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Understanding Resilience in the 2007-2008 Global Financial Crisis: Lessons from Organisational Theory and Virtue Ethics

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Introduction

As dust settles from the turmoil, survivors ascend in all of their potency. Alas, the number of victims increasingly surmounts victorious entities, unveiling a perilously widening resilience void. The environment is growing tempestuous quicker than organizations are maturing resilience. Regrettably, it is progressively evident as systems collapse under the strain of unsurmountable forces engulfing and annihilating whoever stands in their path. Thus, the modern delicate and intricate global equilibria call for the attainment of enhanced resilience. Yet, such eludes most responsive aptitudes enacted amidst storms, defecting when most needed. This absence might appear paradoxical as present organisations are steadily provided with the opportunity to ripen a plethora of diverse skills and means, whose inadequacy often manifests only when it is too late. Ergo, everyone debates on it yet no one precisely knows how to define or attain it: resilience is truly the novel enigma. This thesis, whose purpose lies in investigating the latter in the Global Financial Crisis, dives into the intricacies surrounding the concept to provide augmented clarity on the ubiquitous notion and uncover unnoticed peculiarities embedded in the international cataclysm. Such Daedalian duty is endeavoured with the aid of two vital theoretical frameworks, intertwining synergistically to generate renewed inferences on resilience and its role in the 2007 and 2008 financial crisis: organisational and virtue ethical theories. These, exhibiting unseen connections, intriguingly culminate in the postulation of the existence of a virtuously resilient entity, who agilely moulds and weathers threats where others succumb. The significance of such inquiry emerges as complexes are confronted with novel and exotic hazards whose propulsive force leaves no alternative but to be concerned about the expression of resilient responses. At best, the choice, if present, is survival. Indeed, the infamous financial crisis exposed a modest yet dire truth, brilliantly worded by Gary Hamel and Liisa Välikangas: every business is successful until it is not.

Thus, the investigation fosters a more profound comprehension of resilience to aid perplexed entities to thrive, casting clarity on the entangled extant literature, whose richness unconstrainedly expanded, undermining its congruity and applicability. In particular, the notion comprises a vast array of elements and potential processes to obtain it, rendering this thesis a further contribution to delineate proper boundaries. Fascinatingly, Aristotelian virtue ethics revealed itself as an ingenious complementary framework to explore the subject, exhibiting unexpected nexuses with organisational theories and generating unusual findings regarding resilience and its presence in the 2007 and 2008 crisis. In particular, the responses of two financial institutions, JP Morgan and Bear Stearns, have been closely inspected to appreciate the practical implications of the theoretical structure outlined. The credit crunch was selected for examination in virtue of the pervasiveness the financial system depicts in modern times, carrying effects whose disruptive potential has been unfortunately observed. The relevance of cultivating resilient entities in the sector thus fervently emerges, rendering the analysis of resilience amidst the disaster a crucial instrument to better comprehend the motives behind its absence and the means to ensure its future presence. Alas, disasters inexorably await to unravel. Whether the global arena will be able to withstand them is left to their devices. Amusingly, ethical virtues are inserted in this paradigm as the procedures to attain resilience and virtuousness unveil as remarkably similar, with the former symbolising a virtue in itself. In addition, the interpretation of the Global Financial Crisis through virtue epistemological lenses offers an ingenious novel perspective to detect unique threats embedded in the catastrophe. As a matter of fact, the genesis of renewed perspectives on the disaster precisely underlines the motive for embracing the unusual combination of organisational and virtue ethical theories. The rich theoretical exploration and inquiry culminate in several managerial recommendations provided to hopefully assist entities to devise a virtuously resilient organisation, whose modus operandi perpetually harmonises opposing tensions, daringly embracing paradoxes to recoil with increased vigour.

Thus, this thesis aims to contribute to a rich theoretical heritage surrounding resilience and the Global Financial Crisis, acknowledging its inestimable value yet aspiring to incorporate relevant and renewed perspectives. A thorough enquiry into the genesis of resilience and its subsequent adoption in the managerial and business realm was provided to appreciate its intriguing developmental trajectory. Furthermore, virtue ethical conceptualisations have been presented with a specific focus on their Aristotelian conception, whose postulations were selected to depict the fascinating connection between resilient and virtuous characters. The chief actors and dynamics involved in the 2007 and 2008 financial crisis were subsequently delineated to provide the proper grounds for its interpretation through virtue epistemological lenses. This revealed unusual threats entrenched in the international cataclysm, culminating in the assessment of JP Morgan's and Bear Stearns' responses to the crisis in light of Luca Giustiniano's and virtue ethical theorisations. Such investigation denoted an exceptionally virtuously resilient aptitude of the former, standing in net opposition to its specifically vicious and unresilient counterpart. In addition, the financial system in its entirety was inspected to devise holistic propositions concerning resilience and virtuousness within the catastrophic event. Finally, the several lessons learnt transpired through the proposal of diverse managerial recommendations, encouraging the construction of a virtuously resilient organisation. Albeit previous analyses, which this study owes much to, brilliantly unveil various peculiarities concerning resilience and the Global Financial Crisis, enthralling inferences arise from the synergetic interaction amongst organisational and virtue ethical theories. These, formulated through the investigation of the former amidst the international debacle, offer novel theoretical and practical elements to support entities forced to confront the increasingly hazardous modern circumstances.

CHAPTER I

The Genesis of Resilience

1.1 Resilience: a Voyage into its Origins

In the last twelve months, the average number of monthly searches for the word resilience has been 301.0 thousand in the United States only. Worldwide, the number reaches 961.7 thousand¹. Casting a glance to its future direction, the trend shows no signs of reversal². These figures – coherent with the reported scores of Ahrefs³ and Moz⁴, two Search Engine Optimisation analysis providers – might appear less startling when observing the data offered by Google Trends, a search trends feature that illustrates how often a particular term is keyed into Google's search engine with respect to the site's total research volume over a definite period. The results are exhibited in a normalised fashion in a range of values between 0–100, with numbers closer to zero corresponding to lower search interest and digits approaching 100 indicating higher interest in the researched word⁵. Analysing the results from 2004 to 2021 concerning the expression "resilience" globally (figure 1.1) and in the United States (figure 1.2), a rising attentiveness is clearly observable. It is intriguing to notice that peaks in the line graphs frequently coincide with phases of global distress, with the outbreak of the coronavirus pandemic representing a leading propulsive force in driving the value – hence the concern – to

² Ramos, Gabriela, and William Hynes. "A Systemic Resilience Approach to Dealing with Covid-19 and Future Shocks." OECD. April 2020. Accessed March 21, 2021. http://www.oecd.org/coronavirus/policy-responses/a-systemic-resilience-approach-to-dealing-with-covid-19-and-future-shocks-36a5bdfb/#biblio-d1e826.

¹ "Keyword Overview: Resilience." SEMrush. Accessed March 20, 2021. https://www.semrush.com/analytics/keywordoverview/?q=resilience&db=us.

³ "Ahrefs - SEO Tools & Resources." By Ahrefs: Discover Keyword Ideas and Analyze SEO Metrics. Accessed March 20, 2021. https://ahrefs.com/keywords-explorer/google/us/overview?keyword=resilience.

⁴ "Keyword Explorer - SEO Keyword Research Tool." Moz. Accessed March 20, 2021. https://analytics.moz.com/pro/keyword-explorer/keyword/overview?locale=en-US&q=resilience.

⁵ "FAQ about Google Trends Data." Google. Accessed March 22, 2021.https://support.google.com/trends/answer/4365533?hl=en.

its maximum⁶. From December 2019 to April 2020, an interval encompassing both months prior to and amidst the crisis, the search interest for resilience increased by nothing less than 85% at the international level, compared to a rise of solely 26% for the same period in the antecedent year. In the United States, the spike was even more impressive, with an upsurge of 96% from December 2019 to September 2020, opposed to a mere 6% growth for the equivalent timeframe in 2018⁷.



⁶ "Google Trends Explore: Resilience." Google. Accessed March 22, 2021.

https://trends.google.com/trends/explore?date=all&q=resilience.

⁷The starting month of the time intervals (December 2019) was selected because antecedent to the onset of the pandemic, while the ending period (April 2020 globally and September 2020 in the US) was chosen to represent the maximum peak value in search interest equivalent to 100 in the scale proposed.

The Global Financial Crisis of 2007 and 2008 exhibited a similar pattern in search interest from January 2006 to 2009, demonstrating a heightened attentiveness to the notion of resilience portrayed by an augmented value of 40% worldwide and 70% in the US. Interestingly, this amplified fascination is also observable regarding the number of publications concerning resilience in the business and management literature, whose growth has been exponential in the last two decades, as shown by Martina K. Linnenluecke in her research review. Two critical events where the volume of reports incremented drastically are the 9/11 terrorist attacks in the United States and the abovementioned financial crisis when it more than tripled in less than five years, representing the sharpest peak in the selected dataset⁸. Moreover, the most researched correlated topic to resilience from 2004 to 2021 is its definition, and the top related query globally is "resilience define".

This properly reflects the need to cast clarity amongst the vast array of interpretations developed in the extant literature surrounding the concept, whose reach and application have been ominously increasing at the expense of consistency⁹. Indeed, the traits selected to describe resilience fundamentally modify the notion's analytical lens and practical applications. Intuitively, ascribing the capacity of a system to be resilient to its ability to reinstate the status quo after a shock has noticeably diverse implications than requiring it to express transforming faculties¹⁰. In other words, bouncing back is rightfully not equivalent to bouncing forward. Thus, careful assessment of the expanding body of empirical research – a further signal of its growing relevance - becomes of utmost significance, if not strictly necessary. Albeit revelatory, the reported numbers are most certainly not the sole source of evidence of the mounting relevance of resilience and its associated theorisations. For brevity and focus of the research, the concept's following introductory genealogy does not aim to be comprehensive with respect to the entirety of works concerning resilience developed in the last few centuries. Conversely, it aims to illustrate several salient events pertaining to the notion's evolution and use across different selected domains. Furthermore, as the core subject to investigate is resilience in organisational, business, managerial, and economic realms, a holistic debate on its historical aspects is appreciable when concise.

⁸ Linnenluecke, Martina K. "Resilience in Business and Management Research: A Review of Influential Publications and a Research Agenda." *International Journal of Management Reviews* 19, no. 1 (January 20, 2017): 4-30. doi:10.1111/ijmr.12076.

⁹ Vernon, R. F. "A Brief History of Resilience." In *Community Planning to Foster Resilience in Children*. Boston: Springer, 2004.

¹⁰ Giustiniano, Luca, Stewart R. Clegg, Miguel Pina e Cunha, and Arménio Rego. "Introduction: The Aim and Structure of the Book." *In Elgar Introduction to Theories of Organizational Resilience*. Cheltenham, United Kingdom: Edward Elgar Publishing, 2018.

The word resilience, introduced in the English language by Francis Bacon in his work *Sylva Sylvarum, or a Naturall Historie: In Ten Centuries* in 1626, stems from the Latin term *resiliere*, composed of the prefix *re-*, indicating backward motion, and the verb *salire* which signifies to "jump" or "leap", hence meaning to "rebound" or "recoil"¹¹. The British philosopher, renowned for his enthralling contributions to modern empiricism, employed the noun whilst pondering on the ability of echoes to bounce back, paving the way for broader adoption of the term¹². Indeed, the Moravian educationalist John Amos Comenius – strongly influenced by Baconian thoughts – followed shortly thereafter, utilising the word in 1633 in his *Naturall Philosophie Reformed by Divine Light or A Synopsis of Physicks*¹³. Moreover, resilience is utilised as a means to describe the "springiness" of solid bodies and the "elasticity" of liquids and gases in Samuel Gott's *The Divine History of the Genesis of the World Explicated & Illustrated* of 1670. The former use is of particular interest to understand the development of the notion as the adjective springy is defined as "returning quickly to the usual shape, after being pulled, pushed, crushed"¹⁴.

Throughout the seventeenth, eighteenth, and nineteenth centuries, the word's diffusion rapidly unfolded as the term was progressively included in the works of a wide range of illustrious authors. Amongst the many thinkers that endowed the expression in their writings, a few worth of notion are the Cambridge Platonist Henry More, the writer Samuel Johnson, the physicist Thomas Young, the engineer Thomas Tredgold, and the mathematician Henry Moseley. Young's theorisations are particularly relevant for having bridged the transition of the locution's use from natural philosophy and physical theory to applied mechanics and material science. Following empirical studies to establish the rupture point of metal cylinders and beams, in 1807, the physicist defined resilience as a material's definitive capacity to withstand the energy or the impetus of a moving body¹⁵. Intriguingly, he compares resilience with stiffness and strength whilst arguing which a ceiling, door, ballroom, and coach spring should possess, respectively. Stiffness is deemed desirable for ceilings, strength for doors, and

¹¹ Cresti, Simona. "L'elasticità Di Resilienza." L'elasticità Di Resilienza - Consulenza Linguistica - Accademia della Crusca. Accessed March 28, 2021. https://accademiadellacrusca.it/it/consulenza/lelasticità-di-resilienza/928.

 ¹² Alexander, D. E. "Resilience and Disaster Risk Reduction: An Etymological Journey." *Natural Hazards and Earth System Sciences* 13, no. 11 (2013): 2707-716. doi:10.5194/nhess-13-2707-2013.
¹³ Ibidem.

¹⁴ "Springy." Cambridge Dictionary. Accessed March 29, 2021.

https://dictionary.cambridge.org/dictionary/english/springy.

¹⁵ Young, Thomas. "Lecture XIII. On Passive Strength and Friction." In *A Course of Lectures on Natural Philosophy and the Mechanical Arts*, 135-56. Vol. I. London: J. Johnson, 1807.

resilience for ballrooms and coach springs. The passage with the explicative justification is particularly salient:

"It is a common remark that a floor which shakes is the strongest; and, improbable as it appears at first sight, it may perhaps be founded in truth: for if its absolute strength of a stiff and shaking floor were equal, the shaking floor would bear the effects of motion with the least injury. It is possible that a stiff floor, which would support a numerous assembly, might give away at a ball; while a more resilient one, which would be suited for dancing, might be destroyed by a crowded concert"¹⁶.

Furthermore, whilst examining naval architectures, the author stresses the advantage conferred to a ship's sailing by flexibility. Here, he argues that prioritising strength at the expense of resilience might result in greater evils than those desiring to evade. Amusingly, the suggestion would seem particularly useful and applicable to contemporaneous organisations as well. Despite being just an initial contribution to the understanding of resilience in this scientific domain, due to the constraints of modest empirical testing conditions at the time, Young's work remains pivotal to its evolution. Indeed, the former was possibly the first to advance that a solid material's ability to stand impulse could correctly be labelled resilience. Moreover, his inputs have been further developed and crucially advanced by Tredgold, Moseley, and Rankine¹⁷.

Through the examination of the properties of timber, Tredgold conceived the first modulus of resilience as "the power to resist a body in motion" in his *On the transverse Strength and Resilience of Timber*¹⁸. Moseley subsequently developed a modulus of longitudinal resiliency whilst testing the elongation or compression of a bar. Focusing on the required units of work to elongate the material, thus on its elastic limits, the mathematician stated that the abovementioned modulus "is evidently a measure of that resistance which the material of the bar opposes to a strain in the nature of an *impact*, tending to elongate it beyond its elastic limits"¹⁹. The mechanical engineer William Rankine and the mathematical physicist William Thompson built on such efforts, with the former defining resilience as "an exact measure of the capacity of a material for resisting shocks by tension", and the latter as "the work given back by the spring after being strained to the extreme limit within which it can be strained again

¹⁶ Ivi, pp. 148.

¹⁷ Hellige, Hans Dieter. "The Metaphorical Processes in the History of the Resilience Notion and the Rise of the Ecosystem Resilience Theory." In *Handbook on Resilience of Socio-Technical Systems*. Cheltenham, United Kingdom: Edward Elgar Publishing Limited, 2019.

¹⁸ Tredgold, Thomas. "XXXVII. On the Transverse Strength and Resilience of Timber." *The Philosophical Magazine* 51, no. 239 (1818): 214-16. doi:10.1080/14786441808637536.

¹⁹ Moseley, Henry. "Part V. The Strength of Materials." In *The Mechanical Principles of Engineering and Architecture*, 488-93. London: Longman, Brown, Green and Longmans, 1843.

and again without breaking or taking a permanent set"²⁰. It is interesting to note that Thomson provides a series of examples in *Elasticity and Heat* to expose how materials express resilient characteristics and advocates the word's particular usefulness²¹. The increasing popularity of the term propelled its dissemination in a theoretical fashion and rather practical manner, as other English-speaking countries and France embraced it. Thus, the concept of, in Augustine of Hippo's words, *flectamur facile, ne frangamur* (let us be flexible, lest we break)²², gained conspicuous visibility in several distinct fields. Ranging from sciences to natural philosophy, it was mainly employed to describe physical counter-reactions and material's features, gradually establishing itself as a pertinent expression.

Although resilience's practical understanding was fundamental for its development, it is worth noticing that a metaphorical appreciation of the concept was contemporaneously surfacing. Whilst the atrocities of World War I and World War II represented a milestone for the breakthrough of the notion in the psychological domain, the employment of resilience to describe mental recovery from trauma, stress, and afflictions was often found in the literature of antecedent times. For instance, Richard Allstree and Robert Greene discussed about "resiliency of the soul" and "resiliency in mind" in 1684 and 1727, respectively, interpreted as the capacity to recoup audacity after having experienced emotional strain²³. In a similar fashion, the locution's figurative connotation was also embraced by theologians, poets, and writers. In his work *The Rambler* of 1751, Samuel Johnson mentions "the common resiliency of the mind" whilst discussing the intricacies related to the propitiation and atonement of the faithful seeking Divine favour²⁴. The homonymous and English poet Samuel Taylor Coleridge included the term in his Hymn to the Earth in 1834²⁵, and five years later, in 1839, Robert Bell exquisitely portrayed the concept of resilience as he narrated the life of the composer Edward Young. The author exposes such notion with regards to Mr. Temple, a gentleman who married the daughter from a previous wedding of Young's wife. In facing his spouse's death, the former has demonstrated "to have possessed an extraordinary resiliency of spirit under his great

²⁰ Thomson, William. *Elasticity and Heat*, 13. Edinburgh: Adam and Charles Black, 1880.

²¹ Ibidem.

 ²² Van Waarden, J. A. "Writing to Survive: A Commentary on Sidonius Apollinaris, Letters Book 7, Volume 1: The Episcopal Letters 1-11." 2009. Accessed April 4, 2021. https://pure.uva.nl/ws/files/747755/64943_thesis.pdf.
²³ Hellige, "The Metaphorical Processes in the History of the Resilience Notion and the Rise of the Ecosystem

Resilience Theory.".

²⁴ Johnson, Samuel, and Arthur Murphy. *The Works of Samuel Johnson, LL. D.: With an Essay on His Life and Genius,* 173. Vol. I. New-York: George Dearborn, 1836.

²⁵ Alexander, "Resilience and Disaster Risk Reduction: An Etymological Journey.".

affliction, for he married the daughter of Sir John Barnard shortly after²⁶. The use of resilience in this context is of captivating nature as it represents a steppingstone for its more popular acceptation into the collective imaginary. Having the word been mainly relegated to more specialistic niches, thus not necessarily comprehensible to the broader public – as it can be denoted from the inclusion of the term in Thomas Blount's *Glossographia*²⁷ –, its embodiment in describing a trivial and emotional state rendered it more generally relatable. Despite having already been embraced, as mentioned, in a somewhat figurative sense, the essence of the example depicted is indeed more pragmatic.

Notwithstanding, two fields have been of particular relevance for the notion's quantum leap: physiology and psychology. Physiological resilience originally referred to blood vessels and lungs resilience yet evolved to denote more generally the entirety of the organs' capacity to withstand and respond to pressure and strain. The concept of homeostasis, proposed by Walter Cannon during the first half of the twentieth century, represented a crucial insertion²⁸. The etymological root provides per se a clear understanding of the word: from the Ancient Greek ὄμοιος (hómoios) "same, similar" and στάσις (stásis) "state, position" the expression indicates "any self-regulating process by which biological systems tend to maintain stability while adjusting to conditions that are optimal for survival"29. In other words, it describes the tendency of systems to resist change to preserve a fairly stable environment dynamically. Hence, as homeostasis, through internal regulation and adaptation processes, secures within a set of parameters the stabilization of an organism when affected by external stress factors, its applicability with regards to resilience unquestionably emerges. The physiologist can be said to have been inspired by the theory of "milieu intérieur" proposed by the French doctor Claude Bernard in 1859, concerning a self-regulative and self-defensive mechanism to restore stability and a protocol for the "social organism". However, as opposed to Bernard, Cannon advanced the concept from returning to an original state to rebounding to a similar - yet not identical -

²⁶ Bell, Robert. "Edward Young." In *Eminent Literary and Scientific Men, 2: English Poets*, 343-44. Vol. II. London: Longman, Orme, Brown, Green, & Longman, 1839.

²⁷ Blount, Thomas. Glossographia, Or, A Dictionary, Interpreting All Such Hard Words, Whether Hebrew, Greek, Latin, Italian, Spanish, French, Teutonick, Belgick, British Or Saxon, as Are Now Used in Our Refined English Tongue: Also the Terms of Divinity, Law, Physick, Mathematicks, Heraldry, Anatomy, War, Musick, Architecture; and of Several Other Arts and Sciences Explicated With Etymologies, Definitions, and Historical Observations on the Same. London: Tho. Newcomb, 1656.

²⁸ Hellige, "The Metaphorical Processes in the History of the Resilience Notion and the Rise of the Ecosystem Resilience Theory.".

²⁹ Rafferty, John P. "Homeostasis." Encyclopædia Britannica. 2015. Accessed April 06, 2021. https://www.britannica.com/science/homeostasis.

condition through a series of modifications³⁰. Though the delineated difference would appear negligible at first sight, it has hitherto been a matter of intense discussions in the organisational theories' literature. Indeed, the divergence in interpretation results in crucially different practices auspicated to cultivate individual, collective, and systemic resilience.

With regards to psychology, the two World Wars represented a fundamental step for utilising resilience as a measure of the capacity of people to recoup mental stability after being exposed to grave emotional distress. The field regarded the notion as a vital feature for individuals and communities to possess, for which attempts towards its improvement gained particular momentum. In this sense, the focus shifted on psychological elasticity and sentimental robustness. In virtue of this transition, the effort to maintain internal stabilisation was elevated to, in Richter's words, "one of the most universal of all behaviour drives"³¹. Moreover, by analysing child development in the British post-war period, an exciting conceptualisation emerged: "ego-resilience", intended as a personal ability to recoil or rebound. In 1957 J. S. Tyhurst further developed research on personal and social reactions to disasters to illustrate the typical and distinctive patterns of psychological response to adversities, identifying in individuals' answers a steady sequence of three stages: impact, recoil, and posttraumatic episodes³². Such coping capacities can be appreciated in the works of Paul Chodoff and Jerome Kagan. The former author examined tendencies regarding Jewish children who bore and endured Holocaust; the latter focused instead on adolescents' cognitive functions to recoup in the face of infant retardation³³.

Moreover, to appreciate resilience's metaphorical connotation, a few further illustrations are worth depicting. Though portraying a figurative interpretation, these are of particular interest as they remain closely relegated to some of the concepts surrounding Young's and Tredgold's formulations of resilience, namely robustness, persistence, and endurance, that compose its conception as a coping mechanism to withstand catastrophes. The United States Strategic Bombing Survey used such nuance in conducting a study to delineate the efficacy of aerial attacks on German and Japanese soil to assess their effectiveness in military strategy. Executed to report on the resilience of Germany's army, economy, and society during and after

³⁰ Hellige, "The Metaphorical Processes in the History of the Resilience Notion and the Rise of the Ecosystem Resilience Theory.".

³¹ Richter, Curt P. "Biology of Drives." *Psychosomatic Medicine* 3, no. 2 (1941): 105-10. doi:10.1097/00006842-194104000-00001.

³² Tyhurst, J. S. "Psychological and Social Aspects of Civilian Disaster." *Canadian Medical Association Journal* 76, no. 5 (March 1, 1957): 385-93. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1823645/.

³³ Bourbeau, Philippe. "A Genealogy of Resilience." *International Political Sociology* 12, no. 1 (February 21, 2018): 19-35. doi:10.1093/ips/olx026.

World War II, as ordered by President Franklin Roosevelt in 1944, it was recognised by the sociologist David Stark as the initial approach of methodical studies of the notion in a social environment, evincing the contingency between resilience and vulnerability³⁴. Additionally, academics have started to juxtapose resilience with the tenacity and fortitude of institutions. Robert Powell, Hasenclever, Meyer, and Rittberger postulate that establishments' durability is directly related to the ability to remain in power when confronting exogenic pressure. As a result, regimes fluctuating according to every transposition of power amid components and members are void of resilience. On the same note, it must be observed how authoritarian, nationalistic, and welfare state organisations have resisted democratic, regionalist, and neoliberalist encumbrance, respectively. Also, very significant is national safeguarding against international organisations such as NATO's permanence during the post-Cold War period³⁵.

Although an analysis of the history of the term and underlying concepts is outside the scope and aim of this thesis, a brief introduction on the *iter* of resilience is of crucial significance. This is due to the myriad of definitions and acceptations related to the term that worryingly influence both its credibility and uniformity in today's literature. Its original conception, whose role remains pivotal to interpret its evolution in time and across areas of knowledge, having been embraced by a vast array of fields, might be misguided, and the way it is applied can become profoundly ambiguous. It is of no surprise that nowadays resilience has become a common jargon and gets direly criticised for its redundant use, the insufficient clarity of the components that define it, and thus, the necessary actions devised to achieve it. Besides, other grave judgements linger all-around modern literature associated with resilience. From defining it as a by-product of neoliberal imposition, a static process, or an intrinsic quality, authors have critiqued the discriminative connotation of the ideology. Evans and Reid elevate resilience to a survival trait required by individuals to endure any form of strain they might need to withstand in such a way that communities shall be able to take care of themselves. This culminates in a problematic implication: people should be left to their means, with little or no social assistance from the vertices, dehumanising the political agenda. Thus, increasing inequalities and marginalisation are discarded on the basis that they are inherently justified. A perilous opportunity to open a nihilistic window unveils, subjugating the population to its current state³⁶. These arguments, often arising from a defective comprehension of resilience's developmental

³⁴ Stark, David. "On Resilience." Social Sciences 3, no. 1 (2014): 60-70. doi:10.3390/socsci3010060.

³⁵ Bourbeau, "A Genealogy of Resilience.".

³⁶ Evans, Brad, and Julian Reid. "Dangerously Exposed: The Life and Death of the Resilient Subject." *Resilience* 1, no. 2 (2013): 83-98. doi:10.1080/21693293.2013.770703.

process and the association of its genesis to the theory of ecosystems, are disproven when an appropriate examination of the genealogy is conducted; thereby shedding light on the multitude of works treating and utilising resilience to describe a vastity of events, processes, systems, communities, and individuals³⁷. Indeed, its origins expose the richness of the contributions that have engaged the term to espouse its peculiar meaning. Under closer inspection, two elements emerge: firstly, the use of resilience can be traced back to at least four centuries ago – or more, if its Latin root is considered –; secondly, its progression has been predominantly empirical, being primarily relegated to the natural sciences and mechanical physics. Since in modern organisational theories, a return to its connotation in physics is auspicated to provide managers with realistically achievable organisational design attributes³⁸, the relevance of its genealogy undoubtedly arises.

Given the intricate dominion surrounding the idea, the significance of its genealogy is brilliantly exposed by Philippe Bourbeau, who portrays in a crystalline fashion its ontogenesis to deliver practical and theoretical clarity and to address few grievous ill-placed criticisms. The author cleverly denotes how frequently scholars criticise the manifestation of resilience rather than resilience itself, confusing the use with the essence. Thus, the resulting animosity might be unfounded as it refers to a mere interpretation. For instance, the adoption of resilience in psychology perfectly explicates this duality: the word embodied a deterministic conception for which resilience was an innate and intrinsic quality that pertained to specific individuals and not to others a priori. As a consequence, the processual nature of resilience was discarded altogether to the advantage of its stationary understanding, resulting in a void of opportunity to cultivate it because perceived as unattainable³⁹. This dilemma touches on a susceptible element of resilience embodied precisely by its static connotation. Conversely, the former is not an intrinsic quality but rather a processual outcome achievable by whomever seeks it.⁴⁰ Given that the purpose of this thesis comprises the exposition of how to build resilience, it is evident that assuming an inert or intrinsic nuance would direly hinder its raison d'être. It is of utmost importance to associate resilience to a dynamic process in continuous evolution and recognise that there are means available to grow and nurture it. Indeed, interpreting resilience with the

³⁷ Bourbeau, "A Genealogy of Resilience.".

³⁸ Giustiniano, Luca, and Franca Cantoni. "Between Sponge and Titanium: Designing Micro and Macro Features for the Resilient Organization." In *Learning and Innovation in Hybrid Organizations: Strategic and Organizational Insights*, by P. Boccardelli, M. Annosi, F. Brunetta, and M. Magnusson. Palgrave Macmillan, Cham, 2018. https://doi.org/10.1007/978-3-319-62467-9_9.

³⁹ Bourbeau, "A Genealogy of Resilience.".

⁴⁰ Giustiniano and Cantoni, "Between Sponge and Titanium: Designing Micro and Macro Features for the Resilient Organization.".

sole lens of perseverance has the risk of neglecting its regenerative and metamorphic facets. Being a process by which individuals, communities, and entire societies' structures can mutate and renovate, it is strongly reductive to interpret it as a mechanism for retaining or returning to an original condition. Moreover, afore better presenting Bourbeau's thoughts, it is worth mentioning that the nebula surrounding the ideology has brought many people besides specialists to judge it unfairly for its increasing ubiquity. As with virtually every other notion, it persists a clamant necessity to define clear boundaries and pillars to stand on, delineate what resilience is, what composes it, the dominions in which it can be utilised, and the ways it may be applied. Without undergoing such a procedure, it is particularly challenging to appoint the seriousness its use deserves and to develop further research sensibly⁴¹.

Referring to Bourbeau's work *A Genealogy of Resilience*, a specific study by Jeremy Walker and Melinda Cooper arises as the vademecum lens of analysis for resilience, according to which its origin must be retraced to system ecology, in particular, to Crawford S. Holling's theorisations⁴². Moreover, this has permeated multiple fields of knowledge, elevating the former's interpretation as the dominant genealogy to explain resilience's genesis and evolution. Additional authors, including Julian Reid and Jonathan Joseph, endorsed this doctrinal belief. However, Bourbeau fundamentally critiques the two authors' study for its overbearing attitude in imposing their view as the correct and only acceptable genealogy of resilience, assuming a limiting and deterministic stance. In such a way, their conception arises as *the* one as opposed to being a possibility out of many. Thus, key features characterising the course of resilience's occurrence – multidisciplinary, multifaceted, and polychronic in time – are not given proper consideration⁴³.

Furthermore, the importance of how genealogy research ought to be conducted is portrayed from the outset. The author convincingly defines the process as unveiling how the present has become to be through a logical pathway. Given its synchronous nature, genealogy defies spacetime continuity embracing all predominant nodes to explain the modern conception of a specific matter. Figuratively, it can be pictured as a tree branching out from the present into the past rather than following the apparent ramifications from the past to the present. In other words, instead of proceeding in the intuitive direction, it is an inverted genealogical tree starting from the most recent component tracing back to the ancestors. As the writer fascinatingly

⁴¹ Hillmann, Julia, and Edeltraud Guenther. "Organizational Resilience: A Valuable Construct for Management Research?" *International Journal of Management Reviews* 23, no. 1 (2020): 7-44. doi:10.1111/ijmr.12239.

 ⁴² Walker, Jeremy, and Melinda Cooper. "Genealogies of Resilience: From Systems Ecology to the Political Economy of Crisis Adaptation." *Security Dialogue* 42, no. 2 (2011): 143-60. doi:10.1177/0967010611399616.
⁴³ Bourbeau, "A Genealogy of Resilience.".

states, "historicizing the present, one could say, is the main purpose of a genealogy"⁴⁴. Similarly, according to Nietzsche's interpretation – whose brilliance can be appreciated in, amongst others, his work *The Genealogy of Morality* –, genealogy must depart from sequential and historical linearity that deems past, present, and future as static dots in time to be connected⁴⁵. Amusingly, the philosopher is father to perhaps one of the most emblematic quotes concerning resilience, being "Out of life's school of war: That which does not kill me, makes me stronger."⁴⁶. As a common belief, matters as elements of protracted and one-way journeys are not well-conceived by genealogists. Therefore, all significant nodes, junctures, and splits of the branches must be considered, together with their synchronous occurrence, for an all-encompassing understanding of the present. It is essential to note and analyse the reasons and contexts that brought determined deviations to take predominance over others, which may be dismissed despite being worthy of inclusion. It is precisely by bringing under scrutiny all the existing positions to describe a present concept, even if in contraposition between them, that the making of a genealogy unfolds, whose essence welcomes strain and discordance⁴⁷.

Genealogists can be appreciated for their open-mindedness and humble methodological attitude. Knowledge is relative and absolute truths cannot exist in virtue of their contextuality, rendering them unattainable and prone to inaccurate generalisations. The human factor of interpretation is elevated as a fundamental variable, implying that every exegesis is deemed equally valuable and legitimate to its creator. Alas, the same scientific humility is not to be found in the works of several other composers, including the ones of the abovementioned Reid and Joseph, but also Mark Neocleous, Claudia Aradau, Chris Methmann, and Angela Oels. These portray resilience's genesis in ecology as a state of fact, rather than mere opinion, building on Walker and Cooper's irrefutable conclusion that coerces the concept towards a predefined target in the field of international politics: neoliberalism⁴⁸. This fed a perilous spiral of exchanges ascribing resilience to an outcome of the latter, for which the empirical focus shifted on reinforcing such an argument rather than questioning it. As a result, the notion has been instrumentalised and weaponised to bring about determined inferences and verdicts to support their idealism, namely the triumph of *laissez-faire*. Besides, given that a blind eye has been turned on the entirety of the literature on resilience antecedent to ecological studies,

⁴⁴ Ibidem.

⁴⁵ Nietzsche, Friedrich. "Second Essay: 'Guilt', 'bad conscience' and related matters." In *On the Genealogy of Morality*, 35-67. New York: Cambridge University Press, 2007.

⁴⁶ Giustiniano, Clegg, Pina e Cunha, and Rego, "Resilience in management and organization studies.".

⁴⁷ Bourbeau, "A Genealogy of Resilience.".

⁴⁸ Walker and Cooper, "Genealogies of Resilience: From Systems Ecology to the Political Economy of Crisis Adaptation.".

questions about the motive naturally arise. A possible answer emerges if resilience is considered a means to justify specific practices that promote self-adjusting equilibria and management structures. This, of course, results in specific practical outcomes, which would otherwise not be observed if a different interpretation of the concept were embraced. In other words, if its ecological relegation gets refuted. Intuitively, for instance, interventionist measures would not be contemplated within this paradigm. If anything, they would be strictly condemned⁴⁹.

Resilience has, as seen, experienced multiple fallacies in the establishment of its genealogy. The translation of the notion's conceptualisation from the psychological realm to alternative disciplines has been no exception in portraying the inability of external theorists to formulate on the development and change that fields themselves encounter. The initial cogitation of resilience as an intrinsic quality has all too often been utilised both as a means to construct further considerations and to direly criticise the presumed discriminative approach, exposing the unsophisticated result of an incomplete and monodisciplinary analysis. Starting to stray away from the previous idea of resilience as an intrinsic trait, many psychologists in the 1990s began to uncouple it from the single persona to embrace its postulation as a process attainable at the individual, communal, and societal level, regardless of its innate presence⁵⁰. Alas, the equivalent evolution was not sustained by the works pertaining to other domains, whose assumptions remained relegated to the infelicitous initial formulation. The most prominent example transpiring from this impasse is allowing the possibility to create vicious dynamics of inculpating victims for being subjected to any wrongdoing and not reacting with resilience.

A final and significant analysis on the previously mentioned processual nature of resilience is due. As Suniya Luthar and Ingrid Schoon state, resilience is a dynamic process requiring constructive adaptive functionalities within adverse contexts⁵¹. Ultimately, Michael Ungar intriguingly construes it as "the outcome of negotiations between individuals and their environments for the resources to define themselves as healthy amidst conditions collectively viewed as adverse"⁵². This postulation is of great relevance as it comprehensively embodies

⁴⁹ Bourbeau, "A Genealogy of Resilience.".

⁵⁰ Ibidem.

⁵¹ Luthar, Suniya S., Dante Cicchetti, and Bronwyn Becker. "The Construct of Resilience: A Critical Evaluation and Guidelines for Future Work." *Child Development* 71, no. 3 (2000): 543-62. doi:10.1111/1467-8624.00164; Schoon, Ingrid. "Risk and Resilience: Adaptations in Changing Times." *Cambridge University Press*, 2006. doi:10.1017/cbo9780511490132.

⁵² Ungar, Michael. "A Constructionist Discourse on Resilience." *Youth & Society* 35, no. 3 (2004): 341-65. doi:10.1177/0044118x03257030.

the most appropriate essence that resilience not axiomatically possesses but probably should, given the virtuous implications that follow both theoretically and practically. Reasonably, it entails employing a constructive attitude at the individual, societal, organisational, and communal level, centred on self-improvement and growth. This results from perceiving resilience as neither hypothetical nor unreachable, yet available and attainable when the necessary practices and mindset are applied. It is worth noting that a characteristic apparently foregone of the latter elements is that they can be put into exercise quite straightforwardly. Understanding the components and the reasoning behind every variable that constitutes the acclaimed equation $E = mc^2$ is indeed accomplishable. Nonetheless, it is a different ballpark seeing who is able to do so. Conversely, creating, for instance, psychological safety – notoriously useful in constructing resilience within a team – is not banal yet arguably less intricate. Caitlin Ryan well explicates this line of thought by exposing how communities can employ resilience to obtain tactical resistance and strategic adaptation in the context of prolonged conflictual and adverse scenarios⁵³.

Such processual interpretation of resilience becomes crucial not only but primarily for its implied transformative capacities. Companies nowadays must express such abilities to transmute distresses and disruptions into novel and resilient solutions, being evermore exposed to increasingly complex, uncertain, risky, and in continuous evolution environments. Examples of possible and actual adversities to which organisations are subject abound and are increasingly numerous⁵⁴. The magnitude of interconnections and relative propinquities in the modern era have augmented the volume of encumbrances and comprehensively altered their nature, for instance mutating local strains into global crises. A quote that impeccably exemplifies such interrelationships and their dynamic implications is by the Prussian diplomat Klemens von Metternich, who stated during the Napoleonic Era that "when France sneezes, Europe catches the cold"⁵⁵. The expression has changed its incumbent in time to America for its leading role in world politics and economy, but a further change to Asia is becoming increasingly evident in more recent periods. A few illustrative instances have been the British Petroleum's Deepwater Horizon spill-over in the Gulf of Mexico in 2010 and the Fukushima catastrophic earthquake, tsunami, and the subsequent nuclear disaster during the following

⁵³ Ryan, Caitlin. "Everyday Resilience as Resistance: Palestinian Women Practicing Sumud." *International Political Sociology* 9, no. 4 (2015): 299-315. doi:10.1111/ips.12099.

⁵⁴ Giustiniano, Clegg, Pina e Cunha, and Rego, "Resilience in management and organization studies.".

⁵⁵ Lubin, Alex. "Reading America from the Peripheries." American Quarterly. March 30, 2015. Accessed April 15, 2021. https://muse.jhu.edu/article/578084/summary.

year⁵⁶. Although different in nature but not in magnitude, the 2007 and 2008 financial crisis embodied a culmination of distress in the international arena, portraying the ripple effect of increasing interconnectedness. Considering the significance of expressing resilience in such situations, it is not surprising that its processual formulation is prevalently embraced by organisational theories, given the transformative skills required to endure⁵⁷. In particular, it is adopted by the ingenious author Luca Giustiniano, whose conceptualisation of the notion and theoretical stance will be subsequently employed to analyse organisational resilience in the Global Financial Crisis.

Referring to resilience as a process and therefore to its evolutive essence together with the ways to attain it, the selected framework appears to be most appropriate to evaluate - when confronted with its relative presence or absence - which causes, thus variables, can be isolated to explain it. Moreover, this analytical lens is antithetic, quite evidently, to its static counterpart and intrinsic connotation, as it will be shown that a lack of resilience is indeed not imputable to an innate deficit but erroneous practices and mindsets. Furthermore, as this thesis aims to provide hallmarks to organisations on ways to cultivate resilience, no other theoretical elaboration serves more appropriately the purpose in that direction. Being this interpretation one of the many available in the organisational theory domain, conducting a literature review of the notion in the latter is strictly advised. Firstly, in virtue of intellectual fairness, to comprehend other proposed theorisations; secondly, as it provides the background to execute a deeper examination of its conceptualisation within this specific field; thirdly, to retrace its evolution amongst a vast array of authors to fully appreciate the motive behind selecting this particular facet to direct the study; finally and mainly, since research and theorisations on organisational resilience, although augmented in volume, are yet nebulous and far from reaching a commonly shared consensus for its assessment⁵⁸. As for the genealogy of resilience, it should be reminded that the following literature review is conceived to be informative yet selective to highlight the most salient junctures in the organisational theory's knowledge domain conducive to the notion's progression.

⁵⁶ Giustiniano, Clegg, Pina e Cunha, and Rego, "Resilience in management and organization studies.".

⁵⁷ Ibidem.

⁵⁸ Linnenluecke, "Resilience in Business and Management Research: A Review of Influential Publications and a Research Agenda.".

CHAPTER II

Delving into Organisational Theory and Virtue Ethics

2.1 Resilience's Mitosis in Organisational Theory

The provenance of the theory on resilience in business and management can be reconducted to two fundamental papers by Barry M. Staw, Lance E. Sandelands, Jane E. Dutton in 1981, and Alan D. Meyer in 1982. The two studies refer to the same evolutionary theory process of variation-selection-retention but posit alternative and contrasting formulations on the way organisations behave when exposed to exogenous pressures⁵⁹. Staw advances the theory by which adversities cause responsive rigidities in entities, although making a clear distinction between two fundamental components of distress: when it represents major contextual alterations and when it produces minor changes such as when no seminal core connections have been modified. The main corollary in the latter is that rigidity in response may not necessarily be dysfunctional or detrimental. For the author himself proposes, an antecedent rigid practice put into place propitiously may be beneficial if the context does not bring about significant alterations relative to the incumbent. Nonetheless, in the alternative scenario, a rigid reaction proves to be both ineffective and contextually inappropriate, intensifying the threat⁶⁰. A scintillating notion and resolution that Staw exposes in the individual-level effects of adversities is disciplining the cognitive to be flexible in distress. Such conceptualisation strictly resembles the theorisations and work by Giustiniano, who refers to resilience as paradox work and to the anecdote of building both walls and windmills during times of storm⁶¹. Juxtaposing

⁵⁹ Ibidem.

⁶⁰ Staw, Barry M., Lance E. Sandelands, and Jane E. Dutton. "Threat Rigidity Effects in Organizational Behavior: A Multilevel Analysis." *Administrative Science Quarterly* 26, no. 4 (1981): 501-24. doi:10.2307/2392337.

⁶¹ Giustiniano, Luca, Miguel Pina E Cunha, Ace V. Simpson, Arménio Rego, and Stewart Clegg. "Resilient Leadership as Paradox Work: Notes from COVID-19." *Management and Organization Review* 16, no. 5 (December 2020): 971-75. doi:10.1017/mor.2020.57.

the concept of training – a form of rigidity by nature as it confers preestablished frameworks and protocols to the processual thinking and acting of an individual – and flexibility is paradoxical but ingenious, as it communes the ability to express malleability whilst being robust.

Moreover, the author exposes the effects of threats on group and organisational entities. With regards to the first, particular focus is placed on the impact of external and internal strain on the cohesiveness and uniformity of inter and intra-group dynamics. Specifically, it is interesting to note that the influence of threat on intra-group relationships is substantially diverse if the same is perceived as exogenous or endogenous, with the latter having particularly dire effects on the members, whose faith both in the leading figures and the probability of the team's success significantly diminishes, resulting in reduced cohesiveness and consensus⁶². In other words, external adversity is more likely to culminate in a victorious outcome, mainly because potential vulnerabilities are not ascribed to internal issues regarding the partners. Exogenous shocks are, after all, perceived as uncontrollable in occurrence, hence not consequential to any of the member's will. As trust and psychological safety dimensions are negatively affected by blame assignment in groups, leading to unresilient responses⁶³, the author's analysis can be fascinatingly employed to avoid the materialisation of such unfortunate dynamics. For instance, sensemaking is notoriously a crucial practice to build resilience in the face of catastrophes, implying the reframing of the disaster in an attempt to withstand it with increased vigour⁶⁴. It might be argued that a favourable scenario could incur from reducing the condemning charge of a variable deemed as intrinsic in the collective imaginarium and transforming it into an opportunity for the aggregate to improve. Formula 1 drivers well explicate this mentality, as it can be denoted that in the aftermath of races, rather than accusing any technical failures on team engineers, they usually show accountability by exposing in a plural fashion the faulty performance. The employment of pronounces such as "we" or "our" in the descriptive discussion depicts such disposition⁶⁵.

However, increased cohesiveness and uniformity following an exogenous threat, or its reframing if internal, have potential complications of their own. Indeed, Staw highlights the dangers of groupthink and affiliative tendencies, all forms of intellectual rigidity, and lack of agility due to their conforming nature. Such practices are perilous for the restraint on

⁶² Staw, Sandelands, and Dutton, "Threat Rigidity Effects in Organizational Behavior: A Multilevel Analysis.".

⁶³ Giustiniano, Clegg, Pina e Cunha, and Rego, "The diffusion of resilience via cross-level interactions.".

⁶⁴ Giustiniano, Clegg, Pina e Cunha, and Rego, "Resilience in collectives.".

⁶⁵ Senna. Directed by Asif Kapadia. Produced by James Gay-Rees, Tim Bevan, and Eric Fellner. By Manish Pandey. Performed by Ayrton Senna and Alain Prost. United States: Universal Studios, 2010. Documentary.

information, neglecting dissonant and deviant points of view, overlooking their function⁶⁶. When achieving the relative malpractice of consensus, a narrowing of control is engaged, polarising the postulate of the prevailing member, further centralising their authoritative status. As a result, both mechanisms involving information and control will possibly lead to fallacious collective decision-making. The effects of crises and threats on informational processes also ensue a reduction in potential alternatives of plans of action or practices, which Smart and Vertinsky postulated as a consequence of minor provenances of information consulted⁶⁷. Conversely, Williams suggested that new information unable to be incorporated into the existent is supposed as not equally relevant⁶⁸, subsequently culminating, as Paige formulated, into a scenario where decision-makers depend primarily on past knowledge or experience⁶⁹. The latter is particularly problematic as another critical capability to cultivate in order to express resilience is "learning to unlearn" which implies portraying open-mindedness to the proper course of action to undertake, with the possibility of needing to forget, even in previously successful, known solutions whose utility fades in the advent of specific novel adversities⁷⁰.

At the organisation level, the effects of a threat are similar regarding the constriction of information and centralisation of control, yet differ – or are more pronouncedly visible –, when standardisation of routines or practices and increased want for efficiency are taken into consideration. Both are detrimental for resilience if applied when innovative arrangements and redundant resources would be required for an effective response⁷¹. A firm-wide mechanistic shift, often engaged to attain increased control, augments rigidity, whose incongruousness in radical change instances has been previously exposed. Furthermore, the contradictory relationship between resilience and efficiency renders the latter especially alarming when operated inadequately in times of strain, as blind research for increased productivity or performance results in hindering paradoxically precisely both⁷². For example, budget tightening, cost-cutting, and a reduction of marginal practices to endure financial difficulty can

⁶⁶ Staw, Sandelands, and Dutton, "Threat Rigidity Effects in Organizational Behavior: A Multilevel Analysis.".

⁶⁷ Smart, Carolyne, and Ilan Vertinsky. "Designs for Crisis Decision Units." *Administrative Science Quarterly* 22, no. 4 (1977): 640-57. https://doi.org/10.2307/2392406.

⁶⁸ Williams, Harry B. "Some Functions of Communication in Crisis Behavior." *Human Organization* 16, no. 2 (1957): 15-19. https://www.jstor.org/stable/44124807.

⁶⁹ Paige, Glenn D. "On Values and Science: The Korean Decision Reconsidered." *The American Political Science Review* 71, no. 4 (1977): 1603-609. https://doi.org/10.2307/1961499.

⁷⁰ Giustiniano, Pina E Cunha, Simpson, Rego, and Clegg, "Resilient Leadership as Paradox Work: Notes from COVID-19.".

⁷¹ Staw, Sandelands, and Dutton, "Threat Rigidity Effects in Organizational Behavior: A Multilevel Analysis.".

⁷² Giustiniano and Cantoni, "Between Sponge and Titanium: Designing Micro and Macro Features for the Resilient Organization.".

culminate in a firm's decline, as demonstrated by the case study of Starbuck and Hedberg⁷³. This is not surprising given the crucial role that the availability of slack resources can assume in times of crisis. Indeed, possessing them provides the organisation with flexibility and margin to withstand unexpected shocks by relying on backups that allow, for example, systems to maintain operativity despite complications to core functionalities. The previously mentioned BP Deepwater Horizon disaster perfectly depicts such issue: a predilection for lean management resulted in the absence of redundant resources to amortise the jolt of a breakdown in a vital structure⁷⁴.

A systemic level analysis is also salient to appreciate the aforementioned forces' entirety within a holistic framework. In the case of hazard, a complex will prioritise behavioural answers whose nature is well-known, neglecting both non-essential input and operating activities. As for the individual, collective, and organisational levels, whilst such an approach might be efficacious to manage familiar threats, it is unlikely to deliver a positive response for unprecedented events. Quite intuitively, if solution "A" is an appropriate response for problem "B", it will not necessarily follow that problem "C" can be managed by the same means. Employing repeatedly "A" would mean failing to understand both the diversity of the issues at hand and overestimating the efficacy of the answer. Not because antibiotics will cure fever from a bacterial infection, it follows that they will have the same success when the cause of the illness is viral in nature. The symptom might be the same, but the difference in roots renders the selected solution appropriate in the former case and ineffective in the latter. Supporters of social evolutionary theories such as Donald T. Campbell⁷⁵, Karl E. Weick⁷⁶, and Howard E. Aldrich⁷⁷ would agree that survival is achieved only through diversity in input and reaction when confronting profound change. Weick's postulations are particularly intriguing as he was one of the few authors at that time to argue for a fluid, dynamic, and improvising organisational conception as opposed to a static, structural, hierarchical acceptation. Organisations embody incessant and continuous action, tainted by inconsistency, incoherency, recurring crises, and

⁷³ Thomas, James B., Shawn M. Clark, and Dennis A. Gioia. "Strategic Sensemaking and Organizational Performance: Linkages Among Scanning, Interpretation, Action, and Outcomes." *Academy of Management Journal* 36, no. 2 (1993): 239-70. https://doi.org/10.5465/256522; Gersick, Connie J. G., and Richard J. Hackman. "Habitual Routines in Task-performing Groups." *Organizational Behavior and Human Decision Processes* 47, no. 1 (1990): 65-97. https://doi.org/10.1016/0749-5978(90)90047-D.

⁷⁴ Giustiniano, Clegg, Pina e Cunha, and Rego, "Resilience in collectives.".

⁷⁵ Campbell, Donald T. "On the Conflicts Between Biological and Social Evolution and Between Psychology and Moral Tradition." *American Psychologist* 30, no. 12 (1975): 1103-126. doi:10.1037/0003-066x.30.12.1103.

⁷⁶ Langenberg, Suzan, and Hans Wesseling. "Making Sense of Weick's Organising. A Philosophical Exploration." *Philosophy of Management* 15, no. 3 (2016): 221-40. doi:10.1007/s40926-016-0040-z.

⁷⁷ Astley, Graham W. "Howard Aldrich: Organizations and Environments 1978, Englewood Cliffs, N.J.: Prentice-Hall." *Organization Studies* 1, no. 3 (1980): 285-88. doi:10.1177/017084068000100306.

inefficiencies. Paradoxically, effective ones comprise the entirety of the latter, perpetually reconfiguring themselves to exploit embedded intricacies. Sensemaking and sharing of meaning represent the foundations of the dynamic complex, transforming the objective of leadership from validating a dominant sense to encouraging the formation of collective consciousness. Divergences and oppositions are welcomed as an integral part of the process: it is through the acknowledgement of the existence of distinct understandings that sharing of meanings unfold⁷⁸.

It must be noted that although the responses to threat have been illustrated in isolation at the individual, collective, organisational, and systemic level they are to some extent generalisable to all, also in virtue of the existing interrelation amongst the different entities and the consequent resulting mutual influence. An interesting case in which ripple effects are visible is when analysing the welfare of individual agents as a function of organisational action. For instance, administrators, whose interests are more closely relegated to the organisation, will defend aggregate well-being when their stake is not directly at risk. Instead, middle management will demonstrate allegiance to their department or division, while the lowest level members of the organisation will possess incidental and more personal interest in mind⁷⁹. As Olson postulated, organisational practices can be analysed and observed as contingent on individuals' welfare, for which it can be argued that macro-organisation behaviour ultimately reflects individual bearing mechanisms. In other words, subjective coping reactions are transposed in the overall organisational practices⁸⁰. This said, on a concluding note, it should be reminded that the effectiveness of a chosen response depends ultimately on the nature of the threat in question. In other words, not all threat-rigidity answers lead to maladaptive behaviours. Their potential in fostering a vicious cycle is relegated to the disruptiveness of the incurring scenario, rendering them a two-edged mechanism in which the endurance and annihilation power of an organisation are simultaneously expanded. Whether it will subsequently survive or succumb, it is in the hands of the entity itself.

The second author identified with the origins of the use of resilience in the organisational field, Alan D. Meyer, discusses in 1982 in his *Adapting to Environmental Jolts* about hospitals' responses to a one-month strike conducted by doctors in San Francisco in 1975. Intriguingly, the author denotes how particular features of the structures are not visible until under pressure.

⁷⁸ Langenberg and Wesseling, "Making Sense of Weick's Organising. A Philosophical Exploration.".

⁷⁹ Staw, Sandelands, and Dutton, "Threat Rigidity Effects in Organizational Behavior: A Multilevel Analysis.".

⁸⁰ Olson, Mancur. "A theory of Groups and Organizations". In *Logic of Collective Action: Public Goods and the Theory of Groups*. United States: Harvard University Press, 1971.

In other words, major seismic tremors, as in real-life situations, reveal structural inadequacies otherwise not perceivable in times of serenity. Therefore, environmental jolts open a window of opportunity both for researchers and organisations to grasp specific peculiarities that characterise them, offering a learning opportunity for improvement. The adaptation strategy of Memorial Hospital is of particular interest as it exposes the antithetic relationship between efficiency and efficacy. The complex, whose operational tactic was usually much centred on cost-cutting and strict budgeting policies in stable periods, engaged the opposite approach during the strike, expensing the financial and human capital strain at the cost of productivity⁸¹. This practice remarkably exemplifies a resilient response, as seen through Staw's and Giustiniano's examinations⁸². Indeed, in times of distress, efficiency might quite purely add pressure to an already suffering system. Moreover, precisely because organisational culture and practices centred on efficiency were pivotal for Memorial in quiet periods, slack resources were accumulated and utilised in times of need. Community Hospital's adaptation instead excellently portrays the benefits of anticipated preparation for adversity. Top management sensed the possibility of a strike two months in advance and acted accordingly by organising contingency plans distributed to all departments and subunits. Amusingly, the structure that customarily operated in slight deficit, profited during the storm. The administrator even stated that the event was a beneficial learning experience, gaining new consciousness of novel practices towards enhanced productivity. Similarly, in General Hospital's case, preparedness played a crucial role in its capacity to withstand the circumstance. Engagingly, a sensemaking technique appears to have been employed. When interviewed about the accident, two informants answered ironically, "What strike?" and the director asserted that he would not define the situation as critical as they dealt daily with comparable occasions. Reducing the psychological weight associated with the episode, the hospital endured portentously, quickly returning to equilibrium⁸³.

The quantitative results emerging from an overall analysis of the adaptation to jolts, comprising anticipation, respondence, and readjustment phases, are particularly stimulating. Concerning anticipation, strategic considerations appear to have had the most pronounced impact on foresight. Memorial's conservative outlook, focused on specialistic niches and

⁸¹ Meyer, Alan D. "Adapting to Environmental Jolts." *Administrative Science Quarterly* 27, no. 4 (1982): 515-37. doi:10.2307/2392528.

⁸² Giustiniano and Cantoni, "Between Sponge and Titanium: Designing Micro and Macro Features for the Resilient Organization."; Staw, Sandelands, and Dutton, "Threat Rigidity Effects in Organizational Behavior: A Multilevel Analysis.".

⁸³ Meyer, "Adapting to Environmental Jolts.".

characterised by low environmental curiosity, was the least effective in forecasting the strike. On an opposite tone, Community's entrepreneurial essence heightened external surveillance, and search tendency for volatile niches proved to be the most beneficial for forewarning. Thereby aligned with the statistical results that evinced that innovative and environmentally attentive approaches favour effective detection. General's diversified strategy, characterised by both broad domains and specialised subunits, ensured that the company attained a moderate capacity to foretell. Furthermore, although strategy and slack resources were influential in the response phase, the critical variables identified were the companies' ideology and structure. Strategically, diversification in different markets reduces concentration risk and, therefore, the impacts of a disruption in a specific niche, rendering the organisation still functional in the broader environment⁸⁴. Additionally, the amassing of slack resources during times of regular operation allows organisations to absorb more readily unexpected exogenous jolts. As a matter of fact, the availability of such resources possesses a more predominant role in the reaction stage than in the anticipation and readjustment periods. Notwithstanding, the ideological dimension emerges as the chief factor in determining an organisation's success during response. Ideologies can be defined as structures of beliefs that tether and unite people, justifying their reality in terms of causal relationships. However, the nature of the causality is essentially circular as ideologies influence the believers' world whilst simultaneously being influenced by it. Being at the foundation of meaning construction and sensemaking practices, they define the legitimisation of determined actions⁸⁵.

Indeed, disruptions acquire different significance depending on the ideological outlook of the organisation, characterising them as dilemmas, opportunities, or mere aberrations. It can be evinced, quite instantly, how the depiction and portrayal of a turmoil as relatively beneficial or detrimental is wholly subjected to the lenses through which the incumbent assimilates it. In this respect, Community Hospital's administration revealed its more competitive edge, ascribing the strike as an opportunity to experiment and to assess member's adaptive capabilities. As opposed to Memorial's and General's interpretative stance, centred respectively on dilemma and aberration situational framing. The complexes that best endured the crisis were identified as possessing key ideological characteristics, namely attentiveness to environmental considerations, nurturing strategic reconfiguration, openness to structural adaptations,

⁸⁴ Ibidem.

⁸⁵ Beyer, Janice M., Roger L. M. Dunbar, and Alan D. Meyer. "Comment: The Concept of Ideology in Organizational Analysis." *The Academy of Management Review* 13, no. 3 (1988): 483-89. https://doi.org/10.2307/258094.

acknowledgement of members' value, and encouragement of active participation⁸⁶. Besides, with respect to organisational structures, it can be observed that they epitomise the interconnectedness that may obstruct an exhaustive response to jolts. For instance, Memorial's operational design integrated interrelated activities into a preconfigured array that was arduous to dissect, while Community's modular structure allowed for a flexible readjustment to be immediately implemented. Instead, General's survival strategy was to compartmentalise the effects of the disruption to permit unaffected subunits to endure without operational deficiencies. Thus, decentralised organisational designs permit the pursuance of malleable adaptation strategies in the face of unprecedented occurrences⁸⁷.

As dust settles from the turmoil, resilience qualities emerge, and the implications of adaptive strategies and measures adopted can be appraised. Resuming original states, firstorder adjustments dissipate, while second-order modulations crystallise, and adaptations persist. Charles C. Snow and Lawrence G. Hrebiniak sustain in their analysis on the relationship between strategy, distinctive competence, and organisational performance, that inconsistency may be emblematic of ineffective organisations, with distinctive competence being defined as a group of several particular activities that organisations tend to perform better than their peers within an analogous environment⁸⁸. Similarly, disruptions' consequences in hospitals were magnified by dissonant ideologies and responses, such as the inability of skilled personnel to return to work, alienation among employees, and elusion of complex tasks by liability-conscious workers. For instance, those that withstood with less resilience were characterised by high dependence on surgical procedures, traditional marketing of services offered, low reserves of slack resources, resistance to strategic reorganisations, and scepticism over employees' competencies. Structures that endured jolts' effects vehemently and responded intensively struggled to bounce back promptly. Indeed, hospitals that suffered the most significant losses in financial terms, number of patients, and employees during their responsive adaptation sustained more extended periods of adverse repercussions resulting from the strike⁸⁹.

A forward-looking and avant-garde mentality is exemplified by the ability to capitalise and take advantage of perturbations, as perceptive administrators are observant for surreptitious opportunities. Such outlook is epitomised by the Chinese ideogram of crisis, composed of two

⁸⁶ Meyer, "Adapting to Environmental Jolts.".

⁸⁷ Ibidem.

⁸⁸ Snow, Charles C., and Lawrence G. Hrebiniak. "Strategy, Distinctive Competence, and Organizational Performance." *Administrative Science Quarterly* 25, no. 2 (1980): 317-36. doi:10.2307/2392457.

⁸⁹ Meyer, "Adapting to Environmental Jolts.".

meanings, danger and opportunity. The benefits of adopting such paradigm are brilliantly advocated by William H. Starbuck, Arent Greve, and Bo L. T. Hedberg in their work Responding to Crises⁹⁰. In analysing companies' withstanding capacities, the authors expose the dangers of holding on to past successes, ideologies, and strategic orientations when inadequate to changing contexts. In other words, to avoid learning to unlearn, whose centrality for resilience has been briefly aforementioned⁹¹. Although fundamental for organisational autonomy and success, buffering, programming, and slack resources, desensitise the complex from the environment precisely by conferring it independence. This results in problematic interpretations and responses to adversities, whose particular features are frequently overlooked. Specifically, even when in light of novel developments, crises are not conceived as periods of opportunity to promote organisational flourishment. If anything, they are strictly condemned or bluntly denied⁹². Conversely, in Community's case, top management connoted the strike as a chance to test and learn from an experiment, acquiring a deeper comprehension of the adaptive capabilities of the structure and devising frameworks for containing costs⁹³. Indeed, experimentation is pivotal for complexes to weather storms effectively⁹⁴, as further demonstrated by Coimbatore K. Prahalad in his The Dominant Logic: a New Linkage between Diversity and Performance. In examining the relationship between diversification and performance, the author exposes the imperative significance for organisations to learn using multiple dominant logics, with the latter being defined as a world view of the corporate and the managerial tools to achieve ends and perform decisions in a firm⁹⁵. With regards to statistical analysis, the results convey that strategic variables such as entrepreneurial schemes and adaptive ideologies, are most eminent to amplify training experiences. In addition, wellestablished and variegated structures tend to delay learning, while it is enhanced as mentioned by entities with decentralised decision-making. Most notably, organisations that were more prone to learn invested further slack resources in human and technological capital rather than financial reserves and control systems⁹⁶.

⁹⁰ Starbuck, William H., Arent Greve, and Bo L. T. Hedberg. "Responding to Crises." *Journal of Business Administration* 9, no. 2 (1978): 111-37. https://ssrn.com/abstract=2708264.

⁹¹ Giustiniano, Pina E Cunha, Simpson, Rego, and Clegg, "Resilient Leadership as Paradox Work: Notes from COVID-19.".

⁹² Starbuck, Greve, and Hedberg, "Responding to Crises.".

⁹³ Meyer, "Adapting to Environmental Jolts.".

⁹⁴ Starbuck, Greve, and Hedberg, "Responding to Crises.".

⁹⁵ Prahalad, C. K., and Richard A. Bettis. "The Dominant Logic: A New Linkage between Diversity and Performance." *Strategic Management Journal* 7, no. 6 (1986): 485-501. doi:10.1002/smj.4250070602.

⁹⁶ Meyer, "Adapting to Environmental Jolts.".

Resourceful administrations can create inventive opportunities to exploit turmoil, such as appraising and overstating ideologies in the case of Memorial Hospital where the no-layoff policy was trumpeted melodramatically, Community Hospital's staff providing orchestrated responses to external observers and interviewers, or to understate the potential calamitous state as with General Hospital, exemplified by the employees' asseverations: "what strike?" or "it was an everyday problem". Jolts can also be fortunate timely occurrences to mask unsanctioned incidental alterations as threat responses, allowing Pacific Hospital to undertake a long-overdue cut back of personnel stalled by unions and employees' resistance. The strike granted them the necessary edge to reduce costs and, when the aversion ended, the possibility to rehire selectively curtailing the staff by 10%, leaving the hospital in a conspicuously better state than before⁹⁷. When disturbances are identified as crises, they instil vitality into an organisation, authorise unconventional actions, and restructure power hierarchies. However, as James G. March and Johan P. Olsen – appreciated for devising the brilliant "garbage can" model of choice – postulate, such symbolic attributions of practices to fictitious environmental claims may cause the emergence of superstitious learning, polarising training opportunities, impairing observative and adaptive capabilities of personnel⁹⁸. Overall, it is interesting to note that such adjustments are more consequential to social realities designed through mechanisms of ideological interpretation than to the objective actualities of contextual occurrences⁹⁹.

The extensive analysis conducted on Staw's and Meyer's elaborations and a few of the relevant interrelated authors is not casual. Conversely, it is precisely through it that particularly salient aspects can be evinced regarding both the authors in their quality of ingenious intellectuals and their contribution to resilience's development in managerial and organisational theories. The first strikingly fascinating aspect is the contemporaneity of the entirety of the theorisations proposed, composed predominantly in the 1970s and early 1980s. Indeed, despite the significant yet not comprehensive results – as clearly explicated by the many –, several postulations are not much distant from numerous specifically modern theories which can rely on extensive historical data, avant-garde methodologies and technologies, means of extraction, and analytical tools. From Meyer to Weick, Starbuck, Hedberg, March, Olsen, Smart, Vertinsky, Williams, Staw, and several others, it is appealing to appreciate their ability to expose and advocate specific organisational features that in modern times, after

⁹⁷ Ibidem.

⁹⁸ Moch, Michael K., and Louis R. Pondy. "The Structure of Chaos: Organized Anarchy as a Response to Ambiguity." *Administrative Science Quarterly* 22, no. 2 (1977): 351-62. doi:10.2307/2391967.

⁹⁹ Meyer, "Adapting to Environmental Jolts.".

operational and ideological waves of administrative centralisation, routine standardisation, topbottom control, rigid systems' structures, rational agents' assumptions, and efficiency, coherency, and consistency-centred cultures, gained momentum. These include tendencies towards decentralisation, debureaucratisation, power diffusion, fluid informational channels, reduced hierarchical barriers, increased functional and mental heterogeneity, organisational improvisation and incoherence, embracing opposing sentiments.

In addition, researchers analysing organisations in times of crisis, as the abovementioned, have developed concepts concerning managerial practices frequently more innovative than colleagues focusing on structures in static environments; thereby exposing the relevance of examining systems under pressure to better appreciate the peculiar characteristics and features that compose them¹⁰⁰. It is worth mentioning that only in moments of distress can a complex express its true capabilities, otherwise dormant in tranquillity as invisible or not required to surface. Analogously, to observe the properties of matter, such as elasticity or resonance, it is necessary to place it in a state of stress where external forces are exerted to detect the actual behaviour and reaction of the object¹⁰¹. Elastic or resonant bodies, when at rest, may appear as other materials, but when physical strain or sound waves are exercised, respectively, their peculiar properties emerge. It would be impossible to discriminate between two objects identical in appearance yet different in nature by neglecting such a practice. In other words, an object possessing, for instance, elastic capabilities would be incapacitated to show its intrinsic features, miserably misidentified with its peer. Thus, retracting the discourse on the processual nature of resilience, undoubtedly a dynamic conception of the notion seems to be most coherent.

Though significant and developed in scientific research, as demonstrated by its historical evolution, it appears that his section of managerial and organisational theories concerning examinations in crises is perhaps underestimated, given its focal delay by academics to investigate it thoroughly¹⁰². Such deficiency is quite startling considering the cruciality for organisations to cultivate abilities that ensure their capacity to weather storms. Whilst practices to ameliorate existing structures are indisputably a founding pillar of such a knowledge domain,

¹⁰⁰ Staw, Sandelands, and Dutton, "Threat Rigidity Effects in Organizational Behavior: A Multilevel Analysis."; Smart and Vertinsky, "Designs for Crisis Decision Units."; Williams, "Some Functions of Communication in Crisis Behavior."; Langenberg and Wesseling, "Making Sense of Weick's Organising. A Philosophical Exploration."; Meyer, "Adapting to Environmental Jolts."; Starbuck, Greve, and Hedberg, "Responding to Crises.".

¹⁰¹ Tredgold, "XXXVII. On the Transverse Strength and Resilience of Timber."; Moseley, "Part V. The Strength of Materials."; Thomson, *Elasticity and Heat*.

¹⁰² Moch and Pondy, "The Structure of Chaos: Organized Anarchy as a Response to Ambiguity.".

they vanish in relevance if the base to improve ceases to exist. As it has been unfortunately frequently observed, a long history of successes has not impeded prominent and incumbent companies from crumbling abruptly. Eastman Kodak, Nokia, Blockbuster, Enron, General Motors, Lehman Brothers, and Bear Stearns are just a few out of a plethora of examples¹⁰³. Ironically, in Gary Hamel's and Liisa Välikangas' words: "Every business is successful until it's not"¹⁰⁴.

Given the increasing environmental complexity and heightened contextual risks that organisations are forced to withstand, a shift in focus is auspicated, if not strictly essential. Note the specific use of the verb *forced* as such features, intrinsic to the current and future global arena's trajectory, are unavoidable, leaving no choice but to dedicate attention to these issues¹⁰⁵. The choice, if present, is survival. Additionally, another intriguing aspect of Meyer's and affiliated authors' decision to concentrate their researching efforts on crisis endurance is their countertrend mentality against the blind attainment of ever-increasing efficiency and performance ingrained in the cultural and mental outlook of the time. Only after a series of unfortunate events occurred, including the Oil Price Shock of 1973, the Asian Crisis of 1997, the dotcom bubble bust of 2000, and the Global Financial Crisis of 2007-2008, did the creed paradigm shift from "more" to "less"¹⁰⁶.

Finally, retracing the origins of resilience's adoption in organisation and managerial fields proves to be essential to comprehend its development path, enlightening the rationale sustaining its current theoretical conceptualisation. In particular, its dualistic nature clearly emerges, rendering evident the need to interpret resilience, in Giustiniano's words, as a paradox work, juxtaposing two opposing properties of the same spectrum. Indeed, as observed in the elaborates of March, Olsen, Starbuck, Greve, Hedberg, Weick, and Meyer, complexes ought to express contradicting approaches in diverse phases, oscillating from structured to unformalised, centralised to decentralised, or efficient to redundant¹⁰⁷. Analogously, entities

¹⁰³ Thangavelu, Poonkulali. "Companies That Failed to Innovate and Went Bankrupt." Investopedia. October 25, 2020. Accessed April 21, 2021. https://www.investopedia.com/articles/investing/072115/companies-went-bankrupt-innovation-lag.asp.

¹⁰⁴ Hamel, Gary, and Liisa Välikangas. "The Quest for Resilience." Harvard Business Review. September 2003. Accessed April 29, 2021. https://hbr.org/2003/09/the-quest-for-resilience.

¹⁰⁵ Franco, Emilio Granados. "The Global Risks Report 2020". World Economic Forum in partnership with Marsh McLennan, SK Group and Zurich Insurance Group, January 15, 2020. Accessed April 21, 2021. https://www.weforum.org/reports/the-global-risks-report-2020.

¹⁰⁶ Bondarenko, Peter. "5 of the World's Most Devastating Financial Crises." Encyclopædia Britannica. Accessed April 21, 2021. https://www.britannica.com/list/5-of-the-worlds-most-devastating-financial-crises.

¹⁰⁷ Langenberg and Wesseling, "Making Sense of Weick's Organising. A Philosophical Exploration."; Moch and Pondy, "The Structure of Chaos: Organized Anarchy as a Response to Ambiguity."; Starbuck, Greve, and Hedberg, "Responding to Crises."; Meyer, "Adapting to Environmental Jolts.".

striving to be resilient must simultaneously portray anticipation and adaptation, boldness and prudence, solidity and flexibility, fortitude and vulnerability, autonomy and control. Resilience itself is a paradoxical strength: adversities might result in destruction but when they do not, they foster its presence¹⁰⁸. Intriguingly, inter alia, if Aristotle would have ever devised an organisation it would probably be structured in the aforementioned fashion. Though such an assertion will be better appreciated further on in the thesis as the theory of virtue ethics will be exposed profusely, the central idea revolves around striking an equilibrium between two extremes, the cardinal point that the philosopher defines as the intermediate or mean¹⁰⁹. Just as an agent is required to act neither recklessly nor cowardly to be considered courageous, an organisation must demonstrate, for instance, malleability and robustness to be denoted as resilient.

Hitherto some authors have been exposed, yet a more in-depth literature review of the use of resilience in business and management research is required. Linnenluecke provides a bibliographical map that enables to retrace the intellectual genesis of the notion and the literature structure's progression. The elaborates selected for the review were the most cited publications concerning resilience in the mentioned domains, identified through searches into the Social Sciences Citation Index, an academic online citation database found on the Thomson Reuters Web of Science platform. Such exercise is particularly appreciated as these works will be thoroughly examined in the following section. Although Staw's and Meyer's papers have been fundamental milestones in the origins of the concept, the author notes that much of the researching efforts on resilience from the 1980s onwards were centralised on intraorganisational disruptions rather than response to exogenous threats¹¹⁰. This implied a shift in focus on internal reliability and, more specifically, on the reliability of intricate intra-firm processes to avert any malfunction, deviation, or failure potentially degenerating in accidents with substantial impacting force. Catastrophes including the Space Shuttle Challenger, Chernobyl, and Bhopal pressured the rise of such a theoretical stance. Given the scale and scope of their dire consequences, it is of no surprise that endeavours aiming to avoid organisational faults gained momentum. Moreover, these expose the influence contextual

¹⁰⁸ Giustiniano, Pina E Cunha, Simpson, Rego, and Clegg, "Resilient Leadership as Paradox Work: Notes from COVID-19.".

¹⁰⁹ Hursthouse, Rosalind, and Glen Pettigrove. "Virtue Ethics." Stanford Encyclopedia of Philosophy. December 08, 2016. Accessed April 21, 2021. https://plato.stanford.edu/entries/ethics-virtue/.

¹¹⁰ Linnenluecke, "Resilience in Business and Management Research: A Review of Influential Publications and a Research Agenda.".

features exert on academic research. Indeed, the 9/11 terrorist attacks shifted back the predominant attentiveness to external threats¹¹¹.

Amongst the various authors constituting the literature's development, Charles B. Perrow can be identified as the first particularly salient composer addressing resilience after Staw and Meyer. The author, who published in 1984 the book Normal Accidents: Living with High-Risk Technologies, illustrates the dangers intrinsic to high-risk systems, typically tightly coupled and characterised by interactive complexity. The former feature refers to systems where processes occur markedly rapidly and in an irreversible manner, for which the effects cannot be isolated. The latter is a measure of the interactivity amongst components and its potential to create subsequent unexpected connections resulting from a first interface. For instance, if X failing causes Y to unpredictably fail as well, and the two failures interact creating a further effect, the system portrays interactive complexity. According to Perrow, aggregates possessing both characteristics will inevitably produce accidents, which should be named normal accidents. Normal as they represent an intrinsic property of the system, not a statement of occurrence or predictability¹¹². It is worth to briefly outline the case scenario provided by the author to depict complexes with the aforementioned traits, in that it brilliantly illustrates his argument. Additionally, it demonstrates that slack resources, redundancy, and backups can prove essential yet are not inexorably enough to prevent a catastrophe. Deemed usually relevant attributes to manifest resilient responses, their fault is particularly salient for analysis.

An individual, supposedly named Alexander, has finally managed to obtain a crucial job interview. The appointment is scheduled in the morning and he takes the day off to ensure his punctuality. As he is preparing to leave, he heads into the kitchen to grab a cup of coffee, only to find out that his spouse leaving the stove on has accidentally caused the glass pot containing it to break. He could avoid taking coffee altogether, yet being particularly addicted to it, prepares another carafe. Nervously checking the clock, he waits for it to be ready and quickly chugs some whilst rushing outside. As he reaches the car, he realises that in the hurry he left his car and apartment keys inside. Fortunately, he typically keeps a spare pair hidden in the hallway, precisely for such emergencies. Amusingly, this is a safety device or a redundancy. However, he remembers that he lent the keys to a friend who had to collect some books from his apartment, knowing he would not be present at that time¹¹³. As he is running out of time,

¹¹¹ Ibidem.

¹¹² Perrow, Charles. Normal Accidents: Living with High-Risk Technologies. Princeton (N.J.): Princeton University Press, 1999.

¹¹³ Ivi, "Introduction".

he heads to his neighbour, supposedly John, to kindly ask for his car. Albeit John sincerely desiring to help, the vehicle's generator has broken down and is awaiting to be fixed, resulting in the failure of Alexander's supplementary backup system. As opposed to the first (the spare keys), this fault is not related to his behaviour; additionally, the two shortcomings are uncoupled events given that no connection exists between the emergency pair and the generator. This still leaves him two options: to either catch a bus or a taxi. Nevertheless, John promptly informs him that a lock-out of the bus drivers was announced on the radio, resulting in all cabs being booked. These are two tightly coupled events as one triggers the other. Exhausted and helpless, Alexander calls the interviewer's secretary to notify her that he would not be able to attend the interview. He would want to explain, yet he refrains from doing so. It is way too far an unusual and lengthy series of happenings. The secretary reschedules the appointment, but Alexander is well aware that cancelling with such short notice a meeting – for which he insisted for weeks –, is going to have a dire impact on the following one, if he even obtains it ultimately¹¹⁴.

Perrow invites the reader to select one or more choices amongst five possible causes of the accident: human error (leaving the stove on and forgetting the keys), mechanical failure (the generator), the environment (bus strike and cabs overburden), the design of the system (the door's locking mechanism and absence of other emergency taxis), and the procedures used (preparing coffee in a glass pot and saving only standard time to be prepared that morning). Though tempting to attribute the accident to one of the aforementioned, the correct answer, according to the author, is that none can be identified as the cause. The blame, if any, is ascribable to the complexity of the system. The failures are neither completely unexpected nor remarkable in themselves. It is through their interaction that the catastrophe unfolds. It is foreseeable to encounter at least one of these issues. What is quite unpredictable is for all to occur simultaneously. Additionally, whilst the backup systems guarded against the faults when taken discreetly, they proved ineffective in their concurrent happening¹¹⁵. The example might appear trivial, yet if finely interpreted, the nature of current reality reveals itself through it: the world is inherently tightly coupled, and although such characteristic passes frequently unnoticed – as failures do not necessarily occur, or do not happen simultaneously – events that appear seemingly unlinked, ultimately are. Thus, individuals live in interactive systems that are tightly coupled and accidents, as mentioned, are normal. The implications of such discourse

¹¹⁴ Ibidem.

¹¹⁵ Ibidem.

are several. Perhaps the most crucial one for this analysis is the role of management and organisations in averting or causing failures. High-risk systems require creative and sometimes independent responses from the operators closest to them, implying a degree of decentralisation. Nevertheless, in virtue of their tight coupling, the control of the operators providing the answers must be centralised. In other words, given the impossibility to account for all occurrences in the system and the interactive nature of the actions, solutions' unfolding must be concerted. Notwithstanding, complexes cannot be decentralised and centralised simultaneously. Thus, once more, organisational contradictions arise as a pivotal element for examination and whose management is crucial for effective response to crises. Furthermore, as illustrated with the case scenario, blame assignation appears to be an improper and unsettling practice, given that accidents are, somewhat paradoxically, normal. Instead, understanding – and accepting – the complexity of systems seems much more constructive. Only with a deeper comprehension of their frequently perilous design improvements can be sought and attained¹¹⁶.

Perrow's contribution resulted in creating a paradigm that views resilience as reliability, subsequently adopted by Wildavsky, who in 1988 published the book Searching for Safety. Addressing the dangers introduced by technological development, the author offers practices to foster safety, whose essence is inextricably intertwined with risk. Indeed, as the author cleverly states, safety's existence would cease without the latter's presence. Entailing its achievement involves paradoxically taking risks themselves. As the title suggests, safety is a great unknown that must be sought, and actions implemented to do so are naturally characterised by uncertainty: they might help to achieve it, or they might not. Nonetheless, avoiding acting altogether - hence playing it safe - diminishes the opportunity of benefitting from daring. The role of resilience emerges precisely in virtue of such theorisation: trial-anderror risk-taking is the auspicated strategy to ensure safety, and its performance notoriously cultivates it. Defined broadly as learning how to improve from adversities, Wildavsky suggests that resilience more explicitly entails having the ability to withstand threats whose occurrence is unexpected and optimal response unsure, implying improvising capacities in action and instruction¹¹⁷. Focus on experimentation can also be appreciated in Sitkin's work, which invites managers to embrace "strategic failure", an integral part of efficacious organisational learning and adaptation that secures against minor faults protracting and escalating in substantial disasters. Similarly to Wildavsky, failure is considered a tolerable risk from which to grow

¹¹⁶ Ibidem.

¹¹⁷ Wildavsky, Aaron. "The Jogger's Dilemma or What Should We Do When the Safe and the Dangerous Are Inextricably Intertwined?" In *Searching for Safety*. 1st ed. London and New York: Routledge, 2017.
and foster resilience, and efforts to avert it might exacerbate issues rather than improve them. Holding on to past successes might breed complacency, restricted attentiveness, risk-aversion, and lack of heterogeneity reducing the search for variety in strategies, methods, and even personnel¹¹⁸.

Moreover, Weick and Roberts proposed in 1993 the concept of a collective mind, postulated as a pattern of heedful interactions of actions in a social system. Agents within a complex perform individual contributions whose level of heed varies and influences the understanding of occurring events and the presence of errors. Organisational faults diminish as heedful exchanges and mindful comprehension augment. These are typically appreciable in organisations focused on reliability yet absent in ones centred on efficiency. Indeed, whilst the latter are mainly concerned with the dichotomy between productivity and unproductivity, the former concentrate on whether their performance is heedful or heedless - be it high, low, productive, unproductive, adequate, or inadequate. For systems averting attention from careful versus careless execution, an unmindful error might be their last. The authors exemplify such argument by examining aircraft carriers, whose operations are constantly required to be virtually error-free to avoid catastrophes. Despite these embodying a myriad of accidents waiting to occur, these rarely do happen. The motive is relatively straightforward: the mental procedures enacted by organisations attentive to reliability, such as carriers, are more thoroughly developed than those originating from organisations focused on efficiency. In other words, more resources might be dedicated by the first to manage for heedful action, mindful attentiveness, and organised knowledge processing. Consequently, actors operating in the system achieve a deeper comprehension of the complexity they confront, enabling them to respond with fewer faults¹¹⁹. As Linnenluecke notes, although such article does not refer directly to resilience, the discourse on reliability was at the foundation of further research on the notion 120 .

In the equivalent year, Weick published *The Collapse of Sensemaking in Organizations: The Mann Gulch Disaster*. Through analysing the Mann Gulch fire tragedy, during which thirteen men lost their lives, specific attention is dedicated to the process of sensemaking. In particular, four possible sources of resilience to render collectives less susceptible to hindrances

¹¹⁸ Sitkin, Sim B. "Learning through Failure: The Strategy of Small Losses." *Research in Organizational Behavior* 14 (1992): 231-66.

¹¹⁹ Weick, Karl E., and Karlene H. Roberts. "Collective Mind in Organizations: Heedful Interrelating on Flight Decks." *Administrative Science Quarterly* 38, no. 3 (1993): 357-81. doi:10.2307/2393372.

¹²⁰ Linnenluecke, "Resilience in Business and Management Research: A Review of Influential Publications and a Research Agenda.".

to the same are identified. These, which are proposed to prevent fragmentation, include the capacity to improvise, group wisdom, virtual role systems, and norms of respectful interaction¹²¹. Moreover, further research efforts were directed at examining the tools and practices organisations implement to avoid the escalation of adverse events' effects and cope with unfavourable contexts. In this respect, Weick, together with Kathleen M. Sutcliffe and David Obstfeld, contributed to another crucial work that explores high reliability organisations. Written in 1999, Organizing for High Reliability: Processes of Collective Mindfulness describes HROs as complex adaptive systems that, as mentioned, operate in uncertain, hazardous, and intricate environments nearly without error, achieving high levels of safety and production execution. They provide an outlook on a specific set of practices that promote effectiveness in demanding contexts. When efficacious, HROs integrate systematic processes of cognition with diversification in routine tasks to attain awareness of and manage entangled contingencies, giving rise to the cognitive infrastructure that allows for concurrent reliable performance and adaptive learning. Reliable structures are accomplished by a mechanism composed of cognitive processes that perpetually reassess reliability¹²². In non-HROs, such a technique is typically neglected as agents avert attentiveness to failure and reliability to concentrate on success and efficiency. Heedfulness towards failure minimises the inertial blind spots that result in the accumulation and culmination of faults into disastrous events. Preoccupation with failure, reluctance to simplify interpretations, sensitivity to operations, commitment to resilience, and underspecified structuring are the characteristics required to manage for high reliability, intrinsically present in effective HROs. In this context, resilience is postulated as a mindful procedure towards reliability rather than an outcome variable. Thus, its conceptualisation essentially mimics the previously illustrated definition by Wildavsky, whose focus lies on the ability to cope with unexpected events following their occurrence¹²³.

In *Managing the Unexpected: Assuring High Performance in an age of Complexity*, Weick and Sutcliffe further theorised on the notion of mindfulness as a tool to enact early identification and adjustments of errors to prevent catastrophes. The authors primarily advocate greater awareness towards which justifications are selected to understand breakdowns. Whilst people are tempted to adopt those that instantly turn the unknown into known, a more virtuous choice would entail choosing clarifications that view the unknown as knowable. The principles

¹²¹ Weick, Karl E. "The Collapse of Sensemaking in Organizations: The Mann Gulch Disaster." *Administrative Science Quarterly* 38, no. 4 (1993): 628-52. doi:10.2307/2393339.

 ¹²² Weick, Karl E., Kathleen M. Sutcliffe, and David Obstfeld. "Organizing for High Reliability: Processes of Collective Mindfulness." In *Research in Organizational Behavior*, 81-123. Vol. 21. JAI Press, 1999.
 ¹²³ Ibidem.

underlying the processes required to reach the latter elucidation portray a combination of stability and variety. Stability as they exhibit a pattern of concentration to minor faults, constant operations, alternative pathways to ensure operational continuity, less abstract specifics, and the deployment of expertise. Variety insomuch this pattern generates reasonable activities that arise from local customising, eschewing the hindrance of the adaptive faculty produced by the pattern itself. Resilience is once more defined in Wildavsky's terms, concentrating on the capacity to bounce back¹²⁴.

Despite High Reliability Organising emerging ultimately as the dominant theory, its combination with Perrow's Normal Accidents Theory has been the foundation of a wealth of knowledge on safety, reliability, and their nature. However, as Rudolph and Repenning sustain in Disaster Dynamics: Understanding the Role of Quantity in Organizational Collapse, both theorisations exhibit shortcomings by neglecting the effect and function of unprecedented happenings accumulation in organisational accidents and catastrophes. Resilience is not formally defined, yet a resilient system is hypothesised to counteract the interruptions' cumulation. Indeed, over-burdening beyond a specific benchmark can transform a resilient organisation into a frail and self-wrecking complex that heightens failure¹²⁵. It must be noted that although this work was written in 2002, the entirety of the aforementioned elaborates has been composed prior to the 9/11 terrorist attacks in the United States. Following the 2001 events, research on resilience encountered a profound reformation, shifting from internal organisational reliability to response mechanism to exogenous threats and environmental complexity. Indeed, the tragedy was a fundamental rupture in the trajectory of resilience's development, whose course irreversibly altered ever since. Also, the regulatory framework began to encapsulate the concept of resilience. Such is the case with the Federal Reserve and Security and Exchange Commission which advanced necessary guidelines to enhance the US financial system's resilience. As a consequence, three independent research branches arose focusing on managing employees' strengths, the adaptability of business models, and resilient supply chain design¹²⁶.

The first stream originated with Diane L. Coutu in 2002, who in *How Resilience Works* underlines the pivotal role of resilience for both individuals and organisations to thrive. The

¹²⁴ Weick, Karl E., and Kathleen M. Sutcliffe. "Mismanaging the Unexpected" In *Managing the Unexpected: Assuring High Performance in an Age of Complexity*. Wiley, 2001.

¹²⁵ Rudolph, Jenny W., and Nelson P. Repenning. "Disaster Dynamics: Understanding the Role of Quantity in Organizational Collapse." *Administrative Science Quarterly* 47, no. 1 (2002): 1-30. doi:10.2307/3094889.

¹²⁶ Linnenluecke, "Resilience in Business and Management Research: A Review of Influential Publications and a Research Agenda.".

author reports a statement of Dean Becker, president and CEO of Adaptiv Learning Systems, who claims its relevance in determining which individuals succeed overshadows the one of education, experience, and training. Moreover, three key characteristics that resilient people possess are identified: a solid predisposition to accept reality, a deep-rooted conviction that life holds meaning, and exceptional improvising capacities. The first implies holding a realistic view and a down-to-earth sense of existence. Optimism is beneficial insomuch it does not result in coping mechanisms founded on denial. When dire situations occur, facing the truth can be an unpleasant and emotionally straining practice. Yet, it might be the most beneficial to conquer challenging events. To explicate the importance of confronting reality, Coutu illustrates Morgan Stanley's evacuation process during the 9/11 attacks, being able to vacate the premises of most of its 2700 employees residing on 22 floors in the south tower. Just one minute after the first plane crashed into the north tower, the company started evacuating employees from the south tower. Fifteen minutes later, when the second plane collided into it, almost all personnel had abandoned the offices, resulting – albeit receiving nearly a direct hit - in the death of only seven employees¹²⁷. Such a successful response was achieved by virtue of senior management's recognition, through the earlier 1993 attack on the World Trade Center, that operating in one of the most symbolic locations of the United States' commercial power exposed the corporation to possible terrorist attacks, bringing about the necessity of a crisis contingency plan. Drilling practices were enacted by Rick Rescorla, an intrepid Vietnam veteran who performed the exercises with utmost seriousness. Such micro-level preparedness saved thousands of lives during the disaster, even though, sadly, Rescorla was one of the seven lost. Furthermore, Morgan Stanley had additional backup sites to its contingency plans to ensure operational continuity in all three different recovery locals. An administrator amusingly stated how paradoxically, the day before the attack, such countermeasures were deemed redundant, but ingenious in the following one. May there be uncertainty about the geniality, there is none about the resilience present in the measures undertaken. Indeed, when individuals stare down at the barrel, they start to cultivate preparedness, allowing them to overcome seemingly insurmountable obstacles. Resilience lies in equipping themselves before the occurrence¹²⁸.

The second feature that resilient individuals and organisations possess is closely linked to the first: strong sensemaking abilities. These enable actors withstanding tragic events to give

 ¹²⁷ Coutu, Diane L. "How Resilience Works." Harvard Business Review. May 2002. Accessed April 26, 2021.
 https://hbr.org/2002/05/how-resilience-works.
 ¹²⁸ Ibidem.

meaning to their suffering and elude victim attitudes that hinder their learning opportunities. Coutu here reports a brilliant concept expressed by a woman who survived a remarkably tough life. The latter stated: "People sometimes say 'Why me?' but I've always said, 'Why not me?". Thus, finding purpose whilst weathering storms is a crucial practice that truly resilient agents have the capacity – and bravery – to conduct. A robust value system is typically appreciable in such entities as it aids in moulding and interpreting their environment, injecting meaning to virtually any context or situation. It is not surprising that the Catholic Church, holding a set of immutable principles, has been one of the most resilient organisations in history, surviving for more than two thousand years a myriad of challenges including corruption, wars, and schism. Similarly, efficacious and enduring businesses construct and cling to their creeds, granting them resilience. Johnson & Johnson's "Credo", UPS' "Noble Purpose", and Phillip Morris' blind faith in "adult choice" are just a few out of the many axioms of companies that understood the relevance of building a bulletproof value system. Indeed, this ensures coherence in vision and action, contributing to organisational resilience more than employing a group of resilient individuals. Such theorisation is embraced by Giustiniano as well, who cunningly states that a group portraying resilience is not necessarily composed by an entirety of resilient members¹²⁹. In other words, a system's attributes are not conducible nor explicable through the mere sum of the individual parts. Ludwig von Bertalanffy would undoubtedly agree¹³⁰.

Finally, a pronounced propensity to improvise, or in the words of the French anthropologist Claude Levi-Strauss, to bricolage, is deemed essential. Amusingly, the old verb *bricoler* was employed to refer to incidental actions. This capacity implies showing inventiveness, embodied, for instance, by having the ability to improvise solutions through unfamiliar or unusual means and exploiting objects for non-obvious uses. Bricoleurs morph as challenges unfold, devising opportunities where others would be bewildered. As demonstrated by the physics Nobel Prize Richard Feynman, cracking into safes at Los Alamos assuming theoretical physicists would select codes with mathematical significance rather than randomly, bricolage can also be intellectual. All three safes enclosing the entirety of the atomic bomb's secrets were set to the number 2.71828, representing the first six digits of the mathematical constant e^{131} . Thus, resilient organisations elevate improvising as a core skill. This is further advocated by Giustiniano, who interprets improvisation as an antecedent to proactive resilience, implying

¹²⁹ Giustiniano, Clegg, Pina e Cunha, and Rego, "Resilience in management and organization studies.".

 ¹³⁰ Bertalanffy, Ludwig von. "Il significato della teoria generale dei sistemi" In *Teoria Generale Dei Sistemi*.
 Fondamenti, Sviluppo, Applicazioni. Translated by Enrico Bellone. Oscar Saggi. Milano: Mondadori, 2004.
 ¹³¹ Coutu, "How Resilience Works.".

the ability to respond without a priori organisation with existing rather than optimal resources¹³². Naturally, creativity must be complemented with a degree of order, fostering equilibrium between the two opposing forces. Indeed, in times of profound turbulence, rules and regulations aid companies' survival. Thus, in an Aristotelian fashion, the optimal answer seems once more located around the centre of two contraposing poles.

Fred Luthans and Alan H. Church explore in *Positive organisational behavior: Developing* and managing psychological strengths the effects of employees' optimism and positive organisational behaviour, or POB, on performance. Composed in 2002, the work advocates greater attention to individuals' strengths and psychological capabilities, frequently overlooked due to concentration on weaknesses and dysfunctions in the workplace. Building on concepts such as subjective well-being and emotional intelligence, the authors devise a POB approach for an improved organisational performance whose features culminate in the acronym CHOSE. This comprises the concepts of confidence/self-efficacy (having faith in successfully completing a determined task in a given context), hope (expressing willpower and waypower), optimism (positive outcome expectancy), subjective well-being (life satisfaction), and emotional intelligence (self and others-awareness). In illustrating the process and impact of self-efficacy on positive organisational behaviour, the authors define resilience as a form of perseverance. When confronting adversities, individuals with positive efficacy will be resilient, and recoil, whilst those with low efficacy will inevitably surrender¹³³. In the equivalent year, Luthans further developed such theorisation in his The need for and meaning of positive organisational behaviour. Building on the concept exposed hitherto, the thinker employs additional criteria of positive organisational behaviour to detect psychological abilities that are unique, measurable, and open to evolution and performance management. Interestingly, whilst much focus is placed – as in the antecedent composition – on self-efficacy and hope, resilience is introduced as a new POB capability. Described as a positive psychological ability to rebound from uncertainty, failure, conflict, adversity, or even progress, positive change, and augmented responsibility resilience is considered particularly relevant for organisational leaders and employees confronting their stressful and dramatically changing intra-organisational and exogenous environment¹³⁴.

¹³² Giustiniano, Clegg, Pina e Cunha, and Rego, "Resilience in management and organization studies.".

¹³³ Luthans, Fred, and Allan H. Church. "Positive Organizational Behavior: Developing and Managing Psychological Strengths [and Executive Commentary]." *The Academy of Management Executive (1993-2005)* 16, no. 1 (2002): 57-75. Accessed April 27, 2021. http://www.jstor.org/stable/4165814.

¹³⁴ Luthans, Fred. "The Need for and Meaning of Positive Organizational Behavior." *Journal of Organizational Behavior* 23, no. 6 (2002): 695-706. doi:10.1002/job.165.

It must be noted that many efforts in this field perspired from Albert Bandura's Self-Efficacy: The Exercise of Control, published in 1997 and centred around belief in one's abilities and related performance achievements. His conceptualisation of self-efficacy as an individual's perceptual judgement of its capacity to perform actions required to manage prospective situations has been foundational for subsequent authors further constructing on the notion. Additionally, Seligman's theorisations have been identified as a primary source of the period's positive psychology movement. The author, who conducted research for most of his carrier on human dysfunctions and frailties, realised in a second moment that examining people should involve discovering and nurturing their most remarkable qualities, what they possess and excel at, and aiding them in individuating places where they can best express these assets¹³⁵. Moreover, in his work Learned Optimism of 1998, he illustrates how individuals' positive or negative sentiments and framing of life events they experienced can alter their capacity to influence what happens thereafter. Overall, it can be noted how the research stream on employees' strength is profoundly affected by the periods' abovementioned positive scholarship movement, resulting in more consideration granted to nourishing the good in people and organisations. Precisely in this context resilience emerges, together with hope and optimism, as a crucial attribute¹³⁶.

Luthans further developed its theoretical framework concerning this research section in the following years, publishing in 2006, along with James B. Avey, Bruce J. Avolio, Steven M. Norman, and Gwendolyn M. Combs, *Psychological Capital Development: Toward a Micro-Intervention.* As the title suggests, a micro-intervention is offered to foster psychological capital or PsyCap, representative of positive organisational attitude and constituted by four interconnected elements: optimism, resiliency, self-efficacy, and hope. In particular, the authors convene that by adopting employee intervention tactics – such as requiring agents to recognise individual shortcomings in their professional realm, examine the effects of such faults, and individuate opportunities for improvement – resilience can prosper. In this sense, resilience can be considered as a building block of psychological capital¹³⁷. According to Giustiniano, the aforementioned practice of failure recognition, if executed in a psychologically safe environment, is pivotal to develop resilience at the collective level. Indeed, accountability

¹³⁵ Ibidem.

¹³⁶ Linnenluecke, "Resilience in Business and Management Research: A Review of Influential Publications and a Research Agenda.".

¹³⁷ Luthans, Fred, James B. Avey, Bruce J. Avolio, Steven M. Norman, and Gwendolyn M. Combs.
"Psychological Capital Development: Toward a Micro-intervention." *Journal of Organizational Behavior* 27, no. 3 (2006): 387-93. doi:10.1002/job.373.

and psychological safety are fundamental assets in resilient groups¹³⁸. Conducting numerous further researchers on psychological capital, Luthans revealed in studies with Bruce J. Avolio, James B. Avey, Steven M. Norman, and Carolyn M. Youssef, respectively, positive correlations between the latter and organisational performance, job happiness, and work satisfaction¹³⁹. Moreover, PsyCap and work-related effects were also at the centre of Avey's, Luthans', and Susan M. Jensen's examination, discovering negative correlations between the same and personnel stress, willingness to quit, and job hunting. Indeed, for agents to better confront workplace stress, the authors offer concrete strategies to leverage and cultivate agents' psychological capital¹⁴⁰. Formulated as an element of PsyCap and deemed subject to administrative interposition, resilience in this research stream became designated as an acquirable quality that can be calculated and developed.

The second research branch related to resilience that emerged after the 9/11 attacks concerned the adaptability of business models. As Linnenluecke argues, the focal point resided in underpinning how organisations adapt, adjust, and transform their line of business to an environment constantly reshaping, preferably before they are coerced into doing so by external variables. Thus, research efforts recalled Staw's and Meyer's theoretical approaches, focusing on fostering resilience in companies and organisational processes resulting in efficacious or inefficacious responses to adverse and exogenous change¹⁴¹. Two ingenious authors explicating this analytical lens have been Sutcliffe and Timothy J. Vogus. In their Organizing for Resilience written in 2003, they argue academics have mistakenly focused on dysfunctional and maladaptive cycles of organisational behaviour in a rather deterministic fashion. Indeed, organisations withstanding adversity have been assumed as necessarily rigid, pathological, and unreasonable in response. Undoubtedly, erroneously, as several entities had proven to adjust and thrive amidst disasters. Resilience is precisely identified as the explanatory variable to appreciate the difference between survivors and forfeiters. Defined as the maintenance of a favourable adjustment in distress situations, Sutcliffe and Vogus re-embrace a processual approach, stressing the attainability of resilience as a fundamental asset to ensure adaptability.

¹³⁸ Giustiniano, Clegg, Pina e Cunha, and Rego, "The diffusion of resilience via cross-level interactions.".

¹³⁹ Luthans, Fred, Bruce J. Avolio, James B. Avey, and Steven M. Norman. "Positive Psychological Capital: Measurement And Relationship With Performance And Satisfaction." *Personnel Psychology* 60, no. 3 (2007): 541-72. doi:10.1111/j.1744-6570.2007.00083.x; Luthans, Fred, and Carolyn M. Youssef. "Emerging Positive Organizational Behavior." *Journal of Management* 33, no. 3 (2007): 321-49. doi:10.1177/0149206307300814.

¹⁴⁰ Avey, James B., Fred Luthans, and Susan M. Jensen. "Psychological Capital: A Positive Resource for Combating Employee Stress and Turnover." *Human Resource Management* 48, no. 5 (2009): 677-93. doi:10.1002/hrm.20294.

¹⁴¹ Linnenluecke, "Resilience in Business and Management Research: A Review of Influential Publications and a Research Agenda.".

Their conceptualisation, comprising both continuing pressures from minor internal disturbances and grave disruptions due to external factors, depicts a rich theoretical heritage, incorporating elements from both the reliability and response-to-exogenous-threats theoretical branches. Encouragingly, the authors state that resilience can be cultivated through fairly straightforward processes – relaxation of control, employment of slack, greater information handling – grounded on individual, collective, and organisational dynamics that generate or preserve resources in a manner adequately convertible, malleable, storable and flexible. Be they structural, emotional, cognitive, or relational¹⁴².

Gary Hamel and Liisa Välikangas published in the equivalent year The Quest for Resilience, which commences with the provocatory statement: "Call it the resilience gap. The world is becoming turbulent faster than organizations are becoming resilient. The evidence is all around us"¹⁴³. In the enthralling article, innovation and renewal are proposed as supplemental critical elements to cultivate resilience and subsist, enabling organisations to foresee and calibrate regularly and steadily to a wide variety of disturbances. Success, according to the authors, had become impressively volatile, rendering a vast array of companies, once protected by regulatory protection, oligopolistic practices, stable products paradigms, first-mover advantages, and high entry barriers easy preys. Whilst corporations could once survive performing little or no alteration to their business models, changing times decreed mandatory for endurance to embrace diversity. Once grounded on momentum, success now inexorably depended on resilience, defined as the capacity to reinvent business models and tactics to evolving contexts dynamically. Thus, resilient entities must perpetually express such ability, anticipating and adjusting to secular drifts. Bouncing back just once is a luxury no organisation desiring to survive can possess. Moreover, Hamel and Välikangas argue that firms aiming to foster resilience are required to overcome four challenges: cognitive, strategic, political, and ideological. The first implies avoiding arrogance, nostalgia, and denial to grow profound awareness of circumstances and their effects in order to anticipate them; the second concerns formulating a vast array of novel solutions and alternatives to existing strategies; the third refers to the ability to experiment, allocating resources from past products to new projects; the last advocates for adopting a culture of continuous rather than sporadic innovation. In particular, the authors invite companies to embrace paradoxes, abandon optimisation-centred

¹⁴² Sutcliffe, Kathleen M., and Timothy J. Vogus. "Organizing for Resilience." In *Positive Organizational Scholarship*, by Kim S. Cameron, Jane E. Dutton, and Robert E. Quinn, 94-110. San Francisco: Berrett-Koehler, 2006.

¹⁴³ Hamel and Välikangas, "The Quest for Resilience.".

mentalities and foster strategic resilience, different from its operational counterpart as rooted in the capacity of perpetual exploration for renewal. Companies, for instance, are far better off when striking an equilibrium in their workforce between engineers and heretics. Overall, overcoming the aforementioned issues nurtures resilience, elevated as the ultimate and most crucial factor to gain and preserve competitive advantage¹⁴⁴.

In recalling Meyer's conceptualisations, Jody H. Gittell, Cameron, Sandy Lim, and Victor Rivas advocate in Relationships, Layoffs, and Organizational Resilience the importance of preserving relational reserves to foster organisational resilience in times of strain. By examining the United States airline industry's response to the 9/11 terrorist attacks, the authors suggest that airlines struggling to recover in the long term were those that engaged more extensively in layoffs. Initially designed to promote financial solidity, such a practice ultimately hindered business restoration. Indeed, implemented due to a deficit in financial and slack resources such as the availability of cash flow and low debt levels, its benefits could be appreciated merely in the short term. Consequently, according to the authors, organisations ought to operate in a manner that enables the creation and accumulation of additional reserves to retain the opportunity to demonstrate commitment to employees when challenging periods befall. Indeed, relationships maintenance proves essential for organisations to promptly recoil to a solid performance, as relational capital represents a chief element for operational success¹⁴⁵. Further studies in this research stream converge towards cultivating slack resources to withstand adversities, exposing the contraposition between seeking efficacy and efficiency. Notwithstanding, clearer indications had yet to be developed concerning the design of business models and resource allocation in light of such paradox 146 .

Furthermore, the inherent vulnerability of supply networks was exposed by the 2001 terrorist attacks' effects, rippling through them in virtue of their interdependence and generating the third branch of research centred around the need to design resilient supply chains. James B. Rice and Federico Caniato supported this argument in their paper *Building a Secure and Resilient Supply Network*. The authors portray the intrinsic fragility of supply networks to disruption, illustrating, for instance, how the failure of a single component in the system could result in its entire collapse. Moreover, the scenario is further exacerbated when

¹⁴⁴ Ibidem.

¹⁴⁵ Gittell, Jody Hoffer, Kim Cameron, Sandy Lim, and Victor Rivas. "Relationships, Layoffs, and Organizational Resilience." *The Journal of Applied Behavioral Science* 42, no. 3 (2006): 300-29. doi:10.1177/0021886306286466.

¹⁴⁶ Linnenluecke, "Resilience in Business and Management Research: A Review of Influential Publications and a Research Agenda.".

considering that the frailties were evinced both in the trading partners and the United States government agencies participating in the goods supply and transportation infrastructure. Thus, according to the authors, the novel critical scenario required remodelling to ensure secure and resilient supply chains to absorb shocks and warrant regular supply chain operations in the aftermath of hindrances¹⁴⁷. Martin Christopher and Helen Peck further developed the concept in *Building the Resilient Supply Chain* published in 2004, underlining that out-sourcing strategies and globalisation generated progressively intricate networks of interrelated organisations. These are subject to enhanced systemic risks that threaten operational continuity across the broader supply chain, calling for the need to devise strategies embodying a heightened level of resilience¹⁴⁸. Defined as the capability of a system to resume its status quo or reach a novel and more desirable state following disruption, resilience is fostered through flexibility and agility; with the former being ensured by creating slack or redundant resources and the latter being defined as the ability to react promptly to unexpected alterations to demand and supply¹⁴⁹.

Additionally, in *Managing Disruption Risks in Supply Chains*, Paul R. Kleindorfer and Germaine H. Saad focus on managing risks in supply chains deriving from disturbances to regular operations. Two fundamental practices emerge for dealing with disruptions: the first implies promoting activities and strategies to diminish the risks' incidence and gravity both through the supply network and within the businesses; the second concerns attaining an augmented faculty of supply chain participants to readily absorb risks without incurring significant unfavourable impacts and operating disruptions. In particular, resilience is referred to within the ten principles proposed by the authors to conduct risk specification, assessment, and mitigation tasks. Flexibility and mobility of resources – ensured, for instance, through inputs fungibility in modular designs and delayed differentiation – foster resilience, which, in turn, hedges risks and requires rigorous attention when designing supply chains. Further studies in this research stream, including Yossi Sheffi's and Rice's *A Supply Chain View of the Resilient Enterprise*, focus on developing resilience within and across supply chains and networks¹⁵⁰. Overall, flexibility, agility, mobility, and redundancy are elevated as critical

¹⁴⁷ Rice, James B., and Federico B. Caniato. "Building a Secure and Resilient Supply Network." *Supply Chain Management Review* 7 (September 2003): 22-30.

¹⁴⁸ Christopher, Martin, and Helen Peck. "Building the Resilient Supply Chain." *The International Journal of Logistics Management* 15, no. 2 (2004): 1-14. doi:10.1108/09574090410700275.

¹⁴⁹ Kleindorfer, Paul R., and Germaine H. Saad. "Managing Disruption Risks in Supply Chains." *Production and Operations Management* 14, no. 1 (2009): 53-68. doi:10.1111/j.1937-5956.2005.tb00009.x.

¹⁵⁰ Yossi Sheffi and James B. Rice Jr. "A Supply Chain View of the Resilient Enterprise." MIT Sloan Management Review. October 15, 2005. Accessed May 01, 2021. https://sloanreview.mit.edu/article/a-supply-chain-view-of-the-resilient-enterprise/.

elements to ensure business continuity. Moreover, as illustrated, organisational practices advised to attain these features range from implementing diverse transport modalities, fostering differentiation among suppliers, designing modular arrangements to isolate impacts, and promoting quick detection, information dissimilation, and proactive reaction capabilities diminishing the load capacity of disruptive events¹⁵¹.

Regarding novel research efforts, most were made towards identifying organisations' resilience potential in advance of the manifestation of resilient or non-resilient reactions. Linnenluecke and Andrew Griffiths explicate such an approach in their work Assessing Organizational Resilience to Climate and Weather Extremes: Complexities and Methodological Pathways. Published in 2012, the paper proposes four diverse methods to assess organisational resilience: business interruption loss models (where the difference between the estimated and actual impact of a disruption is calculated), resilience indicators (concerned with measuring features regarding impact resistance and rapidity), scenarios (engaging in strategic planning on projected events), and identification of thresholds (detecting irreversible rupture points of organisational functioning)¹⁵². Concurrently, academics such as Kevin Burnard and Ran Bhamra, who published in 2011 Organisational Resilience: Development of a Conceptual Framework for Organisational Responses, suggested that additional focus should be directed to the timing between the detection of a threat and the mobilisation of an organisational response, as well as to characteristics leading to resilient organisations. Integrating various conceptualisations, the authors intricately elaborate resilience as the emergent feature of organisational complexes related to the intrinsic and adaptive attributes and abilities that allow a system's adaptive capability in times of strain. Organisational resilience's mechanisms thus attempt to ameliorate an organisation's contextual mindfulness, diminish organisational exposures to systemic risk circumstances, and reinstate effectiveness in the aftermath of turbulences¹⁵³.

Moreover, analysing a shooting at an American business school, in 2009 Edward H. Powey offers a model to understand how resilience, interpreted as an adaptive process, can be activated through social mechanisms in times of crises. The author defines resilience as a dormant

¹⁵¹ Craighead, Christopher W., Jennifer Blackhurst, M. Johnny Rungtusanatham, and Robert B. Handfield. "The Severity of Supply Chain Disruptions: Design Characteristics and Mitigation Capabilities." *Decision Sciences* 38, no. 1 (2007): 131-56. doi:10.1111/j.1540-5915.2007.00151.x.

¹⁵² Linnenluecke, Martina K., and Andrew Griffiths. "Assessing Organizational Resilience to Climate and Weather Extremes: Complexities and Methodological Pathways." *Climatic Change* 113, no. 3-4 (2011): 933-47. doi:10.1007/s10584-011-0380-6.

¹⁵³ Burnard, Kevin, and Ran Bhamra. "Organisational Resilience: Development of a Conceptual Framework for Organisational Responses." *International Journal of Production Research* 49, no. 18 (2011): 5581-599. doi:10.1080/00207543.2011.563827.

capability of organisations that cultivate it employing social exchanges and relationships. Additionally, resilience can be identified when businesses confront adversities and is embedded in the social networks of organisational members who activate it when required. Such practice is prompted and employed through three processes: liminal suspension, which implies the transformation of existing relational structures and the development of novel relational connections that span above and beyond functional and organisational boundaries; compassionate witnessing, which entails being carefully mindful, empathetic towards others, and sharing and connecting, thus embodied by individuals' and groups' sympathetic behaviours, interactions, and actions; and relational redundancy, which concerns the ways in which interpersonal interactions overlay and span beyond immediate social reference groups. In this sense, relational redundancy illustrates the influence of individual acts on broader social entities internal and external to the impacted complex¹⁵⁴.

In contemporary studies, a number of significant trends concerning resilience's future research trajectory can be detected. The first exposes that academics have remained concerned with psychological capital cultivation and employees' resilience comprehension. For instance, novel examinations have integrated unseen variables such as cross-cultural considerations and their impact on PsyCap enhancement, as discussed by Maren Dollwet and Rebecca Reichard in Assessing Cross-cultural Skills: Validation of a New Measure of Cross-cultural *Psychological Capital*¹⁵⁵. The second trend shows that scholars have sustained the pursuance of supply chain resilience analyses, in particular, to compensate for the void of empirical investigations that characterised the field. These efforts generated deeper understandings of how elements such as the administration of internal relationships in organisations by means of knowledge distribution, interconnectedness, and inventory management affect resilience. In addition, studies commenced focusing on the role of associations among public and private entities, and community, stakeholders, and governmental assistance in developing organisational resilience, suggesting a connection between institutional support and societal involvement in encouraging resilience in both communities and businesses¹⁵⁶. Thirdly, exposure to new global threats such as terrorism and climate change has sparked energised research efforts towards creating organisations' and supply chains' resilience to confront these

¹⁵⁴ Powley, Edward H. "Reclaiming Resilience and Safety: Resilience Activation in the Critical Period of Crisis." Human Relations 62, no. 9 (September 2009): 1289–1326. https://doi.org/10.1177/0018726709334881.

¹⁵⁵ Dollwet, Maren, and Rebecca Reichard. "Assessing Cross-cultural Skills: Validation of a New Measure of Cross-cultural Psychological Capital." *The International Journal of Human Resource Management* 25, no. 12 (2013): 1669-696. doi:10.1080/09585192.2013.845239.

¹⁵⁶ Linnenluecke, "Resilience in Business and Management Research: A Review of Influential Publications and a Research Agenda.".

contemporary challenges. Inspiring studies have been dedicated to averting the eradication of the life-preserving infrastructures generated by ecosystem equilibrium. In conjunction, analyses have focused on organisational practices aimed at minimising the interconnectedness embedded in significantly intricate and frail systems such as supply networks. Moreover, in developing countries distressed by conflicts, academics have initiated investigating entrepreneurship and enterprise resilience that enable the conduction of business processes in such precarious and risky environments¹⁵⁷.

Finally, a thorough examination has been conducted to appreciate the evolution of resilience's use in the managerial and organisational theoretical realm. Several aspects can be evinced from its development, first of which is the presence of a rich academic heritage that underlines the relevance of the subject and the need to conduct further studies to assist individuals, communities, and organisations to cultivate what is deemed as one of the most relevant skills to possess nowadays: resilience. Indeed, although a plethora of diverse interpretations, definitions, practical advice, and analytical lenses can be appreciated within the field, occasionally expanding into different horizons, a common belief inexorably emerges: resilience is pivotal to endure and thrive in this ever-increasing intricate world. Whether its growth can be fostered through enhanced psychological and relational diversification, the presence of slack resources and redundancy, the acceptance of ideological and operational paradoxes, the ability to welcome strategic and organisational design alterations, or the capacity to improvise bringing order through chaos, a heightened attentiveness will advantage those entities that have had the boldness to pursue it. Although it might not be immediately evident, such a review was fundamental for conducting a precise and well-grounded analysis of resilience during the Global Financial Crisis and devising valuable managerial recommendations for organisations striving to prosper in the forthcoming business environment. Intuitively, a building must be constructed on solid foundations to eschew collapse. As mentioned, the ambiguity surrounding the notion's ubiquitous character necessitates the creation of tools to navigate effectively amidst the vast array of conceptualisations, forasmuch this averts at least two remarkably dire risks. The first concerns not ascribing to the issue the seriousness it deserves, and the second regards formulating superficial inferences and organisational advice, inevitably stemming from an insubstantial examination. It is worth noting that the former preoccupation arises from an observed negative bias towards investigations on resilience, precisely in virtue of its recent inflated popularity.

¹⁵⁷ Ibidem.

Notwithstanding, it is assumed that such adversity exists primarily due to a marginal understanding of the notion and its copious, multifarious, and empirical theoretical background, whose unveiling was hopefully contributed to by this thesis. Lastly, and perhaps even more significantly, a superficial comprehension of the concept would render exceptionally problematic to grasp the reasons behind the advocated potential synergy between organisational theories on resilience and virtue ethics, whose brilliance and elaborateness will be exposed hereafter.

2.2 In medio stat virtus: a Gaze into Virtue Ethics

Virtue ethics can be understood as one of the three main theoretical stances in the broader field of normative ethics, a branch of moral philosophy focused on principles of what is morally righteous or wrong and with the devising of moral standards that express propositions of how agents ought to act and live. The chief question in normative ethics revolves around identifying the manner to arrive at and justify fundamental moral rules. The other two approaches comprised by the field are deontology and teleology - more notoriously referred to as consequentialism. Whilst the former is centred on the intrinsic righteousness of acts, the latter focalises on the goodness of the consequences brought forward by the act itself. Hence, deontology constructs criteria for ethical principles on concepts such as duty, obligation, right and wrong, with actions deemed necessary being so in virtue of their inherent righteousness. Whereas consequentialism builds ethical principles on notions of the good, the desirable, and the valuable, prompting agents to engage in specific actions in light of the value of their consequences¹⁵⁸. In other words, according to a consequentialist, an action cannot be considered right in itself as its righteousness is ultimately a function of the goodness of its results. Illustrious philosophers have contributed to the aforementioned branches, with Immanuel Kant's theorisations being considered one of the most pivotal influences on deontological thought¹⁵⁹, and several authors ranging from Jeremy Bentham to John Stuart Mill, Henry Sidgwick, and Peter Singer advancing consequentialist propositions¹⁶⁰. Intriguingly, virtue ethics departs from such conceptualisations as rather than providing

¹⁵⁸ Rodriguez, Emily, and Brian Duignan. "Normative Ethics." Encyclopædia Britannica. May 2020. Accessed May 02, 2021. https://www.britannica.com/topic/normative-ethics.

¹⁵⁹ Alexander, Larry, and Michael Moore. "Deontological Ethics." Stanford Encyclopedia of Philosophy. October 30, 2020. Accessed May 02, 2021. https://plato.stanford.edu/entries/ethics-deontological/#DeoThe.

¹⁶⁰ Sinnott-Armstrong, Walter. "Consequentialism." Stanford Encyclopedia of Philosophy. June 03, 2019. Accessed May 02, 2021. https://plato.stanford.edu/entries/consequentialism/.

principles that guide individuals in determining what they ought to do, it elevates the discourse to who they ought to be. Thus, crucially, instead of wondering which is to be considered the righteous action *hic et nunc*, the theory questions what type of person one should be in order to act always in the appropriate manner¹⁶¹.

Thus, virtue ethics attributes primary importance to the virtues and vices – or moral character – of agents, with theorisations and normative notions of virtue ethical theories being grounded on them. Whilst a utilitarian would justify aiding someone in need on the based on the action maximising the good and a deontologist on the grounds that it follows a moral principle, a virtue ethicist would argue the act is valuable as assisting an agent would be generous. Plato and Aristotle can be identified as the western fathers of such theory, whereas Confucius and Mencius are acknowledged as the eastern founders. A fundamental contemporary work encouraging a renewed attention to the field has been Gertrude E. M. Anscombe's Modern Moral Philosophy, whereby criticising a wide array of thinkers pertaining to the deontological and consequentialist schools of thought, the author expresses a severe dissatisfaction with both approaches, advocating greater attentiveness to Aristotelian concepts. For instance, according to Anscombe, Joseph Butler was naïve with respect to human conscience, David Hume has averted the inclusion of ethical judgements and sound justifications in his definition of truth, Kant's universalisable maxims' rule is useless as inconclusive, Bentham and Mill are neglectful of the intricacies embedded with the notion of pleasure, and the latter additionally fails to provide proper descriptions of actions that ought to be performed under the principles of utility. Such criticisms culminate in the author's assertion that, in the philosophical framework of the time, an explanation of how an unjust man or action are bad was still required. A constructive step in this direction would entail yielding attentiveness to issues central in virtue ethical theories such as moral wisdom, education and character, relationships and emotions in moral life, motives, virtues and vices, and how individuals ought to be and live¹⁶².

Three notions deriving from the theory's Aristotelian and ancient Greek tradition are particularly relevant within this realm: the one of $\dot{\alpha}\rho\epsilon\tau\eta$ (arête) meaning virtue or excellence, $\phi\rho \dot{\sigma}\nu\eta\sigma\nu\zeta$ (phronesis) which is practical or moral wisdom, and $\epsilon\dot{\nu}\delta\alpha\mu\nu\nu\alpha$ (eudaimonia), typically interpreted as flourishing or happiness. A virtue can be described as an excellence regarding character. It is an agent's aptitude to feel, act, and react in specific distinguished

¹⁶¹ Alexander and Moore, "Deontological Ethics.".

¹⁶² Anscombe, G. E. M. "Modern Moral Philosophy." *Philosophy* 33, no. 124 (1958): 1-19. doi:10.1017/s0031819100037943.

manners. A relevant feature embedded in this framework is to comprehend the variety of reasons that can stand behind a particular action, as, for instance, a generous individual cannot be considered as such merely in virtue of it acting generously. Indeed, if the act was consequential, for example, to the fear of being judged or the prospect of receiving something in return, the agent committing it cannot be described as generous. In order to possess the trait of generosity, the motive must lie in the realisation that an alternative course of action would be ungenerous. Accordingly, a person is not truly honest if the reason for telling the truth is merely because it is the truth, as one can simultaneously possess the virtue of honesty and yet be tactful and discrete when adequate. In other words, lying is not necessarily wrong or does not prevent an agent from being defined virtuously honest if done, supposedly, to protect someone's feelings. The context and underlying reason are pivotal for the virtuousness or viciousness of acts, and thus, people. Hence, the agent's motives and choices concerning generous and honest actions should be consequential to its opinion of generosity and honesty, and therefore to the value attributed to both. This results in a natural predisposition of the entity to surround itself with generous and honest people, promote, and act - when possible and apposite - in such a way. The opposite is also observable: it will disdain dishonest and ungenerous characters, decisions, and actions not due to a universal rule or a utilitarian calculus but precisely for the value recognised in the alternative forma mentis¹⁶³.

Notwithstanding, as mentioned, a single dishonest act will not render an individual necessarily dishonest. Just as an occasional deed of charity is not enough to possess the disposition nor virtue of generosity. Gopal Sreenivasan well explicates this argument in his work *Errors about Errors: Virtue Theory and Trait Attribution*, where particular attention is granted to disprove the situationist argument of the fundamental attribution error, which connotes possessing an inflated belief in the relevance of character traits and dispositions, combined with the incapacity to recognise the influence of situational variables in shaping behaviour. Whilst situationist empirical findings suggest that it is hardly possible to possess character traits, doubting their existence, the author argues that these results barely weaken the virtue-theoretic postulation that specific individuals do indeed possess such dispositions. Sreenivasan deconstructs the results and assumptions posed by an investigation conducted by Hugh Hartshorne and Mark A. May, who – he states – have erroneously employed temporal stability (the regularity of behaviour over time), cross-situational observations (the consistency

¹⁶³ Hursthouse and Pettigrove, "Virtue Ethics.".

of conduct in diverse contexts), and an improper operationalisation of traits to derive the supposition that ascribing personality features to agents is inconceivable¹⁶⁴.

Particularly salient is the discourse on the operationalisation of character features, defined by Gilbert Harman as "relatively long-term stable dispositions to act in distinctive ways"¹⁶⁵. Generally, virtue theory refers to traits that may be thought of as inclinations to react in a distinctive manner to a specific situation. In John M. Doris' words, "a virtuous person will exhibit virtue-relevant behaviour in a given virtue-relevant eliciting condition"¹⁶⁶. This implies two aspects require clarification to comprehend a determined personality attribute: taking, for instance, honesty, it must be specified which reactions are to be affirmed as honestly-relevant behaviours, as well as which contexts should count as honesty-eliciting situations. The crucial and amusing caveat is whose specification is to be taken into consideration. Hartshorne and May would argue that an objective criterion defines whether an individual's attitude in a specific circumstance is honest or dishonest. Nonetheless, they do not contemplate the subjective perception of the agent undertaking the act. In other words, what for some is a deceitful practice might be, to others, an honest deed. The relativity of judgement lies in the eves of the beholder. This also implies that ascribing the possibility of defining someone as honest, for example, to cross-situational observations, is flawed at the outset, as an individual could be behaving, to its account, in a consistently honest manner. In contrast, external witnesses might deem some of his conduct honest and others dishonest¹⁶⁷.

Moreover, it surfaces the issue of the degree of relevance embedded in diverse measurements to categorise specific actions. That is the weight and pertinence particular behaviours hold to assume a person as dishonest correctly. Reasonably, pocketing a few pennies from the ground and shoplifting contribute to different extents to honesty assessment. Furthermore, even if evaluations of a determined behaviour related to a peculiar situation are equivalent, the variability of the action's underlying motives must still be reflected upon. In other words, normative sensitivity deserves notice. If a given act is sensibly labelled as dishonest yet the agents performing it have diverse reasons to engage in it, these are not irrelevant for the valuation. As mentioned, a kid lying to avoid a peer incurring trouble is reasonably not equal to one misleading for the attainment of a selfish interest. Even more

¹⁶⁴ Sreenivasan, Gopal. "Errors about Errors: Virtue Theory and Trait Attribution." *Mind* 111, no. 441 (2002): 47-68. doi:10.1093/mind/111.441.47.

¹⁶⁵ Harman, Gilbert. "Moral Philosophy Meets Social Psychology: Virtue Ethics and the Fundamental Attribution Error." *Proceedings of the Aristotelian Society* 99, no. 3 (1999): 315-31. doi:10.1111/1467-9264.00062.

¹⁶⁶ Doris, John M. "Persons, Situations, and Virtue Ethics." *Noûs* 32, no. 4 (1998): 504-30. doi:10.1111/0029-4624.00136.

¹⁶⁷ Sreenivasan, "Errors about Errors: Virtue Theory and Trait Attribution.".

crucially, if the goodness of the act supposedly justifies the declaring of the falsehood, it might be argued that such action does not fall within the paradigm of lying but – for instance – of protection, completely altering the behavioural assessment. An alternative hypothetical thought concerning compassion is worthy of illustration. Consider the deed of helping people in distress: if an individual is hurrying to a truly vital appointment, supposedly a surgery, and runs into someone requiring minor assistance, it would be arduous to state that the agent lacks compassion if failing to aid on that specific occasion¹⁶⁸. Thus, everyone who is said to possess the virtue of honesty, courage, generosity, prudence, and temperance, will reveal some grey areas, seldom acting in a deceitful, cowardly, selfish, reckless, and arrogant manner. This does not render the individual any less virtuous and quite arguably grants a much more practical and realistic fashion to virtue ethical theories, whose spectrum of applicability averts trivial polarisations. Being virtuous, in other words, is a matter of degree, context, and motive¹⁶⁹. Amusingly, its valuation seems to rest on a relatively balanced equilibrium of contraposing considerations, just as virtues themselves.

Phronesis, namely moral or practical wisdom, is another fundamental concept in virtue ethical theorisations that virtuous agents should exhibit. Indeed, it is a valid theoretic extension to the prior discussions as it aids in distinguishing between a virtuous and vicious individual. A virtuous person is expected to feel and consequently act in a morally good manner. Such assertion is subsequent to possessing virtuousness itself. Yet, as mentioned, there are instances in which a generous, courageous, compassionate, and honest agent is not truly virtuous and others in which one acting in the opposite fashion is not necessarily vicious. Thus, they also are not morally righteous or corrupt, respectively. Indeed, character traits which would otherwise be considered virtuous might occasionally be defective. To comprehend the distinction, one must understand the pivotal role of the forces underlying human action. Acts motivated by instincts or emotions are not equivalent to those engaged by reason or rational choice. Honesty, compassion, or courage might bring about malevolent deeds, as, for instance, possessing the virtue of courage does not merely entail having the readiness to face danger. If it were so straightforward, several children would be deemed as morally admirable. Oppositely, these are portraying to own *natural* virtue or ordinary usage. Notwithstanding, what they are lacking is precisely phronesis. Benevolent intentions are held by both the virtuous adult and the kind-hearted children, yet the latter are significantly more inclined to act in a faulty manner,

¹⁶⁸ Ibidem.

¹⁶⁹ Athanassoulis, Nafsika. "A Response to Harman: Virtue Ethics and Character Traits." *Proceedings of the Aristotelian Society* 100, no. 2 (2000): 215-21. doi:10.1111/1467-9264.00076.

as they are oblivious of the necessary knowledge required to act upon their intent. This does not imply that virtuous agents are infallible. They might fail to engage in desired and intended actions due to a deficit of knowledge, premised that the lack of cognisance is not liable in such events¹⁷⁰.

Thus, children or adolescents frequently damage those they initially intended to benefit, either because they do not know how to ensure their acts guarantee the supposed benefit or their comprehension of what is beneficial and damaging is limited and more than often wrong. Whereas children are hardly liable for such a deficit of knowledge, adults are sensibly blameworthy if they hold an erroneous understanding of what is favourable and what instead is unhelpful. Moreover, they are culpable if they engage in disruptive behaviours due to impulsiveness, recklessness, short-sightedness, thoughtlessness, or a lack of an objective rather than a subjective judgement of which course of action is appropriate. Knowing how to efficaciously ensure actual benefits is enclosed by the possession of practical wisdom. Those who truly own it will not incur the erroneous practice of hiding an unpleasant truth to an agent who strictly necessitates knowing it due to the wrong conviction that they are aiding it after all. Practical wisdom is the knowledge that allows individuals to efficiently act upon their helpful intentions, with these being predispositions to do the right thing. Two elements of phronesis are worth noting. Firstly, it can only be developed through life experience, as the salient moral characteristics of a determined situation might be the possible consequences of specific actions for the concerned individuals. Intuitively, such understanding can only be cultivated by undergoing several events, rendering evident in this scenario the reason behind children or adolescent's ignorance. Secondly, the practically wise person has the ability to recognise amongst differing variables those most relevant in a given situation. Contrarily to the adolescent, the wise agent is not obfuscated in judgement by the personal advantages embedded in an action if alternative to an honest, fair, or benevolent one. The practically wise have a profound comprehension of what is truly valuable in life. Consequently, they know how to conduct a virtuous existence¹⁷¹.

Four distinct branches of virtue ethical theorisations have developed in contemporary times. The eudaimonist conceptualisation of virtue ethics delineates virtues with respect to their liaison to eudaimonia. According to eudaimonists, we should cultivate virtues as they foster eudaimonia, with these precisely being defined as attributes that confer to or are a component

¹⁷⁰ Hursthouse and Pettigrove, "Virtue Ethics.".¹⁷¹ Ibidem.

of the latter. Agent-based virtue ethicist focus instead on explaining how an agent ought to act by referring to the motivational and dispositional states of the individual. In other words, an action's assessment or its normative properties are and must be contingent on ethical judgements regarding the inner life of those who undertake them¹⁷². Consequently, this results in a diminished emphasis on the consequences of the specific deeds. Hence, the virtuousness of an act or agent is a function of the actor's motivations. Target-centred virtue ethics, grounded on Christine Swanton's work Virtue Ethics: A Pluralistic View, focus on the manner to attain virtues, how these interact, and a feasible way to construct a theory of right action. Whilst agent-centred theories concentrate predominantly on incentive, target-centred theories focalise on whether an agent is successful in doing what a particular virtue is aimed to do. Each virtue possesses four main elements: the field (the general topic the virtue concerns), the basis of acknowledgement (what issue the virtue will address in the specific field), the target (the intended consequence of the virtue), and the mode of response (the manner by which the basis connects to the target). The righteousness of an action is consequential to the attainment of a determined target, and if a certain virtue is properly embodied, the target will be ultimately achieved¹⁷³.

Finally, Platonistic virtue ethics, as the name suggests, are inspired by Plato's theorisations. This is not surprising as in the illustrious philosopher's dialogues, great attention is given to queries on the nature of virtues such as wisdom, piety, justice, and courage. Timothy Chappell proposes a possible formula for this virtue ethical branch in *Knowing What To Do: Imagination, Virtue, and Platonism in Ethics* as "Good agency in the truest and fullest sense presupposes the contemplation of the Form of the Good". Thus, substantial attentiveness is granted to the contemplation of goodness, as agents by focusing on satisfying their passions, desires, needs, and thoughts obfuscate their view of the world and are oblivious to the good that surrounds them. Rather, they ought to detach from thoughts concerning the self to pursue a selfless, objective, and real consciousness. Such practice is related to virtues, with these being defined as traits that precisely aid to mould consciousness itself and contribute to a proper vision of reality¹⁷⁴. Although these theoretical streams are worth examination and have been extensively developed in the modern virtue ethical literature, the analytical lens this inquiry will adopt and further explore is the Aristotelian conception of virtue ethics. This is due both

¹⁷² Athanassoulis, Nafsika. "Virtue Ethics." Internet Encyclopedia of Philosophy. Accessed May 03, 2021. https://iep.utm.edu/virtue/#H2.

¹⁷³ Hursthouse and Pettigrove, "Virtue Ethics.".

¹⁷⁴ Chappell, Timothy. *Knowing What to Do: Imagination, Virtue, and Platonism in Ethics*. Oxford, United Kingdom: Oxford University Press, 2014.

to its utmost relevance, having inspired nearly the entirety of subsequent analyses, and to construct inferences that retrace as far as possible the origins of the theory, whose concepts are undoubtedly foundational in virtue ethical frameworks. Moreover, an in-depth investigation into virtue epistemology will be conducted, predominantly to propose a renewed vision of the Global Financial Crisis and expose its ethical peculiarities.

Comparably to Plato's and Socrates' postulations, Aristotle argues that virtues are central to conduct a well-lived life. Ethical virtues such as temperance, justice, and courage, are intricate social, emotional, and rational abilities, and to attain a virtuous or eudaimonic existence, one must mature a correct understanding of how goods such as virtue, honour, friendship, wealth, and pleasure combine in a harmonious ensemble. Moreover, to employ this overall appreciation to more specific cases, individuals ought to acquire, by means of proper education and habits, the capability to discern, in each instance, which path of action is the most suitable. Thus, as illustrated, phronesis cannot be developed merely by learning general dictates. Moreover, to deploy in all concrete instances – and in a suitable fashion – their general comprehension of well-being, agents must attain, through practice, the necessary social, emotional, and deliberative capabilities which enable them to do so. Two ethical treatises are pivotal amongst Aristotle's works: the Nicomachean Ethics and the Eudemian Ethics. Although both initiate with exploring eudaimonia, subsequently discussing the essence of virtue and the character features individuals require to live life in the best manner, the Nicomachean Ethics appears to have been composed after the Eudemian Ethics, further developing several concepts, such as the inferiority of conducting a political life as opposed to a philosophical one and the tight relation existing among ethical inquiry and politics itself¹⁷⁵. For such reason, the subsequent exposition of Aristotle's theories will be focused primarily on the former treatise.

Aristotle's initial thought revolves around solving the disagreements which arise from differences in judgement of what is best for human beings. Indeed, only after having settled such matter can individuals benefit from ethical inquiries. He outlines explicitly that ethics should not regard merely the theoretical realm, as not much can be truly attained from a sole pursuit of knowledge. Rather, cognisance is constructive insomuch it enables agents to realise their good through a more profound comprehension of what flourishing entails. The question he poses of what good is cannot be dismissed by providing a list of elements deemed as

¹⁷⁵ Kraut, Richard. "Aristotle's Ethics." Stanford Encyclopedia of Philosophy. June 15, 2018. Accessed May 04, 2021. https://plato.stanford.edu/entries/aristotle-ethics/.

favourable. Such a process would be arguably trivial, as, for instance, not much debate would surround the assumption that friendships, pleasure, honour, health, and virtue are enjoyable variables to possess. The real challenge emerges as one questions whether some of these goods can be thought of as more valuable than others. The illustrious philosopher's search for the good concerns the highest good, which he postulates to portray three fundamental features: it is preferable for itself, it is not preferable for the sake of another good, and the entirety of other goods are preferable for its sake. Thus, attaining eudaimonia is the highest end, and no agent ought to live well to obtain other additional objectives. Rather, these subordinate aims, such as honour, friendships, and wealth are valuable insomuch they foster well-being, not for representing well-being itself. The passage describing such assumption, found in Book I of the *Nicomachean Ethics*, is particularly fascinating:

"Since there are evidently more than one end, and we choose some of these (e.g. wealth, flutes, and in general instruments) for the sake of something else, clearly not all ends are final ends; but the chief good is evidently something final...Now we call that which is in itself worthy of pursuit more final than that which is worthy of pursuit for the sake of something else, and that which is never desirable for the sake of something else more final than the things that are desirable both in themselves and for the sake of that other thing, and therefore we call final without qualification that which is always desirable in itself and never for the sake of something else. Now such a thing happiness, above all else, is held to be; for this we choose always for self and never for the sake of something else, but honour, pleasure, reason, and every virtue we choose indeed for themselves, but we choose them also for the sake of happiness, judging that through them we shall be happy. Happiness, on the other hand, no one chooses for the sake of these, nor, in general, for anything other than itself¹⁷⁶."

Furthermore, to pursue their highest end, ergo happiness, individuals must discern which good or goods compose it. Aristotle argues that the process to do so is identifying the function of human beings, which according to him, entails the "activity of soul exhibiting virtue, and if there are more than one virtue, in accordance with the best and most complete"¹⁷⁷. The theoretical assumptions used to derive this function are particularly salient, as the philosopher aims to expose what differentiates human beings from other entities. After illustrating that equivalently to men, plants and animals possess lower capacities such as reproduction, growth, and perception, Aristotle states that what is peculiar to humans is the presence of a rational soul. Thus, the ability of men to guide themselves through reason separates humanity from

¹⁷⁶ Aristotle. "Book I." In *The Nicomachean Ethics*, translated by William David Ross, edited by Lesley Brown. Oxford World's Classics. New York: Oxford University Press, 2009. 1097a.20-1097b. ¹⁷⁷ Ivi, 1098a,15-20.

other species, enabling them to live a better life. Arguably, it is reasonable that the good of a human must be related to being human. Hence, happiness consists of utilising reason appropriately over the course of an entire life. Since virtue or excellence is required to do anything in a proper manner, living well entails performing activities instigated by the rational soul in accordance with perfect virtue. Moreover, it is intriguing to note that Aristotle expresses a processual rather than static conception of a well-lived life, as he does not describe happiness as a virtue but rather as a virtuous activity¹⁷⁸. Furthermore, although other goods – such as power, wealth, friendships - are deemed somewhat necessary for individuals to become virtuous and achieve eudaimonia, agents still hold the principal responsibility with regards to the attainment and employment of virtues¹⁷⁹.

The philosopher then differentiates between intellectual virtues or virtues of the mind and moral virtues or virtues of character. The former relate to the section of the soul involved with cognising, whilst the latter relate to the part that is able to follow reason yet is not itself capable of reasoning¹⁸⁰. In Book II, Aristotle examines moral virtue more closely, which, like the arts, is acquired by the repetition of the corresponding acts. Indeed, intellectual virtues owe their birth and growth to teaching, and moral virtues develop as a consequence of habit. Thus, no moral virtue arises in individuals by nature, "for nothing that exists by nature can form a habit contrary to its nature"¹⁸¹. These are cultivated through their exercise and learnt by practicing them. An agent becomes just, courageous, and temperate by performing acts of justice, courageousness, and temperance. From the same causations and processes, virtue is both nurtured or destroyed: just as good and bad lyre players are manifested through playing, equivalently, by acting in a brave or fearful manner in circumstances of danger, courageous or cowardly characters emerge. For such a reason, individuals' activities are crucial, as traits are forged through exhibiting determined behaviours in action¹⁸². Yet, two phases must be undergone for human beings to become ethically virtuous and practically wise. Firstly, beneficial habits must be cultivated from an early stage. Secondly, phronesis must be attained as reason is amply matured. Nonetheless, it is not implied that ethical virtues are entirely acquired before employing practical wisdom. Rather, only when phronesis is exhibited concurrently with the former can these be truly accomplished¹⁸³.

¹⁷⁸ Ivi, 1098b.10-1099a.30.

¹⁷⁹ Aristotle, "Book III", 1113b.5-30.
¹⁸⁰ Aristotle, "Book I", 1102a.5-1103a.10.

¹⁸¹ Aristotle, "Book II", 1103a20.

¹⁸² Ivi, 1103a.20-1103b25.

¹⁸³ Aristotle, "Book VI", 1144b.5-1145a.10.

Aristotle delineates twelve virtues in Book II. The virtue of courage lies in the mean between feelings of fear and confidence, as the man who exceeds in fear is a coward and the one who exceeds in confidence is rash. Temperance refers to pains and pleasures and is an intermediate between being insensible and self-indulgent. Liberality concerns giving and receiving money, representing a mean between the excess, meanness, and the defect, prodigality. The prodigal individual takes too little and spends too much, whilst the mean agent takes too much and spends too little. The liberal man is distinguished from the magnificent by reason of the amount of money they manage: the former deals with small sums whilst the latter with large ones. The virtue of magnificence is the mean between a deficiency, symbolised by niggardliness, and an excess, vulgarity¹⁸⁴. Concerning matters of honour and dishonour, the excess is described as empty vanity whilst undue humility is the deficiency, with the mean being proper pride. Furthermore, in a similar fashion of liberality and magnificence, small honours are distinguished from great ones, with a deficiency in the desire for honour representing an unambitious man, and an excess of the same depicted the ambitious one. No name is provided to the agent who achieves an intermediate in this particular case, which can be postulated to possess "proper ambition". Good-temper, irascibility, and unirascibility refer to the mean, excess, and deficiency, respectively, with regards to anger. Moreover, Aristotle discusses additional intermediates regarding intercourse in actions and words, whose mean is praiseworthy, and the extremes are blameworthy. Regarding truth, the truthful man portrays truthfulness, being the intermediate between boastfulness and mock-modesty, representing exaggeration and understatement, respectively¹⁸⁵. In matters related to providing amusement, denominated pleasantness, the virtue of ready-wit is the intermediate between the excess, buffoonery, and the deficiency, boorishness. An additional virtue pertaining to the dimension of pleasantness is friendliness, whose intermediate disposition is embraced by the friendly man, the excess by the obsequious or flatterer, and the deficiency by the quarrelsome. Amusingly, the distinction between the obsequious and flatterer is determined by the presence (flatterer) or absence (obsequious) of an end in the mind of the agent displaying the disposition. With regards to passions, the virtue of modesty lies in the mean between shame and shamelessness, with the shameless man never being ashamed and the bashful always being so. Lastly, concerning the feelings of pleasure and pain related to the fortunes of one's neighbours, righteous indignation is the intermediate amongst spite and envy, representing a man pained

¹⁸⁴ Aristotle, "Book II", 1107a.30-1107b.20.
¹⁸⁵ Aristotle, "Book II", 1107b.20-1108a.30.

towards undeserved good fortune. Instead, the spiteful is an agent that rejoices undeserved good fortune and the envious is pained with regards to all good fortune¹⁸⁶.

Although being in contexts requiring proper actions and emotions fosters the development of a primordial form of ethical virtue, agents perfect their deliberative abilities and emotional responses as they reach a more comprehensive vision of human life, decreasing their dependence on other people and increasingly engaging in their own reasoning. Virtuous individuals feel fulfilled by exhibiting their virtuousness and avert internal conflicts concerning different behavioural paths, as they are not, for instance, perturbed by relinquishing a pleasure acknowledged as futile. Notwithstanding, the internal turbulences experienced by nonperfectly virtuous agents generate three diverse categories: the continent (enkratês), incontinent (akratês), and evil (kakos). A deficit of internal harmony is the chief element in each. Aristotle describes the first two as internally conflicted individuals who made a rational choice which was subsequently challenged by the emergence of a contraposing emotion, whose influence is not entirely under reason's control. The difference amongst the continent and incontinent lies in their ability to withstand these countervailing pressures¹⁸⁷. The first exhibit a higher degree of resistance than the latter, typically behaving as a virtuous individual would, albeit not being one. Oppositely, the evil, by reason of not deeming virtues as valuable, refute even the attempt to act virtuously. These are subdued by a tormented and perennial search for desire, namely pleonexia, which, although should result in an undivided mind centred on the pursuance of these cravings, tears them profoundly apart, overwhelmed by self-loathing and frustration. They might also engage vehemently in wrongful designs, but they will deplore their actions in time because obstructing them from reaching their objectives. Indeed, any act performed ultimately emerges as improper for goal achievement¹⁸⁸. Behaving ethically loses relevance as desires gain predominance amongst the agent's priorities, prompted by psychological influences that are not entirely rational. It must be noted that although cultivating proper emotional reactions and habits in childhood and selecting beneficial ends as adults is fundamental, a degree of exposure to the aforementioned effects persists even when relative virtuousness has been developed. Indeed, exhibiting a fully virtuous character is anything but elementary.

Thus, increased efforts should be allocated to foster ethical virtue, described, as mentioned, as a predisposition to experience beneficial feelings which are consequential to proper habits.

¹⁸⁶ Aristotle, "Book II", 1108a.30-1108b.10.

 ¹⁸⁷ Aristotle, "Book VII", 1145a.15-1145b.20.
 ¹⁸⁸ Aristotle, "Book IX", 1166a.5-1166b.30.

In Aristotle's words: "the virtue of man will be the state of character which makes a man good and which makes him do his own work well"¹⁸⁹. The argumentative construction conducing to such postulation is particularly intriguing. The philosopher stresses that three elements are found in an agent's soul, ergo states of character, passions, and capacities with virtue pertaining to one. Passions are intended as feelings that accompany pleasures or pain, including fear, appetite, envy, longing, joy, and confidence. Capacities enable individuals to experience such feelings – feeling joy, being distressed, or becoming enraged. Whilst states of character are how agents stand in relation to such passions, which can be either appropriately or inappropriately. For instance, with regards to anger, one stands badly when it feels it too fervidly or mildly, and well when it feels it in an intermediate manner. Hence, virtues or vices are not to be identified with passions as agents cannot be assumed to be good or bad for merely experiencing joy, fear, or envy. They are neither to be praised or blamed for feeling confident or intimidated. Indeed, as exquisitely exposed by the philosopher:

"for the man who feels fear or anger is not praised, nor is the man who simply feels anger blamed, but the man who feels it in a certain way"¹⁹⁰.

Oppositely, being virtuous or vicious can be regarded as blameworthy or praiseworthy. Feelings do not emerge by choice but acting virtuously or viciously upon them is subjected to the agent's will. For the equivalent motive, capacities cannot be considered virtues. After all, individuals are, once more, not to be defined as good, bad, blameworthy, or praiseworthy, merely for having the capability of experiencing passions. Thus, virtues ultimately must be states of character, in accordance with the definition previously provided. Additionally, this implies that the mere presence or deficit of knowledge cannot be elevated as an exhaustive variable to determine possible virtuousness¹⁹¹.

In such theoretical exploration, elements pertaining to Aristotle's iconic doctrine of the mean can start to be appreciated. Indeed, each ethical virtue is a state in-between two extremes, one embodying excess and the other deficiency. It must be noted that, crucially, according to the philosopher, the mean is subjective to each individual and its specific circumstances, implying a universal one concerning agents' state cannot be determined. This is explicated by distinguishing between the intermediate in the object and the intermediate relative to men. The former can be defined as a point equidistant from extremities, such as six when lying between

¹⁸⁹ Aristotle, "Book II", 1106a.20.

¹⁹⁰ Ivi, 1105b.30.

¹⁹¹ Ivi, 1105a.20-1105b.15.

ten and two. The latter is contingent on what is deficient or excessive for the agent itself, meaning that, for instance, if eating ten or two pounds is too much or too little for a determined person, it does not necessarily follow the proper amount will be six pounds, as this can be still overly abundant or not enough for a specific individual. A professional athlete and a beginner might necessitate exactly some more or less than that¹⁹². Thus, a thorough and careful awareness of the circumstances is needed to identify the mean, which is required for virtue. In particular, the concept finely worded in the following passage is worth depicting:

"Again, it is possible to fail in many ways (for evil belongs to the class of the unlimited, as the Pythagoreans conjectured, and good to that of the limited), while to succeed is possible only in one way (for which reason also one is easy and the other difficult—to miss the mark easy, to hit it difficult); for these reasons also, then, excess and defect are characteristic of vice, and the mean of virtue; For men are good in but one way, but bad in many¹⁹³."

Given that the proper response is contingent on the contextual features of a specific situation, a strong reaction or feeling is not necessarily wrong or extreme in Aristotle's conception. Moreover, the same applies to feeble inclinations. Nonetheless, the disposition in question should never reach the intensity for which it hinders reason, resulting in a loss of control.

Two main theoretical stances have risen from the doctrine of the mean: the first regards such assertion as a statement that every virtue lies between two vices of excess and deficiency; the second focuses on the virtuous agent's attempt to engage in intermediate acts between two refuted alternatives. This conception can prove itself as particularly problematic: whilst it is pretty straightforward to identify a midway approach in certain circumstances, it is hardly possible in others. For instance, deciding the sum of money to spend on a wedding gift is undoubtedly different from choosing whether to attend the wedding or prioritise an impellent duty. It is imaginable that agents possess the capacity to select a fair pecuniary amount for the present yet detecting the virtuous course of action is less immediate in the latter scenario. Not every matter can be interpreted quantitatively or solved arithmetically¹⁹⁴. Thus, this critique undermines the applicability of Aristotle's theory. Nonetheless, it can be argued that acting in accordance with the theory of the mean entails developing a broader consciousness of the several variables present in a specific context to select the most appropriate course of action within the presented framework. For instance, a juror that must decide whether a defendant is guilty will not have the possibility of acting in an intermediate fashion. Yet, it can decide to

¹⁹² Ivi, 1106a.25-1106b.25

¹⁹³ Ivi, 1106b.30.

¹⁹⁴ Kraut, "Aristotle's Ethics.".

consider all relevant elements pertaining to the case for his deliberative process not to be tainted by gullibility nor scepticism. Thus, he attempts to reach the mean by identifying a solution that averts giving too much or too little attentiveness to certain variables that must be regarded to produce a wise verdict¹⁹⁵.

However, it must be noted, that neither of the abovementioned theses are to be considered a protocol for decision-making. Rather, they aid to demonstrate both what is valuable about virtues and which qualities can be deemed such. Indeed, Aristotle argues that no ethical theory is able to provide a procedure for decision. Whilst the nature of virtue can be clarified, what an agent ought to do in each specific circumstance depends on the features of the circumstance itself, implying no universal rules can be derived to guide agents' actions. It is precisely in virtue of reason and its influence on deliberation that individuals are equipped with standards and measures that allow them to correctly judge the right course of action relative to any situation¹⁹⁶. For such reasons, the philosopher states that good agents' advice is to be sought and cherished as they have become exceptionally skilled at identifying the mean in troubling settings. Indeed, according to Aristotle, virtuous individuals should be emulated, and a valuable exercise involves questioning what, in a determined circumstance, a virtuous man would do. Finally, it is worth specifying that although a manual of general rules, as mentioned, is not conceivable, this should not result in the erroneous assumption that no emotion or subsequent act can be described as undeniably wrong. For instance, feeling spite or committing murder cannot be justified on any grounds. Intriguingly, the arguments to defend such claims are anything but tautological. Indeed, adultery is conceived as unacceptable because prejudicial to the valuable institution of marriage – which ought to be dictated by a rule of strict loyalty – by defaming the fundamental relationship between husband and wife. Thus, though ethics are irreducible to a mere set of rules, some are absolute¹⁹⁷.

A further exciting implication can be found in Aristotle's discussion on the relation of philosophic to practical wisdom, where he states that although every so often a virtuous agent confronts an ethical issue with the a priori postulation that virtuous activity constitutes happiness, more frequently a practical objective - such as supporting people in need represents his departing point. Their character ultimately dictates which projects they embark on, resulting in good people selecting worthwhile goals as their habits and dispositions enable them to identify which ends are valuable and attainable. On the other hand, defective agents

¹⁹⁵ Ibidem.

¹⁹⁶ Aristotle, "Book III", 1113a.10-1113b.5.
¹⁹⁷ Aristotle, "Book II", 1107a.5-25.

might also possess the required reasoning capabilities to achieve their ends, but these are typically worthless¹⁹⁸. Indeed, such inadequacy is to be ascribed to a lack of mastery over their passions. Finally, particular emphasis is placed on the role of noticeably resourceful agents, for these, usually commanding considerable financial resources and possessing significant influence and authority, stand naturally in an office of control and responsibility. For instance, political figures hold copious external resources which renders easier the attainment of virtue, and the status and role they embody places them in a privileged position to do the greatest for the good of the community. Nonetheless, the happiest form of life is the contemplative existence conducted by the philosopher, who, even by himself, can contemplate truth¹⁹⁹.

To conclude, hitherto an introduction to virtue ethics and an in-depth inquiry into Aristotle's conception have been offered. Particular focus has been granted to the Nicomachean Ethics, both for its intrinsic brilliance and to develop a deeper comprehension of the philosopher's theorisations, which will be subsequently employed to analyse resilience in the Global Financial Crisis and devise constructive managerial recommendations. Overall, Aristotle's approach can be appreciated explicitly for its attentiveness to agents' character improvement, concentrated on fostering virtuous actors rather than dictating mere rules. In this sense, his elevation in questioning whom individuals ought to be rather than what they ought to do can be undoubtedly defined as illuminating and innovative. Indeed, the right course of action reveals itself to the virtuously minded agent. Organisations, ultimately being constituted by people, can surely ponder upon their behavioural formation. Moreover, given that resilience itself can be deemed a mean between two opposite characteristics and is cultivated by embracing a series of paradoxes, it will prove essential in the further analysis to have absorbed Aristotelian virtue ethics. In the following chapter, an exposition of the Global Financial Crisis will be presented as required for the subsequent inquiries and exposition of the crisis itself with renewed analytical lenses.

¹⁹⁸ Aristotle, "Book V", 1143b.20-1144a.35.
¹⁹⁹ Aristotle, "Book X", 1177a.15-1178a.10.

CHAPTER III

A Metamorphic Vision of the Global Financial Crisis

3.1 The Inception of the International Cataclysm

The Global Financial Crisis, deemed one of the most severe crises experienced in the modern era, befell on the financial and economic system carrying catastrophic worldwide implications. Spanning through international boundaries and portraying significant interactive intricacies, the disaster unveiled the several vulnerabilities and tight interconnectedness characterising financial systems²⁰⁰. A leitmotif was precisely the interrelatedness of elements, exhibiting circular effects such that agents both originated and experienced the cause and consequence of their actions. Although a detailed enquiry of the credit crunch is worthy of a separate dedicated research, only the most salient features will be hereby exposed for the effectiveness and discursiveness of the analysis. Amongst the plethora of actors that have critically contributed to the crisis, a few of the most relevant include homeowners, investors, mortgage brokers and lenders, credit rating agencies, and investment banks. Albeit appearing isolated, a perilous string connecting them emerged as the catastrophe unravelled, with the common denominator being the hazardous pursuit of their evermore demanding individual interests. Afore the portrayal of the dynamics embedded in the crisis, a brief outline of the evolution of the financial system's regulatory framework is due, given its much debated role in enabling the occurrence of the crisis itself. In the aftermath of the Great Depression, characterised by widespread bank failures, the Glass-Steagall Act of 1933 was enacted to prohibit the engagement of commercial banks into businesses related to investment banking. Additionally, it necessitated the latter to invest insured deposits exclusively in low-risk

²⁰⁰ Shiller, Robert J. *The Subprime Solution: How Today's Global Financial Crisis Happened, and What to Do about It.* New Jersey: Princeton University Press, 2012.

investments, such as government bonds. By reason of such regulatory tightening, commercial banks were favourably deemed safer, yet critiques arose from the presumed excessive intervention of the government in private industries and towards the requirements carried by the act. Such sentiment pressured a wave of deregulation - allowing banks to enlarge their operations into more speculative investments rather than solely traditional mortgage businesses -, whose effects culminated in the 1980s with the default of almost half of the savings and loan associations or S&Ls, which required a bailout of \$130 billion by the government. In the 1990s, following a period of industry consolidation, characterised by several mergers and acquisitions, 40% of the banks were absorbed, and at the end of the decade, the largest four (including JP Morgan, whose thorough examination will be appreciated at a later stage), ended up managing half of the United States banking sector's assets by 2014. As the Glass-Steagall Act was partially abrogated in 1999, a limitedly regulated environment remerged, prompting the expansion of markets for novel products such as subprime mortgages, whose diffusion spread without close supervision from federal entities. As of 2005, major national banks were involved with a vast array of commercial and investment banking activities and further financial services. In addition, the novel economic scenario encouraged financial institutions to reduce their liquidity whilst increasing leverage, boosting their profitability, and inciting them to engage in products featuring higher risk²⁰¹.

The origins of the 2007 meltdown can be retraced to the formation and subsequent burst of the housing bubble in the United States, encouraged by the lowering of the Federal funds rate that plunged to 1% in 2003²⁰². Such a measure was implemented by Alan Greenspan, chairman of the Federal Reverse, who, in the wake of the dotcom bust, promoted economic recovery foreseeing potential deflation and financial deterioration, expanding circulating credit and fostering higher consumption²⁰³. Although the Federal Reserve has formally no direct impact on the interest levels of mortgages, it can indirectly influence them through the application of monetary policies that affect the price and volume of credit, resulting in a ripple effect on the interest rates received and adopted by banks and financial institutions²⁰⁴. Thus, by rendering

²⁰¹ Collis, David, and Ashley Hartman. "JPMorgan Chase after the Financial Crisis: What Is the Optimal Scope of the Largest Bank in the U.S.?" *Harvard Business School, Case*, no. 716-448 (August 2018). https://www.hbs.edu/faculty/Pages/item.aspx?num=50835.

²⁰² Singh, Manoj. "The 2007-08 Financial Crisis in Review." Investopedia. September 16, 2020. Accessed May 06, 2020. https://www.investopedia.com/articles/economics/09/financial-crisis-review.asp.

²⁰³ Mckibbin, Warwick J., and Andrew Stoeckel. "The Global Financial Crisis: Causes and Consequences." *Asian Economic Papers* 9, no. 1 (2010): 54-86. doi:10.1162/asep.2010.9.1.54.

²⁰⁴ Thangavelu, Poonkulali. "How the Federal Reserve Affects Your Mortgage." Investopedia. August 28, 2020. Accessed May 06, 2020. https://www.investopedia.com/articles/personal-finance/050715/how-federal-reserve-affects-mortgage-rates.asp.

particularly cheap the acquisition of liquidity, low interest rates foster indebting. During such an economic phase, lenders offered rock-bottom interest on mortgages, exploited by borrowers contracting loans. Moreover, the rate of return of safe bets such as the United States government treasury bills was affected by the appointed interest rate, prompting investors to seek alternative investment opportunities yielding higher returns. Thus, the 1% rate exhibited a twofold impact represented by the cost of borrowing for banks and the rate of return for investors.

Facilitated borrowing embeds, however, a subtle and threatening implication. It encourages banks to engage in high leveraging to enhance financing activities, amplifying profits at the cost of increased risk. Augmented gains nonetheless do not come for free. Although leverage can be substantially profitable, it entails a larger exposure to debt than the assets owned, rendering it highly hazardous. A trivial hypothetical scenario well explicates the concept: an individual's business is based on the purchase and resale of books, each costing \$100. A typical transaction would entail using \$100 of current assets to acquire one book for the equivalent price and selling it forward at \$110 for a profit of \$10. Adopting leverage, the agent could utilise \$100 to borrow \$1000, buy ten books and gain \$1100 from the resale. Repaying the debt with a 1% interest equal to \$10, minus its initial investment of \$100, the total profit amounts to \$90. Although herewith leverage emerges as particularly attractive, an additional variable, market clearance, must be introduced. If the business owner is unable to sell the entirety of the books, not only is he left with no income but the hefty debt and its interest must be honoured²⁰⁵.

Thus, financial institutions started to borrow conspicuously, generating massive volumes of mortgages and proceeds. Observing such substantial returns, investors sought a share of the profits, and Wall Street devised a strategy to satisfy all interests. The tactic lied in inflating the mortgage market by connecting the broad pool of prospective homeowners to investors through the collateralisation of mortgages. Such a design was specifically resourceful as home prices, experiencing an ever-ascending spiral, made the mortgage business exceptionally attractive²⁰⁶. The mortgage origination process initiates with a client's demand to acquire a house, who collects savings for the down payment and contacts a mortgage broker for the remaining amount. In return for a commission, the broker connects the former to a mortgage lender, who

²⁰⁵ The Financial Crisis Inquiry Commission. "Deregulation Redux." In *The Financial Crisis Inquiry Report: Final Report of the National Commission on the Causes of the Financial and Economic Crisis in the United States.* New York: Public Affairs, 2011. Accessed May 07, 2021. https://www.govinfo.gov/content/pkg/GPO-FCIC/pdf/GPO-FCIC.pdf.

²⁰⁶ Pritchard, Justin. "What Caused the Mortgage Crisis?" The Balance. August 28, 2020. Accessed May 07, 2021. https://www.thebalance.com/mortgage-crisis-overview-315684.

provides the necessary capital to allow the client to become a homeowner²⁰⁷. As mentioned, the deal is particularly appealing for all parties in virtue of the ever-increasing home prices. Investment banks sought the acquisition of mortgages, which lenders gladly provided in exchange for fees. The latter gained a quick profit from their selling operations, transforming the origination of mortgages into their primary objective. Moreover, the disposal to investment banks allowed lenders to write the assets off the books, passing on the associated risk. Thus, financial institutions engaged in aggressive borrowing, amassing thousands of mortgages, subsequently turned into investible instruments in the form of mortgage-backed securities. Also known as collateralised debt obligations or CDOs, these involve pooling a number of underlying assets – in this instance, mortgages – into a figurative container and dividing it into different slices or tranches, each representing different levels of risk²⁰⁸.

Collateralised debt obligations can be hypothesised as three piled up cascading trays, filled from the top with homeowners' flow of monthly instalments and spilling over to the following. The first tranche is thereby the most secure being the earliest to receive the influx. If part of the stream of payments is interrupted due to owners defaulting on their mortgages, the final tray might not receive the required capital to satisfy all investors. Thus, to compensate for the higher risk, lower tranches exhibit higher returns. Furthermore, financial institutions warranted for a fee the safest tranche with credit default swaps or CDSs, insurance contracts covering payment in case of default. The guarantee enabled investment banks to receive triple-A ratings on their top tranches from credit rating agencies, symbolising the safest investment grade and allowing them to be sold to a larger pool of investors seeking safe deals. The middle and bottom tranches were sold to banks and hedge funds, respectively, holding a corresponding risk appetite. Given that the underlying assets of MBSs were mortgages, the value depended on the payments of borrowers. Nonetheless, investment banks could foreclose the house in case of default with their value being perceived as ever-increasing, generating a hazardous assumption: the default would not have been a significant issue²⁰⁹.

This mechanism gratified the entirety of agents: investment banks gained conspicuous proceeds balancing their exposure; investors met their investing needs with a return higher than the prospected 1%; brokers and lenders profited from commission fees. Notwithstanding, this prompted the genesis of a vicious cycle. Investors sought additional CDOs inciting investment

²⁰⁷ Crotty, James. "Structural Causes of the Global Financial Crisis: A Critical Assessment of the 'new Financial Architecture'." *Cambridge Journal of Economics* 33, no. 4 (2009): 563-80. doi:10.1093/cje/bep023.

²⁰⁸ The Financial Crisis Inquiry Commission, "Before Our Very Eyes.".

²⁰⁹ Ibidem.

banks to request more underlying assets from the lenders. In turn, these pressured brokers to identify novel prospective homeowners. However, those that qualified for a mortgage already possessed one, implying no prime mortgages were left to originate. Thus, lenders started to issue mortgages with additional risk, not requiring initial down payments, proof of income, and occasionally not even documents, forgoing the standard due diligence practices of investigating an individual's financial background and solidity afore engaging in lending. Hence, as opposed to initiating mortgages with responsible homeowners, ergo prime borrowers, characterised by good credit, low debt-to-income ratio, and stable employment lenders turned to subprime buyers. These usually exhibited poor credit scores affected by their overdue past payments, high debt-to-income ratio, unstable employment, inadequate documentation of their ability to fulfil the instalments, and an overall outlook of solvability lower than required. Equivalently to the previous process, brokers earned a commission for intermediating between prospective homeowners and lenders. These traded newly originated subprime mortgages to investment banks, which restructured and resold them to investors promptly²¹⁰.

The cycle regained momentum, and all participants profusely profited, careless and neglectful of potential adverse implications. After all, as soon as the mortgage was delivered to the following scheme's pawn, so was the embedded risk, being written off from the books concurrently to its sale. The threat that subprime borrowers would not upstand their instalments was trivial as the underlying asset, the house, was assumed to increase in value over time, rendering potentially more profitable its repossession and sale rather than the collection of monthly payments. As for CDOs constructed from prime mortgages, those composed of subprime mortgages had to receive a credit rating. In virtue of the pooling mechanisms involved with collateralisation, the overall security rating obscured the asset's actual risk. As illustrated, the mortgage-backed securities were constituted by three tranches: the first senior level with triple-A rating with a risk profile comparable to a treasury bill, the second mezzanine debt with triple-B resembling a riskier but more profitable investment, and the last junior debt possessing a sub-investment grade comparable to a junk asset class²¹¹. The latter were precisely those with the highest probability of default, and it must be noted that eventually, the entirety of the pool was predominantly composed of subprime assets. Notwithstanding, in this circumstance, the problematic aspect of collateralisation was that CDOs originating as a

²¹⁰ Edey, Malcolm. "The Global Financial Crisis and Its Effects*." *Economic Papers: A Journal of Applied Economics and Policy* 28, no. 3 (2009): 186-95. doi:10.1111/j.1759-3441.2009.00032.x.

²¹¹ Tardi, Carla. "Collateralized Debt Obligation (CDO) Definition." Investopedia. September 2020. Accessed May 07, 2021. https://www.investopedia.com/terms/c/cdo.asp.

singular conglomerate were graded by credit rating agencies regardless of their actual composition. Indeed, whilst in the case of CDOs pooled with prime mortgages the ratings were assigned by reason of the contracts and contingent information provided, in the latter they were based upon inexistent or defective documentation, data, and assessments²¹².

Unsurprisingly, investment banks sought triple-A ratings from major players, such as Moody's, S&P, and Fitch, by reason of the scope and scale of possible investors being directly related to the investment grade of the security. Commanding massive amounts of capital, institutional entities such as mutual funds, pension funds, and insurance companies became a primary objective, whose attainment was possible only through safely graded investments. Concurrently, credit rating agencies were aware that a suboptimal rating would entail losing a client. Thus, they found themselves in a context closely resembling a framework pertaining to game theory, as each player was conscious that defecting would have resulted in the customer switching to the opponent. For instance, Fitch was mindful that an unsatisfactory rating would have implied a novel client for Moody's, and, in turn, Moody's was aware that the equivalent repercussions applied to its decisions. Consequently, in virtue of this analogous and simultaneous reasoning, it was no surprise that all attributed ratings were unjustifiably safer than reality²¹³.

Although the catastrophe was already brewing underneath the surface, it unfolded as the increase in house prices decelerated concurrently to a tightening of monetary policies enacted by the Federal Reserve. As subprime mortgages were characterised by adjustable rates pegged to the FED's rate of interest, these augmented consequently to the ventured measures. Moreover, a common practice was for borrowers to refinance their mortgage due to the increasing value of their property, enabling them to extrapolate the additional equity required for loan repayment. Notwithstanding, the higher value of the underlying asset did not offset the effects of surging interest rates. Thus, homeowners who were unable to repay instalments started defaulting and the junior tranche of CDOs progressively ceased to receive influxes of capital. Yet, investment banks, as recurrently stated, deemed it a tolerable issue, possessing properties whose value was frequently greater than the mortgages' book value and whose liquidation could profusely repay the remaining debt. However, as the triple-B and part of the triple-A tranches started collapsing, several – if not most – investors were left without capital inflow. As the number of defaulted mortgages augmented, so did the number of foreclosures,

²¹² Duignan, Brian. "Financial crisis of 2007–08." Encyclopedia Britannica, October 7, 2019. Accessed May 07, 2021. https://www.britannica.com/event/financial-crisis-of-2007-2008.

²¹³ The Financial Crisis Inquiry Commission, "Dissenting Views.".
inundating the housing market with additional supply. Thus, as the law of demand and supply dictates, with excess offering, prices plummet, and so did the real estate value. Ultimately, these events culminated in homeowners reimbursing mortgages on houses with a declining value. This resulted in an interesting problem, for they were paying more for the asset than its market value. In other words, they wondered the reason for which they were honouring a debt of \$200,000 when the property was now only worth \$70,000. Hence, two categories of borrowers emerged: those who could not repay the loan and those who decided not to²¹⁴.

Thus, a massive ripple effect was unleashed in the financial system. Lenders were attempting to sell mortgages to financial institutions with no success. Investment banks desperately sought buyers for their worthless collateralised debt obligations to no avail. Besides, investors already held massive amounts of toxic CDOs. Extensively exposed to millions and possibly billions of dollars in debt, several banks filed for bankruptcy. "Too big to fail" banks were bailed out. Others were left at the mercy of the storm. The resulting scenario featured a crumbling housing market, rampant mortgage default rates, junk investments with no chance of repayment, and a perilous financial involvement of major and fundamental savings institutions with repercussions at the singular citizen level in the form of 401K and IRA savings depletion or evanishment. Thus, the credit flow in the financial system exhibited a sudden halt, and the ultimate ramifications and repercussions of the vicious cycle surfaced in their entirety. Furthermore, the dire impacts extended beyond the financial realm exposing their hefty psychological weight: the image of laid-off workers departing Lehman Brothers' headquarters holding their belongings has long remained sculpted in the public imaginarium as one of the most memorable events of the 2007 and 2008 financial crisis²¹⁵.

Thus, a brief introduction to the Global Financial Crisis has been herewith provided. An essential understanding of the events is required to appreciate both the subsequent analytical conjectures concerning organisational resilience and the proposed renewed vision of the credit crunch through virtue ethics theoretical postulations. The latter investigation, exposed in the following section, was conducted by reason of the fundamental relevance that analytical lenses hold in shaping the basic assumption on the matter, the resulting inferences, and the final deductions. A clamant example of such argument can be identified in the evolution of resilience's definition and use as it permeated diverse fields. From its conception in the physical realm, relegated primarily to the properties of materials, to its adoption in psychology,

²¹⁴ Duignan, "Financial crisis of 2007-08.".

²¹⁵ The Financial Crisis Inquiry Commission, "Conclusions of the Financial Crisis Inquiry Commission.".

originally tainted by deterministic speculations, and use in ecosystems theories, deeply influenced by Holling's, Walker's and Cooper's works, that fostered a focus on returning to the status quo, resilience has undoubtedly undergone a series of variations that directly affected its essence and application. Indeed, starting from being deemed as a mere element to an intrinsic quality, a capacity to merely bounce back, a further ability to bounce forward, and from being concerned with endogenous or exogenous threats, resilience's theoretical trajectory perfectly illustrates the point. It is evident how, for instance, adopting an intrinsic or extrinsic view of the notion profoundly affects the belief in the possibility to cultivate it. Just as interpreting it as a means for systems to return to previous equilibrium results in considerably different implications than if advancement is expected. Analogously, elevating economic performance, as opposed to business long-term operational sustainability, as the chief variable to determine who did, or did not, adequately withstand the financial crisis, will tremendously variate the classification of participants.

Applying this discourse to the financial crisis, two questions might arise relating to the leverage adopted by investment banks up to a ratio of 1 to 40: the first concerning how to optimise borrowing costs and the second regarding the motive for being in that particular situation. Quite evidently, the whole of Wall Street only asked one question. A functional versus ideological stance abruptly shifts the advisable course of action for organisations. Perhaps the appointment of a virtuous leader should be given more attentiveness than worrying about book performance. Nonetheless, this does not entail diminishing the latter's relevance but rather elevates the former's importance. Besides, the right management might improve book performance as well. Furthermore, a fundamental element to consider while examining resilience is what an entity needs to be resilient to. It must be appreciated that resilience is indeed a relativistic attribute, as one cannot possess it absolutely but rather exhibit it in relation to a specific element to which resistance is expressed. In supplement to the relativistic argumentation, the scale and magnitude to which resilience is effective ought to be considered. Intrinsic to the definition of resilience lies the concept of a rupture point, as it would be impossible to state resilience was exhibited in the absence of the latter. Intuitively, describing an organisation withstanding a threat as resilient is possible precisely in virtue of a breaking point that this brilliantly averted. Nonetheless, if confronted with insurmountable stresses, even potentially resilient agents will fail to be so, as unable to weather their magnitude. Indeed, in Giustiniano's words, "resilience is thus a paradoxical strength: risk factors may destroy but

where they do not destroy it resilience is energized²¹⁶". Hence, it is crucial to note that resilience's nature is arguably transitory as contingent on the anticipation, context, threats, scale, and time span involved.

For such reasons, the contextual features and embedded dangers to which resilience must be portrayed emerge as a fundamental variable, drastically moulding the recommendations to foster it. Indeed, the identified and highlighted threats and the degree of relevance assigned to each depend ultimately on the context's framing. Thus, on the analytical lens adopted. These define what one ought to be resilient to and the means – mindset, behaviour, and course of action - required to ensure the possession of the capability to exhibit resilience itself. In virtue of such argument, the following examination is necessitated to: expose the manner deemed as most appropriate to interpret the financial crisis, both for analyses and to extract valuable organisational advice; individuate the metrics contended to be most relevant to assess organisational resilience (focusing, for instance, on the availability of slack resources as opposed to year-on-year EBIT growth); and portray the threats believed to be the most impactful on organisational survival. In particular, much effort will be granted to shift the common perception of which threats were the most significant amidst the Global Financial Crisis. This attempt finds its raison d'être in the lack of attentiveness specific elements frequently receive. Indeed, when confronted with the aftermath of such an international cataclysm, it is disputably sensible to wonder if the real threats were embodied in high leverage, predatory lending, ninja loans, and distorted credit ratings or rather in the character of the agents performing them: unreasonable, undisturbed, and undisputed. After all, what can be postulated to truly prevent the genesis of malpractices, besides rules and regulation, is altering the intentions of those enacting them. Besides, legal frameworks recurrently develop guidelines to prevent peculiar happening precisely by reason of their occurrence, thus subsequently to catastrophes' unfolding. It might be maintained that, perhaps, it is advisable not to put mere faith in objective obligations to avert misdeeds, but rather to seek those boundaries not necessarily, but also, inside individuals. For the least, if one aims to improve the state of conditions going forward.

Ultimately, the reason for adopting virtue ethics' theoretical lens is to be found in the peculiar synergies portrayed with organisational theories revolving around resilience. It will be appreciated how Aristotle's advised practices to attain virtuousness closely resemble managerial measures to cultivate resilience. For instance, the doctrine of the mean advocates

²¹⁶ Giustiniano, Clegg, Pina e Cunha, and Rego, "Resilience in individuals.".

for identifying an intermediate state between two extremes, such as recklessness and cowardice, to achieve the virtue of courage. Analogously, an organisation is invited to embrace paradoxes, such as exhibiting robustness in flexibility, to express resilience. Moreover, it can be further postulated that virtue ethics is useful both concerning the selection of practices to enact and the manner in which these should be performed. For example, inventiveness, deemed crucial for resilience, could be executed with neither unruliness nor fear for its most favourable outcome to occur. Hence, arguably, virtue ethical assertions resemble organisational theories on recommended courses of action and could be helpful for the attainment of proper modus operandi. Finally, resilience itself can be conceived as an intermediate amongst two opposites. Its excess is detrimental, resulting in exaggerated endurance, and a deficiency hinders its existence. However, it follows that it must be ascertained whether resilience can be assumed a virtue. Furthermore, given Aristotle's argument that two types of virtue exist, intellectual and moral, it must be discerned to which it should pertain. Hence, the ensuing investigation will contribute to answering the entirety of these queries.

3.2 The Villain of the Financial Crisis: Epistemic versus Motivational Shortcomings

The infamous financial crisis that brought the world's economic and financial system to its knees requires no further introduction. The grave repercussions of the 2007 and 2008 meltdown, deemed as one the most severe economic collapses in modern times, render its ethical implications of imperative relevance. The real estate bubble, analogous to a supernova, expanded to its critical mass and then collapsed to its own weight into a black hole, dragging in everything in its gravitational pull. The sources and causes of this tragedy, which are yet being debated, orbit around several diverse events and players, which collectively contributed to the unravelling of the catastrophe²¹⁷. Despite numerous analyses focusing on the agents' motivation, a novel explication of the crisis has been proposed by Boudewijn de Bruin, who applies virtue epistemology to argue why incompetence is worse than greed. Identifying actors' epistemic failings as essential triggers of the breakdown, the author decreets the epistemic shortcomings as direr than the motivational ones²¹⁸. This section, whose aim includes the one to evaluate the pertinence of such assumption, will explore the complexities in interpreting the

²¹⁷ Blinder, Alan S. "In the Beginning..." In *After the Music Stopped: The Financial Crisis, the Response, and the Work Ahead.* New York: Penguin Books, 2016.

²¹⁸ De Bruin, Boudewijn. *Ethics and the Global Financial Crisis: Why Incompetence Is Worse than Greed*. Cambridge: Cambridge University Press, 2015. https://doi.org/10.1017/CBO9781139237093.

financial failure through virtue epistemological lenses, concluding that motivational factors held a more predominant role. To support such argument, factual events of the crisis will be outlined. These expose the unwillingness of agents to halt nefarious practices, albeit being conscious of their significance²¹⁹. It is crucial to notice that motivation is not claimed to be the *sole* protagonist of this tragedy. Such assertion would be incongruous if not directly erroneous. The unfolding of the crunch is attributable to the conjunct action of the parts, and motivational fault is definitely not ascribable to the collective²²⁰. However, narrowing down the scope, if epistemological and motivational forces are specifically compared, the latter appear more relevant. The motives underlying this investigation have been profusely previously exposed. In addition, given the gravity of the ethical allegations underpinning the event, a more in-depth inquiry into its causes seems relevant in itself²²¹; secondly, the prospective practices of prevention change according to whether motivational or epistemic failings are respectively considered as central²²²; thirdly, as mentioned, the essential means to foster resilience follow correspondingly. In particular, the evaluation affects the feasibility of interpreting resilience as an epistemic or moral virtue; lastly, even if disputed, assuming players as conscious or unconscious intuitively modifies the extent of their moral responsibility²²³. Sensibly, there is quite a difference between voluntary and involuntary manslaughter.

A brief overview of virtue epistemology, its main contributors, and theoretical branches is required to conduct this analysis. Despite drawing from a few classical authors, such as Plato and Aristotle, this section's focus mainly revolves around contemporary thinkers, including Ernest Sosa, James A. Montmarquet, Linda T. Zagzebski, John Greco, and Alvin Goldman²²⁴. The main differences surrounding virtue responsibilists and reliabilists will be outlined, with a third approach supported by Enrique R. Moros and Richard J. Umbers that constructively unites both stances. The latter helps to overcome specific issues such as the generality and value

²¹⁹ The Financial Crisis Inquiry Commission. *The Financial Crisis Inquiry Report: Final Report of the National Commission on the Causes of the Financial and Economic Crisis in the United States.*

²²⁰ Moggia, Jakob. "Moral Responsibility for Systemic Financial Risk." *Journal of Business Ethics*, 2019. doi:10.1007/s10551-019-04288-4.

²²¹ Schoen, Edward J. "The 2007–2009 Financial Crisis: An Erosion of Ethics: A Case Study." *Journal of Business Ethics* 146, no. 4 (2016): 805-30. doi:10.1007/s10551-016-3052-7.

²²² Borg, Emma, and Bradford Hooker. "Epistemic Virtues Versus Ethical Values in the Financial Services Sector." *Journal of Business Ethics* 155, no. 1 (2017): 17-27. doi:10.1007/s10551-017-3547-x.

²²³ King, Matt, and Peter Carruthers. "Moral Responsibility and Consciousness." *Journal of Moral Philosophy* 9, no. 2 (2012): 200-28. doi:10.1163/174552412x625682.

²²⁴ Turri, John, Mark Alfano, and John Greco. "Virtue Epistemology." Stanford Encyclopedia of Philosophy. 2019 Edition. Accessed May 09, 2021. https://plato.stanford.edu/entries/epistemology-virtue/.

problem, and Gettier cases²²⁵. Moreover, de Bruin's approach will be presented and assessed for its appropriateness and applicability. Notwithstanding being substantially useful to comprehend peculiar dynamics involved in the crisis, a number of issues arise, mostly regarding the analytical lens selected and the agents' definite possibility to employ his advised practices²²⁶. Finally, the role of epistemic virtuousness in the financial collapse will be evaluated in contrast to motivational integrity. Albeit the epistemological interpretation is persuasive, the influence of incentives will be regarded as superior. As mentioned, factual episodes will be utilised to expose actors' awareness²²⁷. Afore commencing, a few limitations should be denoted. First of all, for the restrictions on the reach of this research, the overview on epistemology does not include Eastern philosophers²²⁸, the sceptic school of thought (of which Hume's works are particularly relevant)²²⁹, and debates on virtue epistemic contextualism and situationism²³⁰. Moreover, intricacies surrounding the interpretation of epistēmē as understanding or knowledge, the notion of credit in the value problem, the rationality of agents, and equality of opportunity, are mentioned but not expanded on²³¹. Finally, despite there being hundreds of pivotal episodes to expose the awareness of chief agents in the financial crisis, a limited number was selected.

De Bruin has been a pioneer in displaying the service of virtue epistemology to the financial field, and several thinkers further addressed his approach and this novel application. For instance, Jakob Moggia adopts some relevant postulations of the author's work in a case study on credit default swaps. Defining the trading of the latter as opaque, complex, and characterised by low moral intensity, he argues for increased utilisation of an ethical theory of knowledge acquisition²³². Moreover, Christopher Baird and Thomas S. Calvard emphasise the absence of proper investigation on epistemic vices. Concentrating on the role of epistemic malevolence, insouciance, hubris, and injustice, they advocate for more attentiveness to vice epistemology, interconnected yet autonomous in its relevance from virtue epistemology²³³. Furthermore, in

²²⁵ Moros, Enrique R., and Richard J. Umbers. "Distinguishing Virtues from Faculties in Virtue Epistemology." *The Southern Journal of Philosophy* 42, no. 1 (2004): 61-85. doi:10.1111/j.2041-6962.2004.tb00990.x.

²²⁶ Borg and Hooker, "Epistemic Virtues Versus Ethical Values,".

²²⁷ The Financial Crisis Inquiry Commission, Financial Crisis Inquiry Report.

²²⁸ Rošker, Jana. "Epistemology in Chinese Philosophy." Stanford Encyclopedia of Philosophy. 2018. https://plato.stanford.edu/entries/chinese-epistemology/.

²²⁹ Greco, John. "Virtues in Epistemology." In *The Oxford Handbook of Epistemology*, by Paul K. Moser. New York: Oxford University Press, 2002. doi:10.1093/0195130057.001.0001.

²³⁰ Turri, Alfano, and Greco, "Virtue Epistemology.".

²³¹ See note 26, 33, 59, 62.

²³² Moggia, "Moral Responsibility for Systemic Financial Risk."

²³³ Baird, Christopher, and Thomas S. Calvard. "Epistemic Vices in Organizations: Knowledge, Truth, and Unethical Conduct." *Journal of Business Ethics* 160, no. 1 (2018): 263-76. doi:10.1007/s10551-018-3897-z.

her study on private debt markets, Lisa Herzog challenges de Bruin's conception of low financial literacy amongst subprime borrowers. The author sensibly questions the presence of equal opportunities to engage in virtuous knowledge formation amidst dissimilar actors²³⁴. On a related note, Marco Meyer, who discusses the ethics of banks' wrongful credit inclusion and exclusion, adopts de Bruin's low financial literacy assertion as a concurrent explanation with the need of meeting urgent expenditures to explain why borrowers consciously initiate loans they will not be capable to service²³⁵. Additionally, Satish Thosar, in reviewing de Bruin's theoretical framework, identifies several complexities, the most salient being the demandingness of the author's theory, that condemns the outsourcing of epistemic virtues to financial experts²³⁶. Randall G. Holcombe, whose scrutiny is mostly centred on the ethics of the governmental policies leading to the crisis, adopts de Bruin's moral intensity concern to expose the ambiguity of affirming ethical judgements on actors' behaviour involved in the financial field²³⁷. Finally, Emma Borg and Bradford Hooker, direly criticise the author by underlying numerous and grave intricacies comprised by his work: firstly, they denote the inconclusiveness of his argument for liberty, that stands as the normative ground for the acquisition of epistemic virtues; secondly, they object to the author's claim that borrowers should internalise epistemic virtues in contrast to seeking financial advice or engaging in financial training; thirdly, they state that de Bruin's theory is generally ill-suited to have a proper and concrete application to the financial crisis and sector. Epistemic shortcomings have been wrongly elevated as central at the expense of moral ones 238 .

Virtue epistemology, the denomination of which not incidentally recalls virtue ethics, can be associated with several different approaches to epistemology. The origins of its contemporary conception are usually attributed to the work *The Raft and the Pyramid: Coherence versus Foundations in the Theory of Knowledge* by Sosa, who in 1980 proposed a parallelism between virtue ethics and virtue epistemology to address epistemological quarrels such as the one between foundationalists and coherentists on the structure of knowledge²³⁹. Although his approach sparked a significant renewed interest in the field, virtue epistemologists

²³⁴ Herzog, Lisa. "What Could Be Wrong with a Mortgage? Private Debt Markets from a Perspective of Structural Injustice." *Journal of Political Philosophy* 25, no. 4 (2016): 411-34. doi:10.1111/jopp.12107.

²³⁵ Meyer, Marco. "The Right to Credit." *The Journal of Political Philosophy* 26, no. 3 (2018): 304-26. https://doi.org/10.1111/jopp.12138.

²³⁶ Thosar, Satish. "On Ethics and the Global Financial Crisis." *Business Ethics Quarterly* 26, no. 1 (2016): 150-53. doi:10.1017/beq.2016.3.

 ²³⁷ Holcombe, Randall G. "The Economic Crisis: Causes and Considerations." In *The Routledge Companion to Business Ethics*, 393-409. Routledge, 2018.

²³⁸ Borg and Hooker, "Epistemic Virtues Versus Ethical Values,".

²³⁹ Moros and Umbers, "Distinguishing Virtues from Faculties in Virtue Epistemology.".

have drawn inspiration from a vast number of past illustrious authors whom themselves have dealt with complicated queries regarding knowledge essence and formation. These include Plato, Aristotle, Thomas Aquinas, René Descartes, and Hume²⁴⁰. In Plato's *Meno*, Socrates addresses a paradox of inquiry by proposing a solution to distinguish between having a mere true belief (*doxa*) and possessing knowledge (*epistēmē*). He explicates that what distinguishes the two is that *epistēmē* involves an explanation of the *doxa*. In other words, true *doxa* is not enough for *epistēmē*. What is required to elevate from *doxa* to *epistēmē* is providing a justification on the *doxa*²⁴¹. Although much debate surrounds the interpretation of the passage and concepts, such as if *epistēmē* refers to knowledge or the phenomenon of understanding²⁴², it does not pertain to this thesis to address such a fascinating yet delicate discussion. Nonetheless, what is essential is to show how the significance of tackling epistemological issues can be retraced to the fathers of Western philosophy themselves.

Aristotle's theses, as seen, are of crucial relevance both in their merit of being the pillars of Virtue Ethics *per se* and for their inquiry into what the philosopher describes as intellectual virtues. The distinction between the latter considered to be excellences regarding thought, and moral virtues, described as excellences regarding action, has provided the foundation to diverse virtue epistemic theories and fierce debates²⁴³. As illustrated, whereas moral or practical virtues are related to character and personality traits, intellectual virtues can be portrayed as intellectual faculties or powers. In other words, courage and generosity can be understood as moral virtues, whilst insight into the most basic truths of reality, and the power of reasoning, which enables to construct further truths on these primary concepts, are deemed as intellectual virtues²⁴⁴. The notion of the latter as cognitive faculties lies at the heart of virtue reliabilists authors such as Sosa and Goldman and is criticised by virtue responsibilists such as Montmarquet and Zagzebski, who interpret intellectual virtues as moral virtues or personality traits that assist inquiry into the truth.

Although all four thinkers pertain to the broader field of virtue epistemology, they differ on their assessment of the nature of intellectual virtue, or the virtue necessary for knowledge. Sosa states that a belief B(p) is epistemically justified for a person S if and only if B(p) is

²⁴⁰ Turri, Alfano, and Greco, "Virtue Epistemology.".

²⁴¹ Schwab, Whitney. "Explanation in the Epistemology of the Meno." *Oxford Studies in Ancient Philosophy* 48 (2015): 1-36. doi:10.1093/acprof:oso/9780198735540.003.0001.

²⁴² Zagzebski, Linda T. "Difficulties in contemporary epistemology." In *Virtues of the Mind: An Inquiry into the Nature of Virtue and the Ethical Foundations of Knowledge*. New York, USA: Cambridge University Press, 1996. https://doi.org/10.1017/CBO9781139174763.

 ²⁴³ Greco, John. "Two Kinds of Intellectual Virtue." *Philosophy and Phenomenological Research* 60, no. 1 (2000):
179. https://doi.org/10.2307/2653438.

²⁴⁴ Greco, "Virtues in Epistemology.".

produced by one or more intellectual virtues of S, where an intellectual virtue is a reliable cognitive ability or power. These range from perceptual capabilities that allow individuals to reliably construct beliefs regarding the environment based on sensory inputs, memory, introspection, logical intuition, and deductive and inductive reasoning. It is important to note that *de facto* – but not vindicated – reliability is required, so whether a cognitive faculty can be said to be a virtue depends on the agent and context²⁴⁵. Goldman, relatedly, labels a reliable faculty as a functional process of memory, reasoning, or perception. Knowledge is understood within an input-output paradigm, as the process produces belief states as outputs through the absorption of inputs. Expanding the scope of what accounts for an intellectual virtue, in *The Unit of the Epistemic Virtues*, the author defines as epistemic virtues any competence, power, faculty process type or action, that is considered to be laudable²⁴⁶.

Montmarquet firmly criticises Sosa's theoretical stance by arguing that cognitive powers are not to be considered intellectual virtues. Personality traits, such as intellectual courage or humility, are to be identified as such. In other words, intellectual virtues are analogous to moral virtues. Moreover, he states that reliability should not be used to define intellectual virtues, as a virtuous person's beliefs would be predominantly false in a deceptive reality, such as Descartes' demon world. Intellectual virtues, quite differently, when understood similarly to moral excellences, would remain as such independently of the context. An intellectually temperate individual remains virtuous regardless. Finally, for Montmarquet, the individual is capable of controlling the exercise of intellectual virtues²⁴⁷. Along similar lines, Zagzebski defines intellectual virtues as acquired personality traits that include both a motivational and a reliable success component. In other words, intellectual virtues incorporate a motivation to gain true belief and are reliably successful in attaining it. According to the author, S has knowledge regarding p if and only if S's believing p arises out of acts of intellectual virtues. The latter's acquisition and exercise are partially under our control, hence subject to moral praise if present or blame if absent. Departing from Sosa's conception on practically all aspects, it is evident that a substantial discrepancy surrounds the nature of intellectual virtues among virtue reliabilists and responsibilists²⁴⁸.

Albeit being crucial to understanding the unique views within virtue epistemology, it can be argued that the binarity of the abovementioned paradigm restrains the potential use of

²⁴⁵ Ibidem.

²⁴⁶ Moros and Umbers, "Distinguishing Virtues from Faculties in Virtue Epistemology.".

²⁴⁷ Greco, "Virtues in Epistemology.".

²⁴⁸ Ibidem.

intellectual virtues. A wedding between faculty reliabilism and virtue resposibilism is appropriate, if not essential. First of all, Sosa and Goldman reflect on our cognitive faculties and processes but not on the excellent use we could choose to make of them, focusing on the belief at the expense of the believer. Secondly, faculty reliabilism appears ill-suited to address the generality problem, namely the specification and delimitation of relevant cognitive faculties and reliable processes. Finally, the value problem, concerning the difference between virtuously acquired knowledge and mere true belief - such as knowledge as a result of luck -, is weakly assessed, even in its most modern conceptions, that introduced the variable of credit. The issue has been at the centre of animated debates between Wayne D. Riggs, Greco, Sosa, and Jennifer Lackey who disagree on the role of creditworthiness in knowledge evaluation²⁴⁹. Virtue responsibilists such as Zagzebski provide a better solution to the value problem by recognising knowing not as an output, but rather as a state of the agent. In other words, knowledge is regarded not as a mere cognitive relation between the knowing agent and reality, but rather as an active relation among them. Additionally, by elevating an individual's virtuous motivations as a condition for knowledge, Gettier cases - justified but accidentally true beliefs - are evaded²⁵⁰. Nonetheless, virtue responsibilists share the generality problem with faculty reliabilists and face a number of issues of their own. Firstly, Zagzebski's motivation-based theory can be extremely complicated to apply to situations where motivation is of minimal importance for knowledge. It seems counterintuitive to argue that a mathematical genius who lacks virtuous motivations or traits does not possess knowledge. Even more problematic would be to justify animals or children's perceptual beliefs. Only a more in-depth ontological explanation provided by nonmotivated faculties could be of aid in such a case. Including faculties in our conception of knowledge appears to be the only solution to describe the first stages of our intellectual virtues, given the evident difficulty in explaining how we know what we know²⁵¹.

Intellectual virtues are thus not to be understood as mere faculties nor as only moral virtues. Instead, it would prove beneficial to recognise the existence and utility of both. The intellectual virtue of courage or carefulness can aid in the exercise of cognitive faculties, which, when used correctly, provide reality or truth as a result. In other words, the moral virtues – humility, temperance, attentiveness – can assist in the process of knowledge formation, yet the act of knowing relates to the cognitive realm and not to the volitional realm of the will. A synergetic

²⁴⁹ Turri, Alfano, and Greco, "Virtue Epistemology.".

²⁵⁰ Moros and Umbers, "Distinguishing Virtues from Faculties in Virtue Epistemology.".

²⁵¹ Ibidem.

interaction between Sosa and Zagzebski's theories offers a much more comprehensive explanation of knowledge. Moros and Umbers provide us with a definition that allows for a distinction between virtue as an excellence of the faculty and a faculty as an innately equipped capacity: S knows p if, and only if S, forms the belief p from an epistemically virtuous use of S's cognitive faculties. This conception brilliantly integrates the diverging perspectives into an accordant entirety focused on an agent that both perceives and wills. In this interpretation, an expert duck hunter possesses exceptional sightedness in virtue of her faculty of sight, yet her increasingly accurate and reliable duck spotting results from having practised at it reliably. The responsibility for the duck's hunter virtue is to be found in herself as agent rather than in the eye with which she sees²⁵². If intellectual virtues are defined as being conductive to intellectual flourishing or part and parcel of excellent cognisers, then excellent perception and intellectual humility appear equally valuable in this respect²⁵³.

It is worth noticing that despite focusing on the divergence between the belief and the believing agent, the cognitive faculties and character traits, the epistemic value and justification, the discourse outlined remains individualistic in nature. A recent development in virtue epistemology focuses on the role of epistemic communities. Recognising yet taming the agent's role to give more space to the influence of the material, social, and political environment, Duncan Pritchard aims to show that being placed in a flourishing rather than unlucky context can foster an agent's acquisition of knowledge. In this sense, the result of the exercise of the cognitive agency will be significantly impacted by the environment. This analytical lens seems coherent with Herzog's assertion of the critical role of an agent's background and environmental factors²⁵⁴. Mark Alfano and Joshua A. Skorburg push the analysis even further, reaching the conclusion that improving the recognition heuristic's reliability can be obtained by refining the informational ecosystem structure, not with the development of additional internal cognitive capabilities²⁵⁵. Jonathan L. Kvanvig similarly underlines the importance of the cognitive development of the agent embedded in a social context. Focus on the individual is discarded in favour of the community. Development and learning acquire importance in contrast with knowledge specification, making the evolution of virtues crucial to comprehend the cognitive mind's life and the systems involved in the process²⁵⁶. It can be argued that the implications of adopting this paradigm are of paramount

²⁵² Ibidem.

²⁵³ Turri, Alfano, and Greco, "Virtue Epistemology.".

²⁵⁴ Herzog, "What Could Be Wrong with a Mortgage?,".

²⁵⁵ Turri, Alfano, and Greco, "Virtue Epistemology.".

²⁵⁶ Ibidem.

importance. If society, and more specifically an organisation, is considered an epistemic community, the norms and practices adopted to promote the flourishing of intellectual virtues or intellectually virtuous behaviour could transcend the individual level. Even more significantly, it might follow that the responsibility of fostering the acquisition of such intellectual virtues would predominantly reside at higher hierarchical levels, be them governmental, societal, or organisational.

De Bruin in his Ethics and the Global Financial Crisis: Why Incompetence is Worse than Greed applies virtue epistemology to business and financial practices, providing peculiar explanations to understand the agents, events, and dynamics involved with novel lenses. Specific attention is given to the infamous financial crisis of 2007-2008, predominantly described in terms of motivation but not of incompetence, which, instead, according to the author, has played a critical role. Precisely, intellectual rather than moral incompetence is to blame for the misadventure. To explicate this point, de Bruin starts analysing - with the aid of James Rest's ethical decision-making theory and Thomas Jones' moral intensity one - the role of incompetence. Particularly salient is the discourse on the moral intensity of an ethical issue, determined by the vastness of the consequences of the actions, the probability that they will occur, and the concentration or dispersion of the consequences on the people. Moral intensity is also relative to the presence of social consensus on the righteousness or evilness of certain actions and to the proximity of the affected agents to the consequences of the action itself. When the moral intensity of an issue is high, ethical considerations and behaviours are more likely to take place. The author argues that the moral intensity of the ethical issues in the financial sector is perceived to be quite low in virtue of their highly technical nature and detached engagement. In other words, traders, for instance, are oblivious to the consequences of their number-crunching sales strategies²⁵⁷.

A question that naturally arises is whether financial actors are *truly* unaware of the consequences of their actions. It could be argued that rather than ignorant, they are quite merely careless or indifferent to the effects. Or, in a preferable perspective, that they face a conflict of interest that inserts their activity in a paradigm of *mors tua vita mea*. Hence, even if concerned, their survival preoccupations prevail. Two events accurately reflect these arguments. The first pertains to employees of subprime mortgage loan originators. Operating for industry giants such as Ameriquest and Wells Fargo, workers claimed to be subject to brutal practices from their employers to increase sales and silence dissent, with termination of their employment

²⁵⁷ De Bruin, "Introduction.".

more than often utilised as a threat. With several former Ameriquest employees regrettably admitting to having participated in improper practices in the years building up to the crisis²⁵⁸ deceiving borrowers on the loan's terms, forging appraisal, falsifying documents, engineering borrowers' income to certify them for loans they could not afford - and one past employee of Wells Fargo stating: "I was in the 1991 Gulf War...I had less stress in the 1991 Gulf War than working for Wells Fargo"²⁵⁹ it seems clear that there was a degree of awareness, whose acknowledgment and discourse was inhibited by a Sword of Damocles hanging over the workforce heads. This does not imply that the employees were oblivious. It rather shows the price of refusing to act as if they were. It is critical to notice that not all major players can be ascribed to these practices. It would be simplistic if not erroneous to amalgamate all financial institutions and actors, from investment banks to mortgage originators, to chief executive officers, to employees. Several had a significantly lower degree of consciousness, if any. For instance, in 2007, senior executives at AIG were left bewildered by Goldman Sachs' collateral calls on their credit default swaps. Most did not even know that the CDSs with Goldman required provisions on collateral calls. Simply put, AIG did not possess, according to Goldman Sachs, the necessary guarantee for the amount of exposure on their securities²⁶⁰.

Nevertheless, the number of highly aware protagonists was consistent enough to argue that complete unconsciousness is utopic. One may object that awareness at the employee level could be easily discredited, as it has been – not incidentally, whistleblowing was a major preoccupation for management²⁶¹. Or that it was merely lacking. Furthermore, realisation at higher hierarchical ranks could follow the same destiny. However, it seems unreasonable to state that the director of a company who promotes certain practices such as predatory lending is oblivious to its effects, especially if threatening attitudes are implemented towards those who try to expose such operations. At most, as mentioned, he might be indifferent or unwilling to change strategy, regardless of the knowledge of the risks involved. This appeared to be the case on many occasions in the financial crisis²⁶². The second event satisfyingly explicates this point.

²⁵⁸ Hill, Claire A. "Who Were the Villains in the Subprime Crisis, and Why It Matters." *Ohio Entrepreneurial Business Law Journal*, Minnesota Legal Studies Research Series 10-21, 4 (2010): 323-52. https://ssrn.com/abstract=1582641.

²⁵⁹ Levitt, Hannah, and Jesse Hamilton. "Wells Fargo Regulator Punishes Leaders Who Spun Culture of Fear." Bloomberg.com. January 23, 2020. Accessed May 09, 2021. https://www.bloomberg.com/news/articles/2020-01-23/wells-fargo-leaders-spun-culture-of-fear-to-meet-goals-occ-says.

²⁶⁰ The Financial Crisis Inquiry Commission, "Late 2007 to Early 2008: Billions in Subprime Losses.".

²⁶¹ Hudson, Michael. "Whistleblowers Ignored, Punished by Lenders, Dozens of Former Employees Say." Center for Public Integrity. November, 2011. Accessed May 09, 2021. https://publicintegrity.org/inequality-poverty-opportunity/whistleblowers-ignored-punished-by-lenders-dozens-of-former-employees-say/.

²⁶² The Financial Crisis Inquiry Commission, "Conclusions of the Financial Inquiry Commission.".

Former Countrywide Financial CEO Angelo Mozilo was charged in 2009 with securities fraud accusations for deliberately misleading investors regarding the substantial credit risks carried by the same to increase and preserve the company's market share. Mozilo, whose company was the largest mortgage originator from 2004 until the outset of the crisis in 2007, noted in a confidential e-mail a lucrative subprime product as "toxic". As maintained by the Security and Exchange Commission, the company's credit risks were disconcerting to the point that Mozilo was prompted to alert with disastrous evaluations the loan products and the threats they posed to Countrywide Financial. In one additional communication regarding adjustable-rate mortgages' performance, the CEO described the company as to be "flying blind"²⁶³.

A last criticism could be that acknowledging does not necessarily entail understanding the consequences of the actions employed. In other words, the mortgage originator's employee knows that he is performing in an ambiguous fashion and perfectly comprehends the practices involved, yet he does not fully grasp their effect on the borrower's life. Once more, it is reasonably plausible for some but difficult to argue for the entirety of the actors. The motive is relatively intuitive. Professionals in the financial field are invested with a veil of complexity that follows the perception of the sector and the technical nature of the operations they partake in²⁶⁴. This is not arduous to imagine for other scientific endeavours as well. Several stereotypes - such as their extreme intelligence - surround the image of scientific experts, which altogether convey the impression that they are distinct from ordinary individuals²⁶⁵. Nevertheless, the profession's perception and technicality should not obscure one critical yet fairly immediate aspect: financial agents are not mystical creatures but rather human beings who engage in activities of the same nature as their prospected clients. This specification might sound evident if not ironic. They engage in, and if needed, delegate, financial operations whose performance affects them on a personal level. In other words, it is not problematic for a specialist who has experienced a significant economic loss to comprehend the dire effects it can have on his own life. It is not clear then why such apprehension should not follow regarding other individuals who conduct similar activities. As usual, it could be argued that they are unconcerned or subject to further issues. However, stating that they are unconscious appears somehow farfetched. A trader, market analyst, accountant, wealth manager, treasurer, bank cashier, loan officer, payroll administrator, who initiates a mortgage that incurs falsification, manipulation, or other

²⁶³ Hill, "Who Were the Villains in the Subprime Crisis,".

²⁶⁴ De Bruin, Ethics and the Global Financial Crisis.

²⁶⁵ Tintori, Antonio. "The Most Common Stereotypes about Science and Scientists: What Scholars Know." In *Turn on the Light on Science: A Research-based Guide to Break down Popular Stereotypes about Science and Scientists*. Ubiquity Press, 2017. https://doi.org/10.5334/bba.b.

deceitful practices, intuitively understands the personal repercussions involved. If that were not the case, it would be difficult to explain the firm opposition coming from a faction of the employees to the practices of financial institutions²⁶⁶.

With regards to the interpretation of virtue epistemology adopted, de Bruin notes that he owes much to Jason Baehr, James Montmarquet, Linda Zagzebski, Robert Roberts and Jay Wood, whose theories pertain to the virtue responsibilist stream of thought. This is manifested by the author's focus on intellectual virtues on their account of being character traits. Particular attention is given to Baehr's analysis in *Inquiring mind*²⁶⁷, where he claims that developing epistemic virtues contributes to personal intellectual worth and that epistemically virtuous individuals have a positive attitude towards epistemic goods and a negative one towards epistemic "bads". De Bruin departs from Baehr's conception that epistemic virtues need to foster intrinsically valuable personal intellectual goods to attain intellectual worth and embraces an instrumental notion of epistemic value. According to the author, requiring intrinsic motivation to achieve epistemic goods – as gaining information or understanding for their own sake – severely restricts the application of the theory, especially in the field of business where insight serves much in an instrumental fashion for the acquisition of non-epistemic goods²⁶⁸. Knowledge is required to achieve our objectives, and to possess it, we need epistemic virtue. De Bruin notes that an instrumental approach to epistemic value better explicates why the amount of knowledge that virtuous individuals aspire to varies according to their prospective use of it. Likewise, the level of justification required for epistemic virtue relates to the forthcoming application of the beliefs. In other words, it allows for a virtuous yet lower degree of justification for conducting activities such as a marketing survey research in contrast to the investigation on the hazards of nuclear energy. Baehr's personal intellectual worth theory would argue for high justificatory standards in both events, as the standards depend on the epistemic good pursued. De Bruin instead considers justification, knowledge, and truth as a means for the attainment of non-epistemic goods, whose justification's standards are relative to them. The divergence between the intrinsic and instrumental conception of epistemic virtues becomes apparent: adopting significant justificatory requirements for advertising analyses is virtuous for the former yet an unvirtuous waste of intellectual resources for the latter²⁶⁹. This

²⁶⁶ The Financial Crisis Inquiry Commission, "Before Our Very Eyes.".

²⁶⁷ Baehr, Jason. *The Inquiring Mind: On Intellectual Virtues and Virtue Epistemology*. Oxford University Press, 2011.

²⁶⁸ De Bruin, "Epistemic ethics: virtues of the mind.".

²⁶⁹ Ibidem.

assertion does not come without problems. Problems that become particularly evident when performing what de Bruin defines as epistemic actions.

Building on the assumption that agents hold a degree of doxastic voluntarism, which implies they influence the formation of their beliefs, the author defines inquiry, belief adoption, and justification as the three elements comprised in an epistemic action. Investigative actions are at the foundation of knowledge acquisition. They encompass activities such as research, probability estimation, and surveys. They do not necessarily result in knowledge possession yet are essential to obtain it. For instance, researchers may conduct surveys that lead to statistically insignificant results. These practices are adopted to find evidence supporting or contradicting the adoption of a belief. In other words, after performing investigative practices, individuals can select one out of three potential doxastic actions: that the belief is true, false, or neither. In the third circumstance, the belief is suspended, meaning that it cannot be asserted whether it is true or not. Finally, the doxastic attitude requires justification, provided by the result of the investigative practices. Epistemic actions are a combination of investigative and doxastic actions that meet the requirement of being true and justified²⁷⁰. Love for knowledge, defined by the author as the epistemic motivation par excellence, is particularly relevant for these activities' conduction. The absence of such virtue annihilates at the outset the motivation to engage in investigative activities. It is not difficult to imagine that a lack of curiosity prevents people from searching for information. On the contrary, possessing love for knowledge implies evaluating the adoption of a doxastic stance meticulously. Only when a proper justification exists a belief is embraced. In this regard, epistemic courage is also deemed as essential. It is required, for instance, to revise one's strongly eradicated beliefs in light of new evidence or to face the truth even when dire consequences are implied²⁷¹.

Particular focus should be placed on epistemic temperance, which is of paramount importance to perform epistemic actions. It comprises the disposition to select the appropriate amount on inquiry, to accept beliefs, and establish judgements at the correct pace, and to possess the right level of justification for such adoption. As usual, these requirements are relative to the objectives that knowledge achievement is expected to help realise. Hence the information instrumental to the initiation of a loan should require much more epistemic attention, for instance, than the one concerning the acquisition of a car, in light of the associated stakes. De Bruin notes that epistemic temperance fosters efficiency in the realisation of one's

²⁷⁰ Ibidem.

²⁷¹ De Bruin, "Internalizing virtues: the clients.".

ends. Overly temperate individuals will produce epistemic waste by allocating too much caution to investigative, doxastic, or justificatory activities. Such as spending several days scrutinising consumer web reviews or other sources for evaluating different vehicles. On the other extreme, epistemic self-indulgers will barely engage in epistemic practices, reaching the opposite result. In both scenarios, people critically endanger their probability of attaining their objectives. Epistemic temperance assists by setting a minimum but also a maximum on knowledge achievement. It manifestly promotes equilibria in the investigative and also doxastic activities comprised in epistemic actions, as one should not be too reticent nor eager to adopt a doxastic stance²⁷².

Hence, various epistemic virtues are essential. They assist agents in conducting investigative and subsequent doxastic actions in a manner for which the doxastic stances are justified by the outcomes of the investigative practices. Despite not ensuring the acquisition of knowledge or its justification, they increase the probability of higher levels of both. Nonetheless, de Bruin clarifies that the role of epistemic virtues is not to result in epistemic success or knowledge formation. A courageous soldier who dies on the battlefield remains courageous, regardless. They serve the purpose of enabling and motivating agents to conduct investigative and doxastic actions in a manner that augments the chance of obtaining knowledge *to the extent* that it is required for achieving other objectives that they hold. In other words, the depth of the inquiry adopted by a virtuous individual is a function of which goal the knowledge he is seeking serves to acquire²⁷³. Nonetheless, this instrumentalist and consequentialist conception of epistemic value, whose inspiration owes much to Julia Driver's approach²⁷⁴, encounters at least three intricate concerns.

The first regards the allocation of intellectual resources across different epistemic activities. If acquiring proper knowledge is instrumental for pursing specific objectives, and the latter differ in terms of relevance, then an accurate hierarchical account of the objectives sought is required. Subsequently, epistemic efforts should follow the selected ranked assessment. In other words, an agent possessing limited resources must identify which of his goals are the most critical to attain. Without evaluating the immense complications that could arise in the attempt of doing so, whose assessment could be brilliantly executed utilising Kahneman's *Thinking Fast and Slow*²⁷⁵, a perilous implication should be noted. If the target of

²⁷² Ibidem.

²⁷³ De Bruin, "Epistemic ethics: virtues of the mind.".

²⁷⁴ Ibidem.

²⁷⁵ Kahneman, Daniel. *Thinking, Fast and Slow.* New York: Farrar, Straus and Giroux, 2011.

signing an optimal mortgage is deemed as superior to, for instance, purchasing the right car, a much more thorough inquiry should be dedicated to construct knowledge instrumental to the first activity. Moreover, increased carefulness would surround the speed of adoption of a doxastic stance. This seems to imply that choosing the car wisely is relevant, yet less vital than selecting the loan. However, if one acquired a vehicle that poorly suited his driving style and ended up being severely injured because of it, was such decision not equally crucial? In this scenario, the answer is far from straightforward. Despite the example being overly inflated, it properly explicates the concern of rendering attentiveness in investigative, doxastic, and justificatory actions relative to particular objectives²⁷⁶.

This leads us to the second issue. Assuming that it is reasonable to distinguish between diverse purposes to advance knowledge possession, quantifying the respective levels of effort needed to conduct the different stages of epistemic actions remains unresolved. In other words, an indication of the proper level of cautiousness in conducting investigative or doxastic activities related to the end pursued is absent. De Bruin focuses on the presence of epistemic virtues or vices, yet the perfectly temperate individual would still lack the means to identify a fair amount of epistemic devotion relative to his objective. It seems reasonable that a marketing survey requires less inquiry or caution in the formation of belief than the exploration of nuclear energy's dangers. Yet, it is not clear how much attention should be yielded to each specific activity. How much less or how much more intellectual resources the two examinations respectively deserve eludes this paradigm's theorisation. It would not be different if each activity, rather than compared, were taken individually. There is no precise way to determine a benchmark between a fair or insufficient amount of research. Nor is it clear when it is appropriate to adopt a doxastic stance about the developed propositions. If, as stated, the amount of investigation a virtuous person should dedicate to a particular matter *truly* depends on the prospected use of the knowledge sought, then a more unambiguous indication of what accounts for a fair quantity of inquiry or a proper doxastic action - concerning a particular objective - should be provided. If not, the virtuous agent, victim of its subjective perception, will lack the concrete tools to engage in such activities effectively, regardless of being epistemically courageous, humble, curious, just, or temperate. A mortgage borrower that virtuously undertakes what, according to her, constitutes a satisfactory investigative and doxastic action will not be able to discern among her notion of appropriateness from what is actually appropriate. Under this perspective, a third issue arises, demandingness.

²⁷⁶ De Bruin, "Epistemic ethics: virtues of the mind.".

Given that the abovementioned hurdles are assessed, and a proper level of inquiry and speed of doxastic action (for a specific objective) are individuated, whether an agent should be required to reach such elevated justified *connaissance* is far from obvious - regardless of the degree of justification implied. Not improperly, Satish questions the appropriateness of requiring high agent's specialisation²⁷⁷. When approaching the economic field, a discrete level of financial literacy is surely beneficial, if not essential²⁷⁸. However, arguing that a significant extent of expertise is desirable, or that increased prudence should surround the doxastic stances relative to a specific end could be too onerous. Indisputably the driver needs to be aware of the various dashboard indicator lights, yet he is not expected to possess the knowledge of a mechanical engineer nor to be as confident as the latter of how he holds such knowledge. Just as the patient is not required to have the same level of information or awareness as the physician when he evaluates a newly prescribed drug, it is precisely the existence of the latter's profession that makes such a proposition debatable. These examples, resting on the assumption that the goal pursued in both cases necessities an increased epistemic engagement, should serve to assess how much burden is congruous to place on the knowing agent. The objection is in line with Borg's and Hooker's critique, whose firm complaint of de Bruin's reluctance to outsource epistemic virtuousness regards demandingness. Accusing the author of quickly dismissing the benefits of financial advising and training, they argue for the appropriateness of the latter practices²⁷⁹.

At last, the relevance of these three objections lies in their assessment of the plausibility of a concrete application of de Bruin's theoretical framework – something the author is particularly concerned about. Whilst the attention is predominantly placed on the presence or absence of epistemic virtues, no precise path is given to the incredibly virtuous, yet perplexed, agent. It might be contested that the virtuous individual is not disoriented precisely by means of his virtuousness. Nonetheless, this assertion is flawed by its circular nature. With the primary apprehension surrounding the person's possession of love for knowledge, epistemic courage, humility, justice, or temperance, the situation in which, despite holding these qualities, he is unsure of how to properly exploit them does not receive enough notice. Although the author explicitly postulates that epistemic success is not a necessary condition nor the aim of epistemic virtues²⁸⁰, providing better directives regarding the process of knowledge acquisition would be

²⁷⁷ Satish, "On Ethics and the Global Financial Crisis.".

²⁷⁸ Meyer, "The Right to Credit.".

²⁷⁹ Borg and Hooker, "Epistemic Virtues Versus Ethical Values,".

²⁸⁰ De Bruin, "Epistemic ethics: virtues of the mind.".

highly beneficial. Especially since knowledge is instrumental for the attainment of the recurrently mentioned non-epistemic ends. The concerns surrounding this issue degenerate if considering that a general rule for its resolution is virtually impossible to imagine. More importantly, even if provided, whether individuals should be compelled to follow it remains controversial.

In light of the presented intricacies, the role of epistemic virtues and virtuousness in the 2007-2008 financial crisis ought to be assessed. Evaluating its relevance in the meltdown will provide a clearer indication of which variables companies need to be most attentive to when seeking to foster resilience. Moreover, it provides the foundations for assessing whether resilience should be desired in an epistemological or moral fashion if interpreted as a virtue. Furthermore, the discussion services both the evaluation of which preventing forthcoming practices are the most appropriate to deploy and the inquiry into the individuals' moral liability. De Bruin deems incompetence as worse than greed. Indeed, unravelling the crisis in terms of greed is truly simplistic, as a myriad of factors and actors have intervened in the formation of the catastrophe. The meltdown cannot be merely attributed to the immorality of numerous key players²⁸¹. Yet, what the author argues is that motivation has been excessively identified as the propulsive force of the collapse at the expense of competence. Alas, we must agree to disagree. To explicate this argument, a salient analysis concerns the subprime mortgages' borrowers and lenders. Simply put, the author states that mortgagors did not understand the terms, intricacies, and consequences implied in the initiation of subprime mortgages²⁸². It is quite undeniable that this was the case for a substantial number of debtors. Diversely from prime mortgages, subprime contracts are genuinely more complex, with minimum or no down payment, changing interest rates, high prepayment penalties, an array of different fees, and indexes such as the sixmonth Libor that influence the rates. Borrowers suffer from behavioural biases that render them myopic to long-term implications, and lenders exploit epistemic vice. Drawing on studies from Ping Cheng, Zhenguo Lin and Yingchun Liu, and Marsha Courchane, Brian Surette and Peter Zorn, de Bruin maintains that most borrowers poorly engage in epistemic actions, with little research or awareness of the desired products. A lack of love of knowledge is attributed mostly to subprime borrowers²⁸³.

The most immediate objection is that the means available to conduct, for instance, investigative activities, are assumed to be as equal between actors. Or that, even with equivalent

²⁸¹ Moggia, "Moral Responsibility for Systemic Financial Risk."

²⁸² De Bruin, "Case study I: primes and subprimes.".

²⁸³ Ibidem.

means, the agents are assumed to have the same degree of capability to deploy them. Considering the typical profile of subprime borrowers – individuals with low credit scores and numerous negative features in their credit reports such as unemployment, delinquencies, divorce, account rejections, and medical emergencies 284 – this assertion is questionable if not incongruous²⁸⁵. Despite equality of opportunity not pertaining to the scope of this analysis, arguing for the absence of love of knowledge, without evaluating if there is in the first place the possibility to employ such disposition, seems controversial²⁸⁶. Subprime lenders such as Associates First, engaging in lending abuses that ranged from elevated prepayment penalties to excessive fees, targeted unsophisticated mortgagors that could not usually assess the forms. They prayed on borrowers with lower education and income, minorities, and the elderly. Unfortunately, debtors with minor access to credit are also poorly equipped to challenge the more skilled individual on the other side desk²⁸⁷. Hence, it appears lenders were leveraging on the absence of adequate means or the capacity to exploit them, rather than on epistemic vice. This does not imply that such discourse should be generalised. It is crucial to notice that an abundant number of borrowers acknowledged their incapacity to repay and initiated the mortgage regardless²⁸⁸.

Nevertheless, the most critical aspect of the mortgages' episode orbits around the consciousness of several financial actors, recurrently aware of the tragedy they were aiding to construct yet unwilling to stop. This is true for numerous other financial players involved in diverse key activities – securitisation, credit rating, regulation, investment – that collectively contributed to the financial meltdown. The abovementioned conduct of Angelo Mozilo and Ameriquest employees is essential to explicate this argument. Yet conspicuous additional examples demonstrate cognisance. Christopher Cruise, a corporate educator employed by some of the largest lender originators of the time, was involved in the training of loan officers. Part of his advice was to be unconcerned "about the quality of the loan, whether it was suitable for the borrower or whether the loan performed". Moreover, he stated "I knew that the risk was being shunted off. I knew that we could be writing crap. But in the end it was like a game of musical chairs. Volume might go down but we were not going to be hurt"²⁸⁹. In 2007, Morgan Stanley, Goldman Sachs, Lehman Brothers, Merrill Lynch, and Bear Stearns were operating

²⁸⁴ The Financial Crisis Inquiry Commission, "Subprime Lending.".

²⁸⁵ Sen, Amartya K. "Freedom, Achievement, and Resources." In *Inequality Reexamined*. Oxford Scholarship Online, 1995. doi:10.1093/0198289286.001.0001.

²⁸⁶ Herzog, "What Could Be Wrong with a Mortgage?,".

²⁸⁷ The Financial Crisis Inquiry Commission, "Credit Expansion.".

²⁸⁸ Ivi, "Conclusions of the Financial Inquiry Commission.".

²⁸⁹ Ivi, "Before Our Very Eyes.".

with leverage ratios as elevated as 40 to 1, implying that for each \$40 of assets, only \$1 in capital was present to cover the losses. This meant that a minimum drop (2,5%) in asset value was enough for the firm to fail. As if that was not preoccupying enough, the majority of their borrowing was done in the overnight market, signifying it required quotidian renewing. The leverage, for obvious reasons, was kept hidden²⁹⁰. May it be in off-balance-sheet entities, derivative positions, or with manipulation of financial reports accessible to the investors. Structured investment vehicles, or SIVs, were explicitly employed by banks to keep the risk off the books²⁹¹. Between 2006 and 2007, the percentage of borrowers that defaulted on mortgages nearly doubled. This denotes that most initiated loans without the ability nor the intention to repay. Similarly, lenders consciously granted loans that debtors could not afford, resulting in massive potential losses for mortgage-securities' investors. Gary Gorton, an economist and consultant to AIG, has explicitly stated that several subprime mortgages – such as the 2/28 ARM – were "designed to default"²⁹². Inflated appraisals, that entail fictitiously augmenting the value of a house, were recurrent to ensure lenders the possibility to close deals. According to a survey conducted in 2006, 90% of appraisers felt pressured to increase the value of houses. Dennis J. Black, appraiser with 24 years of experience and president of the firm D. J. Black & Co., explained that if the clients requesting the appraisal were unsatisfied with the individuated value, they would quite simply hire someone else²⁹³. The same logic, as seen, was present in the business of credit rating agencies such as Moody's, S&P, and Fitch, which were individually pressured, for preserving clients, to grant AAA ratings to mortgage-related securities. Then again, they were quite well aware that an unpleasant rating would entail a shift to the competitor 294 .

Numerous further episodes are of note. Nevertheless, these incidents properly explicate the manifest presence of consciousness or knowledge in several key actors. What seemed to be missing was the willingness to act righteously upon it. An epistemically virtuous individual, who engages in corruption, will behave poorly regardless of his epistemic virtuousness. Although fundamental, the virtuous acquisition or use of information appears subservient to moral character formation, which ultimately determines the knowing agent's actions. In the years preceding the financial crisis, despicable motivations were fuelling unconcernedly, but not entirely inadvertently, the vicious cycle. Not much has differed amidst the meltdown of the

²⁹⁰ Ivi, "The Bust.".

²⁹¹ Schoen, "The 2007–2009 Financial Crisis: An Erosion of Ethics.".

²⁹² Blinder, "The House of Cards.".

²⁹³ The Financial Crisis Inquiry Commission, "Credit Expansion.".

²⁹⁴ Ivi, "The Madness.".

system²⁹⁵. In light of this argument, advocating that epistemic viciousness is primarily to blame for the crunch becomes particularly difficult. The incentives of innumerable players were dangerously aligned, and the predominant shortcoming was not epistemic, but rather resting in their moral character²⁹⁶. This is not meant to belittle the crucial relevance of incompetence in the catastrophe. Nor the value of epistemic virtues. On many occasions, the practices, and those performing them, appeared undoubtedly incompetent. For instance, the widespread belief that the housing market prices were destined to be ever-increasing can be identified as one of the most striking epistemic shortcomings of them all²⁹⁷. As the underestimation of the borrowers' domino default. In addition, reduced hubris and increased epistemic justice, a central concept in Miranda Fricker's works²⁹⁸, could have significantly improved key agents' attentiveness. Perhaps epistemic virtuousness could have diminished the scope and reach of the meltdown. Yet, most probably, not have prevented it. The predominant role in the collapse of the financial system thus seems reserved to motivation. Whilst de Bruin's theoretical paradigm remains central to ameliorate the epistemic attitude of individuals engaging with the financial system, the presence of moral fundaments on which to build such epistemic virtuousness is pivotal²⁹⁹.

Finally, hitherto virtue epistemology and its development have been examined. Particular attention was given to the authors and theoretical streams that constitute the contemporary conception of the field. Virtue reliabilists and responsibilists, albeit focusing on cognitive processes and character traits respectively, synchronously contribute to define the essence and activities of an epistemically virtuous agent. The latter, who cannot be reduced in terms of his faculties nor to the use he deploys of the same, can be better analysed through the combination of both theories. Moreover, de Bruin's approach to virtue epistemology was assessed. The author, who brilliantly utilises epistemic virtues and vices to investigate the Global Financial Crisis, elevates incompetence as a critical explanatory variable to comprehend the system's collapse. Analysing in a responsibilist fashion the role and acquisition of epistemic virtues by individuals and groups, de Bruin exposes their enabling and motivating force. Furthermore, by advocating their adoption to correct behavioural biases and avoid erroneous attitudes whilst engaging in financial activities, the author provides several examples of epistemic shortcomings. Although his examination is undeniably relevant, insomuch as ignorance was a

²⁹⁵ Ivi, "Conclusions of the Financial Inquiry Commission.".

²⁹⁶ Borg and Hooker, "Epistemic Virtues Versus Ethical Values,".

²⁹⁷ Blinder, "In the Beginning...".

²⁹⁸ Fricker, Miranda. *Epistemic Injustice: Power and the Ethics of Knowing*. Oxford: Oxford University Press, 2009.

²⁹⁹ Graafland, Johan J., and Bert W. Van De Ven. "The Credit Crisis and the Moral Responsibility of Professionals in Finance." *Journal of Business Ethics* 103, no. 4 (2011): 605-19. doi:10.1007/s10551-011-0883-0.

principal vector of the catastrophe, motivation seems to have been excessively disregarded at the expense of incompetence. This perilously narrowed down the analytical lenses adopted, illsuited to appreciate the multitude of facets comprised by the chief players and events operating in the financial crisis. In virtue of such discourse, critical episodes were portrayed to demonstrate not merely awareness, but quite fairly the intention of agents. Thus, motivation emerged as a more predominant source of the disaster.

Since for the aforementioned reasons, an increased comprehension of the forces in act benefits the entity that strives to be resilient, a thorough inquiry with a renewed vision of the financial crisis was hitherto offered. Interpreting the fall in terms of competence or motivation produces rather different implications on the appropriate practices to embrace. Indeed, as recurrently mentioned, the analytical lens and framing shift the focus on several specific threats at the expense of others. In light of the above arguments, perhaps focusing on resilience in its moral rather than epistemic virtuous conception could prove beneficial. Notwithstanding, before exhibiting the synergies amongst virtue ethics and organisational theories, Giustiniano's theoretical stance must be presented, as selected as the chief framework to investigate resilience in the Global Financial Crisis. Furthermore, the thread connecting virtuous and resilient organisations will be finally exposed.

CHAPTER IV

A Descent in the Pursuit of Resilience and Virtue: JP Morgan and Bear Stearns

4.1 Unveiling Resilient Responses between Walls and Windmills

The brilliant assertion "I like to frame resilience in the light of the Chinese proverb 'When the winds of change blow, some people build walls and others build windmills"³⁰⁰ is perhaps the most telling of the overall theoretical stance adopted by Giustiniano, implying the necessity for entities to build walls and windmills simultaneously. This entails adjusting with minimal resistance to change, exhibiting both the ability to absorb opposing energies and endure whilst resuming to a superior status without hindering business continuity. Indeed, the author defines resilience as an intricate construct consisting of contrasting forces, suggesting an organisation must be sponge and titanium when facing adversities. These peculiarities expose the paradoxical nature of resilience, which embodies a dialectical synthesis between adaptive and proactive capacities, with the former relating to the ability of entities to recoil in the aftermath of disruptions and the latter to fostering awareness to prepare for the potential reoccurrence of comparable events³⁰¹. Thus, resilient organisations, by reason of their mindfulness of exogenous uncertainty and ambiguity, feature readiness to confront a broad range of unpredictable situations. Furthermore, as mentioned in the first chapter, the author advocates a return to resilience's physical connotation, as it appropriately illustrates some of its intrinsic properties. The main characteristic arising from its mechanical origin can be identified as a form of elasticity, bending and absorbing the energy of the stressor without experiencing

³⁰⁰ Giustiniano, Pina E Cunha, Simpson, Rego, and Clegg, "Resilient Leadership as Paradox Work: Notes from COVID-19.".

³⁰¹ Giustiniano, Clegg, Pina e Cunha, and Rego, "Resilience as dialectical synthesis.".

permanent deformation. Particular to the notion of bouncing forward lies the mechanism of releasing the absorbed energy when discharged from the incumbent pressure, storing energy to recoil to a more advanced state. When applied to organisational theory, resilience is thus composed of two constitutes: the first being recoverability, implying the ability to recover from distress in a timely manner and the second strength with solidity, described as the attribute to remain strong. These elements can be visualised as the sponge and titanium effect, respectively³⁰².

A resilient organisation that is able to maintain productivity in adverse contexts is further inclined to learn in a trial-and-error fashion and bounce forward with increased vigour. Several learning mechanisms are activated in distress to predict changes recurrently and proactively tackle them, promoting a farsighted and self-adjusting organisational design. Such process entails the disposition to originate or withhold resources with malleability, plasticity, and transformability to endure and improve properly. Indeed, the organisation exhibiting resilience is identifiable for its prompt, comprehensive, and favourable reaction. It is fascinating to note that in assessing the peculiarities of their intricate and ambiguous environment, organisation perpetually strive to attain structural forms that align their macro and micro-structures to fit the specific circumstance. Three fundamental elements characterising resilience are robustness, redundancy, and resourcefulness. Whilst response and recovery refer to the possible performances of a system confronting disruption³⁰³. Robustness entails expressing modularity and adaptive decision-making processes. The former concerns procedures enacted to avert the spread of an unexpected shock's effects from the affected part to the whole system. The latter regards maintaining networked organisational designs, enabling organisations to regulate the degree of structural centralisation at need. Redundancy expresses the presence of extra resources and backup systems that ensure operational continuity when endangered. Such implicates redundancy of critical infrastructures and variety in solutions and strategies. The first entails cumulating modules that are not required for operability yet reveal vital to support core functionalities' continuance during crises. The second prompts organisations to develop multiple and diverse processes to attain an equivalent result³⁰⁴.

Resourcefulness involves the ability for self-organisation which includes the availability of social capital, human capital, relationships and networks, and creativity and innovation,

³⁰² Giustiniano and Cantoni, "Between Sponge and Titanium: Designing Micro and Macro Features for the Resilient Organization.".

³⁰³ Ibidem.

³⁰⁴ Ibidem.

relating to unused capacity, and the degree of inflexibility of boundaries separating disciplines, organisations, and social collectives. Furthermore, response necessitates effective and trustful communication and inclusive participation to promptly organise for action, implying a swift information distribution and sharing to enable a cooperative and rapid reaction. The capability to reobtain a level of normality in the aftermath of disruption is embodied by recovery, which must be warranted for each part and the entirety of the system. This entails the system's capacity to be flexible and adjustable and to mould to manage novel or altered contexts after a crisis. For effective recovery, two additional requirements must be met: active horizon scanning, understood as the practice of identifying deficits in current knowledge and initiating investigations to close existing gaps; and responsive regulatory feedback mechanisms, which relate to the activity of translation of newly acquired data from the aforementioned process into action³⁰⁵.

Hence, redundant resources are central to Giustiniano's conceptualisation of resilience, in consonance with several other authors who have contributed to generating its rich academic heritage, including Staw's and Meyer's works³⁰⁶, thus with the very origins of resilience's adoption in organisational theories themselves. In particular, maintaining a degree of margin reveals as a crucial variable for resilient answers, given that its presence allows for favourable responses to unexpected disturbances. Nonetheless, such notion lies in contrast with the concept of efficiency, typically entailing the production of a determined outcome with the least possible amount of waste, cost, and redundancy. Obviously, a sharp consciousness of where an organisation functions relative to its operational limits must be developed to preserve adequate margin. Furthermore, the mere possession of slack resources is not sufficient for resilient responses as their proper deployment, implicating correct activation, configuration, and reconfiguration is pivotal as novel threats surface. Thus, the paradox between efficiency and efficacy manifests as resilient organisations, as opposed to others, focus on reinstating efficacy, fostering their faculty to transform feedback and deploy resources in innovative manners promptly. With regards to favourable practices firms can enact to nurture resilience, the cultivation of resilient behaviour is worth noticing. Indeed, resilience is a multi-level and crossinteractive construct that spans across different aggregation levels - individual, collective, organisational - implying a resilient group is not necessarily entirely constituted by resilient

³⁰⁵ Ibidem.

³⁰⁶ Staw, Sandelands, and Dutton, "Threat Rigidity Effects in Organizational Behavior: A Multilevel Analysis."; Meyer, "Adapting to Environmental Jolts.".

members. Thus, by reason of the existence of its interactive component, promoting resilient networks and workforce is essential to attain advantageous reactions in times of distress³⁰⁷.

Three further facets of resilience can be appreciated concerning behavioural, cognitive, and contextual factors. The behavioural component is established by integrating resourceful processes and contradictory promptness with productive habits and behavioural readiness. Such association generates centrifugal forces that create ideas, information, and knowledge for innovative action, and centripetal forces concerting inputs and operations toward concrete resolutions, allowing the organisation to improve contextual learning and thoroughly utilise its resources when confronting straining situations. Cognitive factors represent the organisation's collective mind, allowing flexible advancement in unison. They necessitate an integral understanding of circumstances and a rigorous inclination to challenge pre-existing situational presumptions typically taken for granted. Contextual factors confide in the firm's internal and external relationships to assist in efficacious responsiveness when facing circumstantial intricacies. These comprise psychological safety, deeply rooted social capital, extended power and accountability, and wide resource networks. When incorporated, all these factors encourage virtuous interrelations and resource supply chains that enable speedy execution in surfacing disruptions. The theorisation of resilience as a dynamic process coincides with the inference that internal mobility, defined as the interchangeability of employees' roles within the firm – allowing for the permutation from a department to another – and the engagement of diverse functions stimulate resilience. Individual performance related to organisational objectives dictates whether the firm achieves these goals. Performance evaluations are directed to rewarding employees for meeting the company's ends and detecting which targets were not accomplished to devise a strategy for future success. In resilient organisations, personnel appraisal can be constructed both on basic parameters, such as the capacity to meet predetermined objectives by adhering to appropriate organisational conduct and the ability to recognise and enforce resilient solutions that are creative and innovative. In addition, components such as learning from experiences and adversities, effective communication, and the skill to reconfigure in counteracting a disturbance can be adequately compensated³⁰⁸.

Moreover, resilient organisations are often planted on two very discrete convictions: firstly, they consider success sparingly and are wary of adverse dormant occurrences to emerge, recognising that their modelling of risks requires constant renovation, corrective measures are

³⁰⁷ Giustiniano and Cantoni, "Between Sponge and Titanium: Designing Micro and Macro Features for the Resilient Organization.".

³⁰⁸ Ibidem.

deficient, and solidity of secure operativity is frail; secondly, they assume that they can easily withstand a broad range of disruptions and are steadily seeking to develop further novel abilities to do so. Resilient organisation are aware of their flaws and that in order to flourish and succeed, it is necessary to learn from experience. Overall, the entirety of the aforementioned practices conveys the idea that resilience ought to be interpreted as a processual or developmental element, in contrast with its static and deterministic connotation. This suggests that resilient responses and the attributes constituting them must be perpetually cultivated and ensured. Furthermore, this analytical lens implies organisations cannot be considered to merely return to the status quo, as each time they engage in a resilient process, they attain a superior level of functioning, embracing the advancements enacted in itinere. Thus, their capacity to withstand adversities is progressively and continuously perfectioned, denoting the life of an organisation can be represented as an infinite chain of resilience processes³⁰⁹. Such concatenation entails unlearning, relearning, and learning, that when combined, result in organisational renewal, fostering longevity and liveliness of the organisation itself. The critical notion of unlearning devised by Hedberg – whose theorisations were outlined in the second chapter -, focuses on deconstructing knowledge concerning preformed beliefs, existing interrelations amongst inputs and reactions, and exchanges between responses. It must be crucially noticed that unlearning implies adopting alternative mindsets rather than merely forgetting, fostering innovative experimentation by surmounting inertia related to engaging in novel solutions³¹⁰.

Resilience thus can be ultimately portrayed as a dialectical synthesis between its adaptive and proactive connotations, with interactions and aggregative processes enabling the emergence of a unitary template encompassing both. Such integrative mechanisms incorporate prior structures into subsequent ones, perpetually and dynamically reconfiguring the system into a superior form, where the result is not merely equal to the sum of the parts. Thus, the adaptive and proactive elements interact exhibiting a permanent tension carrying dynamic and generative effects, whereby one ought to be complementary to the other for the resultant process to occur. This conforms to the notion of permanent dialectics where synthesis is not reached as the parts demonstrate constant reciprocal support, coalescing yet not overshadowing each other. The presence of solely adaptive resilience would inevitably culminate in learning yet forgetting the extrapolations that emerged through the response. On the other hand,

³⁰⁹ Ibidem.

³¹⁰ Giustiniano, Pina E Cunha, Simpson, Rego, and Clegg, "Resilient Leadership as Paradox Work: Notes from COVID-19.".

proactive resilience in isolation results in meditative contemplation but an absence of correspondent action. Oppositely, the synthesis goes beyond the alternative pursuit of one or the other, fostering a perennial reflective reactivity featuring both action and cogitation³¹¹. Prior reflection will feed reaction, which in turn will foster further reflection informing future action. On the macro level, resilience will be embodied by a conglomerate of cognitive, behavioural, and contextual elements, and on the micro dimension, it represents a positive intellectual resource conducive to subjective psychological capital. Resilience thus reveals itself as a dynamic interaction amongst these two faculties, where adaptive resilience unfolds with speediness and instinct as an event obliges the organisation to respond with unprecedented means and actions, and the proactive dimension is expressed as the system and the supporting assumptions are incessantly challenged through heedful reasoning. Intrinsic to such a process lies the practice of learning through anomalies, deemed as opportunities to improve and culminating subsequently in double-loop learning where the system questions itself and its practices. Hence, resilient entities must exhibit fast action and slow thinking. This thought is perfectly embodied by the author's brilliant assertion "The resilient organisational system constantly oscillates between using shocks as opportunities to respond, and responses as opportunities to learn about shocks"312.

The last facet to take into consideration is the manner in which resilience can be fostered through resilient leadership. In Giustiniano's conceptualisation, the latter is manifested as a paradox work, implying the synchronous reception and offering of guidance. Indeed, as seen, resilience is paradoxical in nature, embracing contrasting tensions between agency and association, improvisation and preparedness, fortitude and vulnerability, boldness and prudence, idealism and pragmatism, clarity and plasticity in direction, amongst several others. Accordingly, resilient leadership involves the equivalent attitude to accept and foster paradoxes and, as in organisational resilience, requires reactive and adaptive capacities. The intricacy characterising such a paradigm is portrayed by the necessity of a resilient leader to balance the contraposing yet interrelated forces that surface as non-alternative in times of increased equivocality. In this scenario, leading is not understood as imposition but rather enablement, given the impossibility of cultivating resilience in a top-down fashion. Indeed, through positive interactions, the proper grounds must be provided for resilience to emerge. Furthermore, expressing strategic vision, exemplified by doubting traditional and ordinary patterns of

 ³¹¹ Giustiniano, Clegg, Pina e Cunha, and Rego, "Resilience as dialectical synthesis.".
³¹² Ibidem.

thought and action, differentiates leadership from mere management³¹³. The investigation of the Italian hospitality sector amidst the coronavirus pandemic offers a fascinating case scenario to appreciate the effects and facets characterising resilient leadership. Exhibiting reductions as high as -97.8% of foreign hotel guests in April 2020 compared to the previous year, the gravely affected industry perfectly illustrates the critical role of resilient leaders in periods of extreme distress. The intriguing study *Improvising resilience: The unfolding of resilient leadership in COVID-19 times*, conducted by Giustiniano in conjunction with Sara Lombardi and Miguel Pina e Cunha, exposes two pivotal practices to devise resilience when confronting environmental jolts, the first concerning the concept of leadership as gardening – implying the presence of continuous preparedness –, and the second regarding the capacity to learn whilst guiding. These, depicting a permanent tension and interacting in a synergistic fashion, entail expressing the paradoxical ability of simultaneously being an actor in and a spectator of the system³¹⁴.

The results of the qualitative content analysis performed, grounded on a series of interviews with hotel and general managers, outlined several first-order elements relegated to the emergence of resilient leaders and organisations, ranging from ensuring the presence of social responsibility, to maintaining a positive outlook, and engaging in reflective and sensemaking activities. These culminate in second-order themes such as planning, protecting, rethinking, and responding, contributing to the emergence of leadership as gardening and leading whilst learning, respectively. With regards to the former, the metaphor stresses the critical relevance for managers to enable the organisation to develop resourceful and autonomous assets just as gardeners nurture and allow plants to grow and flourish in an organised and tended context. In particular, features characterising organisational resilience, including planning, protecting, purposing, relating, and perfecting, that entail portraying, amongst several others, psychological safety, shock metabolization, long-term orientation, teamwork, and optimisation are central to create the correct environmental circumstances to effectively weather distresses. This implies a diffusion of decision-making responsibility must be enacted for entities to autonomously mature, expressing the capacity of leaders to abstract and watch the organisation functioning from remote. In this scenario, the relevance of perpetual maintenance surmounts the one of initial planting with regards to organisational outcomes, as managers cannot raise

³¹³ Giustiniano, Pina E Cunha, Simpson, Rego, and Clegg, "Resilient Leadership as Paradox Work: Notes from COVID-19.".

³¹⁴ Lombardi, Sara, Miguel Pina E Cunha, and Luca Giustiniano. "Improvising Resilience: The Unfolding of Resilient Leadership in COVID-19 times." *International Journal of Hospitality Management* 95 (2021): 1-13. doi:10.1016/j.ijhm.2021.102904.

employees or organisations but can create the appropriate conditions for the adequate growth of the rooted seeds. Moreover, all elements pertaining to the system ought to be concerted harmoniously amongst each other for the organisation to represent a congruent entirety, with processual and incremental improvements characterised by heedful attention and gradual alterations. A significant peculiarity to note is behavioural guidance through example. Executives represent role models for their employees, and the most effective communication instrument in their possession is their own behaviour. Ultimately, this holistic mindset culminates in the realisation by leaders that power within the organisation should be shared and diffused, resulting in collective confronting and framing of crises. Thus, the significance of the organisation and the circumstantial idiosyncrasies prevail over managers, who wittingly avert focusing on themselves, conscious that the whole garden, rather than the gardener, must be preserved. In other words, resilient leaders are cognisant that increased contextual awareness is vital given the inadequacy of applying universal solutions to particular and novel issues arising from perennially evolving contexts³¹⁵.

Leading while learning concerns the capacity of managers to frame shocks as opportunities to learn, advance, gain novel information, and enhance their competencies. Organisational resilience's features such as resolving, rethinking, and responding, which include problemsolving, reflective, and sensemaking abilities, surface as pivotal to exhibit such disposition. In particular, such practice might occur with structural improvisation, which entails the manager undergoes the resilient process, learning and responding spontaneously in itinere. Moreover, the jolt surfaces as a critical occasion to achieve an augmented understanding of the organisation, exhibiting peculiar characteristics otherwise unobservable in normal operativity. This allows leaders to challenge preformed assumptions and practices, usually unquestioned in quiet periods because of their apparent marginality, fostering perpetual advancement. Such process enables a constructive amendment of past mistakes, systemic and managerial renovation, and the reconfiguration of the appointed significance to diverse elements constituting organisational performance. Sensibly, this results in enhanced strategic diversification, fostering the emergence of novel mindsets, behaviours, practices, and possibilities for both leaders and their organisations. Thus, guiding whilst learning reveals itself as a vital and complementary skill to leadership as gardening, which taken in isolation proves inefficient to attain resilience as managers ought to be both inside and outside the system to nurture it whilst acquiring novel awareness to confront future unexpected shocks virtuously. In

³¹⁵ Ibidem.

other words, leaders must simultaneously depict ongoing preparedness and learning capacities as catastrophes occur, skilfully managing conflicting tensions and expressing improvising dispositions. Hence, resilience and resilient leadership surface once more as dialectical in nature, entailing the ability to embrace and engage in paradoxical practices and capabilities within a perpetual process of organisational advancement³¹⁶.

4.2 Aristotelian Resilience: a Leap into the Unknown

The ingenious thread connecting such theorisations with virtue ethics will be hereby presented. In particular, two critical postulations will be exhibited: first, the practices for cultivating resilience and attaining virtues share remarkable resemblances; second, the former can be interpreted as a moral virtue in itself. The similarities pertaining to the procedure instantly emerge when considering the initial assertion that resilience entails simultaneously building walls and windmills, symbolising the attainment of a mean between fostering resistance and absorption. Indeed, the concurrent manifestation averts engaging in polarising actions, which can be arguably compared to leaning towards the extremes that Aristotle fervently condemns. Furthermore, harmoniously with its physical connotation, resilience implicates expressing strength with plasticity. With an excessively resisting or rigid aptitude, the energy carried by an exogenous shock will break the entity struggling to be resilient, which requires bending capabilities to accommodate the jolt. On the other hand, an absence of fortitude or excessive malleability impedes the system to vigorously withstand the contrasting power, with the risk of incurring permanent deformation. Hence, just as the attainment of the virtue of courage implies exhibiting the sophisticated capacity to balance two opposing propensities in action, cowardice and recklessness, resilience requires the equivalent predisposition to embrace apparent paradoxes. Moreover, as illustrated, a resilient organisation can be described as an infinite chain of resilience processes, each comprising withstanding adversities and learning from them to inform subsequent action. In particular, learning through experience is elevated as a vital capacity that organisations desiring to be resilient must possess, culminating in the assertion that jolts are utilised as opportunities to react, and reactions are, in turn, opportunities to learn about jolts. Analogously, Aristotle deems experience as a critical element for the achievement of virtuousness. Indeed, exhibiting the adequate dispositions in action generates favourable habits, whose development and expression ultimately forms

³¹⁶ Ibidem.

virtuous characters. It is through the engagement in multiple courageous acts in the face of danger that the agent progressively develops the virtue of courage. Thus, quite evidently, several situations in which to enact such behaviour must occur. Additionally, the peculiarities embedded in specific circumstances can be appreciated only after having lived through them. Hence, just as for the agent striving to be resilient, experience is strictly required by the one striving to be virtuous. After all, such is what distinguishes an individual possessing phronesis and, for instance, a child. Given that practical wisdom ensures that the right disposition will indeed successfully transform in the intended course of action, no doubts surround the pivotal role of experience. Once more, in an equivalent manner, confronting adversities is required for the organisation to learn from them and shape subsequent behaviour, which will prove effective precisely by reason of having cultivated the necessary and mindful preparedness. Thus, opportunities to enact responses are vital both for the virtuous and resilient actor.

Furthermore, intrinsic to the aforementioned process lies the concept of advancement. Indeed, improvement surfaces as a consequence of undergoing the learning practices and subsequently employing them in a self-adjusting fashion. Precisely by reason of such argumentation, the resilient organisation is thus depicted as bouncing forward rather than merely bouncing back. Hence, another striking similarity surfaces, as the attainment of virtue can be portrayed as a process of perpetual refinement of the character of the agent seeking virtuousness. As a matter of fact, virtues result from continuous proper behaviour, which progressively moulds the dispositions of the individual performing them in the attempt to achieve full virtue and consequently eudaimonia. Moreover, increased attentiveness to the features characterising specific circumstances is required both by the virtuous and resilient entity. The resilient organisation perennially shapes its design and response to fit the equivocal and intricate environment it confronts. The virtuous agent is well aware that the appropriate disposition and consequent act is contingent on the situation it is embedded in, as no universal rules are devised to inform action. In other words, for the organisation as well as for the individual, the right response ultimately depends on the definite context, requiring remarkable heedfulness concerning the peculiarities permeating it. Moreover, another salient assonance between the attainment of resilience and the doctrine of the mean can be identified concerning the paradox between efficiency and efficacy. As mentioned, slack resources and their correct deployment play a predominant role in enacting resilient answers, granting the organisation the necessary flexibility to adapt to unexpected events promptly. Nonetheless, developing redundant resources implies a level of detachment from the achievement of augmented efficiency, whose practices revolve around reducing costs, waste, and surplus. Thus, the

resilient organisation ought to strive for a balance between the contraposing elements, individuating a mean between the two excesses.

Furthermore, the ultimate conceptualisation of resilience portrays it as a permanent dialectic exhibiting perpetual tension amongst its adaptive and proactive elements, who support each other in a continuous fashion. Hence, with action and reflection virtuously combining in synthesis, implying speediness and instinct on one side and cautiousness and mindfulness on the other. Once more, such theorisation closely resembles Aristotle's mean where virtue is to be found in the capacity of balancing opposing powers to attain an intermediate state. Lastly, such framework analogously applies to the practices of the resilient leader, who skilfully individuates multiple equilibria between contrasting forces such as improvisation and preparedness, fortitude and vulnerability, boldness and prudence, and fortitude and flexibility. Additionally, as previously illustrated, resilient leadership amusingly entails both guiding and guidance. Notwithstanding, the paradoxical character is not limited to the latter's nature as resilience is analogously a paradox work, equivalently symbolising the necessity to balance contraposing elements for its attainment perennially. For such reason, it can be argued that resilience is ultimately a virtue in itself, developed in a processual fashion and as a habit through experience and learning, with constant refining and refinement by the entity striving to achieve it. Moreover, given that the focus of the resilient organisation surrounds its components and actions and behaviour predominantly, the conception of moral virtue – as opposed to its intellectual facet – is perhaps more appropriate for the exposed postulation. Finally, resilience can be interpreted as a virtue also by reason of the existence of an excessive presence or absence of the same. However, whilst the issue with regards to its deficit is relatively straightforward, the motives rendering problematic its extreme are less immediate. A dark side of resilience lurks in the shadows, symbolised by an agent's and system's potential inclination to seek the attainment of unachievable ends, feeding false hopes, and display an excessive tolerance of adversity, counterproductive environments, and toxic actors. Moreover, unwarranted resilience might inhibit self-consciousness on personal and organisational limits, fostering denial and hubris³¹⁷. Indeed, as Paracelsus suggests, the dose truly makes the poison³¹⁸.

³¹⁷ Chamorro-Premuzic, Tomas, and Derek Lusk. "The Dark Side of Resilience." Harvard Business Review. August 16, 2017. Accessed May 11, 2021. https://hbr.org/2017/08/the-dark-side-of-resilience.

³¹⁸ Giustiniano, Clegg, Pina e Cunha, and Rego, "Introduction: the aim and structure of the book.".

4.3 Organisational Resilience and Virtuousness Amidst the Disaster

In light of Giustiniano's theorisations and its exposed synergies with virtue ethics, several inferences can be proposed concerning resilience in the Global Financial Crisis. In particular, its peculiar connotation of the concept is well suited to analyse the performance of two investment banks: JP Morgan and Bear Stearns, selected by reason of their respective responses to the catastrophe, exceptionally resilient in the case of former, and remarkably unresilient in the latter. Perhaps not surprisingly, on the 16th of March of 2008, nine months after Bear Stearns declared dire losses related to subprime mortgages in the High-Grade Structured Credit Strategies Fund and High-Grade Structured Credit Enhanced Leverage Fund³¹⁹, JP Morgan announced its acquisition – executed with government support –, which along with more than \$300 billion in assets was also displaying fatal issues at the time, resulting in its irreversible collapse. Indeed, it was the 13th of March of 2008 when Alan Schwartz, Bear Stearns' last CEO following James Cayne, declared to the Security and Exchange Commission that it would be "unable to operate normally on Friday"³²⁰. The following morning the New York FED granted a \$12.9 billion loan to the troubled bank through JP Morgan to tackle its liquidity needs. Notwithstanding, this did not prevent S&P from downgrading Bear's rating to BBB, three rating levels below its prior grade. Fitch and Moody's acted analogously, and by the end of the 14th of March 2008, the investment bank had no cash and a 47% plummet in its stock price, closing under \$30. Evidently, the loan was recognised by the markets as a signal of terminal weakness³²¹. On the other hand, JP Morgan, typically acknowledged as one of the most successful companies currently operating in the financial sector, has been widely appreciated for exhibiting a particularly effective response to the financial crisis of 2007 and 2008. Although several factors are worthy of consideration to assess the difference between JP Morgan and Bear Stearns in confronting the crisis, three aspects emerge as particularly clamant signs of their diverse approaches: firstly, the composition of the management pertaining to all hierarchical levels; secondly, the leverage ratio, the subsequent exposure to higher risks, and their assessment and management; thirdly, the degree of involvement in toxic securities, practices, and businesses. It must be reminded that the inferences on the resilient or unresilient character of the elements analysed are founded predominantly on the previously outlined

³¹⁹ Guillén, Mauro F., and Sandra L. Suárez. "The Global Crisis of 2007–2009: Markets, Politics, and Organizations." *Markets on Trial: The Economic Sociology of the U.S. Financial Crisis: Part A Research in the Sociology of Organizations*, 2010, pp. 257–279., doi:10.1108/s0733-558x(2010)000030a012.

³²⁰ The Financial Crisis Inquiry Commission, "March 2008: The Fall of Bear Stearns.".

³²¹ Ibidem.
theorisations of Giustiniano and partly on the authors presented in the second chapter of this thesis. Furthermore, the considerations concerning resilience in JP Morgan, Bear Stearns, and the financial sector in its entirety will focus primarily on features related to their qualitative dispositions. This is consequential to the analytical lens adopted to examine the crisis, influencing amongst the vast array of threats those deemed most critical to its unravelling.

A first extract which is particularly salient to exemplify JP Morgan's outlook and moves amidst the disaster is to be found in a memo that Jamie Dimon, the CEO of the company both currently and at the time, left to his employees on the occasion of the decennial anniversary of Lehman Brothers' bankruptcy. Specifically, the elements that can be evinced contribute to the illustration of the first significant difference outlined amongst JP Morgan and Bear Stearns concerning the quality of the composition of management and employees. The initial sentiment that stands out from the memo is the substantial relevance attributed to the intrinsic value of employees, whose role and efforts are recognised as having been critical for the company's capacity to withstand the crisis successfully. As a matter of fact, not only the challenge is framed as one confronted collectively by the members, but these are, in turn, elevated as a vital part of the solution. In other words, the CEO does not depict the victory in his own hands but rather in everyone's. Not surprisingly, such aptitude generated a sense of unity encompassing all individuals facing the catastrophe: on one side, Dimon exhibits a philosophy of inclusivity recurrently reinstating the personnel's significance, and on the other, these demonstrated extraordinary commitment to the firm by working beyond duty, remaining loyal to the company in the turbulent times³²². Moreover, such dispositions can be arguably described as complementary, feeding each other in a circular fashion, by which one fosters and reinforces the other.

The composition of his operating committee amidst the crisis and his leadership style also support such postulations. Indeed, the former exhibited a group of long-standing loyalists, external hires, and company veterans, whose selection was not founded on their presumed prestige but rather on personal character. Moreover, his guidance featured an unconventional and free-form style, dismissive of formal chains of command, with information gathering spanning fluidly across all hierarchical levels³²³. Both elements disputably are constitutive of

³²² Son, Hugh. "Dimon Says JP Morgan's Actions during '08 Crisis Were Done to 'Support Our Country' - Read Full Memo to Employees." CNBC. September 14, 2018. Accessed May 12, 2021. https://www.cnbc.com/2018/09/14/memo-dimon-says-jp-morgans-actions-during-crisis-were-done-to-support-our-country.html.

³²³ Tully, Shawn. "Jamie Dimon's Swat Team - How Jamie Dimon at J.P. Morgan Avoided the Credit Crunch." Fortune. September 02, 2008. Accessed May 12, 2021.

resilience as on one side, variety is promoted by encompassing a workforce with diversified backgrounds; on the other, an unconstrained flow of data across the company is fostered by encouraging boundary traversing communication and cross-level interactions. An additional peculiarity concerns the sensemaking practices adopted by JP Morgan's leader, who stated the company's objectives did not merely pertain to its own survival and gain but extended to a greater purpose. Such can be identified as the disposition to save and protect the entirety of the actors affected by the dire consequences of the crisis, ranging from clients, competitors, governmental institutions, and the financial system itself. In this regard, a higher sense of meaning is manifestly conveyed by Dimon, asserting that the company felt the responsibility to shield the vast array of players relying on their organisation, even when the required measures entailed significant risk for the firm's own survival³²⁴. This profound motive undoubtedly affected the values held by JP Morgan, whose influence is notoriously pivotal on both organisational culture and employees, concerting their efforts and mindsets towards the achievement of this greater objective.

Furthermore, a wise recognition of errors and responsibility is appreciable, having the CEO stated that investment banks partook in the formation of the disaster, acknowledging and apologising for mistakes committed by the firm itself³²⁵. Moreover, it admits that although JP Morgan confronted the crisis vested with favourable financial and cultural features, these were adequate to avert most, but not all, complications carried by the crisis. Clamant evidence of the effect of Dimon's approach is symbolised by his managers owning up to any mistakes committed, never possessing the urge to sweep the problems under a figurative rug. For instance, Charlie Scharf, a retail banking head at JP Morgan, confessed during an investor meeting to his incapacity to forecast, anticipate, and react to the subprime business's implosion promptly. Nevertheless, despite all members present being convinced that it would be his professional demise, under Dimon's guidance, the executive continued to lead the subsequent acquisition of Washington Mutual and eventually became himself CEO of Visa, demonstrating the beneficial influence carried by an organisational culture grounded on accountability³²⁶. In addition, the aforementioned faults were never exposed with a blaming or fearful attitude but

 $https://archive.fortune.com/2008/08/29/news/companies/tully_dimon.fortune/index.htm?postversion=20080902\ 08.$

³²⁴ Son, Hugh. "Dimon Says JP Morgan's Actions during '08 Crisis Were Done to 'Support Our Country' - Read Full Memo to Employees.".

 ³²⁵ Tully, Shawn. "Jamie Dimon's Swat Team - How Jamie Dimon at J.P. Morgan Avoided the Credit Crunch.".
³²⁶ Son, Hugh. "Jamie Dimon and JP Morgan Are the Big Winners on Wall Street since Lehman, Tripling Investors' Money." CNBC. September 11, 2018. Accessed May 12, 2021. https://www.cnbc.com/2018/09/11/jamie-dimon-made-a-bank-in-his-image-what-happens-when-he-bows-out.html.

rather with humility and the intent of learning from the harrowing experience. Arguably, such inclinations prove essential for the cultivation of resilience in organisations. In Wells Fargo analyst Mark Mayo's words, such "culture allowed JP Morgan to be prepared for the crisis and navigate it far better than the others"³²⁷.

Moreover, Dimon's identification of faulty practices was not confined to its sole company as he outlined industry-wide fallacies resulting from previous operations and regulations. However, these have been framed as opportunities for improvement, resulting in ameliorating both the financial framework and its participants. Crucially, in hindsight, without the emergence of the crisis, pivotal regulatory advancements enacted such as the Dodd-Frank bill and the Basel III framework, promoting transparency, accountability, and stability in the sector³²⁸ would have probably never occurred. As seen, identifying shocks as favourable occasions to learn and grow is essential for the developmental cultivation of resilience. Moreover, a specific heedfulness of Dimon towards the existing circumstances surfaced, whose presence proves critical for efficacious learning and refinement. In particular, the concept of learning but not forgetting is evidently appreciable, for the least by reason of the memo being composed a decade after the unravelling of the disaster. Given that proactive resilience entails reflective reactivity, the CEO undoubtedly manifested it as increased cogitation surrounded the catastrophe and the practices involved³²⁹. In light of the company's adaptive capacities, exemplified by its prompt, efficacious, and constructive response to the crisis, it can be maintained that JP Morgan appears to have embraced the permanent dialectic required for truly resilient responses, exhibiting a favourable reaction and subsequent mediation upon the reaction itself.

Besides, it can be positively asserted that the company bounced forward rather than merely recoiling. Indeed, since 2007 the firm has impressively grown, as demonstrated, amongst other criteria, by doubling its total assets, increasing from \$1.5 to approximately \$3.4 trillion in 2020³³⁰, rendering it nowadays the largest bank in the United States by assets retained. Perhaps such expansion lies also in its propensity to engage in double-loop learning, as reflection enclosed both the peculiarities of the crisis and its own performance within it. Finally, the portrayal of the brilliant temperament of JP Morgan's Chief Executive Officer culminates in

³²⁷ Ibidem.

³²⁸ Collis and Hartman, "JPMorgan Chase after the Financial Crisis: What Is the Optimal Scope of the Largest Bank in the U.S.?".

³²⁹ The Financial Crisis Inquiry Commission, "Before Our Very Eyes.".

³³⁰ "2020 Annual Report." JPMorgan Chase. 2021. Accessed May 12, 2021. https://www.jpmorganchase.com/content/dam/jpmc/jpmorgan-chase-and-co/investor-relations/documents/annualreport-2020.pdf.

the assertion, "The biggest lesson of the crisis: The quality, character, culture and capabilities of your partners is paramount."³³¹. This indicates both an augmented attentiveness to the relational component of the firm and a holistic outlook on the value of non-traditional assets, vital for the creation of virtuous endogenous and exogenous networks. Indeed, the possession of beneficial intra and inter-firm collaborations, allows for increased rapidity and efficacy in response, activating resilience. Amusingly, perhaps the most trivial yet revealing signal of Dimon's excellence relies on his persistence as the company's CEO to this day in the face of the dismissal of all the others³³².

Several additional elements can be retrieved in The Financial Crisis Inquiry Report supporting and advancing the exposed argumentations. During the third quarter of 2006, albeit the housing market exhibited evident signs of contraction and predicament for mortgagebacked instruments, investment banks continued to originate and package related securities, amounting to \$1.3 trillion. Indeed, Wall Street portrayed no indication of halting such nefarious practices despite executives advising caution as corporate governance and risk management were on the brink of collapse. Dimon was to be found amongst these, firmly admonishing and reprimanding the detrimental operations and conduct adopted by top managers³³³. This attitude is further depicted by the CEO's urging to dispose of subprime positions in the equivalent period, outlining their precarious state. Such assertion indicates Dimon's increased awareness and farsightedness, allowing him to adopt a strategic shift that proved essential for the company's survival³³⁴. This comes as no surprise given the CEO's disposition to surround himself with wary collaborators, with whom he recurrently prioritised heedful scrutiny of existing data to detect trouble prior to its unfolding and vigilantly surveilled risk, even at the expense of the company's growth and market share. Thus, exhibiting two attitudes for the attainment of resilience: the first concerning the development of a profound consciousness of the environment to anticipate unexpected events and the second regarding striving for a balance between efficiency and efficacy, demonstrated by its concern for prudence as opposed to mere performance. Moreover, a further element contributing to the favourable position of JP Morgan amidst the crisis was the maintenance of a level of leverage on average 50% lower than almost the entirety of the industry – in the range between 1:20 to 1:22. Such a measure depicted a

³³¹ Son, Hugh. "Dimon Says JP Morgan's Actions during '08 Crisis Were Done to 'Support Our Country' - Read Full Memo to Employees.".

³³² Son, Hugh. "Jamie Dimon and JP Morgan Are the Big Winners on Wall Street since Lehman, Tripling Investors' Money.".

³³³ The Financial Crisis Inquiry Commission, "Before Our Very Eyes.".

³³⁴ Tully, Shawn. "Jamie Dimon's Swat Team - How Jamie Dimon at J.P. Morgan Avoided the Credit Crunch.".

particular concern for prudence and safe practices to minimise risk and, compared to other firms, retain more margin to be allocated toward capital requirements for potential downturns and adverse events impacting assets under management³³⁵. Thus, contrarily to the frenzy prompting increasingly higher leverage to expand investment activities that characterised the sector, JP Morgan exhibited the necessary mindfulness to differentiate and abstain from such toxic malpractices to the extent of positioning the company to the salvaging party.

Furthermore, upon further scrutiny, JP Morgan decided during the surge of the credit bubble to exit the business of securitising subprime mortgages – despite its booming – and to shun instruments including structured investment vehicles or SIVs and CDOs, steering clear of excesses³³⁶. Indeed, Dimon realised that the deterioration of underwriting standards was perilously spreading across the industry, and the concurrent increase of the cost and risk encompassed by maintaining significant positions of MBSs on the books rendered the business unattractive and unfavourable. By late 2006 the company sold over \$12 billion in subprime mortgages that it had generated, vigorously swimming against the tide composed of the entirety of the sector competitors³³⁷. This demonstrates increased heedfulness of extant circumstances and a disposition to engage in strategic diversification by reason of such renewed awareness, averting to hold on to past successful practices³³⁸. Notoriously, both inclinations are central for resilient responses. Analogously, when JP Morgan discovered at the end of 2009 that loans originated from brokers resulted in more than twice the losses from the ones initiated by the company, it adjudicated to terminate brokerage-related businesses. Such a decision was enacted in light of the distorted praxis that characterised brokers dealing subprime clientele and mortgages, inundating the market of unhealthy securities. Thus, it can be evinced that the firm's management – with Dimon at its forefront – took action to prevent adversities from reoccurring, averting the possibility to acquire instruments defecting the necessary due diligence³³⁹. The latter was indeed a defining feature of the company's philosophy to conduct business. If an organisation is unsure of the robustness of the practices performed by its partners within the supply chain, it might be advisable to discontinue relations for the maintenance of a healthy and untainted network. This, as recurrently stated, promotes rapid and resilient responses and avoids suffering rippling disruptions caused by exogenous connections in case of calamities.

³³⁵ The Financial Crisis Inquiry Commission, "Deregulation Redux.".

³³⁶ Son, Hugh. "Jamie Dimon and JP Morgan Are the Big Winners on Wall Street since Lehman, Tripling Investors' Money.".

³³⁷ Tully, Shawn. "How J.P. Morgan Steered Clear of the Credit Crunch." Fortune. September 02, 2008. Accessed May 12, 2021. https://archive.fortune.com/2008/08/29/news/companies/tully_jpmorgan.fortune/index.htm.

 ³³⁸ Tully, Shawn. "Jamie Dimon's Swat Team - How Jamie Dimon at J.P. Morgan Avoided the Credit Crunch.".
³³⁹ The Financial Crisis Inquiry Commission, "Credit Expansion.".

Additionally, as mentioned, the disengagement from the aforementioned practices depicts the CEO's capacity to halt operations once constitutive of the firm's functioning and success in light of novel information, indicating an elevated consciousness of the circumstances, ability to act upon it, and a virtuous disposition to doubt existing operations and knowledge to adapt and evolve constantly. In other words, it shows a predisposition to learning to unlearn, pivotal for achieving resilience.

Moreover, with the collapse of Bear Stearns, it was concluded that JP Morgan was the only firm large and robust enough to conduct the acquisition of the former, exemplifying the quality of its conduct of business that enabled it to reach and retain its prestige, even to our days³⁴⁰. Withstanding a crisis carrying one's issues can be undoubtedly recognised as strenuous activity. Let alone doing the same with the added burden from encompassing the problems of another entity. Thus, it must be denoted and perhaps applauded, the extraordinary resilient character expressed by the firm, limping on one leg of its own with the corpse of a colleague on its shoulders. The internal practices and measures of JP Morgan granted it the margin, slack resources, and flexibility necessary to the resilient confrontation of the crisis, enabling it to support an additional entity beyond its already vigorous assistance to the system and society as a whole. Besides, as previously outlined, the challenging of pre-existing assumptions testifies in favour of Dimon's resilient aptitude. Such inclination is further exemplified by his questioning the definition of solvency when asked about Lehman's financial solubility. According to the former, such a concept was not facilely definable as it encompasses multifaceted implications. Indeed, on an accounting basis - consistently with JP Morgan's Chief Risk Officer's opinion - Lehman Brothers was solvent, yet it was financing assets on very short-termed and leveraged loans. Such practice allowed the company to stay temporarily afloat on a thin and precarious margin, further undermining its risk profile³⁴¹. In his simple yet effective statement, Dimon cleverly expressed scepticism towards judging a company's solvency merely in virtue of its accounting parameters, criticising the frequent inflation and overvaluation of book assets that characterised the period leading up to the crisis. In addition, and perhaps amusingly, whilst growing wary of the businesses surrounding the securitisation of subprimes, the CEO further asserted that increased assets, amounting to as much as \$100 billion, could be observed in quarterly reports of rivals yet without a concurrent augmentation of capital³⁴². Hence, it can be maintained that resilient leaders do not accept de facto

³⁴⁰ The Financial Crisis Inquiry Commission, "March 2008: The Fall of Bear Stearns.".

³⁴¹ Ivi, "September 2008: The Bankruptcy of Lehman.".

³⁴² Tully, Shawn. "How J.P. Morgan Steered Clear of the Credit Crunch.".

suppositions but rather foster the development of subjective standpoints, promoting psychologically safe environments to challenge predetermined notions for potential innovative thought processes and inferences.

Furthermore, no doubts surround the assertion that Lehman Brothers' bankruptcy was one of the most tragic and defining moments of crisis. However, on whether its bailing out would have prevented the catastrophe's unfolding, many still disagree. Not surprisingly, one of those doubting it was JP Morgan's CEO, who adamantly stated that virtually nothing would have changed if the government intervened. Rather, in the latter hypothetical scenario, instead of a discussion over the potential involvement of the FED, there would have been an investigation on the waste of taxpayers' money³⁴³. The consciousness of reality and inevitability of certain events characterises mindfulness and fosters optimal resource allocation in adapting to chaining circumstantial features. In turn, these prevent crystallising in previous practices and mindsets that hinder innovative and alternative thinking, allowing for enhanced responsiveness and efficacy in the face of novel and exotic disturbances. Indeed, as mentioned, a practice of resilient organisations is disposing of the past whilst retaining the lessons learnt, to look forward without the burden of history but with its empowering experiences and lessons. Additionally, in describing the aftermath of Lehman's collapse, Dimon denoted the catastrophic state of financial markets. All operations seemed to have frozen due to the bank run on behalf of investors and depositors extracting liquidity. In particular, he stated that JP Morgan could have more comfortably coped in such a dire scenario by enacting drastic measures halting all lending, marketing, and investing activities and lay-off over 20,000 employees. Nonetheless, ultimately, it did not. With his workers' well-being and prosperity in mind, Dimon determined that the best course of action was not a solution protecting the sole interests of the company, but the entirety of its individual members as well³⁴⁴. Resilient leadership allows for no man being left behind, fostering loyalty in employees towards their management and firm and extending it reciprocally when disasters occur. The CEO further observed the value of visualising the broader picture in such a context, as if all companies were to enact similar cutting countermeasures, a great depression would have occurred³⁴⁵. Lastly, analogously to Bear Stearns' acquisition, JP Morgan was the sole candidate with the capacity to absorb Washington Mutual, the largest insured depository institution in the United States history to have filed for bankruptcy with its \$307 billion in assets. Similar discourse and

³⁴³ The Financial Crisis Inquiry Commission, "September 2008: The Bankruptcy of Lehman.".

³⁴⁴ Ivi, "Crisis and Panic.".

³⁴⁵ Ibidem.

implications concerning Bear's buyout applied, with the difference that JP Morgan already possessed a distresses company by that time. Notwithstanding, it did not shy away from recouping and salvaging another one. This ultimately testifies to the virtuous conduct of the firm and its members, across all levels, that enabled the creation of the resilient attribute to such an extent that it was able to support and uphold not just one, but three, companies in strain³⁴⁶.

On the opposite side of the spectrum lies the utterly inefficacious and unresilient response of Bear Stearns, whose inadequacy is explicated quite straightforwardly by its default. To start with, the company was operating with remarkably thin capital, borrowing to a hilt and holding a leverage ratio as high as 40 to 1, implying a 2,5% drop in asset value was enough for it to go bust. By the end of 2007, the firm portrayed \$383.6 billion in liabilities with only \$11.8 billion in equity and borrowed in the overnight market – requiring daily renewal – up to \$70 billion³⁴⁷. Such unconcerned and reckless aptitude lied in complete contrast with JP Morgan's, which exhibited half of the leverage ratio and great concern towards prudence and risk management. Moreover, revenues and earnings from trading and investments, which include securitisation and derivative activities and the dire risks embedded, accounted in the years following 2002 for 100% of the firm's pre-tax earnings, indicating an arguably excessive involvement of the latter in the most precarious operations available³⁴⁸. Indeed, between 2004 and 2006, its origination of commercial real estate mortgages more than doubled. Yet, the company, as opposed to its rivals, did not portray diversification in revenue sources to cushion potential downturns³⁴⁹. In addition, Bear Stearns adopted a vertically integrated model with regards to mortgage securitisation, for which it profited from and was involved in each step of the process from origination to sale³⁵⁰. These practices and attitude stood in net opposition to Dimon's agile corporation, possessing a diversified strategy to avoid overexposure to specific businesses and strictly disengaged, as illustrated, in increasingly risky operations.

Furthermore, the High-Grade Structured Credit Strategies Fund and High-Grade Structured Credit Enhanced Leverage Fund owned by Bear Stearns, which resulted in the company's capitulation, were highly invested and exposed to mortgage-related securities. Consequently, they were in constant need of novel borrowers to contract new loans for their

³⁴⁶ The Financial Crisis Inquiry Commission, "Crisis and Panic.".

³⁴⁷ Ivi, "Conclusions of the Financial Crisis Inquiry Commission.".

³⁴⁸ Ivi, "Deregulation Redux.".

³⁴⁹ Luh, Tami. "How Subprime Killed Bear Stearns." CNNMoney. March 17, 2008. Accessed May 13, 2021. https://money.cnn.com/2008/03/17/news/economy/gothere/.

³⁵⁰ The Financial Crisis Inquiry Commission, "The Madness.".

speculative activities involving CDOs. Aiding such necessity came a blatant incessant marketing campaign across all means of communication of the time, urging to finance new homes purchases, advertising ridiculously low interest rates, with the catch that it was only referred to the first monthly instalment, no down-payments, and no proof of income required. Many subprime borrowers, incredulous and convinced of the ever-increasing value of the housing market, answered the call and gladly accepted the astounding yet baffling offer³⁵¹. This depicts an inadequate, or directly inexistent, awareness of the hazardous environment the company was contributing to create and a total disregard for both the individuals preyed upon and the underwriting standards of the securities. Once more, at the expense of due diligence and safety of Bear Stearns and the financial system as a whole. Not surprisingly, the lawyer Ruhi Maker expressed her concern towards the loans produced by the company, insinuating their quality was so poor that they endangered the survival of the very firm itself. In hindsight, it was a correct intuition indeed. Moreover, a reluctance to halt nefarious practices despite growing awareness could be observed amongst Bear's executives. Despite challenging arrogant and obtuse assumptions that the housing market was merely directly correlated to income and employment growth, these did not change operative direction, indicating their inability to act upon contextual information and detach from past practices, all vital and constitutive of resilient responses³⁵².

Alas, this was far from being the only issue Bear Stearns' management portrayed. The aforementioned hedge funds, managed by Ralph Cioffi, were barely supervised by the mother company, albeit possessing the highest risk profile of the group³⁵³. The reasoning Cioffi adopted to justify heavy investment in CDOs relied on the presumption that credit ratings were not appropriately representing the underlying securities, possessing yields superior to their inherent risk, potentially creating the financial unicorn of arbitrage. Considering his position and role, Cioffi perhaps should have known that abnormal profits are the exception in efficient financial markets, not the rule. Moreover, following a steep decline in value of both hedge funds' portfolios, a personal exchange between the two managers, Cioffi and Tannin, occurred, posing the question of whether to close and liquidate the funds given a previous note from analysts signalling the crippling state and prospective of the subprime market. Amusingly enough, the week after, in a conference call with investors, the managers stated that their investment positions were optimal and that, although the subprime business was already

³⁵¹ Ivi, "Before Our Very Eyes.".

³⁵² Ibidem.

³⁵³ Ivi, "The CDO Machine.".

suffering losses, they would have ended the fiscal year profiting³⁵⁴. In addition, they outright lied about the actual composition of the funds' portfolios stating that only 6 to 8% was composed of subprime mortgages, when the actual figure was closer to $60\%^{355}$. Yet, the problems were not confined to the executives. An AIG consultant asserted, subsequently to a call with a Bear Stearns' analyst, that the latter was overly optimistic of the housing market to the extent of appearing "out of his mind" and "on drugs or something"³⁵⁶. Altogether these episodes illustrate a defective and deficient heedfulness towards enacted practices, a complete lack of responsibility, poor environmental understanding, and the unwillingness to interrupt toxic operations, inexorably hindering the cultivation of resilient reactions. Indeed, albeit evidence emerging about the looming falter of the market, the company continued expanding its mortgage business, additionally asserting, in the face of a \$3 million loss related to defaults on mortgages as early as in 2006, that the setback would have been temporary³⁵⁷. Thus, it comes as no surprise that by the end of 2007, amongst the investment banks most highly conjectured by market participants of being unhealthy, Bear Stearns landed on top of the suspect list along with Lehman Brothers³⁵⁸. The motives behind the company's excessive involvement in hazardous practices were grounded on the firm's disposition to buy into distressed markets whilst waiting for their turnaround. Unfortunately, however, the trend reversal did not present itself on this occasion, leaving Bear stripped of the success characterising it for several decades. Perhaps a less crystallised mentality would have aided the once grandiose investment bank to weather the storm.

In the testimonies to the Commission of the executives of some of the major implicated investment banks, including Bear Stearns, a few themes permeated the statements. The predominant one emerging was a lack of accountability shown by the investigated companies' heads, eluding faults and assigning blame on virtually anything but themselves. In particular, whilst issues surrounding liquidity inadequacy were subject to a higher degree of acknowledgment on behalf of top management, matters concerning solvency created an immediate reluctance to admit their culpability³⁵⁹. It might be postulated that such arrogance was rooted in the leadership style that rendered Bear so lucrative for several decades, aiding it

³⁵⁴ Ivi, "Early 2007: Spreading Subprime Worries.".

³⁵⁵ Amadeo, Kimberly. "How a Bank That Survived the Depression Started the Great Recession." The Balance. April 24, 2021. Accessed May 14, 2021. https://www.thebalance.com/bearn-stearns-collapse-and-bailout-3305613.

³⁵⁶ The Financial Crisis Inquiry Commission, "The Madness.".

³⁵⁷ Ivi, "March 2008: The Fall of Bear Stearns.".

³⁵⁸ Ivi, "Late 2007 to Early 2008: Billions in Subprime Losses.".

³⁵⁹ Ivi, "Causes Of The Financial And Economic Crisis.".

to survive through every crisis from the Great Depression to the dotcom bust. However, when a crisis featuring ambiguous characteristics started to unfold and its usual means revealed ineffective relative to the novel scenario, their fortune turned around, transmuting arrogance into civil war³⁶⁰. Indeed, the CEOs of Bear Stearns and JP Morgan seemed to represent the opposite faces of the same coin: the former exhibiting a genuinely virtuous character, principles, and guiding style, and the latter, James Cayne, embodying several flaws, from hubris to carelessness, thoughtlessness, recklessness, technical and moral inadequacy. On a number of occasions, Cayne shunned duty to engage in leisure activities, ranging from golf to bridge tournaments, leaving the office days in advance, conscious of abandoning a house on fire. Moreover, he depicted a marked disinterest and deficiency in risk management activities - perhaps evident from the practices enacted by the firm -, resulting in Bear Stearns' experiencing in 2007 the first quarter of losses in its 85 years-long history. Indeed, if the character and culture of an organisation are truly set at the top, then Cayne's entering office can be deemed the moment that marked the firm's ruinous fate³⁶¹. Thus, the deadly combination of corporate arrogance, greed, inattention, and power struggles ended up being fatal to the company³⁶². All in all, Bear Stearns' parable proves as a valuable lesson to be learnt: in the financial industry, complacency is the ticket to failure³⁶³.

The responses of JP Morgan and Bear Stearns to the crisis have been hitherto exposed and examined to appreciate the peculiarities constituent of resilient and unresilient answers, respectively. In particular, from the portrayal of their significant dissimilarities in mindset, action, and purpose, the companies' administration and employees quality, risk conception and management, and degree of engagement in vicious practices ultimately show as diametrically opposite. Retracing the conceptualisation of resilience in organisational theory and its synergies with virtue ethical postulations, several inferences can be delineated when comparing the two firms. With regards to the very first constitutive elements of resilient responses, JP Morgan depicted an increased capacity to recover from adversities in a timely fashion whilst remaining strong and solid. Oppositely, Bear Stearns eluded completely such attitude, lacking anticipating and preparatory faculties and wallowing in unfavourable practices until it was too late even to attempt exhibiting a resilient answer. Moreover, whilst it can be arguably asserted

³⁶⁰ Kelly, Kate. *Street Fighters: The Last 72 Hours of Bear Stearns, the Toughest Firm on Wall Street*. New York: Portfolio, 2010.

³⁶¹ Maxfield, John. "A Timeline of Bear Stearns' Downfall." The Motley Fool. March 15, 2013. Accessed May 14, 2021. https://www.fool.com/investing/general/2013/03/15/a-timeline-of-bear-stearns-downfall.aspx.

³⁶² Cohan, William D.. House of Cards: A Tale of Hubris and Wretched Excess on Wall Street. New York: Doubleday, 2010.

³⁶³ Maxfield, John. "A Timeline of Bear Stearns' Downfall.".

that the former brilliantly maintained productivity amidst the storm, quickly learning from the circumstances and bouncing forward with augmented vigour, the latter portrayed a remarkable reluctance to absorb relevant environmental information, defecting the ability even to bounce back. JP Morgan, in addition, surfaced as specifically resourceful, with flourishing internal and external networks characterised by positive relationships grounded on Dimon's supportive leading style and favourable organisational culture, where psychological, human, and social capital were put at the forefront. This lied in net contrast with Bear Stearns' defective leadership and values, which greatly affected the relational and cultural dimensions of the firm, filling them with arrogance and complacency.

Concerning recovery, JP Morgan demonstrated enhanced flexibility and self-adjustive capacities, moulding and flexing to face the evolving context also in virtue of its abundant resources and strategic inventiveness in their deployment. Indeed, the higher margin maintained by the former enabled it to confront unexpected events agilely, as opposed to Bear Stearns, perpetually operating on the razor's edge in its ever-increasing search for efficiency, resource optimisation, and profit. The difference in leverage ratio and involvement in toxic businesses perfectly explicates such argument as Bear extensively pursued excesses, with little or no margin and regard for the risk or consequences comprised, whilst JP Morgan's - almost obsessive - attentiveness to risk management enabled it to foster growth in the appropriate moments and set it aside when necessary. In other words, Dimon's company appeared particularly capable of balancing the contrasting objectives of efficiency and efficacy. Perhaps such net divergence between the two firms is further explicable by JP's strong consciousness of its operating limits in contrast with Bear's complete obliviousness, symbolised by the disengagement of the former from hazardous operations in unsuspected times. This denotes the company's incredible wisdom as, on the one hand, it disengaged even if not strictly required given its great operative capacity. On the other, it demonstrated increased farsightedness recognising the short-term profitability yet long-term unsustainability of such business activities. Bear, instead, exceeded its operating boundaries even in the face of unconfutable evidence of its financial inadequacy to withstand specific operations, as illustrated by the manoeuvres of its two hedge funds and the executives managing them, who refused to halt undertakings even when mindful that continuing entailed inevitable default. Furthermore, JP Morgan was characterised by a psychologically safe environment where accountability and beneficial social interrelations were greatly valued, generating resource supply chains for proper activation, configuration, and reconfiguration of assets. Indeed, both top management and employees depicted an acute sense of responsibility, admitting faults whenever they

occurred, in virtue of a "no blame" culture praising learning from experiences. Bear Stearns, on the opposite, featured a hostile and aggressive context, where no space was left for errors, and arrogance culminated in what seemed a civil war amongst collaborators.

Another critical distinction between the two companies can be appreciated concerning their aptitude to success: whilst JP Morgan remained wary and vigil of the disruptive potential of novel and equivocal adversities, Bear Stearns' settled in its past victorious conduct, unable to recognise its increasing inadequacy to face emerging challenges. In other words, Dimon's team expressed the needed forgetfulness of prior successful mindsets, behaviours, and practices to enact strategic diversification, activating resilience attributes. In addition, it also portrayed recognition of the necessity to constantly renovate the company and its risk management, enabling them to be a step ahead of competitors perennially. This was also consequential to their realisation that long-term triumph required humility and continuous development through learning activities. Humility, as only with the acceptance and proper cognition of faults, it is possible to amend them. Thus, it comes perhaps as no surprise that JP Morgan was the only sizeable financial institution that continued profiting amidst the crisis³⁶⁴. This, along with its expansion during the last decade, conferring it the title of largest United States' bank by total assets, testify to its excellence and progressive advancement. Thus, indicating the presence of the vital practices concerning unlearning, relearning, and learning that grant the organisation evolutive improvement, renewal, and longevity. Unfortunately, the same cannot be said with regards to Bear Stearns, whose hubris stranded it in the past, where it definitely remained. Perhaps this was also a consequence of its avoidance to challenge preformed beliefs and existing relations amongst stimuli and the resulting reactions. Something which was instead central in its counterpart's modus operandi. In other words, whilst JP Morgan was acting fast and thinking slow, Bear Stearns was thinking fast and acting even faster. Paradoxically, however, such rapidity was appreciable only by the eyes of its beholder, as the company might have been quick according to their distorted perception of reality yet was increasingly lagging behind in the actual evolving circumstances. The dire effects carried by a deficit of reflective reactivity thus manifested in all of their potency, destroying even the slightest remaining opportunity for Bear Stearns to cultivate resilience, marking its dismantlement. On the other hand, JP Morgan embraced a permanent dialectic between adaptive and proactive resilience, promptly withstanding adversities and carefully meditating on its responses to inform future

³⁶⁴ Collis and Hartman, "JPMorgan Chase after the Financial Crisis: What Is the Optimal Scope of the Largest Bank in the U.S.?".

actions. Thus, cultivating readiness to confront forthcoming unexpected challenges with increased efficacy. Hopefully, Dimon will be still commanding the ship as it traverses through rough seas consequential to the most perilous and threatening storm of them all: the hereafter.

The last critical element differentiating the two firms is the quality of their leaders and their relative style of guidance. Whilst JP Morgan's Chief Executive Officer greatly valued his employees, acting as an enabler whose primary objective was to provide them with the necessary means and grounds to flourish, James Cayne was utterly indifferent to both the fate of its company and the members composing it. Indeed, the latter showed no interest in proper professional conduct and duty, prioritising personal leisure at the expense of the performance of Bear Stearns. Additionally, Dimon virtuously – quite literally – embraced paradoxes pivotal for resilient leadership, exhibiting boldness with prudence, robustness with flexibility, control with agency, efficiency with efficacy, and idealism with pragmatism. With respect to pragmatic idealism, the parable of the Greek poet Archilochus of the fox and the hedgehog finely represents the synergic dichotomy between such qualities, exemplified by the fox knowing many things and the hedgehog knowing one big thing. The resilient leader embodies both the pragmatic fox and the idealistic hedgehog, pursing consistently one ambitious grand scheme in the long-term, whilst carefully scrutinising diverse courses of actions with enhanced heedfulness towards details³⁶⁵. Dimon perfectly symbolises such aptitude, enacting a vast array of diverse and agile strategies to protect its company in the immediate, whilst striving to attain the higher purpose of salvaging the entirety of the financial system. Cayne's heedlessness resulted, instead, in his inability to even save his own career and the one entity he should have been truly safeguarding: Bear Stearns.

From a virtue ethical perspective, a number of observations can be outlined. Resilience was previously maintained to symbolise a moral virtue per se. Besides, it was evinced that the practices surrounding the cultivation of resilient behaviour share striking similarities with those required to attain virtues. With regards to JP Morgan, it can be arguably claimed that both the company and Dimon portrayed specifically virtuous dispositions. Retracing Aristotle's twelve moral virtues, the CEO disputably exhibited a remarkable balance between several extreme inclinations. First of all, Dimon was undeniably courageous in confronting danger, taking bold decisions, and enacting challenging manoeuvres whilst still attentively scrutinising the environment to avoid engaging in excessively perilous courses of action. Thus, striking an

³⁶⁵ Giustiniano, Pina E Cunha, Simpson, Rego, and Clegg, "Resilient Leadership as Paradox Work: Notes from COVID-19.".

intermediate between rashness and cowardice on multiple occasions. The acquisition of Bear Stearns exemplifies such an argument, where he audaciously tackled the intricacies involved whilst maintaining the necessary prudence to avoid damaging its own company. The virtue of magnanimity was disputably also appreciable, as Dimon recurrently elevated his collaborators' efforts as vital contributions for the successful response to the crisis, averting aptitudes of self-grandiosity yet recognising his fundamental input as well. In other words, the Chief Executive Officer gave credit to both himself and his partners for the brilliant performance of the firm amidst the disaster. Indeed, the victory was depicted as shared after all. Dimon also depicted truthfulness, as he expressed an acute awareness of the extant circumstances, neither boasting nor belittling his own and company's conduct. He owned a marked grasp of reality, enabling him to avoid lying to himself and others. Amusingly, it appears such disposition was infused to his employees as well, perhaps by reason of the organisational culture they were embedded in, grounded on such favourable values.

Moreover, Dimon and his collaborators responsibly admitted to a number of errors without exhibiting blaming or shameful attitudes, featuring thus the virtue of modesty. Faults were framed as valuable experiences from which to learn, accepting their occurrence as means to advance. A proper degree of ambition was also noticeable, engaging in purposeful practices that fostered the company's growth yet whilst never critically endangering its survival. The same can be asserted concerning the ideology underpinning his objectives, as he aimed at supporting the whole financial system but kept the necessary pragmatism to achieve ends benefitting JP Morgan. To illustrate the virtue of righteous indignation or justice, a statement of Dimon concerning Lehman Brothers' bankruptcy arises as particularly useful. Although such virtue refers to the intermediate between envy or spite regarding the fortunes of neighbours, it can be reasonably applicable to misfortunes. During an interview the CEO was asked whether the failure of Lehman was perceived as merely an occasion to acquire assets at a discount or eliminate a rival from the sector. Dimon answered that "there may be some people who...would have loved to see Lehman go bankrupt...(but) most people there were more like 'they're your friends'. You know if I'm playing tennis I want to beat you, but if you're having a heart-attack we stop the game and we get you to the hospital."366. Lastly, it might be maintained that Dimon's nearly obsessive focus on risk management was excessive, deviating from an intermediate and tending towards a vicious predisposition. Notwithstanding, it must

³⁶⁶ Son, Hugh. "Jamie Dimon and JP Morgan Are the Big Winners on Wall Street since Lehman, Tripling Investors' Money.".

be reminded that the virtuousness or viciousness of a specific inclination is not to be determined in abstraction from the environment or in absolute terms. Thus, in light of the systemic complexity and perilousness of the circumstances, it can be objected that such aptitude was proper, if not strictly, essential. After all, the financial sector perennially exhibits an intricate context, rendering enhanced prudence perhaps always valuable.

Concerning the company, which obviously cannot possess a personal will but generally reflects the character of the collective body of members composing it, some inferences can outlined. Firstly, JP Morgan was appreciably more prudent and concerned with safety than most other market participants. It firmly steered away from deficiencies, excesses, and extremes, something Aristotle would be particularly fond of. In addition, the firm portrayed increased humility, as no past success was striking enough for it to forget the pivotal necessity always to question its practices and beliefs and to learn from experiences continuously. It possessed the right daringness to undertake innovative courses of action, mindful of risks, aware that a potential defeat would have represented an opportunity to improve. Depicting an excellent representation of Nelson Mandela's inspiring statement, "I never lose. I either win or I learn."³⁶⁷. Moreover, the firm attained the appropriate balance between efficiency and efficacy, maintaining an adequate margin to withstand potential and unexpected disruptions to operations, differentiating itself from nearly the entirety of the financial system. Thus, individuating a virtuous intermediate. Conversely, Bear Stearns and Cayne embraced and portrayed a number of excesses, perilously tending towards remarkably vicious inclinations. Unfortunately, the character of both can be postulated to be almost specular to their virtuous counterparts, JP Morgan and Dimon. Cayne wallowed in personal leisure prioritising his pleasures at the firm's expense, eluding the necessary inclination for the virtue of temperance. This embodies a mean between the two extremes of insensibility and self-indulgence, with the CEO clearly possessing the second. On this particular occasion, it might exceptionally be argued that Dimon fell victim to vice as well, embracing the opposite tendency. He declared that when he was summoned to the Treasury Building by the former Secretary Hank Paulson to discuss TARP in early October of 2008, he was about to take his first weekend off in almost six months³⁶⁸. Nonetheless, the same discourse exposed concerning risk management can be applied, as the dire circumstances of the period called for extreme measures and an extraordinary commitment to duty. Alas, on the opposite side, the viciousness of Cayne seems

³⁶⁷ Giustiniano, Clegg, Pina e Cunha, and Rego, "Resilience in management and organization studies.".

³⁶⁸ Son, Hugh. "Jamie Dimon and JP Morgan Are the Big Winners on Wall Street since Lehman, Tripling Investors' Money.".

to have tainted the rest of his collaborators and the company itself. For instance, Cioffi and Tannin lacked the virtue of truthfulness and justice, blatantly lying to themselves and investors regarding their precarious hedge funds' returns and actual portfolio composition. Furthermore, as recurrently stated, both Bear Stearns and its executives displayed rashness by excessively engaging with little or no concern in hazardous and risky securities, practices, and conducts.

Thus, in light of the prior considerations, it can be concluded that virtuous behaviours coincide with resilient attitudes, as all of the virtuous and vicious inclinations illustrated contribute respectively to foster resilient and unresilient responses. In other words, the virtuous dispositions of Dimon such as courageousness, truthfulness, modesty, and magnanimity undoubtedly assist in the cultivation of virtue itself; however, concurrently, they foster inclinations and courses of actions that enhance resilience. For instance, truthfulness implies averting self and other-deceit, which can prove essential to grow awareness, recognise faults, and the related responsibility. Only by engaging in such practices learning and informing future actions can occur. Thus, it can be maintained that adaptive and proactive resilience is activated through these activities, indicating, in turn, that the behaviours entailed in attaining virtue cultivate resilient aptitudes as well. Hence, the achievement of virtue and resilience reveals to be separated by a thin and porous line, as it can hardly be discerned which actions pertain to the enhancement of the one or the other. The analogous discourse applies regarding viciousness and unresilient responses, at it clearly emerges for the consequent effects of the inadequate conduct of Cayne and Bear Stearns. Lastly, as seen, resilience itself can be interpreted as a virtue standing between two extremes, representing its absence and its excessive presence. JP Morgan arguably possessed the moral virtue of resilience as well, indisputably not defecting resilient attributes whilst avoiding an exaggerated concentration of the same. Indeed, as previously illustrated, a dark side of resilience emerges when its disproportionate attainment is enacted, leading to a lack of self-awareness, an over-endurance of strains, and accepting toxic circumstances and people. Thus, at once, a virtuously resilient organisation was born.

On a macro-level of analysis, some of the postulations presented herewith can be extended to the financial system in its entirety, whose predisposition alas generally resembled more Bear Stearns' than JP Morgan's. Firstly, a characterising feature of the crisis was an ever-increasing search for profit and efficiency, tainted by an inclination towards the pursuance of unrestricted excesses, resulting in investment banks infusing the industry with an extreme degree of systemic risk. The absurd leverage ratios and tendencies to operate on extremely thin capital symbolised such a perilous mindset. Thus, hindering the cultivation of slack resources perceived as wasteful and unnecessary, and impeding financial institutions to possess the adequate margin and flexibility to withstand the dire effects carried by the credit crunch. Indeed, at the peak of the bubble, their operativity was grounded on such thin ice that even the slightest downturn would have entailed bankruptcy. In other words, the balance between efficiency and efficacy, whose presence is essential to foster resilience, was nowhere to be found in the industry. Perhaps, this was a consequence of the utter reluctance of most investment banks to act upon novel information and contextual awareness, crystallising their practices and behaviour in pre-existing knowledge, patterns, and successes. No particular disposition to learn from experience was appreciable as neither a wise recognition of errors nor the willingness to accept subsequent accountability were present. This implied an impossibility to meditate upon their conduct, although it is hardly imaginable that they would have engaged in thorough reflective activities even if given the chance to. The beneficial practice of questioning preformed assumptions was not even observable concerning the most basic premise of the crisis: the ever-increasing value of houses, which stood at the foundation of virtually all practices revolving around the mortgage business - additionally denoting the widespread tendency to simplify interpretations. Embedded in the dialectic conception of resilience lies its proactive element, whose emergence was evidently obstructed.

Reflective capacities were far from being the only issue, as anticipative and adaptive abilities eluded the financial system almost in its entirety as well. Indeed, most financial institutions refused to disengage from nefarious practices despite acknowledging the necessity to do so. This indicated anticipative faculties were not sought nor cultivated even when feasible. Perhaps further explaining the lack of financial institutions' adaptive capabilities, effortlessly being engulfed by the disruptive power of the credit crunch. Moreover, these faults were not ameliorated by the impracticability to challenge superiors for improved and alternative solutions. The centralisation of power, rigid organisational structure, and thick boundaries between departments on one side, and the fear of oppression and mobbing on the other, rendered the practice virtually impossible, and when possible, unadvised. This additionally obstructed any deference to expertise - when rarely present - which halted the possibility of developing emergent strategies, typically arising informally in fluid organisational designs. Not surprisingly, both psychological safety and loyalty towards organisations were defecting, hindering the cultivation of positive relational networks and smooth sharing of relevant information. Trustful communication and inclusive participation are vital to organise for action promptly and concertedly, thus explaining the widespread unresilient responses by the majority of investment banks. The last feature observable in the financial system and its participants was the high interactive complexity, aggravated by a lack

of modular structures and internal mobility. With regards to organisations, strict hierarchical boundaries and control impeded the seamless movement of people and ideas across levels and departments. Moreover, the absence of modularity resulting from centralised and vertically integrated structures indicated the impossibility to isolate and compartmentalise disruptions, quickly spreading from affected parts to the whole system. Paradoxically, and perhaps, unfortunately, the same could be said of the financial system itself, whose destructive forces rippled through the economy, dismantling anything they encountered on their path. The raison d'être of the practices surrounding the concept "too big to fail" is precisely found in such effect.

Notwithstanding, as organisational theory on resilience would suggest, every shock carries some opportunities to advance. The same can be postulated for the regulatory system of the financial sector. In 2008 the Troubled Asset Relief Program or TARP was established by the Treasury, consisting of a \$70 billion bailout reserve dedicated to the financial sector. Although much debate surrounded the measure due to the implications of potential moral hazard, stress tests concerning capital liquidity adequacy were introduced as a requirement by the Treasury and the FED. In 2010 Barack Obama signed the Dodd-Frank bill, aimed at improving accountability and transparency of financial institutions. Such included the Volcker rule, which prohibited banks from engaging in proprietary trading. As a consequence, the Basel Committee introduced the Basel III framework to increase financial stability by amending its capital adequacy guidelines. Thus, requiring banks to increase the quality and quantity of their capital, short-term liquidity, long-term balance sheet funding, and decrease leverage. A consequential effect was for the capital to be adjusted to the amount of risk acquired, requiring, for instance, more capital for riskier loans than safer ones. Moreover, a supplementary leverage ratio was introduced to avoid - precisely as in the crisis - excessive exposure to derivatives and offbalance sheet assets. Similarly, a liquidity coverage ratio was imposed to ensure banks held enough liquid assets for covering the total net cash outflows over a period of 30 days³⁶⁹. Reasonably, recalling the disastrous effects of short-term funding during the credit crunch. In 2011 a list of banks, insurance companies, or other financial institutions that were considered "too big to fail" was published by the United States' Financial Stability Board. JP Morgan was found amongst these, denominated as Global Systemically Important Financial Institutions or G-SIFI, in virtue of potential risk associated with their size, diversification, and interrelatedness. In addition, Global Systemically Important Banks or G-SIBs encountered

³⁶⁹ Collis and Hartman, "JPMorgan Chase after the Financial Crisis: What Is the Optimal Scope of the Largest Bank in the U.S.?".

further requirements structured to guarantee banks held enough capital to withstand a crisis without the need for a government bailout. Such increase in measure was predisposed by the G-SIB score, calculating rather than mere risk, several factors such as complexity, lack of available substitutes, and interrelatedness. Furthermore, the FED required specific stress tests for banks contingent on the size of their assets: those exhibiting more than \$10 billion were subject to the Dodd-Frank act stress test or DFAST, whilst those with more than \$50 billion were subject to the Comprehensive Capital Analysis and Review or CCAR. The latter entailed evaluation of, for instance, capital adequacy and internal processes for measuring it³⁷⁰. Hence, it can be evinced that although the 2007 and 2008 financial crisis brought the financial sector to its knees, it promoted the development of a renewed regulatory system featuring several advancements to shield participants from the re-emergence of nefarious practices. Arguably, without the catastrophe, such a detailed regulatory framework would not have been devised.

Thus, the Global Financial Crisis carried at least two positive elements: the aforementioned and JP Morgan's remarkably resilient response as an inspirational model for other entities. The latter concept is perfectly depicted by Mark Mayo's assertion regarding the ameliorated shape of the financial sector: "The entire industry is looking more JP Morgan-like in terms of the strength of their balance sheet."371. Indeed, the company will be remembered for its several acute manoeuvres and characteristics. Ranging from its pre-emptive preparation in 2006 for rough times in recognition of the declining credit quality to its "fortress balance sheet" that allowed it to acquire failing banks. Also, its acknowledgment of errors with accountability to improve and increased focus on the interests of all stakeholders related to the firm, culminating in Dimon's statement that "While we make mistakes along the way, we never lose sight of why we are here."³⁷². Moreover, amusingly, JP Morgan was not only resilient during the Global Financial Crisis, but also in the years following the disaster, confronting several exogenous pressures to change its universal bank business model and scope of operations. Notwithstanding, even the company's strategy exhibited resilience. Indeed, as the only United States investment bank to pertain to the G-SIB category, JP Morgan encountered a disadvantage represented by higher capital requirements with respect to its competitors. Moreover, a number of diverse external pressures surfaced, ranging from politicians to

³⁷⁰ Ibidem.

³⁷¹ Son, Hugh. "Jamie Dimon and JP Morgan Are the Big Winners on Wall Street since Lehman, Tripling Investors' Money.".

activists, analysts, and academics³⁷³. With regards to politicians, in 2015, the United States Senator Bernie Sanders introduced legislation to decompose JP Morgan and other large banks by reason of his conviction that they placed too much risk on the financial system and equivalent burden on taxpayers in the case of default. Hilary Clinton adopted a similar stance promoting a risk fee for banks "too large and too risky to manage" additionally requiring them to break down, downsize, and reconfigure. Analogously, activists pressured for the equivalent measures³⁷⁴.

Analysts suggested that higher value could be obtained by dividing the business, and academics questioned the benefits associated with large-scale diversified banks. Dimon nonetheless fiercely defended the firm, asserting that JP Morgan possessed numerous protective measures, such as its competitive advantage, expertise, and economy of scale. In addition, it was prepared to confront adversities in virtue of its fortress balance sheet, diversified businesses, and advanced risk management procedures, conducting more than 100 stress tests a week to measure the effects of potential shocks³⁷⁵. All with in mind the greater good as explicated by his statements "in the toughest of times, it is not about making a profit, it is about helping your clients survive."³⁷⁶. Such practices were inserted in a culture centred on collaboration and the creation of synergies amongst different branches to the extent that revenue allocation encouraged employees to act per the common good. Dimon assessed any emerging hurdle with mindfulness and attentiveness by reason of a bulletproof faith in the value of cooperation. The copious amount of resources enabled such an ambitious approach not to remain a mere hypothesis but to surface as a concrete strategy, characterising one of, or perhaps the most, successful investment bank in modern times³⁷⁷. The Chief Executive Officer's resilience in maintaining a universal bank model, despite several pressures, was specifically aided by his invulnerable belief in his company and its supportive position in the financial system. Yet always with a proper touch of pragmatism, as portrayed by his assertions: "We don't just guess at the probabilities; we prepare for the worst," and "As a result, we have the

³⁷³ Collis and Hartman, "JPMorgan Chase after the Financial Crisis: What Is the Optimal Scope of the Largest Bank in the U.S.?".

³⁷⁴ Ibidem.

³⁷⁵ Son, Hugh. "Jamie Dimon and JP Morgan Are the Big Winners on Wall Street since Lehman, Tripling Investors' Money.".

³⁷⁶ Collis and Hartman, "JPMorgan Chase after the Financial Crisis: What Is the Optimal Scope of the Largest Bank in the U.S.?".

³⁷⁷ Ibidem.

capital and the earnings and the capabilities to withstand any of those things just as we managed to survive during the financial crisis."³⁷⁸.

Thus, the predominant theoretical framework to analyse resilience has been exposed in this chapter together with the appreciable interrelations between the former and virtue ethics. JP Morgan and Bear Stearns were thoroughly examined to illustrate their relative resilient and unresilient responses, subsequently correlating these to the attainment of virtue. Moreover, inferences concerning resilience in the financial sector were provided to offer a macro-analytical picture in which the two firms were navigating. Although the overall scenario was specifically dire, two silver linings have been identified: the first being the regulatory improvements enacted in the aftermath of the credit crunch and the second regarding the emergence of a role model entities can use as a reference. Finally, several managerial recommendations will be provided in light of the postulations presented to hopefully aid organisations in confronting the modern ever-increasing interrelated, intricate, and equivocal environment, whose perpetually transmuting essence poses a substantial threat to the survival of any business.

³⁷⁸ Son, Hugh. "Jamie Dimon and JP Morgan Are the Big Winners on Wall Street since Lehman, Tripling Investors' Money.".

CHAPTER V

Advising for a Virtuously Resilient Organisation: the Art of Embracing Paradox

5.1 Organising for the Unexpected: Managerial Recommendations

Four areas of interest have been selected to provide managerial recommendations for companies striving to be virtuously resilient, concerning the individual, group, organisational, and cultural levels. The first two pertain to a micro dimension of analysis and the last to a macro perspective. In light of the extensive literature review and antecedent analysis, a series of considerations and subsequent suggestions were formed for organisations to implement to better withstand potential shocks and disruptions to their structure and operations. In particular, these practices are predominantly directed towards ensuring the optimal functioning and, thus, survival, of any business regardless of the industry or sector of pertinence.

Individual

With regards to the individual level, two primary practices are advisable concerning employee incentives and the hiring process criteria. First, incentives should be devised to avoid compensation merely based on metrics related to financial performance measurement. This might obfuscate personnel from attaining more constructive long-term objectives in the attempt of achieving noticeable short-term results to increase their related pecuniary benefits. Rather, incentives should be based on the quality of employees' input, their ability to maintain and cultivate favourable long-term relationships with clients and all other stakeholders, and their contribution to innovative and alternative solutions. The quality of the inputs should be prioritised as opposed to their quantity, fostering heedful rather than quick-fix work. Beneficial and long-standing relationships can be measured by the ability to retain through time established connections with clients, partners, and collaborators. Concerning inventive solutions, unconventional approaches could be designed to measure each employee's effort, such as an intra-firm crowdsourcing platform where issues pertaining to the firm are published periodically, allowing all workers to participate by posting one potential solution to the matter exposed, regardless of their function or department. Subsequently, a bonus could be allocated to the idea adopted. Yet, to keep increasingly engaged the rest of the providers, an additional reward scheme could be implemented. Such consists of assigning points to the following five best ideas and incorporating the results in a ranking available on the company's platform, continuously updated as challenges are completed. On a six-month basis, the first five participants will be awarded a form of compensation, not necessarily pecuniary, but as, for instance, the use of company resources, days of leave, temporary collaborations with different departments, and the possibility of appointing a meeting with an executive. Moreover, a visible board could be installed displaying the names of the ongoing top three ranked contributors.

Such a scheme, closely tending towards gamification techniques, would provide several benefits. Employees would be arguably entertained, prompted to contribute recurrently, aware that not only the selected idea counts. Moreover, the ranking available on the platform and board would promote healthy competition and assign reputational and recognition benefits to the players. Notoriously, non-pecuniary incentives in crowdsourcing tend to retain the highest impact on individuals. Thus, the six-month rewards would also foster engagement and keep personnel hooked as a one-time innovative idea will not ensure their classification in the top five positions required to obtain the benefit. In addition, the benefits awarded could be transferrable from one employee to the other to promote cooperation and support when in need - possibly creating parallel point schemes to be included when such happenings occur, rewarding solidarity among the workforce. The mentioned practice is suggested due to the crucial relevance of allowing smooth flows of ideas across the company to build resilience, enabling the occurrence of emergent strategies, and promoting deference to expertise. Not all breakthrough ideas, solutions, and strategies are necessarily conceived in the top hierarchical levels of the organisation. Thus, such a scheme grants the possibility to tap from the broader organisational mind. Furthermore, the opportunity to transfer benefits would increase attachment amongst employees, fostering a synergic sense of unity and a collective culture of cooperation and conviviality. Sensibly, these promote resilient responses, entangling the individual fates together and aligning them with the organisation's, for which favourable times are collectively confronted as well as rough periods.

The criteria selected for hiring novel workforces should be grounded on non-traditional elements such as quality of character and personal inclinations to create a pool of human capital that reflects positive values and attitudes. Years of experience or academic background are significant signals of potential worth yet are not the only valuable assets employees can exhibit. In light of the disastrous consequences of vicious personalities and motivations in the Global Financial Crisis, enhanced attentiveness should be granted to ensure the composition of personnel and management is favourable and aligned with the organisation's culture and objectives. A team of excellent yet arrogant, insincere, selfish, and inattentive people might taint the firm's wellbeing and functioning, deviating from favourable and safe practices. Just as individuals lacking practical wisdom will recurrently fail to enact intentions in the appropriate manner, personnel defecting virtuous mindsets and predisposition might operate hindering rather than aiding the organisation, even if unintentionally. Furthermore, by reason of the significance of trustful and smooth communication and interactions, praiseworthy characters play a pivotal role in constituting healthy and efficacious groups of individuals. These considerations are critical with regards to resilience, whose attainment greatly benefits from highly ramified networks depicting positive interrelations and unrestricted flows of information. Moreover, these generate resource supply chains to be activated at need. In addition, diversity in the workforce promotes variety in mindsets and skills, whose role is essential both for the generation of inventive and unexpected ideas, practices, and solutions and for increased environmental awareness. Indeed, a team composed of individuals coming from equivalent contexts will inevitably result in similar interpretative lenses adopted, obstructing the opportunity of appreciating reality with renewed visions. As illustrated by using an unconventional framework for exploration of the credit crunch, a spare pair of alternativeobserving eyes can prove vital to identify threats and circumstantial peculiarities.

Group

Four elements have been identified to foster resilience at the group or team level. These include ensuring leaders embrace paradoxes and act as enablers, installing psychological safety, promote multi-level loyalty, and foster constructive self-criticisms. Leaders must convey a style of guidance that is rooted in enablement, mirroring the practice of gardening. Actions must be directed at enhancing the expression of the existing qualities of employees, forging the nourishing grounds and necessary conditions for individuals to thrive individually and collectively. This entails averting rigid lines of command and control to promote the

bottom-up emergence of strategies and solutions. Seeds must be planted and watered, but their direction of development must be freed from constraints or pre-imposed trajectories yet whilst concurrently supporting them if required. This reflects the fundamental need of leaders to embrace paradoxes, granting and simultaneously moderating the possible courses of action to ensure spontaneous yet concerted engagement and orientation. For individuals to express themselves liberally, a safe environment must be provided, rendering evident the need to instal psychological safety. This is fundamental to promote learning and accountability, as failure must be framed as an opportunity to improve rather than an element to avoid at all costs. Only by ensuring the absence of judgement and a "no blame" context and culture can an experimenting attitude arise. As inevitable consequences of experimentation, faults should be inserted in a favourable trial-and-error paradigm, allowing individuals and organisations to act energetically and reflect upon action itself. Thus, enacting perpetual processes of unlearning, relearning, and learning, pivotal for continuous advancement and constitutive of proactive resilience. It follows that excessively risk-averse aptitudes should be avoided as damaging to the enactment and emergence of bold courses of action and opinions, whose presence can prove critical in withstanding unexpected shocks. Indeed, experimenting in uncertain circumstances necessarily entails a degree of risk, being the latter embedded in the notion of uncertainty itself. Notwithstanding, occasionally, solutions to navigate the unknown require precisely explorative and daring undertakings. As virtue ethical postulations would suggest, this should not be carried to an extreme, maintaining a degree of prudence and an acute awareness to avoid potentially catastrophic effects. Embracing, once again, paradoxes.

Managers must also foster the loyalty of individuals to the collective and company. In times of distress, an increased burden is placed on the workforce, reasonably challenging their willingness to withstand additional strain besides the one they already cope with in normal conditions. Thus, rendering their disposition to persist on the troubled ship critical. As leaders agreeably represent a role model for employees, reciprocal commitment must be exhibited to avoid the workforces' perception of standing alone in the effort. Moreover, a positive and appreciative attitude must be displayed, valuing all contributions to enhance engagement and the cultivation of psychological capital, notoriously pivotal to gain and retain resilience. Indeed, credit should always be granted towards the workforces' efforts, avoiding the nefarious practice of taking praise for other people's inputs. It is further advisable to exhibit a degree of flexibility and compassion in dealing with personnel, maintaining vigorous guidance while fostering optimistic and supportive stances. Avoiding excessively compliant approaches, which hinder the proper degree of authority that an inspiring leader should possess, managers

should still aim to grant understanding of distressed agents' necessities. These will treasure the comprehension provided in rough times, returning the favour when needed from the other side. Lastly, a practice that could be introduced to increase awareness is centred on making individuals engage in constructive self-criticism and evaluation. This could be enacted by occasionally asking personnel to redact personal feedback and assessments concerning their own work, fostering mindfulness, self-improvement, and reflective attributes.

Organisational

At the organisational level, nine areas related to resilience's cultivation have been detected: structural modularity, internal mobility, generation of slack resources, innovative allocation of resources, operational and environmental awareness, decreased rigidity in hierarchical design, boundary-spanning projects, centralised and decentralised control, and after-work activities. Modularity related to the organisational structure of a firm entails compartmentalising and isolating divisions to prevent potential compromise from spreading from one department to the entire system. The concept might be directly associated with the safety measures and frameworks adopted in submarines, sectioning the structure so that when one is prejudiced, the rest can be saved by insulating the affected part, preventing the whole complex from sinking. This measure is particularly beneficial in light of the interrelatedness and interactive complexity of most systems and environments nowadays. The ripple effect following the bust of the subprime bubble serves as a valuable reminder of the dire consequences that excessively entangled structures can produce. Furthermore, another advisable practice entails allowing for internal mobility, granting employees the opportunity to cultivate diverse skills and interests by traversing across boundaries and divisions. This also ensures a degree of strategic diversification promoting multifaceted mentalities and expertise, subsequently culminating in unconventional solutions and thought processes. In this respect, a favourable exercise entails creating multiple paths to reach equivalent results. Analogously to the effects of modular structures, such allow for the failure of a singular process by reason of the availability of several others to attain a specific end. Relatedly, the accumulation of slack resources proves essential for the presence of backup systems and redundant assets to be activated and reconfigured in times of need, enabling agile and rapid responses in the face of disruption. As illustrated, striking a balance between efficiency and efficacy is vital for resilient reactions.

Furthermore, with regards to resources, an innovative allocation could be implemented, with 70% dedicated to strengthening and preserving the core business, 20% to enhance slightly

more innovative enterprises, and 10% to be reserved for breakthrough projects. Such configuration depicts an additional but much needed paradox between focusing on existing profitable assets and potentially novel ones. In the modern context, perpetually and rapidly evolving, innovative undertakings are essential to avert being engulfed by the past. Thus, precisely in virtue of such consciousness, inventiveness ought to be maintained as an absolute priority. Moreover, the intricate reality with which organisations are obliged to confront brings the need for acute mindfulness and acumen for potential threats. Such can be fostered by engaging in activities that promote critical thinking, challenging pre-existing and preformed assumptions to be perennially in step with the times. It is pivotal that the same consciousness emerges pertaining to organisational operativity, inciting employees to question mindsets, behaviours, routines, practices, products, and projects constitutive of the firm's success. Given the pressure personnel might experience to conform and the fear of overstepping boundaries by dissenting authority, measures to ensure anonymity concerning contributions might be advisable. For instance, a suggestion box where ideas can be submitted and collected could provide the necessary veil of protection for passionate yet respectful personalities. This can guarantee constant advancements whose presence is remarkably significant to grow resilience.

Maintaining flexible structures is a further critical element to ensure rapid adaptation. Indeed, increased rigidity might result in an entity's rupture when loaded with disruptive forces, hindering its capacity to bend agilely and subsequently release the stored energy upon unloading. This is suggested in accordance with the need to simultaneously build walls and windmills, depicting strength whilst elastically absorbing the impact of an unexpected shock. Thus, once more, a virtuous embrace of paradoxes is advised, portraying fortitude with plasticity. Notoriously, excessive hierarchical designs can result in organisational inertia and inflexibility. Hence, when possible, avoiding increasingly crystallised chains of command will prove favourable. Relatedly, a measure enhancing both increased flexibility and awareness regards boundary-spanning activities and projects. With the consciousness that not all smart people pertain to one's own organisation, promoting the creation of external interrelations can prove essential to finding unconventional and profitable ideas. In this sense, the organisation should be designed to be porous, absorbing all potential benefits arising from the external environment. Additionally, fostering operations that traverse organisational boundaries allows for exogenous information to be captured by the firm. This augments mindfulness of contextual peculiarities and promotes the questioning of existing knowledge. In reference to practices revolving around data collection, further advice concerns the centralisation and decentralisation of control in withstanding adversities. Indeed, when a novel threat emerges, it

might be favourable to temporarily enact decentralised and fluid pools of information, assembling a vast array of solutions to draw upon. Subsequently, a recentralisation of control is suggested to ensure great intuitions are followed by corresponding adequate actions, concerting efforts towards the pursuance of organisational survival. Lastly, a practice to promote team building and collaborative aptitudes concerns after-work activities. For instance, organising social gatherings and sports events allows the entirety of the members of a company to engage and form favourable relationships positively. As recurrently mentioned, a sense of unity and cooperative environment strengthen and enhance social and relational capital availability, whose presence aids resilience's cultivation.

Cultural

The last dimension of pertinence to ensure resilient responses is the cultural sphere. Besides the aforementioned recommendations concerning the promotion of inclusive and cooperative environments, two additional suggestions regarding ideological elements can be provided. The first focuses on maintaining a form of pragmatic idealism, entailing the device of ambitious ends to be achieved through a series of more practical tasks and procedures. This will generate a synergetic interaction between down-to-earth mentalities and practices and grandiose purposes, ensuring efficient courses of action concerted by sharing a common and higher vision. JP Morgan's attempt of salvaging the financial system whilst maintaining operativity perfectly symbolises the efficaciousness of such an approach, prompting employees to fight for the survival of their company and the entire sector. Indeed, possessing great aspirations and engaging in sensemaking processes assists in withstanding increased strain, giving purpose to augmented suffering. Coping in the face of immense disaster requires believing in something higher than the mere conduction of business. The second suggestion follows as a consequence of this mentality: a balance between long-term and short-term aims should be always maintained. An excessive focus on short-term goals might obfuscate members from a more holistic understanding of the organisation and its environment. On the opposite side, concentrating exclusively on long-term objectives might hinder the much needed practicality that organisation must possess to function in daily operations. Sensibly, it must be ensured that the appointed leaders portray such ideological dispositions as well, guiding the ship through the storm and leaving no man behind, with a specific destination in mind. The path to success might be an increasingly turbulent one, signifying bold and courageous undertakings might be required. Hence, no space is left for cowardly and passive figures that for the fear of falling

will not breach through the skies. Yet, never neglecting the miserable fate of Icarus, grievously precipitating by reason of his mindlessness. Thus, the virtuously resilient organisation will attentively scrutinise the equivocal circumstances, agilely flexing to confront unexpected threats, never losing sight of the motives underpinning its existence.

To conclude, several recommendations have been presented to conceivably assist organisations striving to attain resilience. Focusing on four different levels of concern, a number of practices revolving around the individual, group, organisational, and cultural dimensions have been exposed to devise flexible and agile companies, composed by wise and bold members, that enact favourable responses whilst portraying the virtuous and humble disposition to reflect upon them. The advisable measures ranged from promoting modularity to fostering internal mobility, psychological safety, strategic diversification, enhanced awareness and proactive learning. It must be reminded that the processes to achieve resilience strictly resemble the ones for attaining virtuousness, implying an organisation designed on such principles will be simultaneously resilient and virtuous. Thus, the means to devise a virtuously resilient organisation, able to withstand the ever-increasing intricate, interrelated, and equivocal current environment, have been hitherto hopefully provided.

Conclusion

Resilience has progressively surfaced as a prerequisite for entities to thrive in current and future conditions, attracting increased attentiveness from scholars and academics and rendering one of the predominant aims of this thesis precisely to conduct an in-depth investigation of its nature and application. In order to attain a deeper understanding of the notion and appreciate its evolution and permeation in a vast number of theoretical and practical fields, an extensive assessment of its genesis was conducted. Such inspection exposed the several peculiarities and connotations that resilience has assumed, resulting in diverse implications concerning its definition and use. These, however, perilously threaten its correct employment, requiring additional clarity to be cast on the concept. Consequently, a dynamic, processual, and developmental approach emerged as the most appropriate to interpret the concept of resilience, providing the proper foundations for subsequent analyses on its adoption in organisational theories. Initiating from precursors identified with its original acceptation in the field, such as Staw and Meyer, and following with, amongst others, Hedberg, Starbuck, and Weick, the literature review performed unveiled numerous elements pertaining to individual, collective, and organisational resilience along with the most effective practices to cultivate and foster it. The raison d'être behind the profound investigation of both its genealogy and elaboration in managerial theories lies in a firm conviction of the past's pivotal influence on shaping the present and future, moulding and directing the emerging trajectory. Thus, the analysis surfaced as relevant in itself and was furthermore instrumental in gaining the necessary comprehension of the roots underlying Giustiniano's theoretical framework, subsequently employed to examine resilience in the Global Financial Crisis.

Furthermore, virtue ethical theories and the related Aristotelian postulations have been presented, exhibiting a tight coupling with resilience's nature and attainment. As a matter of fact, the processes to cultivate resilience and virtuousness revealed themselves to be remarkably similar, being both associated with a perennial search for an intermediate between two extremes, juggling opposing tensions and embracing paradoxes. Intriguingly, resilient organisations appeared to be simultaneously virtuous, paving the way for formulating a hypothesis concerning the potential existence of virtuously resilient entities. Developing through a perpetual process comprising peculiar mindsets, intentions, behaviours, and acts, resilience's achievement strictly resembled the one of ethical virtues, grounded on habits formed through the repeated and constant engagement in proper aptitudes and actions. Besides, resilience has been conceptualised as a moral virtue in itself, representing a balance between its excessive presence and utter absence. Indeed, a possible dark side of the notion emerged correlated to its disproportionate employment, recalling the wise consideration that the poison truly lies in the dose. In addition to the brilliance of Aristotle's theorisations, whose exposition was arguably worthy in itself, the investigation demonstrated the timelessness of the philosopher's postulations, depicting renewed applicability and manifesting as valuable teachings for modern organisations. In other words, companies striving to advance would disputably benefit from adopting Aristotelian virtue ethical recommendations, despite these having been formulated in ancient times. Thus, an enthralling bridge arose, portraying the intersection between the philosophical and organisational paths, evolving in comparable directions.

Furthermore, the chief dynamics, actors, and events embedded in the Global Financial Crisis have been presented to obtain a proper understanding of the international cataclysm and to possess the foundations required to comprehend the proposed renewed vision of the credit crunch through virtue epistemological lenses. Such interpretation, focused on the role of competence and motivation in the unfolding of the disaster, was also provided in light of the pivotal influence exerted by the selected framing on resilience's connotation and deployment. As a matter of fact, the analytical lenses mould the identification of threats to which resilience must be exhibited, the necessary means and responses to enact it, and the resulting implications. Hence, virtue epistemological lenses aided in the analysis of the catastrophe and in the development of a novel interpretation. Yet, a thorough examination of the crisis and the delineation of its predominant triggers was outside of the aim and scope of this thesis and perhaps worthy of a separate dedicated investigation. Notwithstanding, narrowing the inquiry to two fundamental elements pertaining to human fallacies that contributed to the disaster's unravelling, motivation - as opposed to competence - ultimately emerged as the predominant propulsive force. Such findings were also evinced by analysing JP Morgan's and Bear Stearns' resilience and virtuousness amidst the credit crunch, whose divergent approaches were highly retraceable to the quality of management and employees.

Thus, afore conducting a thorough investigation on the abovementioned, Giustiniano's postulations were presented as necessary for analysing the responses of the respective companies. The author's focus revolves around the paradoxical essence of both resilience and its attainment, considering the variety of elements that intertwine, contrapose, and enhance each other simultaneously in a perennial dialectical tension. Hence, embracing such an approach entails, for instance, being robust whilst flexible, delegating whilst commanding, and learning whilst unlearning. Exploring various elements contributing to resilient reactions, such as the necessity to build both walls and windmills, exhibiting sponge and titanium features, seizing paradoxes, engaging in leadership as gardening, and leading whilst learning, the existence of a permanent dialectical synthesis surfaced to define resilience ultimately. The theoretical framework provided by the author was subsequently utilised to illustrate the thread connecting the former to virtue ethical theories. As mentioned, a fascinating similarity concerning the means to achieve resilience and virtuousness revealed itself, with the first being postulated as a virtue in itself. Thus, a synergetic interaction was denoted contributing to the potential emergence of a virtuously resilient organisation, whose construction is aided by the presence of a thin and porous line separating the necessary practices to be resilient and virtuous.

Finally, the rich theoretical background surrounding the thesis, starting from the inquiry into the genesis of resilience to its juxtaposition to virtue ethics, was employed to analyse the Global Financial Crisis. As a virtuously resilient entity, preformed assumptions and inferences concerning the vision and dynamics embedded in the catastrophe were challenged, widening the potential interpretative stances to adopt. The credit crunch has indeed been explored and explained in a variety of diverse fashions by a myriad of critics and specialists, with fervent disagreements on the different relevance of distinguished actors and causes in contributing to its unravelling. The critical position the financial system vests in modern societies, pervading all sectors and being ubiquitous in each individual's existence, renders the motive for analysing resilience within it reasonably intuitive. Indeed, the dire consequences carried by the credit crunch underline the critical necessity and undisputed value in cultivating the former in the system, for which an in-depth investigation of its relative presence was definitely valuable in itself. Moreover, analogously to the process of double-loop learning, a heightened awareness of faulty mindsets and practices aids in averting the potential and protracted reoccurrence of the same. In particular, this thesis aimed to insert itself in the vast array of interpretations and investigations composing Pandora's box surrounding the matter due to a firm belief in the increased value associated with adopting a perspective formulated upon the synergetic

interaction of organisational and virtue ethical theories. As a matter of fact, novel lessons were sought and hopefully individuated precisely in virtue of such renewed analytical lenses.

Thus, unusual rather than standard characteristics were identified as central elements of inquiry, whose significance and role have been erroneously relinquished to favour straightforward considerations concerning the crisis. Such an approach transpired through the examination of two financial institutions, JP Morgan and Bear Stearns, whose responses to the cataclysm have been specifically virtuously resilient and viciously unresilient, respectively. Several divergences arose with regards to the mindsets, dispositions, behaviours, and practices of the aforementioned, with a particularly evident disparity concerning the Chief Executive Officers of the two firms. Jamie Dimon exhibited an outstandingly resilient character, which intriguingly - and arguably not coincidentally - was virtuous as well, standing in net contraposition to James Cayne's aptitude, diametrically opposed to the former. A number of inferences have been elaborated drawing from the intriguing interplay amongst organisational and virtue ethical theories, illustrating the most favourable response possessed exceptionally resilient and virtuous attributes, steering away from extremes and balancing opposing tensions. JP Morgan portrayed a specific inclination to gravitate around intermediates, engaging in relevant practices with prudence and vigour. Oppositely, Bear Stearns, whose hubris resulted in an unmindful and incessant pursuance of excesses, completely obliterated its odds of survival. Furthermore, an assessment of the financial system in its entirety was performed, whose character and practices predominantly resembled Bear's hazardous approach, exhibiting a wide-ranging tendency to indulge in extremes. The derived postulations were deeply influenced by the renewed vision offered of the Global Financial Crisis, underlining the critical role of actors' character and motivations. Notwithstanding, a silver lining surfaced from the inquiry. As Giustiniano's theories would suggest, shocks symbolise opportunities to learn, and indeed two positive elements were identified amidst the disaster: the first regarding the emergence of JP Morgan's response as a role model for entities striving to accomplish resilient reactions; the second concerning the regulatory advancements enacted in the financial sector as a consequence of the credit crunch, demonstrating the system's capacity to advance and express resilience. Intriguingly, role models are pivotal both for organisational and Aristotelian theorisations, which encourage emulating resilient and virtuous agents, respectively. Moreover, the regulatory framework's improvements would disputably not have occurred without the manifestation of the catastrophe.

Ultimately, managerial recommendations were provided to assist entities confronting the increasingly interconnected, ambiguous, and complex modern environment, who strive to

attain resilience. The thesis' rich theoretical and analytical background culminated in several suggestions concerning favourable practices to be implemented on the individual, group, organisational, and cultural level. Focusing on the significance of cultivating and retaining positive and virtuous dispositions and characters, the recommendations ranged from suggesting strategic diversification to pursuing paradoxes, confident outlooks and mindsets, agile structural designs, fluid information networks, and challenging preformed assumptions to learn perpetually. The capacity to juggle opposing tensions surfaced as specifically relevant, pervading practices pertaining to all four dimensions and resulting in the necessity to constantly balance several elements including short-term and long-term attitudes, efficacy and efficiency, agency and control, centralised and decentralised decision-making, prudence and boldness, and rigour and improvisation. As illustrated, the means to achieve resilience and virtuousness emerged as outstandingly similar, implying the pursuance of the delineated procedures fosters resilient and virtuous inclinations simultaneously, generating a virtuously resilient organisation. Such can be contemplated as a dynamic system, agilely and effortlessly operating between contradicting tensions, with the capacity of maintaining plasticity whilst exhibiting fortitude. Thus, building walls and windmills to withstand with enhanced vigour unexpected jolts whilst flexibly bending to avert destruction. As in resilience's physical connotation, this enthralling organisation absorbs energy upon impact, subsequently releasing it to advance forward with augmented propulsive power, energetically confronting potential and ambiguous hazards.

Appendix

Table 1.1 Searches trend for Resilience Worldwide

Table 1.2 Searches trend for Resilience in the US

Year	Month	Search Interest	Year	Month	Search Interest
2004	4 January	19	2004	January	2
	February	24		February	2
	March	15		March	12
	April	21		April	18
	May	18		May	2
	June	19		June	4
	July	11		July	4
	August	30		August	10
	September	19		September	24
	October	13		October	9
	November	20		November	10
	December	23		December	18
200	5 January	14	2005	January	6
	February	18		February	18
	March	14		March	15
	April	23		April	19
	May	20		May	10
	June	23		June	16
	July	27		July	12
	August	21		August	8
	September	24		September	21
	October	22		October	21
	November	24		November	13
	December	20		December	9
200	5 January	16	2006	January	10
	February	22		February	14
	March	18		March	10
	April	20		April	18
	May	20		May	14
	June	20		June	11
	July	11		July	11
	August	23		August	10
	September	16		September	16
	October	23		October	17
	November	23		November	9
	December	18		December	12
2007	January	18	2007	January	17
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	February	26		February	16
	March	27		March	19
	April	27		April	22
	May	18		May	14
	June	26		June	17
	July	18		July	12
	August	21		August	23
	September	22		September	24
	October	23		October	15
	November	23		November	26
	December	29		December	23
2008	January	23	2008	January	21
	February	26		February	22
	March	26		March	24
	April	29		April	32
	May	27		May	20
	June	26		June	17
	July	24		July	24
	August	26		August	18
	September	28		September	24
	October	27		October	20
	November	19		November	21
	December	19		December	20
2009	January	25	2009	January	17
	February	23		February	27
	March	25		March	21
	April	28		April	32
	May	37		May	41
	June	24		June	23
	July	26		July	23
	August	23		August	20
	September	29		September	30
	October	32		October	34
	November	28		November	29
	December	21		December	23
2010	January	26	2010	January	25
	February	27		February	31
	March	32		March	32
	April	32		April	28
	May	34		May	27
	June	28		June	26
	July	24		July	24

	August	24		August	18
	September	31		September	26
	October	32		October	24
	November	29		November	21
	December	26		December	30
2011	January	30	2011	January	31
	February	29		February	25
	March	32		March	31
	April	31		April	29
	May	28		May	26
	June	26		June	25
	July	28		July	29
	August	28		August	26
	September	34		September	37
	October	32		October	33
	November	29		November	28
	December	26		December	22
2012	January	26	2012	January	28
	February	31		February	30
	March	32		March	28
	April	32		April	33
	May	32		May	30
	June	28		June	24
	July	26		July	25
	August	28		August	28
	September	33		September	34
	October	35		October	34
	November	35		November	37
	December	27		December	26
2013	January	31	2013	January	34
	February	37		February	30
	March	35		March	37
	April	40		April	43
	May	33		May	40
	June	31		June	28
	July	28		July	29
	August	27		August	26
	September	38		September	41
	October	39		October	43
	November	38		November	39
	December	30		December	34
2014	January	34	2014	January	33
	February	37		February	41

	March	39		March	39
	April	40		April	42
	May	39		May	42
	June	39		June	38
	July	35		July	36
	August	38		August	35
	September	42		September	46
	October	46		October	47
	November	42		November	42
	December	39		December	40
2015	January	41	2015	January	43
	February	46		February	45
	March	47		March	49
	April	45		April	51
	May	40		May	45
	June	41		June	35
	July	37		July	42
	August	38		August	38
	September	49		September	52
	October	50		October	57
	November	49		November	51
	December	41		December	45
2016	January	45	2016	January	45
	February	49		February	51
	March	48		March	47
	April	53		April	49
	May	50		May	44
	June	44		June	41
	July	39		July	35
	August	40		August	40
	September	49		September	51
	October	50		October	55
	November	53		November	50
	December	42		December	40
2017	January	45	2017	January	45
	February	51		February	51
	March	56		March	55
	April	53		April	53
	May	51		May	50
	June	49		June	41
	July	42		July	38
	August	44		August	44
	September	59		September	61

	October	62		October	70
	November	61		November	61
	December	48		December	47
2018	January	52	2018	January	52
	February	59		February	60
	March	60		March	55
	April	58		April	60
	May	58		May	55
	June	52		June	47
	July	49		July	37
	August	51		August	52
	September	61		September	61
	October	66		October	66
	November	64		November	64
	December	53		December	64
2019	January	60	2019	January	65
	February	63		February	65
	March	64		March	63
	April	67		April	71
	May	62		May	58
	June	56		June	53
	July	54		July	44
	August	54		August	57
	September	69		September	68
	October	69		October	71
	November	70		November	63
	December	54		December	51
2020	January	62	2020	January	57
	February	69		February	67
	March	81		March	67
	April	100		April	86
	May	91		May	78
	June	85		June	69
	July	76		July	65
	August	77		August	74
	September	95		September	100
	October	84		October	76
	November	85		November	70
	December	69		December	61
2021	January	76	2021	January	59
	February	77		February	67
	March	77		March	72

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