the relative frequency of causal reasoning words in the whitepaper. The identification of the causal reasoning words is based on a list of causal words used by LIWC (Linguistic Inquiry and Word Count). LIWC is a text analysis software program designed by James W. Pennebaker, Roger J. Booth, and Martha E. Francis.⁸ It is an automated content analysis software for the purpose of analyzing linguistic features of text. The software⁹ processes text on a word-by-word basis and calculates the number of words that match pre-defined word categories (Merkl-Davies, Brennan, & McLeay, 2011; Pennebaker, Chung, Ireland, Gonzales, & Booth, 2007). According to LIWC, insertion of causal words in a sentence has a substantial impact on comprehension and memory for text. This is consistent with prior research showing that the number of causal connections and causal chain membership is positively related with recall, summarization and judged importance of text messages. The LIWC causal words list is presented below. An alternative measure (referred to as ‘causal reasoning sentence intensity’) is based on a sentence as unit of analysis. A causal reasoning sentence is defined as a sentence that includes at least one of the causal words in the LIWC causal words list.

⁸ <http://liwc.wpengine.com/>

⁹ The LIWC Dictionary is composed of 2,290 words. Each word or word-stem defines one or more word categories or sub-dictionaries. For example, the word ‘cried’ is part of four word categories: sadness, negative emotion, overall affect and a past tense verb. Hence, if it is found in the target text, each of these four sub-dictionary scale scores will be incremented. Many of the LIWC categories are arranged hierarchically.

Table A: LIWC causal words list.

activat*	changes	depended	how's	lead*	permit*	solves
affect	changing	depending	ignit*	led	pick	solving
affected	compel*	depends	implica*	made	produc*	source*
affecting	compliance	effect*	implie*	make	provoc*	stimul*
affects	comple*	elicit*	imply*	maker*	provok*	therefor*
aggravat*	comply*	experiment	inact*	makes	purpose*	thus
allow*	conclud*	force*	independ*	making	rational*	trigger*
attribut*	consequen*	foundation*	induc*	manipul*	react*	use
based	control*	founded	infer	misle*	reason*	used
bases	cos	founder*	inferr*	motiv*	response	uses
basis	coz	generate*	infers	obedien*	result*	using
because	create*	generating	influenc*	obey*	root*	why
boss*	creati*	generator*	intend*	origin	since	
caus*	cuz	hence	intent*	originat*	solution*	
change	deduc*	how	justif*	origins	solve	
changed	depend	hows	launch*	outcome*	solved	

Appendix B: Components of a whitepaper

Overview: Introduce the industry, market status, competitors and finances of the project.

Risk Factors: This section concerns the various legal, industry and internal risks of your project and how it impacts the success of the project and the ICO.

Solution: This section explains in detail how the project is going to solve the problem. The solution is usually the main focus for investors when reviewing a whitepaper.

Token Valuation: It provides information about how the token is going to be used in the project, and whether the team has plan or timeline to buyback the token in the future.

Token Distribution: It provides details regarding the distribution schedule, token allocation, overall fees and costs of the project.

Team Members: This part focuses on providing details about the project team members and their capabilities. It is essential that at least one team member has a strong understanding or background of blockchain technology.

Milestones: This portion focuses on the use of tokens and the journey of the project through a series of timelines. This gives the reader a bird's eye view of the project and provides a deeper understanding on how the project will proceed in the future.

Reference: This section contains all the references and resources from which the external data has been compiled. It may help the project to gain credibility as authentic sources are provided for the readers to study further.

Sources:<https://cointelegraph.com/ico-101/what-is-a-white-paper-and-how-to-write-it#what-is-a-white-paper>
<https://medium.com/@listoficomarketing/ico-whitepaper-a-definitive-guide-for-creating-a-compelling-whitepaper-f7d846c0efdd>