Article

The United States and China Financial Communication and the Notion of Risk

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Abstract: The close relationship between governments and their central banks generates risks for both partners. This paper presents an original qualitative empirical approach based on textual analysis of the United States of America, China, and their Central Banks' respective communications. These financial communications are the subject of comparison through a textual analysis to determine these actors' positions in the "cultural theory" and, more widely, the sociology of risk. The risk profiles identified of the United States of America Federal government and the People's Bank of China do not necessarily correspond to their legal status and economic role. These results also shed light on the fact that the cultural background cannot be separated from the risk perception in these countries. However, an eye needs to be kept on the geopolitics and securities risk factors that can influence the global economy's evolution.

Keywords: risk; government; central bank; textual analysis; cultural theory

1. Introduction

Global borrowing has been overgrowing so fast that many are ringing the alarm about its sustainability. Estimated by the Institute of International Finance in November 2020, worldwide debt is expected to surge from 253 trillion U.S. dollars at the end of September 2019 to a record $277 trillion by the end of 2020 due to the sharp increase in government, corporate, and households borrowing in response to the coronavirus pandemic. This debt will be increasing with interest rates falling to historically lower rates. Furthermore, we live in a more speculative than productive economic world. Companies' capitalizations are often worth more than twice their real values, which has led to a speculative bubble worth trillions of U.S. dollars that can explode at any time. There is no longer any fundamental logic economy but just speculation. The global economy is on a drip in the context of the global indebtedness of countries. This global debt crisis combines with the current pandemic situation, and special capital packages setting by governments will send debt even higher by the end of 2021. We are into a self-fueled negative spiral involving sovereign difficulties, banking fragilities, massive speculative bubbles, and an economic recession. The world we know has never been so in debt, and this was happening even before the COVID-19 pandemic.

Knowing that, over the last 50 years, there have been four waves of debt accumulation, and we are currently in the midst of the fourth wave. What we can learn from the first three is that they never ended happily. This fourth wave is the largest, fastest, and most broad-based of them all, and experience has taught us that when countries' debts reach such a high level, one has to expect a worldwide economic crisis or economic reset. This time, it could be even more violent than the preceding crises, regarding the globalization of economies and the rising of nationalism from America to Asia passing by Europe. In this context, debt management and transparency should be a top priority.

It is regarding this concern of debt management and transparency that financial communication has developed this past decade, maybe faster than any other communication discipline area as an outcome of the recent financial crises. These crises have tarnished the trust and legitimacy of financial institutions. The societal and economic carrying unit can now be associated with irresponsible actions, frauds, and lack of expertise (Hallvarsson and Halvarson 2010). As a result, international regulations and standards (i.e., Basel 3 accords (Bank for International Settlements 2006, 2010, 2017)) have been developed to ensure financial stability, disclosure, and trustworthiness.

Knowing all of this and that one cannot separate a country's global politics from its economic policy because both are linked, what is the place of these credits or financial risks in touch practiced by governments and their central banks? Crisis communication (Libaert 1999) provides a partial answer: communication is also the company's strategic communication in an uncertain world (Bouzon 1999). Risk communication alone becomes a risk: it must meet the need for transparency of citizens or shareholders and reflect responsibility and ethics.

The close relationship between governments and central banks also generates risks for both entities, particularly the traditional financial risks. In this delicate situation, we propose to analyze the discourses held by both of these entities, governments and central banks in the world, two more significant economies around the notion of risk (in a financial sense), to clarify their respective risk culture. Could greater distance in their conception of risk explain the current debt situation and harm the financing system's stability soon? Indeed, despite a unique technical reality, we make the hypothesis that the apprehension of the risk related to these massive amounts of debts, for example, is not external to the cultural affiliation in this matter.

This paper digs deeper into recent financial reports of the Central Government of China and the Federal Government of the United States of America (USA), and their different central banks from 2007 to 2019, to bring new light to how the concerned should interpret it.

Firstly, these financial reports are subject to comparison through a textual analysis of lexemes co-occurring in a set of text segments (Alceste) using the Reinert (2007) method. Secondly, the behavioral economics curriculum that is applying good psychology to economics is involved in this study using the sociology of risk and the "cultural theory" for reading the communication of these four entities.

Hopefully, this approach will explain how governments and central banks handle this fourth wave in their decision-making.

The first part recalls the sociological approach to risk according to the "cultural theory" of Mary Douglas and poses the research hypotheses. A second part traces the empirical work methodology, from textual analysis using lexicometry software to collected financial communication materials. Finally, the established results are presented and discussed regarding the theoretical grounding to identify the cultural risk profile of the two more significant economies in the middle of the coming financial crisis.

2. The Sociological Approach to Risk: Risk as an Object of Perception

Risk is everywhere (Ewald 2000): in the economy, finance, social, law, medicine, defense, ecology, industry, etc. It is the "Risikogesellschaft" of Ulrich, Beck (Beck 1986). However, the risk is not just a technical notion. It necessitates a comprehensive understanding of people's beliefs, concerns, perceptions, knowledge, and practices as defined by the World Health Organization (2015). Defined by scientists, the risk does not exist since its social representations differ according to the societies and the periods. For Duclos (1994), risk presents "a social and anthropological meaning which is not necessarily reducible to the definition most operationalized by scientists, or technical and economic actors." In this sense, individuals' risk perception only makes sense (Le Breton 2017). Therefore, the risk becomes relative. It is socially constructed, just as the conception of danger is socially selective. The distance between the expert and the layman is attributable to access

to knowledge and, above all, to different sensitivities and dissimilar logics of apprehension and measurement (Adams 1995). Thus, the perception of risk is a psychosocial construct, influenced by cognitive, emotional, social, cultural, and personality differences between individuals and between different ethnic groups, i.e., (Af WÅhlberg 2001; Corvoisier and Gropp 2002; Dryhurst et al. 2020; Joffe 2003; Kasperson et al. 1988; Leiserowitz 2006; Loewenstein et al. 2001; Moiseev et al. 2020; Sjöberg 2002; Slovic 2010; Slovic et al. 1982; Van der Linden 2015, 2017; Varyash et al. 2020; Wildavsky and Dake 1990; Xu 2018; Zeng et al. 2020). Indeed, the culture of belonging shapes a risk assessment framework. The values possessed give meaning to the risks encountered (Peretti-Watel 2000), to the point of giving rise to a "Cultural Theory".

Despite some criticism (see Boholm 1996; Marris et al. 1998; Sjoberg 1998; Van der Linden 2016), one theory of variable risk perception that has produced critical empirical insights across domains and in different countries is the cultural theory of risk.

Mary Douglas developed the cultural analysis in the 1970s. It examines the role of culture in the making of social order. In the context of British social anthropology and the follow-up of Evans-Pritchard (1968), it takes up. It extends Emile Durkheim (1893) contributions on social institutions' formation to build an operational process for analyzing and comparing cultures. She rejects the social evolutionism of the early writings of Emile Durkheim to consider different cultures comparably. The cultural analysis also breaks with the culturalist approach that mobilizes hermeneutics of culture of philosophical or aesthetic inspiration. It replaces it with a sociological approach by considering the principles and judgments that guide and nourish individuals' actions in culture. It constructs an analysis in which social organization and cultural principles combine to ensure social institutions' stabilization and reproduction. For Douglas (1970), there are steadfast ways to collaborate, regardless of their size; organizations can be distinguished based on how the members' appropriate roles are defined in a strict way and with the degree to which they maintain firm boundaries with the outside world.

Entered public policy discussions with the publication of Thompson's (1980) paper "Aesthetics of Risk: Culture or Context," the cultural theory of risk perception theory has since been the focus of extensive debate in both scholarly and policy communities.

The cultural theory was formalized in the sociology of risk by Douglas and Wildavsky (1983). The foundation of the cultural theory of risk is that only when we fully understand the cultural contexts that govern the interpretation of risk can we approach and understand risk perception (Dake 1992). For Dake (1992), search for an objective measure of risk is destined for failure, because the risk is a socially constructed phenomenon.

The cultural theory is based on the use of cultural bias to represent internal social relationships and explain how these internal social relationships influence risk perception. Cultural bias is a societal organization or set of beliefs and experiences of the world (Schwarz and Thompson 1990) and acts as a "point of view, with its framing assumptions and readily available solutions to normative problems" (Douglas 1997). Dake (1992) defined these cultural biases as shared beliefs and values that justify different ways of behaving: worldviews that correspond to different social relations patterns. These biases provide a window to investigate how risks are individually viewed in conjunction with one's cultural environment.

The cultural theory is based on two dimensions representing every social organization: the grid and the group, where the grid is a measure of restrictive classifications of group members, and the group is a measure of social integration of individuals into social units (Douglas 1982; Duclos 1994; Rayner 1992). Therefore, these two dimensions constitute the *x*-axis and the *y*-axis of a matrix and illustrate four typical ideals: Figure 1.
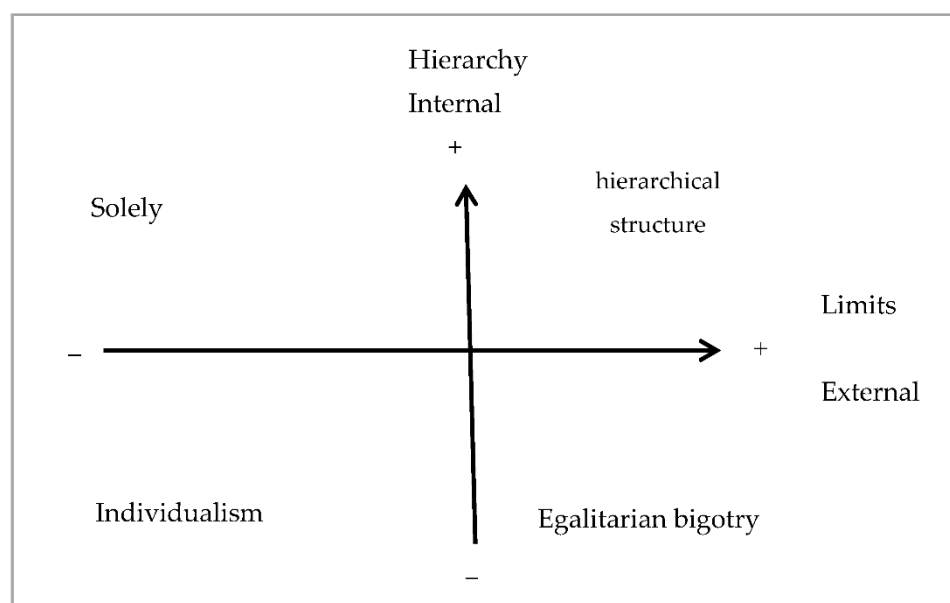
Figure 1. The matrix of "cultural theory" according to Mary Douglas.

Represented horizontally are the borders with the rest of society and the affirmation of an identity; vertically, an internal structuring, with reference to the hierarchy or the differentiation of functions, is apprehended. The four quadrants are built on values, a conception of knowledge, and an attitude towards risk (Le Breton 2017; Peretti-Watel 2010).

The hierarchical structure: It is the bureaucracy, a very hierarchical organization, within which the functions are clearly defined. The hierarchical structure is averse to risk, almost blind to risk. It manages uncertainty through regulations and some rigidities and routines. It is, by hypothesis, the positioning of governments.

Individualism: It is the company in a pure and perfect competition market. It is not hierarchically attached to any other companies involved in the market, free from any barrier to entry or free to leaving the market. Driven by a spirit of competition, uncertainty, and risk-taking are assumed, given the trust placed in market mechanisms. It is, by hypothesis, the positioning of financial institutions.

Egalitarian bigotry: this is the case of a sect, a political party, a union, where cohesion comes from the existence of an egalitarian and identity feeling between its members. There is a strong aversion for major risks and an imaginary threat, going as far as suspicion for the hierarchical and the individualist.

Solely: they are the excluded from our societies, fatalistic and risk-takers, in total subordination to other cultural peculiarities. They do not want to worry or to organize, nor to create values or identity.

In some, there are different risk cultures for governments and financial institutions. The governments' vis-a-vis their citizens and their general interest missions would make one think of a bureaucracy and a hierarchical structure. Furthermore, it appears more cyclical for governments, more related to the difficulties or opportunities of the moment, perhaps also to a short-term vision of the governments' mandate. Whereas, the central banks, as the basic unit of a capitalist economy, would identify with Individualism. On the other hand, we would have a hierarchical structure on the one hand and Individualism, raising two fundamental questions (Duclos 1994). These assumptions must be compared with their respective position around the concept of risk. How to explain that the bureaucrats are generators of an uncontrollable a posteriori project? It would be the case for the previous financial crises suffered. Are the excesses of certain liberalism compatible with the rationality attributed to it? The current indebtedness of the world calls out. To answer these questions, it is necessary to implement a qualitative analysis of governments and their primary lenders' recent discourses.

3. Methodological Approach: A Textual Analysis of Financial Communication in a Financing Relationship

3.1. Textual Analysis Using Alceste Method

Communication or discourses analysis has received particular attention in social science literature, whether in the field of organizational theories (Hardy and Phillips 1999; Maguire and Hardy 2009; Oakes et al. 1998; Phillips et al. 2004), innovation (Hargadon and Douglas 2001; Mikhaylov et al. 2020; Munir and Phillips 2005; Perren and Sapsed 2013), or strategy (Lawrence and Phillips 2004; Seignour 2011).

In addition, since the switch to digital writing, word processing via software has increasingly impacted research methodology in various disciplines. The utility of analyzing words lies in the fact that words are the markers of society and, as they carry connotations, they define a shared meaning (Richardson 2006).

The use of these methodologies has led to a search for systematization of the analysis, making it possible to consider the volume of data available today. The diversity of approaches around discourse analysis underlines its richness and fruitfulness for researchers. Let us mention the new types of textual data processing, such as "quantitative narrative analysis" (Franzosi 2012) based on relational and network models. It is going beyond statistical approaches based on assumptions of linearity and additivity.

Our theoretical frame of reference is the textual analysis of communications via a "risk" reading grid from the world's two most advanced economies from 2007 to 2019. The study was conducted using the Alceste method of Reinert (2007).

Alceste allows in-depth analysis of a corpus and is frequently used in management sciences. Its principle is based on a division of the corpus (Gavard-Perret et al. 2008) into a series of text segments (called U.C.E. for Elementary Contextual Units) to study the distribution of words in these segments (Reinert 2007).

Automated textual analysis is based on a "de-structuring" of the corpus (Gavard-Perret and Helme-Guizon 2008). What then needs attention is the repetition of words and the proximity of certain words to each other (we speak of "co-occurrence"). Therefore, it is a question of dividing the corpus into segments of relatively arbitrary lengths, but of the same size, and quantifying them by analyzing their statistical distribution. This method is derived from factorial correspondence analysis and is the originality of the Alceste method.

Contrary to a principle of ascending classification, the software used will not classify words but U.C.E. and proceed to a hierarchical descending classification. On the U.C.E., the whole words will be detected by comparison between them to define the classes. Finally, the Alceste method using the process (Reinert 2007). calculates the corpus decomposition in different classes and among all the possible decompositions; it maximizes the oppositions to say, in technical terms, the Khi2 margins. At the end of the treatment, the corpus is thus "arranged" in different classes. Our responsibility is to make sense of this distribution made automatic by the software, giving a name to the classes obtained. This last step highlights the major themes significantly addressed in the discourse analyzed.

3.2. Discourse on Risk and Choice of Material

The purpose of this part is the comparison of the discourses held around the concept of risk by the two entities, the government, and the central bank, through the textual analysis to determine these actors' positions in the "cultural theory."

Our framework is that of the two governments, China and the U.S.A., and their central banks' annual reports during the recent period (2007–2019). Since it is a lexicometry, it cannot include the accounts and encrypted data. It cannot be part of a single information process but in a communication approach.

The annual reports are publicly accessible online. These reports are perfect for identifying a particular risk discourse. For the government, the approach will no longer be confined to the budget description or the budget procedure's narrative but becomes a report of activity. It reviews the exercise of the government's powers and includes development on

the management of the debt. It is this part that we will retain for the textual analysis. We will isolate and not include the statistical analysis.

Four textual analyses will be successively conducted to enable us to position the different perceptions of risk in the theoretical quadrant of the "cultural theory": the perception of the two central banks (via the contents of their annual reports); the perception of the two governments (via the contents of their annual and financial reports). The goal is to understand government and central bank risk perceptions, to explain central banks' behavior toward government debts and comprehend whether different or same risk cultures have contributed to the precedent episodes of debt crises and will for the next one, whether these call into question the relationship between these two entities.

3.3. Collection and Creation of the Database

The confrontation of the discourses of the two largest economies in the world gives rise to two parallel collections; that of China and the United States of America based on an annual or financial report. The collection is summarized in Table 1.

Table 1. Assessment of the collection of the reports.

Country	Entities	Number of Annual Reports Analyzed
The U.S.A.	Federal Reserve	13 (2007–2019)
	Federal Government	13 (2007–2019)
China	People's Bank of China	09 (2011–2019)
	Central Government	13 (2007–2019)
	Total report analyzed	48

4. Textual Analysis Result and discussion: Words of Risk

4.1. Structuring Financial Communication Classes

Four "corpuses" were put together to compare the two different countries and their financial communications. After the Reinert classification, we had the following results in Table 2.

Table 2. Preliminary information on the processing of the corpuses.

Classification	The U.S.A.		China	
	Federal Reserve	**Federal Government**	**Central Government**	**People's Bank of China**
Number of stable classes	4	4	4	4
Number of text segments	29,554	49,255	5018	14,498
Number of forms	8407	12,706	6505	10,678
Number of occurrences	1,068,466	1,789,068	181,253	519,446
Number of lexemes	6173	9140	5083	7735
Number of active forms	4793	7557	3110	6236
Number of additional forms	1380	1583	1973	1499
Number of active forms with frequency	>=7: 2862	>=13: 2881	>=3: 1967	>=6: 2677
Average of forms per segment	36.153008	36.322566	36.120566	35.828804
Percentage of elementary context units (U.C.E.) classified	79.76%	90.99%	86.23%	76.38%
Number of hapaxes (forms present only once in the corpus)	2245	927	1677	2253

Number of occurrences: total number of words contained in the corpus. Number of forms: number of forms present in the corpus. Average of occurrences by form: (number of occurrences)/(Number of form). Hapax number: number of words appearing only once in the entire corpus. Average occurrences by Texts: (number of occurrences)/(number of Texts).

4.2. Place of "Risk" in the Discourse of the Two Countries and Their Central Banks: From Textual Analysis to a Return to the Cultural Theory of Risk

The Notion of Risk in the Annual Report

1. China;

    -   *The People's Bank of China*

    The analysis of the annual reports of the People's Bank of China 2011 to 2019 shows a significant presence of the word "risk" in the financial communication practiced. More precisely, let us see how Figure 2 shows the proximities of words around the term "risk".

Figure 2. The network of the form "risk" of People's Bank of China.

Around "risk," two kinds of vocabulary coexist. One relates to an explicit delimitation of risk sectors *(real estate, bond market, banking system . . .)* with a desire to identify and manage these risks *(identification, assess, management, control, supervision . . .)*, but above all, a desire to reduce uncertainty in an organized or even procedural way *(mitigating, sharing, preventing)*. In this case, it is indeed the terminology specific to the values, the conception of knowledge, and the perception of risk of the hierarchical structure, in the matrix of Mary Douglas's cultural theory: risk aversion is contained by processes, listing problem and standardized solutions. Thus, contrary to the initial hypothesis, the People's Bank of China's as a financial institution discourse is similar to that of the hierarchical structure, also called "bureaucracy".

    -   *Central and Local Government*

    The analysis of the annual reports of China's Central, Local Government reports from 2007 to 2019 shows a significant presence of the word "risk". More precisely, let us see how Figure 3 shows the proximities of words around the term "risk".

Figure 3. The network of the form "risk" of China Central and Local Government.

Unlike the People's Bank of China study, the term risk is not systematically present at the general level but at the local government level. The environment in which they operate is considered more unstable, hence the need to sound the alarm on the level of risk *(warming, high)* while preserving the central government *(guard against, protection)*. Still, this context of uncertainty is, above all, the opportunity to assert the management capacities of the central government against the risks *(local government debt, public finance, grain, agriculture, special bonds . . .)* by *(monitoring, assessment, compensation, sharing, prevention, and control, respond . . .)*. We are in a pure hierarchy where the top controls and ensures the survival of the whole group.

2. The United States of America;

- The Federal Reserve

The analysis of the Federal Reserve's annual reports from 2007 to 2019 also shows the significant presence of the word "risk" in the financial communication practiced. More precisely, let us see how Figure 4 shows the proximities of words around the term "risk".

Figure 4. The network of the form "risk" of the U.S. Federal Reserve.

Here we have an explicit delimitation of the responsibilities represented by (participants). We also find the vocabulary testifying to a particular aversion to risk (viewed, see, weighed), reinforced by the technical terminology of risk management (management) attributable to control internal and prudential regulations. In this sense, a context emerges that can be considered unstable (inflation, disinflation, recession) and its consequences (unemployment, economic activity, personal consumption, real activity . . .). It describes the reality of risk management. This imaginary threat and the construction of one's knowledge resources are characteristic of "egalitarian sectarianism" in cultural perceptions of risk. It is as if the notion of risk has spread everywhere or as if risk management is no longer the risk department's prerogative. The explanation here is familiar to most world economies' in their general state, with countries trying to adapt to new economic regulations (i.e., Basel 3) in a continually changing financial world.

- *The U.S. Federal Government*

The U.S. Federal Government annual reports analysis from 2007 to 2019 shows the significant presence of the word "risk" in the financial communication practiced. More precisely, let us see how Figure 5 shows the proximities of words around the term "risk".

Figure 5. The network of the form "risk" of U.S. Federal Government.

The common denominator here is the short-term dimension and the cyclical nature. Opposed to the structural problematization of risk, with a risk department in the banking sector, this is precisely the horizon of thought and decision of the individualist pole. Thus, the environment is considered unstable, beyond the economy's risks *(federal debt, credit, market, cash . . .).* There is an aversion to security risk *(information security, department of defense, terrorism, data, susceptible programs . . .).* This strong aversion for security risks and a tangible or imaginary threat, going as far as suspicion against other countries, is typical of the egalitarian bigotry. The federal government can embody both individualist and egalitarian bigotry.

4.3. The Positioning of the Countries and the Central Banks in the Matrix of "Cultural Theory"

Regarding the theoretical grounding, the empirical results conclude a different risk culture for both countries, Figure 6. Not only is the communication practiced here a reflection of the actions carried out by the concerned countries, but also a revelation of significant trends.

Firstly, the Individualism egalitarian corresponds to the same degree removed from external borders and a lower hierarchy or, more precisely, a lower internal differentiation in cultural theory for the United States government and Central Bank. We invalidate the hypothesis of a hierarchical structure of the bureaucratic type. In fact, in terms of a strict perception of financial risk, this position can be explained vertically in the matrix, by an undifferentiated risk management function, since it is completely confused with the economic role and horizontally, by the absence of external border with the rest of society, insofar as the American executives are indeed the expression of representative, and therefore the direct emanation of their culture.
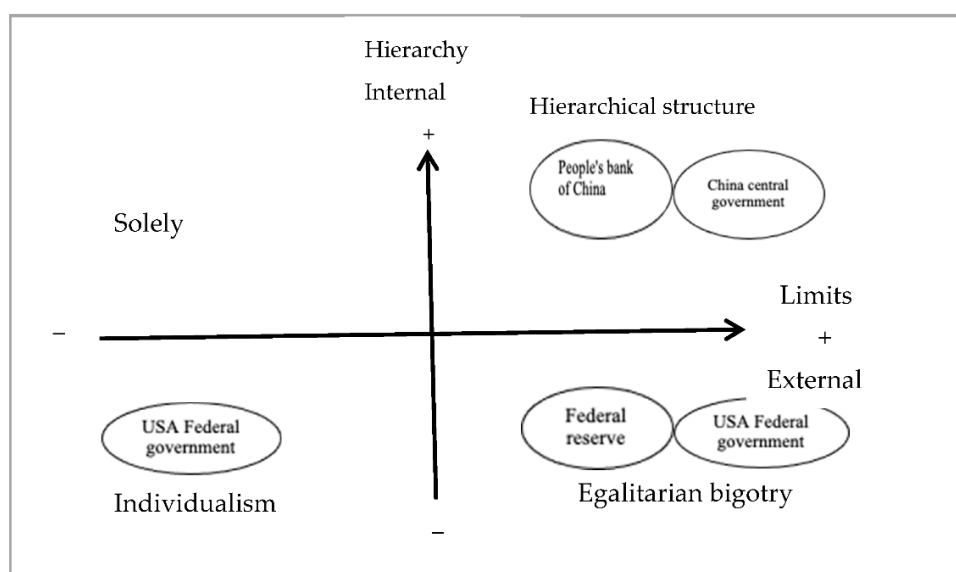
Figure 6. The positioning of the countries and their central banks in the matrix of "cultural theory".

"To be fruitful, the conceptual framework of this theory must therefore be adjusted to each situation," wrote Peretti-Watel (2000) about the cultural poles of Mary Douglas. If the initial hypotheses were not fully validated, it is because the study did not consider the study subjects' status (legal and economic).

Secondly, the relation to risk is more structural for the China Government, which guarantees China a certain economic stability thanks to hierarchical management of its risk. It explains the fact that the trade war has had a more significant impact on the United States than China (e.g., An et al. 2020). Moreover, the risk ratio is not recurrent in China central government communication and appears preferably during difficulties or opportunities of circumstances.

Lastly, as the Federal Reserve as the basic unit of a capitalist economy structure validates our hypothesis, the People's Bank of China invalidates it, so it is also essential to understand the status (legal and economic) operating in China.

In some, the cultural poles explain the current global economic context: from a typical hierarchical structure of risk management for China and the People's Bank of China, to egalitarian bigoty for the United States of America government and the Federal Reserve to escape a new banking crisis and contain their image crisis that arose after 2007. The cultural theory also allows interesting projections; people are not rational, at least not as much as the Standard Model assumes, yet they are entirely predictable in their very irrationality.

This complex environment especially underlines the coexistence of two very distinct entities at the top of the world economy, which should constitute and allow a balance, which undoubtedly is seen from the point of view of communication practices: China which seeks and anticipates, necessarily the result of a double culture of risk; the hierarchical structure of a public institution, having the heavy responsibility of investing locally in awareness of the risks on the one hand, and the Individualism egalitarian of the United States who prefer to take advantage of market opportunities on the other hand. Moreover, this financial risk corresponds to one and only one objective reality, that of the evolution of market parameters over time; the American government has understood this since 2007–2008 with the subprime crisis. It explains the Federal Reserve's extraordinary measures amid the pandemic-induced recession to buy corporate bonds.

Does the distance separating the two poles herald the future end of globalization? Does it condemn a scheme for a common future? What more to come after the trade war and the end of the pandemic?

To answer these questions, economists should consider associate social psychology since people are not rational. These two disciplines, economy and psychology, are distin-

guished by the objectives pursued: if the social psychologist identifies the environments conducive to the appearance or disappearance of certain biases, the economist's job is to propose instruments to limit them (Petit 2011). In this sense, economics and social psychology appear to be complementary in the study of risk.

Nevertheless, beyond the classification, this analysis allows us to understand that we cannot forget the "geopolitical" and the financial bubble risk mentioned by the People's Bank of China; a critical issue is the aversion to security risks of the U.S. Federal Government.

5. Conclusions

Firstly, the international crisis has had a good impact on governments and their central banks' financial communication about the notion of risk, particularly in the world's two biggest economies. It is even present in annual or financial reports from 2007 till now. Beyond that, reasonably excellent stability is observed in the themes addressed. The risks associated with debt and credit are structured by high transparency in the different reports analyzed. After the 2007–2008 crisis, the emphasis was on the presence of deficits and the notion of "budget constraint" explicitly became an object of communication. However, since the risk is linked to uncertainty, the real risk culture is the perception of acceptable risk, not to mention accepted. To admit a risk, it is above all necessary to understand it and seize its alternatives (Bouzon 1999). So, starting in 2007–2008 with the subprime crisis and the Lehman Brothers Holdings Inc. case, countries and their central banks have learned. So, each time there is a crisis or a brewing crisis, they act to limit and contain risks, especially in developed countries; these can explain global indebtedness, especially in the United States, where corporations' debt bubble surged to more than 10.5 trillion, after the Federal Reserve took extraordinary measures amid the pandemic-induced recession to buy corporate bonds. Central banks become like a "casino" that pays their clients when they lose.

Besides, our analysis allows us to understand that any future crisis, which could be uncontrollable, has a good chance of starting against a different background from the precedent, the geopolitical crisis, or security conflicts.

The emerging landscape foreshadows a tremendous challenge for communicators: reconciling communication of a more comprehensive nature for the population on the part of the government, the guarantor of the general interest, and more financial communication aimed at investors and markets, concerned with profitability for central banks.

Secondly, this study found that the two governments and their central banks have different risk cultures. These diverse risk cultures are the result of the different social backgrounds, which need further investigation.

Finally, measurement of culture is controversial but common, so making such measures more reliable and valid is likely to be productive, even if there are even better grounds for promoting multi-method studies of which surveys are only a part. We invite other scholars to join us in pursuing such research.

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