

The Chinese Corporate Social Credit System(s)

One system to rule them all?

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Abstract

The aim of this thesis is to investigate the Chinese Social Credit System. Commonly envisioned as a massive scale database with a vast number of governmental agencies collecting data and rating individuals and companies. While the social credit system has gained attention and criticism in Western media, it has mainly focused on the individual-based side. However, the initial visionary policy documents make it clear that the target of the system is mainly corporations. With China's tremendous importance for international business, understanding a potential game-changer within the regulatory system and the playing field of doing business in China, is vital. Therefore, the goal of this thesis is to expand and contribute to the little research done on the corporate side of the system.

The thesis aims to illustrate the connections and governance of the ecosystem that makes the social credit system. It investigates the structure of the different actors involved, by conducting a social network analysis. In order to understand the corporate social credit system network within its political context. Tying it to the theoretical modes of governance: top level design and fragmented authoritarianism. The two modes of governance can explain policy implementation and steering within the relatively decentralized national legislative structure. In addition, the thesis dives into the question if it is really is one coherent system, despite the numerous actors involved. In order to understand the effectiveness and implications for a company that is listed in the system. By analyzing blacklists – which is often described as the central incentive mechanism of compliance. Through tracking the source of data in different leveled databases and blacklists, the paper is able to map out the connections between the different actors and their databases.

The thesis finds that the Corporate Social Credit System is fragmented into silos and that there is no cohesive system in place. Despite the target of implementing the system in 2020. A reason behind it is the decentralized nature of the system involving numerous different databases on multiple levels, ranging from different municipalities to ministries and third-party actors as well as that there is no governmental agency solely responsible for the social credit system. Although

the NDRC and PBoC has to ability to influence and steer actors that stray too far from the target. In turn, one could even describe many of the databases on different levels as their own corporate social credit system, due to their functionally independent nature and different targets. Furthermore, blacklists are unlike typically depicted not connected to a scoring system. Thus, the author suggests that the corporate social credit systems should be understood in the context of a previous lack of a national credit system. The multitude of databases have been created in order to facilitate background checks, improve legal enforcements and increase trust on the market. Yet it is perhaps not meant to become an all-purpose coherent database. Especially since there are legitimate methods that a company can delist themselves and remove a bad track record. However, since the system is still in its infancy, there is still a possibility that the shape and structure might change in the future. Despite this, it is the author's hope that by clarifying the structure of the Corporate Social Credit System it can facilitate further understanding and future research of the system.

Abbreviations

CLSGCDR - Central Leading Small Group for Comprehensively Deeping Reform

CSCS - Corporate social credit system

NDRC – National Development and Reform Commission

NIFA – National Internet Finance Association of China

NPCIC - National Public Credit Information Center

PBoC – People's Bank of China, the Chinese Central Bank

SAMR – State Administration for Market Regulation

Content

Abstract	2
Abbreviations	4
1. Introduction	8
1.1 Background	9
1.2 Purpose	11
1.3 Research Question	12
1.4 Limitations	13
2. Methodology	14
2.1 Material	14
2.2 Philosophy of research	14
2.3 Social networks	15
2.3.1 Connections	17
2.3.2 Degree centrality	18
2.3.3 Density	18
2.3.4 Between centrality	19
2.3.5 Eigenvector	19
2.4 Evaluation of the method	20
2.5 Research design	21
2.6 Delimitations	22
2.7 Visualization	24
3. Theory	24
3.1 Fragmented authoritarianism	24
3.2 Top level design	25
3.3 Political steering	26
4. Previous research	29
4.1 The discussion about the Social Credit System on an individual level	29
4.2 Compared to previous Chinese systems	31
4.3 The Corporate Social Credit System	32

	4.4 One system to rule them all?	. 33
5.	The structure of the Social credit system	. 36
	5.1 Functions	. 36
	5.2 Purpose	. 37
	5.3 New tech	. 39
	5.4 Blacklists and redlists	. 40
	5.4.1 Blacklists	. 41
	5.4.1.1 Dispute mechanisms	42
	5.4.2 Redlists	. 43
	5.4.3 Covid-19 and social credit	. 44
6.	The different agencies	. 45
	6.1 The top	. 45
	6.2 National Development and Reform Commission	. 45
	6.3 People's Bank of China	. 46
	6.4 State Administration for Market Regulation	. 48
	6.5 Tech companies	. 49
	6.6 The Courts	. 51
	6.7 Ministries	. 52
	6.7.1 The Ministry of Housing and Urban Rural Development	. 52
	6.7.2 Ministry of Culture and Tourism	. 54
	6.8 Local governments	. 57
	6.8.1 The case of Yiwu's corporate social credit system	58
	6.9 Third party credit rating agencies	. 61
	6.10 Comparing the systems	. 62
	6.11 Connecting the dots	. 64
	6.12 Flow of data	. 65
7.	Analysis	. 69
	7.1 Political dimension	. 69
	7.2 The number of system(s)	. 72

7.3	3 Will it be one system?	75
7.4	4 Implications	77
8. Co	oncluding remarks	80
9. Re	eferences	82

1. Introduction

Much has been written and discussed about the Chinese Social credit system. Following its official announcement in 2014, it has been given a considerable amount of media attention in the Western hemisphere. Frequently described and characterized as a mandatory system were all citizens are subjected to a score based on their compliance with laws and well behavior. What is described as invasive score-like features has been drawing international critique as a dystopian science fiction -like feature of digital authoritarianism. To mention just a few examples, the New York Post, (2018) called it a "real-life Black Mirror nightmare", referring to an episode of the sci-fi tv-series where every interaction is rated by other people and the score in turn affects every citizens socioeconomic status. Even the US Vice President Mike Pence has described the system in a speech as "an Orwellian system premised on controlling virtually every facet of human life" (White House, 2018) However, is this critique justified? Or is it a simplified view of an ecosystem of complexness?

Because what is the social credit system of China? In reality, the individual-related system should perhaps not be referred to in singular, since the term covers a range of different functions and usages, on different platforms. Ranging from commercial companies giving points and discounts based on consumption patterns in order to encourage purchases through their payment platform, to traditional credit systems meant to assess risk of defaulting on loans. The wide range have been lumped together and framed as an all-encompassing unified mandatory system. Furthermore, while the individual side has been attracting the most international interest, there is a lesser known corporate related counterpart. In fact, the social credit system which was officially announced in 2014 is mainly aimed at companies.

In the grand plan mapping it out (The State Council 2014) the system extends to include all types of registered companies operating in China. Both domestic and wholly foreign owned. The system is described as a method to evaluate the company based on compliance with laws, and regulations.

In accordance with compliance, special advantages might be given in the form of certificates or certain bonuses, while disadvantages and even penalties will be given if there is a low compliance with the system. While it is still in process of being rolled out at the time of writing, perhaps delayed by the covid-19 pandemic, it is originally set out to be in place in 2020. The scale of the thought-out system is massive, involving a wide number of different governmental agencies as well as local level governmental actors regulating and enforcing it on different levels. Furthermore, other actors such as the giant tech champions plays a part, constructing the technological infrastructure. However, is the corporate social credit system really the individual ones, a united system? How is the system structured and how is it governed? Are there differences in different jurisdictions? What are their roles and what can we learn from the actors involved?

Understanding how the social credit system works and what it implies is important in order to understand the realities of doing business in China in the 2020^s. Not only domestic but also international companies are affected, both directly and indirectly due to the global interconnectedness in supply chains. If the social credit system lives up to the grand plan it could have a great impact on how business is conducted in China. In addition, understanding the inner workings of the system also provides a glimpse into the inner workings of policy progress and the Chinese legal system.

1.1 Background

The corporate social credit system (from here on CSCS in order to differentiate between individual related parts), is envisioned as a massive scale database consisting of all companies operating in China. To understand the reasoning in allocating resources to develop such as system one has to go back in time: In the 1990s there were an increasing rate of companies defaulting on their debts as well as serious cases of misleading company disclosures on the securities markets. The development of the securities markets was from an early stage heavily affected by government

policies, as it was established and formalized relatively late in the early 90s. However, there were many instances of false corporate disclosure, which added to the volatility of the already vulnerable financial market. With many State-Owned Enterprises struggling to adapt to the changed economic situation in China they found themselves in a position where they were losing money. As a result, they were encouraged by the government to transform into joint stock companies and to list themselves on the stock exchange. However, the highly regulated stock markets had adopted a quota system of how many shares could be issued and by which companies, this resulted in companies' that attempted to game the system in order to issue more shares. Preferring to use strategies such as change the names of their companies and make fabricated disclosures, rather than improving their performance. One of the most prominent cases was in 2001, when the Yinguangxia Corporation fabricated a 745-million-yuan profit in order to be listed on the stock market. The lack of transparency and corporate disclosure is identified as one of the biggest reasons of its vulnerability (Fu, 2010).

This led to the first development of a credit rating system in order to evaluate companies' financial ability and risk (Liang, Das, Kostyuk, Hussain 2018). Later on, in 2007, the Chinese State Council (the highest executive organ) published the first outline of an idea of creating a so-called social credit system. Envisioning a credit system as a means of dealing with the issues of fraud, tax evasion, and intellectual property infringement. At the time, the focus and emphasize was mainly to use it as a financial credit system, expanding on the idea of evaluating risk and measure credit worthiness (Shen, 2019). Following that, the State Council published the blueprint like document Planning Outline for the Construction of a Social Credit System 2014-2020 (2014), which is the central document of the Social Credit System since it goes into detail mapping out what the content and vision should be. As Liang et.al (2017) points out, it is starting with this document that the social aspect of a credit system first is included. By creating a credit system where vast information on all companies are stored. Looking at the purpose and goal of the system, it is expressed as a mean of enhancing efficiency, increase trust and transparency in society (Creemers, 2018). Besides

that, the document also sets a timeline to implement the CSCS. The government set the target of starting from 2014 and then have the system fully implemented in 2020. However, as the European Chamber of Commerce (2019) acknowledges in a report published in the latter half of 2019, parts of the system have continuously been created and implemented even before 2014. Thus, it should not be understood as a system that is suddenly implemented and imposed in a complete form in 2020, but rather being rolled out gradually. This can be compared to another ambitious policy, namely the goal of universal health care coverage. According to the official narrative it was achieved within the target timeframe of a few years. However, according to official statistics it still took an additional five years before some of the healthcare schemes were fulfilled (Gu and Page-Jarett 2018). Therefore, even in 2020 the social credit system is likely not to be completed (European Chamber 2019).

1.2 Purpose

With the complex structure and wide range of different actors in this grand plan this thesis sets out to examine the relationship between the different actors involved in the CSCS. Such as the involved governmental agencies, local level systems, and tech-companies, in order to shed light on how the CSCS is interlinked between different actors and in turn how it is governed. The massive size of the required database and the different agencies involved in collecting data by itself creates a great technical challenge. As to this date, there has been no previous research attempting to interlink and map out the different actors involved, and only sparse research has been conducted on the topic of the corporate related side of the social credit system. As mentioned previously and which will be further examined in the Previous Research chapter, the major focus of international research has been on the individual side of the SCS. However, the author argues that to not focus on the company side is a missed opportunity as the original plan from 2014 foremost focuses on implementing a system for companies, and judging from the official document

it is likely to be the major focus of the policy (Meissner, 2017). Therefore, one of the purposes of this paper is to fill the research gap within the China related as well as regulations related sphere. Much of the economic or business-related academic research focusing on China tends to look at grand plans such as the Belt and Road Initiative, or industrial policies such as Made in China 2025. Without considering the massive impact the Corporate Social Credit System might have if it is anything like what it is envisioned as. Examining that presents a groundwork in order to understand how the government, the economy, as well as companies are interlinked and how the CSCS affects it.

At the same time by approaching the subject academically in order to provide further context and understand the structure as well as functions of the system, this thesis seeks to provide a more balanced view than the dystopian black-mirror narrative. In case it is reported in an over-exaggerated manner it could harm the trust of people living with the system and speeding up the decoupling process. With an increased risk of labeling everything from the same western media sources as misunderstanding China and fake news. Thus, it is important to strive to provide unbiased information in order to increase trust and legitimacy. Otherwise it risks diluting necessary discussions such as human rights violations.

1.3 Research Question

The research question sets out to investigate the connections between the different actors involved in the CSCS. In order to unravel the structure, as well as the different actors and their tasks, ranging from gathering the data, providing infrastructure, to regulating it and using the output. Making it a descriptive study since the aim of this paper is to examine the structure of the network and identify key actors in it, as well as their roles. Therefore, the research question is:

How is the CSCS structured and governed?

The second goal of the paper is to examine if it is a unified or disjoint system. With the numerous actors and sheer size of it, it is an enormous task to uphold. If several databases exist, are there data sharing between them? Therefore, the second research question is the following:

Is the corporate social credit system one cohesive system, despite the numerous actors involved?

In the case of a fragmented system, that would impair data transfers, making it even impossible to process and transfer in an efficient manner between the databases. Ultimately if it is not coherent that would imply that the actual system is much less efficient than what it is depicted as. While it is known that the data-gathering is made in silos (by the different agencies etc.) it is important to know if the data ends up in a single master data base or not. Or if it is possible to make use of the data in a similar sense. This will be research by investigating commonalities between the system in order to identify sources of information.

1.4 Limitations

As is well known 2020 was a year deeply affected by the covid-19 pandemic. This limited the author's ability to do any type of field research as China at the time of writing had closed their borders. This did affect the outcome and path that the research ended up taking, but future research once the borders are open or by researchers in China have the possibility to conduct fieldwork in order to investigate how the CSCS affects companies operating on the ground.

2. Methodology

This chapter outlines the methodology and research design of the paper. To that end, in order to gain a further understanding of the structure of the system this paper will conduct a social network analysis of the governmental agencies and other actors that combined, gathers and uses the data of the CSCS. This, by mapping out the involved actors in the system.

2.1 Material

This paper uses second-hand sources in the form of public data from various social credit related databases, documents from different governmental agencies as well as previous research. The information gathered in the social credit related databases adds to understand the workings of the system by cross-examining the information found in one database by investigating commonalities with others. Investigating the relationship between the system sheds light on the connections between them and which databases are gathering data from each other. If the system is coherent that would imply that information of a company on a blacklist would be registered on a blacklist in another database as well. The usage of governmental documents, which includes legal documents and reports are to understand how the connections are linked to the system as well as how the system is used. Adding to this the author found that certain databases were geo-blocking users outside of China. The author was able to use a VPN and other creative solutions such as accessing them through her WeChat account.

2.2 Philosophy of research

Philosophy of research involves clarifying the nature of knowledge and how the world is viewed in this paper. The author assumes a nominalist ontological worldview which is based on the individual's viewpoint of the world. The world is shaped by the belief in the existence of universals, which are entities that have universal values. The entities can be either concrete or abstract, for example justice and beauty. Particulars are entities that have human conventions behind the concepts, thus it depends on the individual that discusses the particular what meaning it holds, in contrast to the universal values (Solem, 2003). Thus, a nominalist worldview is one that does not believe in universals but assumes that the world consists of particulars. What is considered a social credit system also follows this notion, and it is the author's understanding that it is a particular.

The chosen methodology of the paper is a so-called inductive approach where the author uses observations to identify consequences (Saunders, Lewis and Thornhill's 2015). The paper sets out to use empirical data gathered to develop understanding, which in turn is a result of data analysis that stems from the social network analysis. It is a qualitative case study which enables the research to dive deeper and investigate the topic closely. In order to answer the research questions of how the system is structured and if it is one coherent system, despite the many actors involved. However, the methodology does not provide waterproof conclusions as it is not saved from potential fallacies. Faulty premises will lead to a faulty conclusion, as well as concepts considered universals might not always be. An example is Newton's law of gravity, while considered universal, it does not apply in space (Åsberg, 2000). Thus, the research is set out to investigate if the CSCS is one coherent system or not rather than assuming either.

2.3 Social networks

Considering that this thesis sets out to study the connections between the different actors involved in the CSCS it has chosen a social network analysis as its methodological approach. A social network analysis refers to the study of the structures of a network. By analyzing the quantitative properties of its nodes (Borgatti et al 2018). It is an interdisciplinary method, which emerged from sociology, psychology, and statistics. However, nowadays its application stretches into other fields

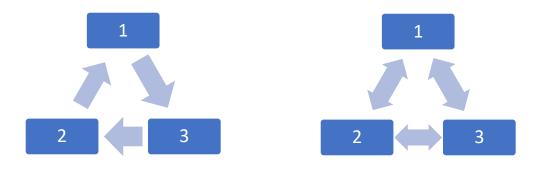
such as computer science, biology and economics. The versatility and usability of the method makes it possible to apply it to a wide range of subjects. Ranging from the study of our innermost circle of friends, the spread of an infectious disease, to a global supply chain network. The benefit of a social network analysis is that the structure of the network, as well as the relations between the nodes impacts the network. Examining that gives further information on the characteristics of it. In addition, social network analysis is a type of structural analysis. However, one difference is that it does not draw conclusions solely from single variables, but rather analyzes the bigger picture as the structure is the most important (Grannovetter, 1983). In order to create a complete analysis, it is important to also study the network on an individual level, thus understanding the actors' point of view and their part of the network.

A network is defined as a web of different actors, from here on called nodes, connected to each other, by so called links. In social science, nodes can represent different things, such as individuals, organizations, and objects. The links are in turn representing a relationship between the nodes. They can represent connections, social interactions, flow of data etc. The nodes in the network as well as their connections is what defines the network, thus examining the relations and connections in the network is essential (Borgatti, et al 2013).

Networks exists in many different shapes. On one end of the spectrum, it is governed completely by entities within the network or are highly brokered with actors acting as middle hands between entities (Tichy, Tushman and Fombrun 1979). A middle ground network would be a mix where one actor governs key activities while others in the network runs others. Lead-organization governed network is a type of network which is highly centralized, vertical, with one organization leading (Antivachis, Angelis 2015). In terms of business that would be a buyer-supplier type of relationship. All major activities and key decisions are coordinated through one single actor, implying asymmetrical power.

2.3.1 Connections

Examining how well connected the nodes are and how they are connected is the target of social network analysis, since it sheds light on their behavior, power and importance. It can clarify the cohesiveness of the system as well as examining if there are isolated clusters within it. In addition, the flow of information between the nodes can be either one or two-sided, depending on if there is an exchange of data or not. It is directed if the flow of data only goes one way, and undirected if it goes two ways (Barbási, Albert 1999). This means that either A gives information to B or if it is undirected A and B exchanges information. Thus, directed from a node would imply greater influence from that node.



An example of a system with only direct connections and besides it a system with undirected connections.

In this thesis the edges represent the flow of information, examining whether it is directed or not. They can be examined by considering the reachability, the connections between the nodes. In directed graphs where the flow of information between the nodes is only going one way, it is possible to discover division in the network and to observe if certain actors are isolated or not. If a node is not directly connected to a well-connected node and only receives information, it has

very little power compared to the well-connected one. In the context of the CSCS the connections should be understood as the more connected the more knowledge it possesses, rather than directly making it influential. The knowledge in turn would make the edge to an important cornerstone or player in the eyes of the higher ranks, which in turn implies influence or power. In addition, there is also the prominence of a node's position in the network. This is examined by centrality, which in this paper is measured by their degree centrality, eigenvector, and between centrality. As well as the general structure of the network.

2.3.2 Degree centrality

Degree centrality is the number of connections that a node has. Simply put, the one with the most toys win. Thus, the more connections, the more central a node is, which implies that they have indirectly greater influence over more nodes. They are also in a more advantageous position to have information transferred to them. However, there is a modification to this approach as two nodes with an equal number of connections are not necessarily equally important. As it rather suggests that the nodes are central in the network rather than powerful. However, being connected to isolated nodes and being their single source of information is what makes them more influential compared to the node which depends on the other node (Bonacich, 1972). However, solely looking at degree centrality gives a very limited picture of influence and importance since it says very little about actual influence but rather its importance of gathering information.

2.3.3 Density

The density of the network is the direct ties in a network relative to the number of nodes in it (Borgatti, et al. 2018). For example, if there are ten people in the network the maximum possible connections for one person is nine. The number is used to divide the actual edges of the node. The

denser the network determines how fast information can travel and on how much access to information certain actors have.

2.3.4 Between centrality

Between centrality is measuring how well-connected a node is. Measured by the number of shortest paths passing through a node. It can be calculated by the proportion of the shortest paths among other nodes that pass through the node. Nodes with high between centrality are the ones connecting different nodes to each other and act as a type of broker or intermediary (Borgatti, et al. 2018). Comparing it to degree centrality, it may actually result in a relatively low score if it is only connected to two or three other nodes, but may still act as an important intermediary if it is the shortest path in order to reach the node with few direct connections. Thus, this measure can lay ground on which actors in the social credit system are more prominent than others and have a higher influence due to their access to information. However, if it is well connected between two clusters it could imply that it is in the periphery of them.

2.3.5 Eigenvector

Eigenvector centrality also investigates the prominence of a node while considering the importance of its adjacent nodes. If the node is connected to other well-connected nodes that imply more importance rather than total number of connections (Borgatti, et al. 2018). Thus, eigenvector may as a complementary measure to the other centrality measures give insight into what nodes influence the entire network rather than only the direct connections in it.

2.4 Evaluation of the method

The approach has been selected due to its dual interest in both the structure as well as actors of the system. Mapping out the connections of the system will bring clarity to the characteristics of the structure. Illustrating and investigating the structure of the system will shed a light on the distribution of different actors and their activities in the system as both connectivity, and the individual role of the actors are important. Using a social network analysis lets the researcher investigate both. One obstacle with the given method is that it is a descriptive case study and will not directly be generalizable on other cases. The topic of Social Credit is, at least for now, very specific to China and the Chinese context. However, by using a wider methodology to examine the social credit system is also a case of examining the Chinese government in terms of policy design and implementation on a large-scale policy involving multiple levels. Furthermore, the author argues for its relevance as China is of huge importance to global businesses and an understanding of the market and playing field of conducting business is vital to many companies. Thus, expanding the knowledge of the system is important. Furthermore, the goal of the thesis is to demystify and examine an area where very little research has been conducted and the aim of the paper is to fill the research gap.

The strength of the method is that it fits well with the research question as it is a way of visualizing how the different actors are connected and how they interplay. However, doing a social network analysis not only provides clarity of how the different actors are connected, but it can also map out clusters. This would help with researching the second research question. By investigating eigenvector, the importance of the different nodes also becomes clearer. By comparing that to the flow of information, potential clusters or silos can be discovered to be their own system. Therefore, it is a powerful tool to determine if the CSCS actually consist of a number of systems or if it does not. As it can also identify the most important hubs of data centralization or discover flows. However, by only investigating the direct connections of the different databases in the network the importance and influence of other actors higher up in the hierarchy might be hidden as they will

not be found within the network, and thus this aspect of influence would not be illustrated. Combining it with a theoretical framework that can further analyze the political dimension and investigating the relationship between them through other sources, such as official documents is an important additional method. Another approach would have been a methodological triangulation where one gathers data using several methods in order to offset intrinsic biases of single method papers. That would be a method of increasing validity of the research. However, common means of gathering data such as interviews or questionnaires is not directly suitable in this field of research. Approaching high level officials is easier said than done. It also does not make as much sense to do so as the objects of study are different governmental agencies rather than individuals, which already has been a common research object when it comes to the individual side of the social credit system. The paper approaches the subject on a macro/meso level rather than individual company level and so it is questionable if it would be too subjective with regards to this type of research.

2.5 Research design

In this study the different actors that make out the CSCS are the nodes. In order to answer both research questions, in the first case the link between them is the hierarchical relationship between the nodes. In this case adjacency is important to shed light on the direct connections and relationship between different structures. In order to reveal if certain governmental agencies and actors are more influential than others and if so which ones. The structure and relationship between them are also analyzed using the theoretical chapter in order to understand the structures within the political system in China.

The central objects of research are the different actors involved in the system and their relationship and connection to the other actors within it. Thus, in order to answer the second research question, it is vital to look at the flow of information. In this case the commonality will be the blacklists and

redlists to observe if the information gathered are used by other actors as well, rather than solely by the creator of the blacklist. Since data is gathered in silos and by different agencies as well as local actors that have the control of the blacklists and redlists within their database, it is interesting to examine if the information is gathered and shared further. Or if the information stays within the same unit. As mentioned previously, information flow between two nodes can be either directed or undirected and the usage of the blacklist in another database/CSCS will be counted as an undirected link between the two entities. Blacklists and redlists which are further discussed in chapter 5, are the most concrete choice of representing a link of data sharing. One reason is that the source of the penalty is listed, thus making it clear which governmental agency or other actor is behind it.

2.6 Delimitations

The chosen method is not spared from potential methodological issues. A weakness with the chosen approach is the lack of transparency of the study object. When studying Chinese policy and governance in particular, there is always a risk of being affected by its opaqueness. This in turn, also impacts the possible study objects. Thus, one issue with the method is a potential uncompletedness due to a hidden population that the author is unable to identify. As the primary source of the data is public records rather than using a data gathering technique such snowballing from the connections in interviews. To completely mitigate the risk of a hidden population is not possible. It might also be hard to find proof of information flow, such as cases where it is hidden or not publicly known. It could be connected to sensitive topics or certain areas that are important to the government and therefore not made public. Implying that there is a risk that links between agencies are left out. Considering the risk, that could potentially skew the findings if there are players that have a much more prominent role than is made clear. Thus, the research is mainly based on public records. However, the author is aware of it and the limits it adds to the findings. However, considering that the option otherwise would be to not conduct the research, the author

still argues that with what the research can shed light on and investigate still makes it worth the potential hidden data. In addition when it comes to the study of the social credit system Engelmann et al. (2019) pointed out that if the system was inscrutable that would defeat the purpose of nudging companies to better behavior as if they were put on a blacklist without any reason or explanation they would not know how to improve or behave to not end up there. They propose that the system itself is semitransparent, as too transparent would make it possible for companies to game it. Having this in mind that the system would function better for its own purpose if it were relatively open with the information provided. Nevertheless, the paper first delves into previous research in order to avoid solely relying on sources from the Chinese government. When it does, such as discussing the motives and reasoning behind implementing the CSCS, it should still be understood that they are the reasons given to the public. If there are additional ones, or additional data gathered it would unfortunately, go beyond the scope of this paper.

In addition the CSCS was from the beginning set out to be in place by 2020 so studying something that is still in the making might also skew some of the results, as it might be clearer to observe the connections and impact of it in the following years. By solely conducting a social network analysis might as Monsted (1995) argues make us blind to more fluid aspects of emerging ties in a network that is not well established and stable. Thus, by having this in mind this paper does not solely rely on the quantitative data stemming from the connections found in the social credit system databases. Therefore, the findings should be interpreted in this light and will still able to provide an indication of the structure. It is the author's hope that by mapping out the connections between the different actors involved it will create further clarity when doing future research on the subject or for companies operating in China that are affected by the system. In addition to an interesting study of how the interconnectedness between different governmental and non-governmental actors' manifests and can be used to compare with other circumstances both within and outside of China.

2.7 Visualization

The paper will use the software Gephi in order to visualize the network. The most important tool when conducting a network analysis according to (Nooy et al 2005) is the sociogram. Which is a graphical representation of the network structure. Gephi is chosen as it has the option of visualizing one- and two-sided links between two nodes. In order words it can clearly illustrate the flow of information.

3. Theory

The purpose of this chapter is to map out the theoretical framework that this master's thesis will utilize to analyze the connections of the social credit system. It will make use of top-level design and political steering as theories in order to understanding the structure behind the system. The concept of top-level design and political steering can be used to illustrate the political actors involved in policy making and implementation. By assessing the capacity to produce an outcome, to analyze if the set objectives have been reached or not (Schubert and Alpermann 2019), making it applicable to the case of CSCS. The theory section also brings up fragmented authoritarianism. This concept is used more frequently to describe the political system before Xi Jinping came into power but is still relevant in order to understand the changes that have come since. In addition, parts of the current political system still have traces left of fragmented authoritarianism.

3.1 Fragmented authoritarianism

Fragmented Authoritarianism is a theory to describe the interplay between local governments and state government actors. The theory is based on the decentralization that occurred in the Chinese society following the time after Mao Zedong. Through the reforms that followed, local governments were given autonomy and could use it to launch their own reforms and policies. Resulting in that China has even been classified as one of the most decentralized nations when it

comes to government spending (Yang, 2013). The fragmented authoritarianism theory states that due to the decentralized nature of policy making process other actors apart from the state has considerable bargaining power. So called bureaucratic bargaining (Mertha, 2009). As outcomes are shaped by interest beyond the state with local actors and even non-political actors being able to influence policy making and implementation. It is possible that the remains of these structures have an effect on potential differences in implementing the social credit system. While there has been a recentralization since Xi Jinping came into power, the author argues that it is not yet irrelevant and important to understand the current system. As Brødsgaard and Mertha (2016) states that since Xi Jinping, policy is still fragmented but is stricter kept in check. For example, with the difference that coordination responsibility by several Leading Small Groups that Xi Jinping himself in many cases heads, outranks other governmental agencies.

An example of fragmented authoritarianism is the development of the wind power industry (Lema and Ruby 2007). The policy coordination had initially started in a fragmented authoritarianism mode during its development. Later it had moved into a more coordinated phase. Whereas the fragmented system led to a more hierarchical structure which was increasingly coordinated on central level. It started off with three different state commissions with overlapping fields all in charge of governing and leading the project. Unsurprisingly, coordination between them became a big hurdle. Leading to competition over funds instead of coordinating policies with each other. It was not until a restructure of the agencies governing it, including giving responsibility to the National Development and Reform Commission that it could eventually coordinate the different actors and reach its targets.

3.2 Top level design

Ever since Xi Jinping came into power in 2013 there has been a shift to a top-level design (顶层设计) type of governance. This is characterized by a higher degree of centralization, or re-

centralization. Reversing the shift that followed Mao Zedong that power went from a highly centralized level to increasingly give room for local level governance, but since Xi Jinping there has been a gradual reversal. Policy and monitoring have become more and more streamlined at the top as well as implementations which are under stricter control by authorities at a higher level. It also includes top-down signaling of which policies should be implemented. This has been a shift from the previous president, Hu Jintao's governance since local governments were able to make their own policies to a wider extent. However, according to the official narrative this resulted in the negative development of corruption, as well as a growth model based on over-investment and debt accumulation of local governments which is used to justify the shift (Schubert and Alpermann 2019).

3.3 Political steering

Schubert and Alpermann (2019) argues that China is not governed in only one distinct way, but rather different modes of governance is used simultaneously both in the same policy field and administrative level. There is a combination of steering by state power as well as cooperating with a wide range of actors including individuals, corporates etc. Schubert and Alpermann (2019) states that party state bureaucracies at central or local level as well as lower level local governments are both steering objects and steering subjects at the same time. Non-state actors include corporate actors, collective actors such as business associations, and individual social actors such as lawyers or business tycoons. The non-state actors also have ability to influence and negotiate and can also be both steering objects and steering subjects. Pointing to a country the size of China there is no wonder that there is a degree of decentralization where the local state actors can adjust the set targets and adjust it to the circumstances of their constituency and local situation. To ensure that

the policy is coherent across the country, the center engages in a form of meta steering where the government steers the steering.

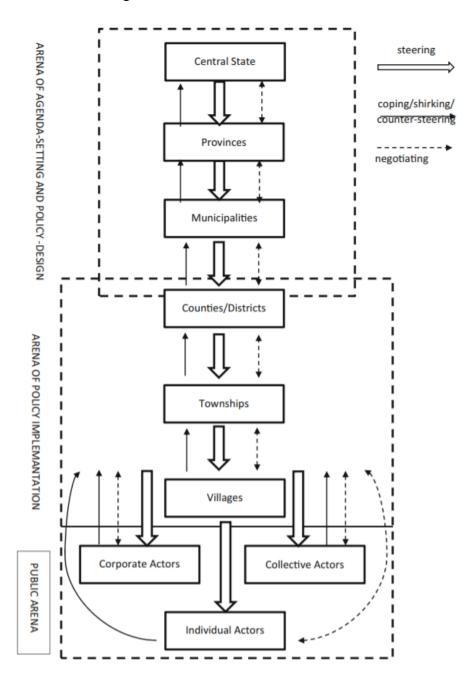


Illustration of a generic model of the steering process (Schubert and Alpermann 2019 p214)

The model is a generic model of a potential policy process where policies are designed at central and higher levels whereas counties and districts are responsible for their implementation on the ground. In these situation non-state actors still have an opportunity to negotiate with these actors as well, as well as a mode for counter-steering/tweaking the course of the steering. However, the steering objects such as lower level governments and the actors on the public arena responds to the policy in different modes. In order to overcome fragmentation, the top-level design mode provides "an authoritative blueprint that stipulates policy goals, if not the concrete measures to achieve them." (Schubert and Alpermann, 2019 p. 216). This mode is set for policy fields that are complex and grand including policies such as Made in China 2025, and the Belt and Road Initiative. The policies leave room for initiatives and plans from the local governments but as they are vague in their nature, hierarchical steering is prominent.

4. Previous research

This part is divided into four different parts. First generally about the more notorious individual facing credit systems of China, a comparison with previous systems combined with research conducted in Chinese, and then specifically about the corporate social credit system. The final section is about the academic discussion about the current state of the system.

4.1 The discussion about the Social Credit System on an individual level

The vast majority of research done in the academic field of the Chinese social credit system has mainly focused on the individual related systems. By either leaving out the impact on companies or while acknowledging that there is a company related part, choosing to focus on the individual level. Aspects such as privacy issues, digital authoritarianism, surveillance etc. are common themes. With theoretical frameworks such as Foucault's panoptic model of surveillance being a common method of comparison (Hoffman 2017). Furthermore, there are researchers that have observed that while the discourse is referring to a singular social credit system, it is in fact different commercial platforms (Sithigh and Siems 2018). Likewise, Kostka (2019) points out that they are voluntary, with similar functions to loyalty schemes. As well as pointing out the fragmentation of individual related systems. Furthermore, other researchers even suggest that the phrase *social credit* should be considered an umbrella term for a broader policy agenda of local and statewide policies rather than a system that will be implemented on a national scale (Ahmed, 2019).

In more recent time there have also been papers looking into the relatively high approval of Chinese citizens of different SCS, focusing on systems such as the Sesame Credit (Kostka, 2019) While Chinese citizens surveyed by western researchers as well as Chinese media predominantly approves of the system (Ohlberg, 2017), some Western scholars but foremost media often describes the social credit system as something from a Black Mirror episode, an extension of the

digital dictatorship or Orwellian (see the Economist, 2016; Botsman, 2017 etc.). A reason behind it appears to be a simplification of the original road map from 2014. While the document mainly refers to regulating companies, there have been a discussion that these rules would apply to individuals as well. Stating that it will be nationwide and include all individuals (such as Bach, 2020). Horsley (2018), also points out that another common misconception is to mix up platforms that check social behavior and consumption patterns and attributing it to social credit systems, while they are rather part of commercial rewards programs. He further states that "unless people are the sole proprietors or company representatives, have taken a loan or credit card, violated the law, or defaulted on a court judgement, they're unlikely to be in the social credit database" (Horsley, 2018 p. 3). However, some scholars such as Jiang and Fu (2018) states that while the system might initially emphasize on regulating companies, it could potentially monitor individual behavior as well.

Another issue adding to the misconception is that many articles cherry pick some functions of the many pilot city tests as something that will be or stating that it is implemented countrywide and is basing assumptions on some of the most far fetching ones like in the city of Rongcheng. In Rongcheng there is a social credit system that does score individuals on compliance with certain laws and regulations. Such as drivers who do not stop before a crosswalk gets a penalty or a person gains points if they donate blood (Mistreanu, 2018). However, this is mainly unique to that specific city. Through this researcher's case studies on a specific city this in turn turns to another researchers projection of what might be implemented in the entire China, and further down the line some media outlets reports this to be the current system in all of China. Instead, Ohlberg et al. (2017) argues that pilot cities are just trials of different ideas, and Rongcheng is one of many. There is not a country-wide, unified, mandatory system for citizens in place (Liu, 2019). More recently there are a few comparative studies made on different city-level systems, brining light to the differences. Such as Wang and Jiang (2020) on the topic of recycling and different usages of the social credit system in order to nudge citizens to compliance with new regulations. As well as Lewis (2020) comparing the Xiamen and Fuzhou systems, highlighting that they are voluntary

with at the time of writing only having 5% in Xiamen and 21% in Fuzhou of the population as registered users. With incentives such as discounts or priority access to public services for its users. On the other hand, penalties are limited to the same legal penalties in case the person was committing a crime, with the only additional consequences of being locked out of the benefits from a high score.

4.2 Compared to previous Chinese systems

Another narrative is to compare the social credit system as part of a tradition of different credit or evaluating systems of Chinese history (Zeng, 2016). Such as the household registration "Hukou" system, and the Dang'an (档案). The dang'and was a system borrowed from the Soviet Union which record attitudes and performance of citizens, on an individual level. Recording everything from educational background, political lenience, awards and punishments. The records were important as they could affect an individual's career and educational possibilities. It is still relevant for people working for the government and state-owned enterprises but not for the majority of society. Zeng (2016) states that the social credit system is a method of modernizing this system, by using modern technologies. Or as Jiang and Fu (2018) refers to it, a digital dang'an. Worth noting is that while individuals were in dang'an, companies were not.

From the academic discussion in China, published in Chinese, the social credit system is mainly regarded as an extension of the regular credit system (Yu, 2018). With frequent comparisons to other nations or how it has evolved in time to what the scholars define as a multilayered and modern method of governance (Chen and Yang 2018). Scholars like Chen and Yang (2018) further argues that the corporate social credit system has a much wider sense of governance than in comparison with western narrow emphasize of regulation. Besides the traditional roles of the legislating government there are also what they refer to as crime scene investigators. Consisting of business associations and media who are able to encourage and give penalties to companies. At

the same time, they can exchange ideas with the government. In addition, there are also the competitive producers of the market. These are companies that uses credit as a product such as guarantors, and lenders etc. At the same time, they are also crime scene investigators, since they are the ones who gather data on credit defaults, and credit records etc.

4.3 The Corporate Social Credit System

While the academic discussion has mainly focused on a SCS that affects individuals, the discussion about how it affects companies have been growing in recent years. One of the earliest pieces is Meissner's MERICS (2017) report, which emphasize that the main target is to regulate corporations rather than individuals. The focus of the report was foremost on the implications for foreign companies in China as it also appears to be the intended audience of the report. She defines the system as a toolkit for monitoring, rating and steering companies in order to improve enforcement of regulations and policies. With the goal of becoming a self-enforcing tool of business regulation. An additional emphasize is laid on steering companies towards participation in industrial policies rather than the system only working to enhance regulation.

As the topic has become more current with time, 2019 saw an upswing in popularity from several China based think tanks, business groups and consultancies which all published their own reports on the corporate social credit system. Adding businesses to the discussion of the Chinese social credit systems. Such as the European Chamber of Commerce in China's (2019) which included material gathered from interviews with some of their members in order to give insight into some foreign companies' experience with the system. There have also been surveys conducted on international companies present in China, where the social credit system has been given some space. Amongst them, one of them was conducted on 70 Danish companies (Royal Danish Embassy Beijing, Danish Chamber of Commerce, Sino-Danish center for education and research, 2020). However, only 5% of the asked companies regarded it as a huge concern. 44% stated that

they had some concern about it while the rest rated it as of little or even no concern. The uncertainty of what the system entails and what effect it will have — is how the survey explains the answers. One responded commented that another part of the explanation is that Danish companies already has a high CSR profile and play by the rules. Thus, they were unlikely to be greatly affected by it as to the respondent's understanding it aims to target the rule breakers.

4.4 One system to rule them all?

Just as researchers' opinions are divided on the future extent and target usage of the system, in addition, there is a divide both on the current state of the system as well as on how coherent it will be. So much so that there is a divide if it should be described as *one* system or if it is actually *several* systems. Outside of the academic sphere the singular system is dominant. Perhaps it is the source of the uncertainty of if certain aspects will include both citizens and companies. While in academia it is often referred to as a system, the separate individual part and corporate part more frequently gets acknowledged. Ohlberg et al. (2017) stated that there are two types of pilot social credit systems, one commercial and city level. Using examples such as Sesame credit run by a subsidiary of the tech giant Alibaba and separating it from the local government run system.

Taking a more careful approach than attempting to predict the future, scholars have argued that it is a fragmented system which still face many challenges before it would be possible to implement on a larger scale (Creemers, 2018, Zinnbauer, Hansen 2018, Roberts et al 2019). Even Chinese scholars (Chen and Liang 2018) points out that sharing information between the different regions, governmental agencies, industries etc. is one of the key issues to solve in order to efficiently implement a unified system. Both in terms of the wideness and depth of the information that can be shared as well as the usability and quality of it. After all, the data must be possible to interpret and be comparable as it travels between different databases, run by different governmental agencies and local level actors. At the same time Ahmed (2019) points out that the algorithm used

in the system is relatively unknown, making predictions on what a unified system would be able to do, very hard to predict. Adding to that Liang et al. (2018) describes the data collection and details of the system as a black box. Ahmed (2019) remarks that the wide range of areas and goals covered in official documents suggests that the government might be unsure what the system can accomplish and that they are still in the process of figuring it out.

However, on the other side scholars such as Chen and Cheung (2017) as well as Meissner & Wubbeke (2016) argues that the system is all encompassing and controls and shapes society, Meissner (2017) has further predicted that the system will integrate central and local data with industry associations and private rating services which will become a state-run platform once completed. Whereas Chen and Cheung (2017) argues that the system will include all Chinese citizens and all companies operating in China. Other scholars argue that the system is more or less in place. Such as J. Bi et al. (2019) which describes it as an information sharing platform were 39 different ministries and commissions as well as "all provinces, autonomous regions and municipalities" (Ibid, page 730), and that it has collected information about more than 6.5 billion items.

Other perspectives are a bit cautious about the future such as Sithigh and Siems (2018) which states that it is not one coherent system and separates it into different systems run by the government, pilot cities and financial institutions. However, their main focus of research is on the individual level systems and their comment should be interpreted within this context. In addition, they question if the separate systems eventually will turn in to a state-run mega system or not. There is also Liu (2019) which describes the system rather as multiple co-existing *systems* which is used differently on different groups, levels and that they often do not aggregate. Dividing it to a commercial, municipal, and two nationwide, one run by the People's Bank of China and one run by the ministry level National Development and Reform Commission.

As for the non-state actors such as tech companies involved Hatton (2015) argues that the they are running their own social credit projects such as Alibaba and their Sesame credit score, and that is a part of the system since that their algorithms will be implemented in the centralized system.

Liang (et al 2018) remarks that private sector efforts are a vehicle for the government to test and transfer features for future inclusion in the government run version. They further state that it is using a collect everything approach. Wong and Shields Dobson (2019) remarks that it remains to be seen if they will actually be implemented or if the government will allow them to continue to work independently.

5. The structure of the Social credit system

In order to dive deeper into what the actual system is, this chapter is about the functions of the social credit system: Its structure, usage, and mechanisms. Such as the notorious blacklists and redlists. It also investigates its purpose based on the official narrative.

5.1 Functions

The general function and premise of the corporate social credit system is a database for financial and economic activities, to assess a company based on certain parameters. They are based on laws and regulations, taking financial, economic and sometimes sociopolitical regulations into account (Ohlberg, Ahmed and Lang 2017). There can also be other parameters added, changed and adapted to fit certain goals and policies. One example is during the covid-19 pandemic, where there has been new regulation put into place which both gives penalties and rewards in accordance with compliance related to it. See the later section in this chapter for concrete examples. The parameters of the system are specific and includes compliance with regulations such as related to taxes, the environment, and labor rights. It also evaluates credit history, as well as if debts are payed on time etc. (Jin 2018).

Information about the companies are obtained from different public records. For example, governmental agencies such as the tax office, different level courts etc. If the performance is good it can lead to rewards, while bad ones such as committing corporate crimes leads to sanctions and penalties. However, worth noticing is that a point system with an exact score does not seem to be central to the system, as it is not mentioned in the initial document (The State Council (2014). In accordance with the guiding document, Meissner (2017) pointed out that the initial plan does not mention anything about creating and monitoring a single aggregate score for every company, but

it does urge the ministries responsible for each sector to carry out classifications of different credit ranks. The social credit system should instead be thought about as a record of the company, for the user of the record to make their own evaluation about the companies.

The enforcement mechanics of the system are blacklists which are used as a punishment mechanism to hold corporates that break the law accountable. The penalties can in some cases be extended to the legal representative of the company which in turn would limit the person from taking out certain loans or purchases, in case the company had defaulted on its loans (Ohlberg, et al 2017).

However, while there are measures such as blacklisting there does not seem to be a mechanism that warns companies when they are in risk of being listed or once they have been listed (European Chamber of Commerce 2019. As Ahmed (2019) remarks it falls on the individual company to discover that they are part of a blacklist. An extension of this is that it is likely that not all data collected is made public (Liang et al, 2018), assuming that some of the data is made for the government or the agency which controls it only rather than everything being used in a method of shaming the company to compliance.

5.2 Purpose

The goals of the corporate social credit system are multitude. While the actual main policy document Plan for Establishing a Social Credit System (The State Council, 2014) lacks a clear definition of the term, its purpose is stated to increase trust in society and thereby decrease transaction costs due to the general low trust in society (Shen, 2019). Furthermore the system aims at "improving sincerity in governmental, commercial and societal affairs, on raising judicial credibility and the honesty mentality and credit levels of the entire society with international competitiveness and a harmonious socialist society as ultimate goals" (Translation by Hansen and Weiskopf, 2019). This should be understood by a context of many years of struggles with scandals

covering counterfeit and even dangerous products (Ahmed, 2019). One infamous example is a baby milk powder scandal in 2008 which unfortunately turned lethal (Jin, 2018). The scandal is still central in many people's memory and the huge amount of imported milk powder shows that it has caused huge damage on consumers trust in the domestic milk powder sector. As many that can afford to buy from foreign brands, does not even consider domestic ones (Strait Times 2019). An efficient system would facilitate for the public to instead filter through companies with a bad track record, as well as easier keep unserious companies accountable. It could also be useful for new entrants to the market and foreign companies that want to engage in business in China to find serious partners and reduce risk of being subjected to foul play. As well as increase trust from the public of certain industries that previously has had scandals and being able to separate reliable companies that operates by the book. This, since an effective system would increase the capacity to enforce and control market regulations and policies, and strengthen rule of law (Meissner, 2017).

Another reason is in order to integrate and unify the decentralized systems regulating companies. According to Creemers (2018), previously each different regulator has their own system of registering companies, and so the business license, social security services and tax registration would all mean different registration numbers for the same company. Considering the vast size of China, it has been possible for people to start companies, scam customers and then move on to another part of the country and register a new company. Since 2015 all companies registered in China has been given a social credit code unique to the company (The State Council, 2015).

Another way of understanding the purpose of the system is on a higher level than just regulating companies. According to Creemers (2018) it can also be used as a method of keeping local governments in check. As a part of the recentralization and method of decrease corruption, which has been a central policy during Xi Jinping. Since one of the consequences of being listed on a blacklist is that companies would be shut out from getting procurement projects and government subsidies. Despite good ties with local officials, it would still shut them out from participating.

5.3 New tech

Another target of the system is to combine the effort with the usage of new technologies such as big data, 5G and AI powered technologies. This being a natural step as the system is set to handle a massive amount of data, with the new technological advancement enabling a large scale and an advanced metadatabase. Since Xi Jinping came into power the usage of technology in order to enhance and increase the governance capacities has increased (Lee, 2019). New technological advancements also carry new possibilities of both depth and width for the CSCS. For example, cloud computing and big data enables the system to keep tabs on the huge size of the system (Creemers, 2017). In a recent guiding paper, the State encourages departments and regions to make use of next generation IT such as big data and AI technologies (The State Council 2019a).

A goal for the system is to be able to move from monitoring before or after something has happened, to continuous monitoring (事中事后监管) both through data gathered by the companies themselves as well as inspections done by governmental agencies (The State Council, 2019a). In another recent Guiding Opinion next generation technologies was once again emphasizing to make such a system efficient. Also naming, big data, IoT, cloud computing, AI, blockchain and so on, in order to maximize the efficiency, optimize costs and minimize disturbance for the market entity (The State Council 2019b). Smaller attempts of creating a real time monitoring system has already been made. In Jiangsu companies were made to give out real time emission reports on their factories, which data would be transferred and used in real time (The European Chamber of Commerce 2019).

Looking at the usage of AI Roberts et al. (2019) states that the focus of China's AI governance effort appears to center around its use in the social credit system. Implementation of AI would increase the governments capabilities. However, much like in certain parts of China and parts of the economy, it is full of contrasts and while somethings are high tech others are based on civil

servants manually filling in forms with pen and paper. For now, the same appears to apply for parts of the social credit system as well (Roberts et al. 2019).

5.4 Blacklists and redlists

The central incentive mechanism of the social credit system is to ensure compliance through blacklists and redlist. They are often defined as blacklists for companies who failed to comply with the system, and redlists for companies complying with and performing well (Creemers, 2018). The mechanism can be used to shut out unserious actors, such as corporations that have committed crimes, and block them from certain commercial activities. Such as participate in governmental procurement, financial activities such as receive stock options, receive government subsidies etc. (Creemers, 2018). It also adds a dimension of public shaming. Since companies being backlisted are public it would potentially make other businesses unwilling to work with the company and tarn the reputation of it. If successful, the system would be a vessel of improving regulatory compliance. On the contrary, redlists works as a method to promote and encourage good behavior by giving awards to companies doing well, complying with laws and rules.

One thing to take note of is that the current system does not consist of one coherent blacklist and redlist. Instead, a multitude of governmental agencies and local level actors all have their own. In turn the blacklists and redlists can be shared with other governmental agencies and other actors (Ahmed, 2019). Sanctions due to becoming listed on a blacklist are not limited to affecting the company; it can also affect the legal representative and even key representatives of the firm. One example would be if a company defaults on their debt it would also make the key personnel liable. This can lead to prohibiting them from becoming a legal representative in another company, or access to certain conspicuous consumption. One of the most developed type of blacklists is one that lists companies, or key personnel which has been ruled to pay for a fine but refuses to do so, even though they have the financial means. (Liu, 2019)

At the same time Engelmann et al (2019) argues that there is an information asymmetry considering it would be essential to know what constitutes either bad or good behavior in order for the system to effectively steer the users towards wanted behavior. While blacklists cite regulations as their guide to measure what company ends up there, but for redlists the rules appear to be much vaguer. Becoming listed on a blacklist also comes with consequences, while redlists are rather honorary and reputational rewards. So, the mechanism of blacklists theoretically has an effect on compliance while redlists does not.

5.4.1 Blacklists

The multiple existing blacklists stem both from the jurisdiction and rules of the governmental agencies as well as local level systems. The source of what company should be put on a list stems from court rulings from different levels, ranging from municipal level courts to the Supreme court. From official data from 2018, the most common reasons for being put on one of the lists were tax fraud, financial crimes such as severe dishonesty towards debtor (严重失信债务人), illegal fundraising, severe dishonesty towards venture capital firm (严重失信创业投资企业) (China Credit, 2019). The traditional credit related part appears to be a central part of the system. However, there are other parts in other jurisdiction such as compliance with environmental regulations where companies face penalties if they fail to comply with local environmental regulations which in turn can shut them out of certain contracts (The State Council 2020). Both legal representatives and key personnel of the company and the organization itself can end up on a blacklist. There have already been cases of international MNCs being affected negatively by the system were at times unaware that they had been listed. In these cases, it had led to denial of certain permits (European Chamber of Commerce 2019).

5.4.1.1 Dispute mechanisms

However, ending up on a blacklist does not mean that the company has to cease to operate. While there is sometimes an order to stop business activities during a limited time, companies have ways to appeal and restore credit. In addition, there are also disputing mechanisms. When researching the Beijing system, Engelmann et al. (2019) found functions where people can directly send in complaints to the database if the company had incorrectly listed information.

The most interesting part is that there are also methods of restoring a company's bad credit. This has been outlined as a necessary function for the legitimacy of the system, and even the NDRC who is a major player behind the system has expressed its necessity (Creemers, 2018). Since 2019 it is possible to be delisted from the blacklist, resulting in a growing market of companies that are offering their services in order to facilitate restoring the track record. This not just restores it, but also completely erases data on previous crimes from the database. In normal cases the time that a company must spend listed on a blacklist is minimal and far from an indefinite ban. Only for exceptional crimes companies must stay listed for at least a few years. However, there are also ways to restore the credit by paying a fee for it. A company can restore credit by filling in certain paperwork and then provide it to the corresponding governmental agency that blacklisted the company or directly to Credit China. With it also comes a small fee. In some instances, there is mandatory training in order to ensure that the company improves their behavior and following that an online multiple-choice test (Caixin, 2020).

The idea behind the possibility to restore credit is to reduce the impact of ending up on a blacklist. As Xinhua (2020) describes it, credit restoration is not a way for bad companies to have an escape route but rather an opportunity to keep on the path and turn forward. The reason behind it is to allow companies to restore credit and make sure that it does not result in excessive punishment. However, Caixin (2020) reported on a company listed on the national Credit China website which had been blacklisted in the end of 2017 due to a severe pollution scandals resulting in the death of

five people. But since they had gone through the credit restoration scheme, the record is not found anywhere. Even though it was only a few years ago. Implying that even when the company is looked up, the bad record is nowhere to be found. Another company was fined for selling pet drugs without a license. The company was blacklisted by a governmental agency and the owner expected to be listed for several years. A credit restoration company then reached out and helped the owner to pay 1800RMB to the governmental agency that listed him, in this case the local agricultural bureau, and after completing a test the record of the fine was completely removed from the website Caixin (2020).

5.4.2 Redlists

Justifications of appearing on a redlist are vaguer than the blacklist counterpart. As Engelmann et al. (2019) study of the Beijing's social credit system they pointed out that blacklists cite laws and regulations which clearly states punishments and penalties, but the criteria for ending up on a redlist are vague. The Beijing system does not even use the word redlist but rather uses the term good behavior. In their research reasons for ending up on a redlist was examples such as tax awards, "harmonious labor relations" and "Excellent contributor to developing Chinese socialism" (p. 7), however it does not state why the title had been given to the company. While it could be explained by the system still being a work in progress, one reason stated by the authors is that it could also be that it would be possible to game the system if it was constructed too transparent.

In the state-run Credit publication magazine, which is affiliated with the government and also featured on the official Credit China website, contains a regional blacklist and redlist in each issue. The companies listed on the redlist did not provide any further motivation either, or does it state why they had received the honor. In the June 2020 issue (China Credit 2020) the redlist featured the category High level Certification of Customs. The author even identified a foreign company on the list, LG, the Korean MNE's Tianjin based subsidiary. Showing that foreign companies are

not only found on blacklists, but they can also be on the redlists. However, neither on their page on the National Enterprise Credit Information Publicity System's Tianjin page nor on the third-party platform Tianyancha page there was any trace of the reward.

5.4.3 Covid-19 and social credit

Throughout 2020 there have been many new measures implemented as a result of the covid-19 pandemic. In cities like Beijing and Shanghai companies got penalties if they increased prices on essential medical equipment and masks. As well as selling counterfeits (Chipman Koty 2020). On the other hand, companies with a good track-record can apply for loans with a lower interest rate in order to alleviate the impact of the pandemic (Roedl, 2020).

However, it seems that the biggest change is more accommodations for companies affected by it, in the shape of exemptions of penalties (Roedl, 2020). Providing that the behavior was a result of lack of compliance due to the virus. For example, firms that fail to pay taxes, repay loans, or insurance premiums. As well as delays in shipments, reporting and signing contracts (Chipman Koty 2020). There is even a policy in Beijing that exempts SMEs and microenterprises from negative measures, due to inability to pay back loans, caused by the outbreak. It is for now only valid throughout 2020 (Roedl, 2020).

On the other hand, some local governments have implemented premiums for companies aiding the containment of the virus. As well as credit restoration schemes for companies for the same kind of companies but that since previously has a low score (Shanghai City Government 2020). There are also additional measures to encourage research and product development related to prevention, curing, and treating the disease. Not just an increased score as a result of it. Successful measures can also lead to preferential treatment for project funding, free insurances etc. (ibid.). In Hubei there were also exemptions from road user charges for vehicles transporting medical supplies and hospital personnel, during the beginning of the outbreak in the end of January (Roedl 2020).

6. The different agencies

This part maps out the different agencies and actors that are part of the corporate social credit system, on which the network analysis builds on. In order to answer the research questions of how it is structured and if it is one coherent system, the result is based on the findings and connections of this section.

6.1 The top

Within the Chinese legal system, the central government has absolute power over state administration. What power the local governments have has been delegated from the higher level. However, in practice administrative regulation are commonly supplementing the national laws as they are more comprehensive (Fu, 2010). At the same time, as administrative regulations are governing the everyday of China, they provide experience and a base of the national legislation. In the context of the social credit system, in top is the creators of the blueprint framework Planning Outline for the Construction of a Social Credit System, the State Council (2014). They set the agenda and long-term goals of the system. Publishing guiding opinions which contains ideas, goals as well as encouragement of accelerating or including new technology such as (2019a and 2019b etc.) In addition, Xi Jinping leads the Central Leading Small Group for Comprehensively Deeping Reform which monitors the project (Ohlberg, M., Ahmed, S., & Lang, 2017). Worth noting is that below there is no specific national level agency or ministry solely responsible of the corporate social credit system. The tasks have been given to both the Chinese Central Bank – The People's Bank of China, and the National Development and Reform Commission (NDRC).

6.2 National Development and Reform Commission

The National Development and Reform Commission (NDRC) which are on the same level as governmental ministries, leads the implementation process of the social credit system together with the People's Bank of China (Meissner, 2017). The NDRC focuses on improving the regulatory environment as well as governing and coordinating the governmental agencies involved. Furthermore, they oversee the design and implementation of the blacklists of the different governmental agencies (Liu, 2019). They also have a say in the local level initiatives and have to approve the systems before they are implemented. At the same time, the NDRC is leading the continuous evaluation of the system while local authorities are running it (The State Council 2019a).

Underneath the NDRC is the National Public Credit Information Center, which runs Credit China, a website that compiles information about the credit system and is facing the public. It also runs the National Credit Information Sharing Platform. The platform gathers data from 42 governmental agencies and all of the province and tier 1 level cities (Liang et al 2018). On the website there is only the option to search for the registration number for a company. With the number it is possible to search on the Important to pay attention to entities list, where companies who have been blacklisted are listed. It does not state why the company is listed and only states how many times they have been listed. It is also possible to search for awards, and lists related to individual credit. While the author searched for companies on the awarded list nothing showed up. Even attempting multiple attempts such as famous companies, searching for city names, which are common in company names yielded no result.

6.3 People's Bank of China

The corporate social credit system is partly led by the People's Bank of China, which is the Chinese National Bank. In a speech in June 2020 by the Deputy Bank president, he stressed that a core goal

for the credit operations of the PBoC is its continuous work with improving and developing the system (Government, 2020). The PBoC's role originally stems from its creation of The Credit Reference Center. The first launched national credit system in the 2000s, which had a narrow focus on financial credits. This system often gets referred to as the first-generation credit, whereas the social credit system is the second generation. The system still maintains the narrow definition and focuses on gathers financial data from banks and financial institutions and is used by lenders (Liu, 2019). It also gathers data from the blacklist of people who are refusing to pay fines despite having the financial means. In 2019 the PBoC stated that it had collected information on 25.91 million companies as well as 990 million natural persons, announcing that it had data files on all legal and natural persons engaged in credit activities in China. The information is released in a credit report which other financial institutions can use as a reference when analyzing the risk, containing credit information including loan information and repayment history which is described as the core of the report. It also contains public records which are court enforcement, penalties, tax arrears. This information is obtained from other authorities (Credit Reference Center, 2020a). The data has also been used in tech companies commercial credit initiatives. Unlike the NDRC the PBoC maintains a narrow definition of the social credit system as their focus is on the traditional credit side, rather than the honest and trustworthy part (Liu, 2019). This part is evident in their interaction with tech companies, which in this thesis is expanded on in section 6.5.

Unlike the NDRC's platform, the Credit Reference Center does not host an online public database. It is possible to request data about a specific company, a so-called credit report by filling in an application. According to the PBoC requesting information can only be done with the consent of the company. Governmental authorities, banks as well as the company itself are the only ones able to request the credit report (Credit Reference Center, 2020a). While the author is unable to access any of the reports, a sample with a fictitious company is listed on the website (Credit Reference Center, 2020b). It states information such as the number of loans and their value, and basic information about guarantees, debt paid, current liabilities, and loans, including which bank is the

credit grantor. It also lists information about the senior management, as well as major investors. In the public records part court enforcements and penalties are listed. In the example, cases were filed to a local court in a district in Beijing as well as a city in Sichuan. Further, it also lists awards as well as licenses and certifications. In this example the company was awarded a Famous Brand of Beijing in 2018 by the Beijing Supervisory office of Quality and Technology.

6.4 State Administration for Market Regulation

The State Administration for Market Regulation (SAMR) have not been involved to the same extent as the PBoC and NDRC but it is also an important part of the system. As they run their own platform, which is perhaps the biggest database of companies, the National Enterprise Credit Information Publicity System (2020). The platform in turn provides data for all legal entities in China. The goal is to combine the data from other platforms of enterprises on all levels. Using the local branches of the SAMR to record the information needed. At the time of writing, the website is divided into different cities. So, one has to select the specific city one is interested in, in order to look up a company.

Another feature of the SAMR system is that they have two different lists. One is called the Heavily Distrusted Entities list, compiling companies that are recorded on multiple blacklists, or that have committed serious crimes. As well as companies punished more than 3 times within two years. The other one is the Abnormal Operations list, listing companies that have failed to disclose information, or not done so truthfully. In addition, they also list fines that have been issued to the company. Worth noting is that the system does not include any redlists or rewards.

An example of a company on the Heavily Distrusted Entities list is a Beijing based company dealing with biochemistry research. The reason for their listing is that they have been listed on the Abnormal operations list enough times and that they have not improved their behavior. They have been listed three times, the latest in July 2020. The Beijing SAMR are stated to be the agency that

listed them. Unfortunately, on the list of Abnormal Operations the reason behind their listing is not specified. It only states that because they had several penalties previously they should be listed on the Heavily Distrusted Entities list. Since the first listed post is from 2015, it might be that the original penalty is not listed anymore and on the company information site there is no further information on why the company was listed. The same information shows up on Baidu's third-party platform, with no additional information on why it was listed. Interestingly enough both databases list the company as open for business, despite the latest listing on the Heavily Distrusted Entities list, which at the time of writing, was only a few weeks earlier.

6.5 Tech companies

The Chinese tech champions has been growing increasingly throughout the years. Starting from the beginning when the system was announced the Chinese tech champions have been working closely with the government. Before that, since 2013 there has been an MoU between 11 major companies on long term collaboration of using big data, with for example the Baidu and Alibaba. To help support the technology of the system tech giants such as Alibaba and Baidu provide means to collect data (Liang, Das, Kostyuk, 2018). Baidu, Alibaba and Tencent (BAT) are as Jiang and Fu (2018) remarks the national champions of the Chinese tech industry. Tech companies have been mentioned frequently as potential gatherers of third-party data in official documents (The State Council 2019a). The European Chamber of Commerce (2019) also points out that companies such as Alibaba which has the huge e-commerce platform Taobao would be able to use the data gathered about transactions on the platform and integrate it as part of a system. However, the tech companies' major influence on the internet might create a rivalry between governmental agencies and companies. There is a distrust towards some commercial players in official media which is a reflection of this. The Alibaba's private social credit scheme Sesame Credit has also received

criticism from the People's Bank of China because of disagreement of different functions that would impact a user's score.

At the same time their influence has the power of enabling actual enforcement of the system as well as gathering data on a wide level, as it is unlikely that the government agencies would be able to create it on their own. These two features are identified by Ohlberg, et al. (2017) as why the tech companies are such important actors in the construction, implementation and gathering of the data of the CSCS. They have also played a great role in the infrastructure for many city run systems (Liu, 2019) However, the companies are still very reliant on the governmental agencies creating legroom for the companies to experiment, thus there has to be a balance.

In 2015 eight tech companies were given licenses by the PBoC to develop their own pilot credit platforms, both for consumer and corporate credit services. It resulted in the creation of Alibaba's Sesame credit, as well as Tencent credit, Kaola credit, Pengyuan Credit, Qianhai Credit, Intellicredit, Sinoway Credit as well as China Chengxin credit. Liang et.al (2017) states that at the time China actually had two parallel systems, with the official one and then the private credit schemes. Or as Liu (2019) defines it, it was a trial to create individual scoring systems. Jiang and Fu (2018) remarks that there is incitement for the tech companies to provide data and cooperate with the government as that would maximize political and economic gains. However, three years later in 2018, none of the companies' licenses were renewed. Instead they became shareholders in Baihang credit, with each company given 8%. Together with the People's Bank of China controlled the National Internet Finance Association of China which holds 36% (Von Blomberg, 2018). While Baihang focuses on individual credit they have a special category of corporate credit. With Baihang the PBoC could use the data to supplement their own data, as they have previously had issues with obtaining information such as the location of the company (Jin, 2018). However, Baihang has initially struggled with gaining access to usable data (Financial Times, 2019) with even shareholders such as Alibaba and Tencent being reluctant with providing data from their platforms. Since their own systems had become very successful. For example, the GM of Sesame

Credit stated that there is no data sharing with Baihang as late as 2019 (Chen, 2019). Perhaps due to that the credit system is one of the most successful ones, it is still in use. According to Liu (2019) the differences between the systems and that they added multiple additional functions and features is also one of the reasons that none of the licenses were renewed and that Baihang was established. Since it suggests that the PBoC wanted to move away from a superfluous system but rather focus on the financial field. Such as based types of purchases and gaining certain discounts and the ability to rent things deposit free. Its officials stated that there was a lack of understanding from Alibaba of what the credit system as they had included these extra functions (Liu, 2019). While Baihang, at the state of writing, is yet to be developed, it is assumed to be a system were data is aggregated from different sources. Their own vision and goal are to be a forerunner of credit reporting and the most quintessential on the credit Chinese market (Baihang Credit, 2020). On their website they do list some of their cooperation partners. While it is listed as personal credit, the actors listed are tier-one cities and provincial level governments. There is a part for small size companies but not more than that. (Baihang Credit, 2020b) If the direction of Baihang will lean more towards individuals rather than companies remains to be seen.

6.6 The Courts

The Supreme People's Court is the highest-level court. It plays an important part as a source of data for the system and was one of the first actors involved in it. Since 2013 there is a list kept of legal and natural persons who have failed to fulfill a court order (Supreme Court 2020). Failure to fulfill court rulings on multiple levels are included as datapoints for several systems as a reason for including a company on a blacklist or log their misconduct. The data from High court rulings also goes to the Supreme Court System were all high courts in China are searchable. Similar measures are in place for legal and neutral persons that are registered as debt defaulters (老赖). In order to gather and make use of the data many actors connected to the social credit systems including private ones has an MoU or agreement with the Supreme people's court, which involves

sharing the list of the debt dodgers that have defaulted. Companies such as Alibaba then uses the data to block purchase of luxury items (The Supreme People's court of China, 2016). The defaulter remains on the public list until they have repaid their debt (Creemers, 2018). For companies, the data is shared with 40 other central governmental agencies that can impose sanctions, for example restrictions in procurement contracts, more frequent inspections etc. This system is referred to as a joint-sanction and reward scheme. In addition to the defaulter blacklist there is also one for tax-evasions, executive misconduct, violation of work-related safety regulations as well as breaking commercial market regulations, gathered from the responsible ministries (Dai, 2018).

6.7 Ministries

On a ministerial level there are several databases for Corporate Social Credit. Each have their own different criteria and rules for what constitutes good and bad behavior as well as what ends up on a blacklist (Liu, 2019). As the databases are still a work in progress for many ministries the author selected two that are running. The Ministry of Housing and Urban Rural Development and the Ministry of Tourism and Culture. Representing different sectors and types of companies involved with the ministry. In common with both systems is that there is no score for companies, instead they focus on background information and certain behavior, such as penalties and rewards. The Ministry of Housing and Urban Development appears to provide more detailed information. Interesting to note is that the Ministry of Tourism and Culture's system uses the term Dang'an for record (unlike the Ministry of Housing and Urban Development which uses the word jilu which also can be translated to record).

6.7.1 The Ministry of Housing and Urban Rural Development

The Ministry of Housing and Urban Rural Development has its own credit platform (National construction market supervision public service platform 2020), for companies involved in the construction industry. The companies included are from different parts of the country. The companies have their unified social credit number listed and when the author did a test on the China Credit website the same company showed up in their register. Companies that were checked was the top company listed as the latest added, the 江西天工水陆工程设计有限公司 (Jiangxi Tiangong water and land engineering design limited co.) did not have anything listed on any of the category's bad behavior, good behavior, or the blacklist. It only had the basic registration information such as legal person and where the company is registered. It could be that the database is still a work in progress as at the point of writing there was the option to look for the latest company and employee added. With multiple listings of the same date as the author retrieved information from the website.



The Jiangxi Tiangong water and land engineering design limited co. on the social credit site of the Ministry of Housing and Urban Rural Development.

For other companies there is more information provided such as for the Inner Mongolia Golden Great Wall engineering project management limited co. (内蒙古金长城工程项目管理有限公司), which has a post about past bad behavior. The company has been ordered by the Ministry of Housing and Urban Development to close down for 90 days and not undertake any new projects. The reason listed is that a building that they were contracted to inspect collapsed during a storm, which resulted in the death of 8 people. Their inspection was deemed inadequate as the accident was considered the result of neglect. Interesting to note is that the company is not listed on the platform's blacklist but solely in the category of bad behavior.



Inner Mongolia Golden Great Wall engineering project management limited co. on the social credit site of the Ministry of Housing and Urban Rural Development.

6.7.2 Ministry of Culture and Tourism

Another example of another ministry level social credit platform is by the Ministry of Culture and Tourism. It also has its own website, the National traveling supervision service platform (2020). However, compared to the Ministry of Housing and Urban development, it is not as informative. At its current state it only provides basic information. The author chose to look at C-trip (携程) which is one of the biggest travel related booking websites in China, comparable to a combined Booking.com and TripAdvisor. Despite being a huge company on their page there were no records of any black- or redlist or other behavior, but only basic information. To compare it with another platform the author looked up the same company on the third party platform Qichacha, where it had listed that C-trip had payed a fine of 10000RMB issued by the Beijing department of Culture and Tourism, which is the Beijing local level office of the Ministry of Culture and Tourism. When looking at the SAMR database for Beijing companies they list a fine of 300000RMB that was issued by the Beijing Chaoyang department of the Administration for Industry and Commerce. But in the SAMR database it was listed under Fined behavior. Thus, while the SAMR appears to gather data from other ministries, the Ministry of Tourism and Culture does not even from local level branches of the same agency. That is to say in its current form. Unlike the Ministry of Housing and Urban Development the Ministry of Tourism and Culture platform did not post the latest added companies and so if that was the case with C-trip, or that there are features that will be added is unknown for now.



The records of C trip on the Social Credit site of the Ministry of Culture and Tourism.

6.8 Local governments

Local governments are also involved as they are the actors that implement the policies. Even before 2014 there were several cities that had their own type of social credit system up and running. While some were primarily focusing on individual behavior such as punishing petty crime, others like in Shanghai had an app called Honest Shanghai which not only looked at individual credit scores, but it also provided the credit report of local businesses. While there were no penalties for a low score, but individuals could receive discounts if they had good scores. In 2017 twelve cities were named model cities by the NDRC and PBoC. Related to the corporate side, there were systems such as in the cities of Suqian and Wenzhou which looks into companies and in the later non-governmental financial institutions. There is also the example of Yiwu which we will come back to in chapter 6.8.1. Some of the other examples are based on the credit rating system in the US company FICO's score model. Such as Xiamen's system. Looking at payment history, and credit repayment. While others such as Fuzhou includes wider variables (Lewis, 2020).

It also falls on the local government to promote and regulate the social credit system in their region (compare to the Zhejiang provincial regulations, 2019). But as Liu (2019) points out that even though a city has a credit system in place, there is no guarantee that the rules are being enforced. In one city there were 11000 instances of debt default, including both individuals and people connected to defaulting companies, but there were only 50 of the listed that had received punishment for it. While local governments have a lot of playroom in how to implement their system, the information from the data acquired does not seem to influence other blacklists. Both horizontally and vertically. (Liu, 2019). However, there are seemingly talks about co-operations between different cities as there have been talks between for example Shanghai and the nearby regions about developing a mechanism that can recognize the different systems. On a provincial level there can be initiatives such as financial institutions and other market entities that are

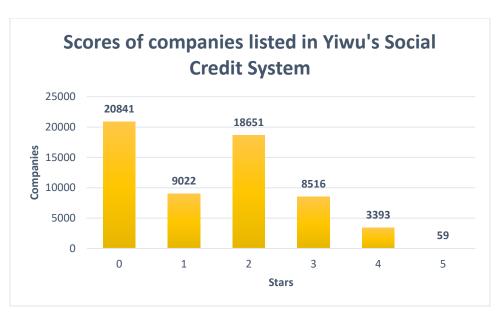
encouraged by law to give preference to companies with a good credit status (such as in Zhejiang provincial regulations 2017).

On the local level there is a deeper coordination effort between local level departments. It is also common for a specific social credit system center or office to exist, for example the Shanghai city social credit construction office. They are then divided into the certain fields related to different jurisdictions, such as tax. Local governments should be considered to have some autonomy as they can chose different criteria and rules and choose how are they implemented. Different local systems include information from different agencies (Liu, 2019) Thus comparing different cities, there is a various focus on certain sectors and priorities in using the system in accordance with it. So in that sense, local governments can chose to focus their efforts in sectors that are priorities for them and even steer and using the system as a method of encouraging businesses and even potentially use it as a tool of their industrial policies. For example in the fight against the covid-19 pandemic as highlighted previously, there were multiple different initiatives by using the system in order to encourage companies to work with preventative measures as well as punishments for attempting to make a profit by increasing prices of vital medical products. Another such example of a city system tailoring to the specific situation of the market in the city is the city of Yiwu. Making it an interesting example to dive deeper into.

6.8.1 The case of Yiwu's corporate social credit system

When it comes to local credit systems focusing on enterprises the city of Yiwu has one of the most complex ones. The city of Yiwu has a prominent role in global supply chains as it has one of the world's largest small commodity wholesale markets. In 2017 the Yiwu State-Owned Assets Supervision and Administration Commission launched their own public app with information about companies operating in the city. The information it contains is part the basic ones about the company, as well as annual reports, and penalty history and if there are any irregularities. There is a credit grading system, unlike the ministerial system, which ranges from AAA to D, as well as a

point system. At the point of writing, according to the app there are 60482 searchable companies listed. The point system is also known as a star system where the companies can have 1-5 stars which corresponds to certain points (Yiwu purchase, 2020). Every company receives 3000 points at the point of registry which is equal to three stars. There are some specific rules which gives out points but generally companies receive points for completing a business transaction and give a score to the company which will add points. But it is also affected by the value of the transaction, so a company with products worth more than 9800RMB will receive 5 points, while a sale of a product worth less than 200RMB will only give 0.1 point. There are also other functions that will give points such as providing information in English in the companies' advertisement. On the contrary deductions comes from every time that the company provides inaccurate information such as contact information, prices, and description of items which would each give a 100-point deduction. Crimes committed will also give a lower grade, where the worst is to negatively impact the marketplace's image which can lead to a deduction of up to 1200 points (Yiwu purchase, 2020) The credit rating does not seem to affect the point system as there are a few companies that have an A+ rating but only one star, which would mean that they would have had at least 2000 points deducted. However, there are no companies with a five-star rating, which means that they have more than 10000 points, with a lower rating than A. However, it does not prove that they are interlinked but since the point rating system does take crimes into account, a company that fails to pay for their debts would theoretically get deduction in both.



Data Source the Yiwu shichang xinyong app

By comparing all the listed companies, it shows that very few have been rewarded with a five-star rating corresponding to 0.000975% of the companies listed. The largest chunk is in the two-star range. Implying that they have failed to comply with some of the rules or received some negative feedback after their transactions. However, as the company starts of at 3000 points which is the limit for 3 stars, only one negative transaction or failure with one of the rules would make the company fall into this range. Interesting to note is that one third of all companies on the platform is listed as without any star. This does not mean that they have utterly failed to comply with the system, but rather that they have never used the platform. The author was unable to find any data on daily usage of the app so one can only speculate if the lower scores is due to getting downgraded by their behavior or that the users only use it for a limited time and then stopped, maintaining their two star score. While it does not seem mandatory to participate, a high score in the system comes with some perks. For example, it enables a company to lend larger sums of money with a lower interest rate. It is also possible to lend money without any security. In addition, Yiwu lists some examples which are more specific to the market. Such as being featured in advertisement for the market and parking spots (Yiwu purchase, 2020). On the other hand, apart from having a listed

low score in the database there does not seem to be any additional measures for companies with a low score.

Furthermore, in addition to the point system companies can also have penalties and rewards listed. The app does not use the term redlists or blacklists but rather penalties, bad behavior and rewards. It is unclear if they impact the scoring system as it is not mentioned in the Yiwu guideline page. Examples of rewards can be that the owner of the company is a Communist Party member, in which the company also gets a hammer and sickle symbol in the drop list of companies. Another example that the author came across was for example participating in covid-19 prevention. Among the Penalties found they were all given by the local Yiwu court and did not list the circumstances in the app. The author attempted to look up several of the companies with listed penalties on Qichacha but as no penalties were listed on their pages the author was unable to look up the nature of their crime.

6.9 Third party credit rating agencies

In addition to the PBoC's Credit Reference Center and Baihang, there are more than 200 licensed credit reporting agencies (CRA). The industry is licensed and regulated by the PBoC. The companies are foremost checking the issuing of bonds which in China is mainly done by local state-owned enterprises. In related policy documents there are discussion about the importance of developing a credit service industry (Livingston, Poon, Zhou, 2018).

In addition, there are also third-party credit rating platforms such as Qichacha (企查查) and Tianyancha (天眼查) which appears to be using data from different platforms or at least public records and uses for example general background information, court decisions, rewards etc. The source for the data is for example for Tianyancha public data from governmental archives and has over 80 metrics of the companies listed (Medium, 2018). The European Chamber of Commerce in

China (2019) states that is unclear to what extent third party rating platforms also gives data back to the system. Comparing the searches that the author did with the ministry level platforms the third-party platforms did contain the same information but more detailed. They also had more aggregated data from many different governmental agencies, both on country, and city levels.

6.10 Comparing the systems

Based on the examples in this paper the author compiled this table of social credit system lists. Where the different platforms are separated, and their content is outlined. Including the system of the NDRC, PBoC, SAMR, the Ministry of Housing and Development, the city-level Yiwu system as well as third party platforms, based on Qichacha. Since Baihang has not been completed by the time of writing it is not included among the listed platforms.

	Score	Blacklist	Penalty list	Reward list	Aggregated
	system				data
NDRC list	No	Yes	No	Yes	Yes
PBoC list	No	No	Yes	Yes	Yes
SAMR list	No	Yes	Yes	No	Yes
Ministry-	No	Yes	Yes	No	No
level					
City-level	Yes	No	Yes	Yes	No
Yiwu					
Third-party	No	No	Yes	Yes	Yes
platforms					

List of corporate social credit databases

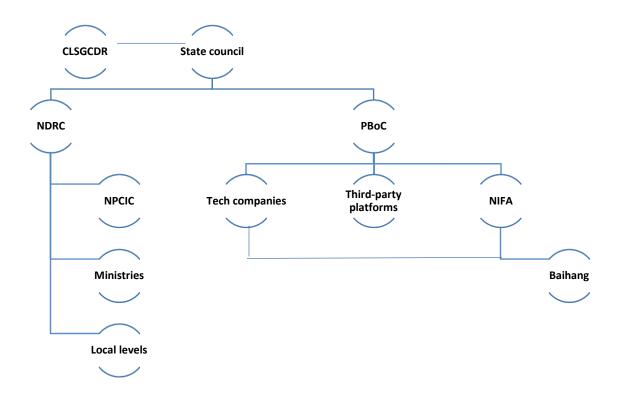
This list is solely based on the examples and the platforms used in this paper and their current form. There may be changes in the future and in other systems as this work takes in some of the clearest examples that involves companies. Worth noting is that individuals are part of other lists and systems and that they might differ in their assessment. Worth noting is that common for all systems are that their content and structure is very similar, even though design and some features differs. Even the information in the PBoC system was formulated in a very similar way as the others with much of the main content and background information similar.

The usage of the term redlist was not used on any of the platforms investigated but several instead used the title "honorary rewards". As mentioned the rewards could range from that the owner was part of the communist party, to having a high-level certification of customs. Unlike blacklists, redlists in none of the platforms seemed to have any effect or impact on the companies listed but rather just symbolizing a record of the achievement. Even in the Yiwu-system where there is a score system it did not seem to have any effect on their scores, at least not in accordance with their guidelines.

Despite the common narrative about the social credit system, there is only one of the listed platforms that has a scoring system. In contrast to the medial discussion in the West, where the discussion often stems from pointing out the scoring system as the most criticized authoritarian aspect of it. Adding to that is the fact that at the time of research, the platform with the scoring system is self-managed, as well as only one third of the companies registered on the platform had actively logged in and used it. If there is a penalty of not using it is not stated, but as far as the system has an aggregated score for the companies listed is not true for most of the systems and even in the case where there is the companies does not seem to face penalties as they can still run their business. However, the score is visible, and since it is possible to filter certain scores, so companies could technically be excluded for users who wish to find companies with good scores. Except for that there does not seem to be any major scrutiny.

6.11 Connecting the dots

In order to essentially get a better picture of the connections between the different actors involved, the author suggests the following chart to illustrate the relationship between them.



Connections between the different actors of the corporate social credit system

As the research lays ground to it is clear that the State Council and together with it the Central Leading Small Group for Comprehensively Deeping Reform (CLSGCDR), which is chaired by Xi Jinping overall has the most influential role as the provider of the overall long term goals.

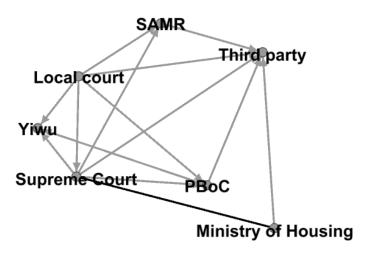
Underneath are the PBoC and the NDRC, respectively. The PBoC and the NDRC has been in charge of coordinating and running different parts of the actors' corporate social credit system, playing major roles in influencing the system. Interesting to note is that while they have a guiding and assessing role, they also both have their own parallel systems. Both compiling data from different branches and organization underneath them. Comparing the different databases to each other, both the structures and content are very similar. Even the PBoC's system is very similar to the data that other platforms have. With the major difference that the information has to be requested to be handed out and is not on a public database. Ministries seems to, at least for now, only gather data of their own rulings related to the companies in their industry, and unlike citylevel systems they do this on a country-wide scale. Underneath them are the clear divide between the PBoC being in charge of tech-company and third-party platforms as they are the provider of their license. While acting with some autonomy, the PBoC is still able to steer the companies in the direction it wants them. Leading to the creation of Baihang, where the PBoC in the form of its subsidiary the NIFA still exerts direct control. The NDRC has a larger influence over the ministries and local levels and have a larger say in the creation and running of their systems. Even though the NDRC is technically on a ministry level itself. The division of responsibility could imply that there are differences between the actors underneath the separate branches. It could even suggest that the PBoC as well as the Baihang system is separate from the ministry and city level systems. From the previous chapters it is clear that there is a bit of a different focus between the different actors and that the PBoC and NDRC are more involved with different actors further suggests that.

6.12 Flow of data

When it comes to the flow of data, it is clear that there is a multitude of sources stemming from a patchwork of different database-systems. The blacklists' data originates from a range of local level agencies, governmental ministries to the supreme court and the People's Bank of China. There are

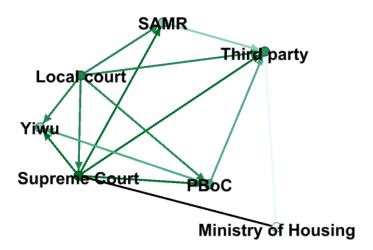
also the third-party platforms such as private credit platforms and service firms, having their own systems accumulating data to a further extent. Local level have a say in how they want to structure their system which has resulted in some focusing on individuals and others being closer to the former private social credit system of the tech companies, while others such as the city of Yiwu is focusing on the many companies registered in their whole sale market ecosystem.

Based on the previous parts and the findings of connections between the different actors gives us the following visualization.



Directed Social Network of the corporate social credit system

The NDRC system is left out since the source of their data is not listed in their database. However, it is likely that it is based on information from either the SAMR, or if it aggregates its own data from other platforms similar to the PBoC's database. Thus, it is likely to be similar to the SAMR. Baihang is also left out as it is not yet launched. The system has a relatively low density at 0.3 out of 1, implying that information does not travel easily between all of the nodes as they would have to pass through several in order to get information through.

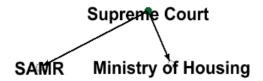


Eigenvector connections of the corporate social credit system network

The illustration above illustrates the eigenvector centrality in the network. A darker color of green implies a higher degree of eigenvector while a brighter implies a lower one. The black line between the supreme court and the Ministry of Housing and Development is not part of it as it is an undirected edge. The network consists of mostly directed edges. Implying that information foremost travels one way. Every Policy Designing actor gathers the data and compiles it in its database. In this case Third-party platform has the most edges, i.e. the highest degree centrality, followed by the SAMR, Yiwu and the PBoC. However, as discussed it does not imply that they are influential as the third-party platform just gathers data from others with only known directed edges to it. In a sense both the Yiwu and PBoC systems are more of a silo since they base much of their information on their own sources whereas they also use the legal rulings in addition to it. The least edges connected to it is the Ministry of Housing and Urban Development since their sources are mainly from their own their own rulings, but also the supreme court. However, the only undirected edge of the system is between the Ministry of Housing and Urban Development as well as the Supreme Court. The two courts listed has no directed edges aimed towards them, since this is in the context of the social credit system, but they are both important sources of the data. On the other end of the spectrum are the third-party platforms since they are not a source by

not having any directed edges stemming from it but rather towards it given that it gatherers data from the most sources. Comparing the findings with the graphic illustration in Gelphi as far as information content goes even third-party platforms contains more data from a wider collection of sources than even the SAMR one. It illustrates that much of the information is gathered in silos where the information remains. Even the SAMR system is divided into city sections and it is the local subsections of the SAMR that in turn provides the data for its system. In accordance with the eigenvector, the supreme court is the most important, then the local courts, followed by the third-party platforms and then the PBoC, later we find the SAMR, and least are ministries and city level.

Comparing it to only looking at blacklists in the system we find the following connections:



Blacklist connections in the corporate social credit system

It is only the SAMR, NDRC, as well as ministry levels such as the Ministry of Housing and Development that have their own blacklists. The SAMR are basing their findings on the different Ministry level and city level rulings as well as using rulings from the Supreme Court since they are the source of the joint-sanction system, which bases it on the failure to fulfill court rulings. Thus, framing the SAMR blacklist as the closest to a national system does have some accuracy as it would entail all of the different ministries.

The most apparent conclusion to make of the blacklist network is perhaps the absence of any of the other actors in the system. As the local level systems such as Yiwu does not have any blacklist even though there is a scoring system. The lack of a connection between the local actors as well as current exclusion of local court rulings still makes the system only count cases of higher significance. From this context both the Yiwu and PBoC should perhaps better be understood as a method of doing a background check of the company before engaging in business transactions with it. Thus, for the CSCS there is no connection between the blacklists and a scoring system.

7. Analysis

This chapter brings together the findings from the previous chapters, summarizes and analyses them. Then they are summarized in order to answer the research questions and discuss them. The paper set out to investigate how the network of the CSCS is structured, by identifying key actors and their roles. In addition, it set out to investigate whether or not it is one unified system or if it is a disjoined one. In order to understand the actual scope and capacities of it.

7.1 Political dimension

While the system's premise is of a top-level design, in reality it is very decentralized. Ministries, and local governments run their own systems, with their own specific rules and regulations. However, comparing it to the social network it is rather a middle ground type of network as it is neither completely governed by entities that are directly part of the network nor highly brokered with middle hands between entities. Rather, actors such as the NDRC and PBoC governs key activities such as approves the systems as well as continuously checks in, while other actors play a bigger role running the network. Similar to what Brødsgaard and Mertha (2016) suggested that while the network of governance might be fragmented, upper levels are still keeping things in

check. Thus, in a sense local level-systems are not completely independent and still has to comply with the overall ambition and goals of the social credit system. In this sense even though it might remind one of a lead-organization governed network it is not identical. While hierarchical and that the NDRC and PBoC can influence and alter systems that step too far out line, many of the major activities and key decision within the systems are made in the silos as they shape them in different ways. At the same time, the State Council is continuously releasing new guiding opinions in order to steer the different level social credit systems. While vague, there are still pushes to create urgency, or one example as mentioned previously to push for the use of and implementation of new technologies, and visions such as continuous monitoring. Thus, the State Council is steering the subjects below, both through the NDRC and PBoC as well as directly influencing the ministries and local level systems. Compared to Schubert, G., & Alpermann's, (2019) theory, the steering takes place in the Arena of Agenda Setting and policy design, with the governmental agencies as well as local actors communicating, and negotiating.

A tweak to the model to better fit the realities of the corporate social credit system would be that the municipalities are both in the Arena of Policy design and implementation. Examining the example of Yiwu the focus and targets of the systems are companies involved in the wholesale marketplace. With the rules specifically targeting the specific situations of the companies while at the same time using it to steer the companies in the direction that improves it. Evidence of this lies in the scoring system which gives the largest deduction of points if a company has a negative impact on the marketplace's image. This is in contrast to other municipality-level systems such as Xiamen's system which focuses primarily on payment and credit repayment history of companies. Implying that local-level systems has the ability to decide what their system should focus on. This could even go as far as being part of policy targets and industrial policies by using the system to grant benefits to companies that comply with it. Much like how it was used during the covid-19 pandemic in order to encourage companies to work with preventive measures, while punishing companies that were trying to unfairly make a profit of it. Even the Yiwu system made use of it as

companies that participated in covid-19 prevention has that listed on their page. However, it is unclear what that listing results in, if there are any extra perks or points connected to it. While the outbreak was active it is likely to have had some perks in order to encourage companies to help out. Such as the perks in the Shanghai system: access to loans with a lower interest rate and credit restoration schemes.

Underneath in the Public Area we find the corporate actors. One type of corporate actor are the companies subjected to the system by being listed in the databases, for example if the consequences are grave for a misbehaving company and the penalty side of the system works as the NDRC intends it, they are being steered towards improving their bad behavior. Another type of corporate actors are companies that are profiting from as well as has the ability of influencing the system. In this category we find the third-party platforms as well as the tech companies. The inclusion and underlining importance of integrating new technologies in the system benefits the tech companies greatly as several of them, such as Baidu, are behind the infrastructure of many of the platforms. It can be discussed if their influence is considered measures of negotiation power or even countersteering. There is no secret that the tech champions in a much broader context are considered vital and their industries are promoted and invested in greatly throughout multiple technological advancement policies and plans. However, that there is an interest even in implementing technologies such as blockchain to be part of the system, despite that it oxymoronically builds on the concept of decentralization might be due to some counter-steering power of the corporate actors.

At the same time, the Public Actors are being clearly subjected to steering. That none of the eight tech companies were able to renew their licenses is a clear example of this. It can be understood as that the commercialization and incitements to increase consumption were deemed too far from the initial idea and concept of the system. Proving that the PBoC has a big say in what the systems may contain, and while there is some autonomy, the entities would theoretically not be able to go out of line too much. At least looking at the example it seems that out of line in this sense was to make it over-commercialized.

The overall structure of the corporate social credit system should be considered an example of toplevel design mode as much like other grand policy fields, in that it is vague and complex in what it can achieve as well as what concrete measures are vital in order to achieve it. The vagueness leaves lay room for the different actors to evolve their systems in different directions, with different targets and goals unique to the actors. However, the research points to that hierarchical steering once one of the actors goes too far out line is still vital in order to maintain the shape and overall goals of the system in line with the initial plan and policy goals. At the same time, the vagueness is likely a reason that there is such disagreement in the West of the capacities, influence and extent of the system. In a sense similar to the wide discussion about the actual intents behind the industrial policies BRI and Made in China 2025. The unanswered question is if the city-level systems can maintain their independence and their own systems or if they will become more similar or even unified nationally as time progresses and the system continues to evolve. While this paper is unable to answer that, the systems can be changed if needed. At the same time, there are strengths with keeping the system decentralized in order to apply it better to the realities of the municipalities and thus enabling the corporate social credit system to be another tool of steering for local level policies. In addition, the system provides an opportunity to keep local governments in check. By enabling ministries and courts to shut certain companies out from procurement processes and extra perks, it would also provide a mean of combatting corruption, since contracts would not go to companies that are just in it to scam the system. Yet, as this paper has showed it is still too fragmented to be able to solve all problems. Due to its many gaps. Especially since there are cases such as the company in Beijing, which even though it had been blacklisted several times it was still operating and conducting business.

7.2 The number of system(s)

To the question of is the corporate social credit system one coherent system, the simple answer is that it definitely is not. In its current state, that is. With the structure of having different agencies

as well as governmental actors on multiple levels, alongside with private actors such as tech companies, and third-party systems running their own schemes, the social credit system could instead be considered an umbrella term for different functions of similar concepts and ideas of creating more trust and accountability for corporations in China. Even the density score points to that it is fragmented since information would have a hard time to travel through the silo-based system as in its current state the information stays there. That no sole governmental agency is responsible for the overseeing and implementation of the system is perhaps one of the root causes of the fragmentation. Similar to the previous example of a failed coordination attempt in the initial years of policy regarding developing the wind power sector. The CSCS has resulted in different ministries, different municipalities all using their own rules and their own blacklists or similar in order to steer the system towards their point of interest. One example is the system in Yiwu, which puts a lot of focus on accountability, successful transactions, and accurate information. This is important as it has an enormous whole-sale market and is dependent on export to other countries. Too many bad apples would harm the city's reputation and trade. Evident since even providing information in English will give some points. Comparing this to other systems on other levels which goes mainly after legal requirements stated by the same governmental agency behind the specific system, or other city level system which has less focus on export, these specific rules are missing.

However, as the example of Yiwu found, only about 66% of the companies listed had logged in to the system, and so it is far from involving all companies in the city. If this is due to a lack of incentives, or bad promotion of the app from the city itself is hard to tell. It is also hard to tell if there are or potentially will be any penalties for not using the system. It has already been around since 2017. In the case of no penalties, there is a risk of it being inefficient as companies who do not perform well or breaks the rules would still be able to get away with it. For this reason, they are perhaps less inclined to sign up since they know that they would not score well. However, this does go to show that just like the statements on the individual social credit system it is far from as encompassing and mandatory as critics has made it out to be. While investigating the

content of the different systems it was interesting to note that only city-level systems have any scoring features. The stated connection between blacklists and a low score is in this sense a faulty one. Since blacklists are based on penalties from misconduct or committing corporate crimes they have legal grounds rather than the black mirror examples of getting too many bad reviews.

Furthermore, this paper acknowledges the existence of different blacklists and redlists. If they are considered the benchmark of what counts as a system, that would imply that there are multiple systems. With the NDRC, SAMR as well as the ministry levels listed could all be considered as separate systems. While both NDRC and SAMR are aggregating data, including from ministries there is a clear connection between them. Since the author was unable to access parts of the NDRC's database it was not included in the social network analysis. Although it does list information about blacklists likely to have been accumulated from different agencies. However, it does not provide more information than that it has been listed but not from where. The author can thus not exclude the possibility that there is more data and information hidden within the system that the author does not have access to. Otherwise it is likely to be similar to the SAMR database but with less information since reasons of why it was listed is not included. It is more of a registry prompting the user to look up more information about the company in another database, which would also be a practical and legitimate usage of it. However, even the SAMR's list which is would be the closest one to a national blacklist, does in its current state, have their system divided by different city-level systems. If this is due to user-friendliness, such as it being easier to find information about a specific local subsidiary of the company or improving searchability with many companies having similar names is not clear. It could also be due to different ministries and potentially city level systems being sources to different systems. With the differences among them, dividing them might be the best method of aggregating the data as it would have too big differences among them otherwise. Therefore, at the present, the system closest to a national blacklist is still a patchwork and is far from having an all-encompassing blacklist.

At the present, the most aggregated information is still found in third-party platforms, since they collect data from a multitude of open data sources and ministries. While they only act as a platform of information brokerage, it is surprising that the other platforms fall so far behind from Qichacha. From a social network analysis perspective, the third-party platforms are in the most advantageous position. While just as in this case, being central does not imply being influential and wielding power but rather as a source of knowledge. It scores high in both eigenvector and between centrality. Making it usable as an influencing node if used that way as it is not only in the periphery. In contrast the supreme court and the SAMR having more out-degree centrality as they are the source of the flow in terms of information as well as listings for the blacklists makes their role imply a greater influence. However, the PBoC and their closed database actually scores a higher eigenvector score than the SAMR. While the same degree centrality, the eigenvector score implies higher influence on the system. Especially compared to a low centrality of city-level systems such as Yiwu. As they lack two-sided connections, the information and usage of it remains in the citylevel and does not have any influence on other systems. Thus, one common misconception that this thesis can debunk is the connection between scoring systems and blacklists. Since the scoring remains on a municipality level and does not affect the outcome or listing of a company on a blacklist.

7.3 Will it be one system?

There are issues with conducting research on an ongoing topic. That is to say, it is still too early to conclude what the final shape, as well as the exact consequences of the system will be. Comparing what the system is now with a few years ago, when there were even fewer cities and local government actors involved, Baihang had not yet been created, as well as only a few ministries having their own platforms, the system looked very different from what it does today. As with Chinese policy, even though it is set out to be implemented by 2020, it has continuously been built on since it was first announced in 2014. Furthermore, it should be understood as a system that is

likely to continue to evolve even after 2020. From the Guiding Opinions from 2019 several mention visions of using more technology and complex surveillance systems within and perhaps with that type of technology it could lead to a more efficient system. In addition, it is possible that the system moves away from the current silo database-like system and adapts a method to coherently gather all data in one single database. But since many parallel systems exist, there appears to be a lot of double reporting and content that is missed out on or purposely excluded, even within affiliates of the same governmental agency. From the social network analysis, it would be logical to incorporate or at least replicate the data gathering from the third-party systems as they contain the most comprehensive data from most sources. Another option would be to expand on the content in the NDRC database by streamlining and gather all data from the blacklists of the different ministerial databases. It would be easier than changing all of the municipal systems since they are more complex. However, based on the limited scope of this paper it cannot conclude if that it is the plan or goal. For example, other actors such as the PBoC claims that it has data on all neutral and legal persons in their database. Perhaps the NDRC does not need to replicate that.

Even with the upcoming Baihang system in place it might very well be separated from the city level, as well as blacklist, redlist systems. If it does produce a score from aggregated data it could be possible for other systems to use that score as part of their judgement or as a part of the criteria for the blacklists. One consideration to make is that since the PBoC is no stranger to change things, such as not renewing the licenses of the tech companies, it does go to show that the upper levels will change if it would be better for their policy goals. As in this case that happened since many of the system were integrating features that the PBoC deemed unrelated to the concept of social credit. While not specifically mentioning the scoring part of the system, it is for now not a feature in most systems. Except for some of the city-levels. Yet as with the example of Yiwu, it is not a mandatory system to participate in. However, as we saw with the change to Baihang, it is not impossible that there would be changes or new connections between some of the other systems. Such as further integrating city level systems with ministry level ones, or between different regions. What this study has found just points to that there currently is a lack of it. Perhaps their will even

be a change of actors involved just like the how the development of the wind power industry started off in a more fragmented sense but moved to only keeping one central governmental agency to coordinate everything. In the end only time will tell.

7.4 Implications

Then, what are the implications of the findings of this paper? With some caveats, it can be summarized as for companies the system is highly fragmented and far from an Orwellian coherent system. While it theoretically may be useful for background checks, but due to the decentralized nature of the system, might instead make it hard to keep track of everything. Would someone want to make use of the system in order to research a potential business partner in its current form would mean that the individual would have go through information about the company in many of the different ministerial databases in order to see if they have violated any rules within their sphere of influence, as well as research the specific cities or region in order to see if there are any entries in their database. Yet, since increased trust and lower transaction costs are the stated goals of the system, the question remains if its current form is able to achieve that.

Perhaps one change it will bring about judging from its current state is to give more incitements for companies to pay of their unpaid fines and remove themselves from the Supreme Court's Debt Defaulting list. As this may have implications for individuals tied to the company's senior management. However, that companies will make the connection to the system is not clear since there does not seem to be a mechanism that warns companies when they are in risk of being listed or once they have been listed. Rather companies might first face the consequences and then find out. In that sense, a parallel to a Foucault panopticon, where the prisoners comply with the rules because they believe they are constantly guarded even though they might not be, is not really a relevant comparison when discussing the CSCS. However, as was the case with the covid-19 prevention work many city level systems used the system to nudge companies to contribute and

could give penalties to companies that wanted to abuse the situation. It can be further used in order to have companies participate in and contribute to industrial policies or other long-term vision of the municipality. Making the system functional with a purpose even in its current decentralized state. Perhaps the system can be used to improve keeping track record of companies that have participated in similar circumstances in order to single out companies that are interested in contributing. If it is necessary to use the system to make companies participate is another question. Perhaps they would choose to do so anyway since laws still exist to punish violators. But the system might be a less restrictive and formal option in order to recognize a company's involvement. Especially since the redlist or reward records are not connected to any laws this could potentially be changed and created fairly easy. If a company has a high compliance and does things by the book it can be beneficial to participate in local initiatives. However, it is up to the individual company if it is beneficial enough to spend the time and resources on a voluntary system. Since in the case of the Yiwu system, it seems that for most companies it is not.

Another key thing to remember is that companies negatively affected by being blacklisted in a system, has the ability to delist themselves. Since this is even pointed out by the NDRC as a vital function, it points to that the system, for both good and bad, is less than absolute. It does provide another chance for companies that want to improve; however, it might also result in a system that does not change much. Since the worst behaving companies could still get away with their bad behavior as long as they pay minor penalties afterwards. The current costs of credit reconstructions are extremely low, much lower than the fines and other penalties that the company is likely to have to pay anyway. In addition, the system has not helped shutting down companies that try to cheat. There are several parallels that can be drawn with the 2001 case of the Yinguangxia fabrication of a 745-million-yuan profit, and the latest in 2020 when the coffee chain Luckin Coffes fabrication a 2.2-billion-yuan profit (CNBC, 2020). Instead the system might have the biggest impact on family owned businesses or smaller international companies that potentially lack the legal knowledge on how to delist themselves. Furthermore, even a tarnished reputation can be prevented given that the company is removed after the credit is reconstructed. It will be as if nothing ever

happened. Instead, by framing it as Kafkaesque, it has created a business opportunity for third-party actors such as consultancies and law firms working as middlemen in order to facilitate the reconstruction. Even when companies do not pay and are listed, the severity of the crime might be unclear. In one of the examples in this paper of a company that was blacklisted in Beijing, the author could not find any information about the reason for the initial listing in any of the systems. The company seemed to still be operating and it is unclear to what extent the company was or had been punished for their listing. While it might disqualify the company from getting governmental contracts and certain benefits, the company is still up and running. Thus, the impact on foreign companies operating in or doing business with China is likely to be much less than initially thought. Similar to the survey with the Danish companies, where more than half had little or no concern about it. Regulations can change anywhere, and it is just a matter of adapting to it. In the end the CSCS is not different from that.

As has been laid ground to in this paper, the corporate social credit system is far from the over encompassing Orwellian system it often gets depicted as. Yet compared to the individual systems, either from private tech companies or city level systems, the corporate social credit systems run by the SAMR, NDRC, PBoC as well as different ministries are not volunteer to participate in. On the other hand, the current system is not even a patchwork, since many databases are in silos, which all uses different metrics and datapoints. A huge undertaking would need to be done in order to compile the data to make it useful and qualitative enough to transform it into the mandatory point system of Black Mirror. However, databases such as the SAMR list should rather be seen as a list of criminal records and basic background information about previous penalties, similar to information that can be looked up when conducting a background check in other countries. All things considered, this is perhaps what the corporate social credit system should be understood and discussed as. A method for Chinese banks and governmental actors to improve their ability of doing background checks, just not through the same system. Filling the vacuum and holes of the historic lack of a national credit system.

8. Concluding remarks

In conclusion, this paper set out to investigate if the corporate social credit system is one coherent system or if it consists of fragmented ones, due to the multiple actors involved. From the research conducted it can conclude that in its current state it is not coherent. The social network analysis further shed light on the different databases access to information which showed the fragmented nature of the system. Furthermore, what the thesis found is that the corporate social credit system is far from its depiction as an Orwellian, system. Instead, its current shape should be understood as different databases in silos, with limited data-sharing between them. A result stemming from the overall decentralized structure of the system with the different level actors of ministries, the PBoC, NDRC, SAMR, municipal, as well as multiple third-party platforms running their own systems and that there is no single governmental agency responsible for it. The governing mode is a top-level system reflecting in that the higher levels adds the vision while the actual ministries and municipal levels have a sort of independence in implementing their own system. However, the decentralized structure makes it hard to tell if a more unified system will be implemented in the future and if it is even possible that all systems eventually could be unified.

The research field of the social credit system is still in its infancy and there are many opportunities to continue to expand the field. The author stresses the importance with conducting research especially on the corporate side, as very little research focuses on it at present. At the same time there is a growing interest in it as international think-tanks and law firms etc. present in China are increasingly writing their own reports about it. Therefore, adding more in-depth and nuanced research to the field is vital. With the system being implemented and continuously expanded in the coming years more research could be done in the shape of different types of case studies. A surprising amount of data is public and accessible through the different databases mentioned in this thesis. The development of more governmental agency databases would make a comparative study examining different ministry level system possible. Another interesting area to dive deep

into is how companies operating in China are affected by it and if their behavior and strategies has changed in any considerable way. Another interesting perspective that is missing from this paper would be to make a comparative study with other national background check or credit systems, in order to investigate what kind of data the CSCS gathers and what the differences are between the systems.

9. References

Antivachis, N. A., & Angelis, V. A. (2015). Network organizations: The question of governance. *Procedia-Social and Behavioral Sciences*, 175, 584-592.

Bach, J. (2020). The red and the black: China's social credit experiment as a total test environment. The British Journal of Sociology, 71(3), 489-502.

Baihang Credit (2020a) Company profile [公司简介] Retrieved from https://www.baihangcredit.com/#/about/singlePage?articleCode=50879cb08b4945899cf33d48e9
7f2908&superCode=5178d8e2afe6408ba5e72c888187f7e2 Accessed: 2020-07-30

Baihang Credit (2020b) Business partners [业务合作] Retrieved from: https://www.baihangcredit.com/#/parter/singlePage?articleCode=817cb1ea3fce44ea9cfd3edb809 a6fbd&superCode=b949d38bfcfa4e4dbcad1fb8e322dde8 Accessed: 2020-07-30

Barabási, A. L., & Albert, R. (1999). Emergence of scaling in random networks. science, 286(5439)

Bi, J., Liu, Y., Li, A., Chen, M., Yang, R., Cai, W., ... & Wang, C. (2020). Digital Earth in China. In Manual of Digital Earth (pp. 713-732). Springer, Singapore.

Brødsgaard and Mertha (2016) Introduction. In Brødsgaard, K. E. (Ed.). Chinese politics as fragmented authoritarianism: Earthquakes, energy and environment. (pp. 1-14) Taylor & Francis.

Bonacich, P. (1972). Factoring and weighting approaches to status scores and clique identification. Journal of mathematical sociology, 2(1), 113-120.

Borgatti, S. P., Everett, M. G., & Johnson, J. C. (2018). Analyzing social networks. Sage Publications.

Botsman, (2017) Big data meets Big Brother as China moves to rate its citizens Retrieved from https://www.wired.co.uk/article/chinese-government-social-credit-score-privacy-invasion

Accessed: 2020-06-03

Caixin, (2020) How Chinese Companies Can Get Off Social Credit Blacklists Retrieved from: https://www.caixinglobal.com/2020-05-27/in-depth-how-chinese-companies-can-get-off-social-credit-blacklists-101559282.html Accessed 2020-05-30

Central Government (2020) People's Bank of China convenes the 2020 Credit Work Teleconference [人民银行召开 2020 年征信工作电视电话会议] Retrieved from http://www.gov.cn/xinwen/2020-06/25/content_5521790.htm Accessed: 2020-07-17

Chen L, Yang U. (2018). Reflections on constructing a pluralized credit surveillance method [构建多元信用监管模式的思考] Macroeconomic management, (12), 45-54.

China Credit (2020) List of companies with High level Certification of Customs, (42) Retrieved from

https://www.creditchina.gov.cn/xinyongkanwu/zazhi/202006/P020200625559909966985.pdf
Accessed 2020-06-30

CNBC, (2020) Shares of China's Luckin Coffee plummet 80% after investigation finds COO fabricated sales Retrieved from: https://www.cnbc.com/2020/04/02/luckin-coffee-stock-plummets-after-investigation-finds-coo-fabricated-sales.html Accessed: 2020-08-20

Credit China, (2019) 2018 Blacklist of Distrusted annual analytical report [2018 年失信黑名单年度分析报告] Retrieved from

https://www.creditchina.gov.cn/home/zhuantizhuanlan/201902/t20190214_146763.html Accessed 2020-05-27

Creemers, R. (2017). Cyber China: Upgrading propaganda, public opinion work and social management for the twenty-first century. Journal of Contemporary China, 26(103), 85-100.

Creemers, R. (2018). China's social credit system: an evolving practice of control. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3175792 Accessed 2020-06-01

Credit Reference Center (2020a) Commercial Credit report Retrieved from http://www.pbccrc.org.cn/crc/qyzx/201410/84be371879224635b7723165b5c8558a.shtml

Accessed: 2020-07-30

Credit Reference Center (2020b) Enterprise Information Report [企业信用报告] Retrieved from http://www.pbccrc.org.cn/zxzx/qyzx/201702/be2693d5ed42400eb9467f93f0042332.shtml Accessed 2020-07-30

Chipman Coty (2020) China's social credit system covid 19, Retrieved from https://www.chinas-briefing.com/news/chinas-social-credit-system-covid-19-triggers-some-exemptions-obligations-businesses/ Accessed 2020-05-12

Dai, X. (2018). Toward a reputation state: The social credit system project of China. Available at SSRN 3193577.

Engelmann, S., Chen, M., Fischer, F., Kao, C. Y., & Grossklags, J. (2019). Clear sanctions, vague rewards: How China's social credit system currently defines "good" and "bad" behavior. In Conference on Fairness, Accountability, and Transparency (FAT* '19), January 29–31, Atlanta, GA.

European Chamber of Commerce (2019) The Digital Hand, Retrieved from https://www.europeanchamber.com.cn/en/publications-

archive/709/The Digital Hand How China s Corporate Social Credit System Conditions M arket Actors Accessed 2020-01-31

Financial Times (2019-09-19) Alibaba and Tencent Refuse to hand loans data to Beijing, Retrieved from https://www.ft.com/content/93451b98-da12-11e9-8f9b-77216ebe1f17 Accessed 2020-06-15

Fu, J. (2010). Corporate disclosure and corporate governance in China. Kluwer Law International BV.

Granovetter, M. (1983). The strength of weak ties: A network theory revisited. Sociological theory, 201-233.

Gu, E., & Page-Jarrett, I. (2018). The top-level design of social health insurance reforms in China: Towards universal coverage, improved benefit design, and smart payment methods. Journal of Chinese Governance, 3(3), 331-350.

Hansen, H. K., & Weiskopf, R. (2019). From Universalizing Transparency to the Interplay of Transparency Matrices: Critical insights from the emerging social credit system in China. *Organization Studies*, 0170840619878474.

Horsley, J. (2018). China's Social Credit Score Isn't Real. Foreign Policy, 16 November 2018

Kostka, G. (2019). China's social credit systems and public opinion: Explaining high levels of approval. *New media & society*, 21(7), 1565-1593.

Jiang, M., & Fu, K. W. (2018). Chinese Social Media and Big Data: Big Data, Big Brother, Big Profit? Policy & Internet, 10(4), 372-392.

Jin Y Z. (2018) China's social credit system: A primer. Retrieved from https://www.jipasg. org/posts/2018/9/6/introduction-to-chinas-social-credit-system Accessed: 2020-06-27

Liang F, Das V, Kostyuk N, et al. (2018) Constructing a data-driven society: China's social credit system as a state surveillance infrastructure, Policy & Internet, 10(4): 415-453

Lee, C. S. (2019). Datafication, dataveillance, and the social credit system as China's new normal. Online Information Review.

Lema, A., & Ruby, K. (2007). Between fragmented authoritarianism and policy coordination: Creating a Chinese market for wind energy. Energy Policy, 35(7), 3879-3890.

Lewis, D (2019) All Carrots and No Sticks: A Case Study on Social Credit Scores in Xiamen and Fuzhou, Medium. Retrieved from https://medium.com/berkman-klein-center/social-credit-casestudy-city-citizen-scores-in-xiamen-and-fuzhou-2a65feb2bbb3. Accessed: 2020-07-21

Liu, C. (2019). Multiple social credit systems in China. Economic Sociology: The European Electronic Newsletter, 2019, 21 (1): 22-32

Livingston, M., Poon, W. P., & Zhou, L. (2018). Are Chinese credit ratings relevant? A study of the Chinese bond market and credit rating industry. Journal of Banking & Finance, 87, 216-232.

Medium (2018) Data Search Platform TianYanCha Knows Chinese Businesses, Retrieved from https://medium.com/syncedreview/data-search-platform-tianyancha-knows-chinese-businesses-3a0a5e725c70 Accessed: 2020-08-08

Meissner, M. (2017). China's social credit system: A bigdata enabled approach to market regulation with broad implications for doing business in China. Mercator Institute for China Studies, 24, 1-13.

Mertha, A. (2009). "Fragmented authoritarianism 2.0": Political pluralization in the Chinese policy process. The China Quarterly, 200, 995-1012.

National construction market supervision public service platform (2020) Retrieved from: http://jzsc.mohurd.gov.cn/home Accessed: 2020-07-17

National enterprise credit information publicity system (2020) Retrieved from: http://www.gsxt.gov.cn/index.html Accessed: 2020-07-12

National traveling supervision service platform (2020) Retrieved from: http://jianguan.12301.cn/#
Accessed: 2020-07-17

Nooy, W., Mrvar, A., & Batagelj, V. (2005). Exploratory Social Network Analysis with Pajek. Cambridge University Press. New York, USA

Ohlberg, M., Ahmed, S., & Lang, B. (2017). Central planning, local experiments. Merics China Monitor. Retrieved from https://www.merics.org/sites/default/files/2017-12/171212_China_Monitor_43_Social_Credit_System_Implementation. pdf Accessed: 2020-05-18

Roedl (2020) China's Social Credit System in the light of Covid-19. Retrieved from https://www.roedl.com/insights/covid-19/coronavirus-china-social-credit-system Accessed 2020-05-08

Royal Danish Embassy Beijing, Danish Chamber of Commerce, Sino-Danish center for education and research (2020) Survey of Danish Companies in China Challenges and Opportunities, Retrieved from

https://kina.um.dk/~/media/kina/pd%20beijing/survey%20of%20danish%20companies%20in%2 Ochina%20june%202020.pdf Accessed: 2020-06-30

Saunders, M., Lewis, P. and Thornhill, A. (2015). Research methods for business students. 7th ed. Pearson Education Limited, pp.4-23

Schubert, G., & Alpermann, B. (2019). Studying the Chinese policy process in the era of 'top-level design': The contribution of 'political steering' theory. Journal of Chinese Political Science, 24(2), 199-224.

SCMP, (2019) Life as one of China's 13 million 'deadbeats' means slow trains, special ring tones. Retrieved from https://www.scmp.com/tech/apps-social/article/3003191/life-one-chinas-13-million-deadbeats-means-slow-trains-special Accessed: 2020-06-03

Shanghai City Government (2020) Notice from the Shanghai Office of Construction of the Social Credit System on credit management and services during the completion of the epidemic prevention and control [上海市社会信用建设办公室关于做好疫情防控期间信用管理和服务工作的通知] Retrieved from

http://www.shanghai.gov.cn/nw2/nw2314/nw2319/nw12344/u26aw64154.html Accessed 2020-05-08

Shen, C. F. (2019) Social Credit System in China, Panorama, 2/2018: Digital Asia

Sithigh and Siems (2018) The Chinese Social Credit System: A Model for Other Countries? Modern Law Review (2019) 82 (6) Sixth Tone (2020) How Chinese Companies Are Getting Off Social Credit Blacklists, Retrieved from https://www.sixthtone.com/news/1005757/how-chinese-companies-are-getting-off-social-credit-blacklists Accessed: 2020-07-23

Solem, Olav (2003): "Epistemology and Logistics: A Critical Overview. Systematic Practice and Action Research"; vol. 16, no. 6

Strait Times (2019) China's lethal milk scandal reverberates a decade later. Retrieved from: https://www.straitstimes.com/asia/east-asia/chinas-lethal-milk-scandal-reverberates-a-decade-later Accessed 2020-06-29

Supreme People's Court (2020) China executive public information website [中国执行信息公开 网] Retrieved from http://zxgk.court.gov.cn/zhzxgk/ Accessed: 2020-08-11

Tichy, N., & Fombrun, C. (1979). Network analysis in organizational settings. *Human Relations*, 32(11), 923-965.

The Diplomat (2014) Xi Jinping leads Chinas new internet security group. Retrieved from https://thediplomat.com/2014/02/xi-jinping-leads-chinas-new-internet-security-group/ Accessed: 2020-05-08

The Economist (2016) China's digital dictatorship Retrieved from https://www.economist.com/leaders/2016/12/17/chinas-digital-dictatorship Accessed: 2020-06-03

The Paper (2019) Sesame Credit: Not considering profit in two to three years, no data exchange with Baihang [芝麻信用:两三年内不考虑盈利,和百行征信之间没有数据交换] Retrieved from: https://www.thepaper.cn/newsDetail_forward_4827406 Accessed: 2020-08-10

The State Council (2020) Guiding opinion on constructing a modern environmental governing system [关于构建现代环境治理体系的指导意见] Retrieved from

http://www.gov.cn/zhengce/2020-

03/03/content_5486380.htm?mc_cid=58d60019df&mc_eid=c1e9c4f764 Accessed: 2020-05-18

The State Council (2019a) The State Council's guiding opinion on Accelerating the Building of the Social Credit System and Building a credit based monitoring system [国务院办公厅关于加快推进社会信用体系建设构建以信用为基础的新型监管机制的指导意见] Retrieved from http://www.gov.cn/zhengce/content/2019-07/16/content_5410120.htm Accessed: 2020-05-25

The State Council (2019b) The State Council's guiding opinion on strengthening and specifications of continuous monitoring [国务院关于加强和规范事中事后监管的指导意见] Retrieved from http://www.gov.cn/zhengce/content/2019-09/12/content_5429462.htm Accessed: 2020-05-25

The State Council (2015) The State Council on The comprehensive plan for establishing a unified social credit system code for legal entities and organizations [国务院关于批转发展改革委等部门法人和其他组织统一社会信用代码制度建设总体方案的通知] Retrieved from http://www.gov.cn/zhengce/content/2015-06/17/content_9858.htm Accessed: 2020-06-30

The State Council (2014) Planning outline for the construction of a social credit system [社会信用体系建设规划纲要] Retrieved from http://www.gov.cn/zhengce/content/2014-06/27/content_8913.htm Accessed: 2020-05-18

The Supreme People's Court of China (2016) The Supreme People's Court on Sesame credit sharing information on people that have failed to fulfill a court order [最高法首次联手芝麻信用 共享被执行人信息] Retrieved from http://www.court.gov.cn/zixun-xiangqing-16431.html Accessed: 2020-06-27

Von Blomberg, M. (2018). The social credit system and China's rule of law. Mapping China Journal, 2, 77-113.

Wang, H., & Jiang, C. (2020). Local Nuances of Authoritarian Environmentalism: A Legislative Study on Household Solid Waste Sorting in China. Sustainability, 12(6), 2522.

White House (2018) Remarks by Vice President Pence on the Administration's Policy Toward China, Retrieved from https://www.whitehouse.gov/briefings-statements/remarks-vice-president-pence-administrations-policy-toward-china/ Accessed: 2020-07-17

Xinhua (2018) China to issue new measure for social credit system, Retrieved from: http://www.xinhuanet.com/english/2018-12/04/c_137650162.htm Accessed: 2020-07-27

Yang, Z. (2013). 'Fragmented authoritarianism'—the facilitator behind the Chinese reform miracle: A case study in central China. China Journal of Social Work, 6(1), 4-13.

Yiwu Purchase (2020) Yiwu Purchase shop credit score [义乌购商铺信用等级] Retrieved from: https://www.yiwugo.com/about/shopcredit.html Accessed: 2020-07-21

Yu, J (2018) A study on the Mode of Enterprise Credit Supervision by Government departments --- a case study of the Post-Supervision Reform in Nanchang City, [政府部门对企业信用监管方式研究 --- 以南昌市企业事中事后监管改革为例] Nanchang University, Master Thesis

Zeng, J. (2016). China's date with big data: will it strengthen or threaten authoritarian rule?. International Affairs, 92(6), 1443-1462.

Zhejiang provincial regulations (2017) China Law translate Retrieved from https://www.chinalawtranslate.com/en/zhejiang-provincial-regulations-on-the-management-of-public-credit-information/ Accessed: 2020-06-30

Åsberg, R. (2000). Ontology, epistemology and methodology: A critical rundown of some basic scientific terms and concepts. [Ontologi, epistemologi och metodologi: En kritisk genomgång av vissa grundläggande vetenskapsteoretiska begrepp och ansatser] Institutionen för pedagogik och didaktik, Göteborgs universitet.