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Crisis and Resilience in the Automotive Industry: Dynamic Capabilities and Institutional Context in U.S. and East Asian Automakers during the 2008 Global Financial Crisis

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Abstract

During the 2008 Global Financial Crisis, structural weaknesses were exposed in the global automotive sector. This paper examines how dynamic capabilities are constructed and utilized when subjected to systemic financial shocks.

Drawing on a qualitative comparative case study of four of the leading automakers – General Motors and Chrysler in the United States, and Toyota and Hyundai in East Asia – the study integrates Dynamic Capabilities Theory and Institutional Theory to explore how companies perceived risks and seized opportunities.

The results suggest that U.S. automakers in a liberal market economy relied on state intervention via bailouts. Their recovery was driven primarily by institutional substitution from outside, rather than local capability. Toyota and Hyundai, operating in coordinated market economies, proved capable of achieving capability-driven resilience through internal acclimatization, operational flexibility, and development without direct state reinforcement.

The findings indicate that resilience is a function of the interaction between institutional models and capabilities. Short-term stabilization or long-term renewal depends on the extent to which institutional environments facilitate or constrain adaptive behavior. The study provides an integrated view of organizational resilience by incorporating institutional and capability perspectives.

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1. Introduction

The 2008 Global Financial Crisis was one of the most severe economic shocks witnessed since the Great Depression, resulting in a sudden fall in credit markets, a steep fall in consumer spending, and turmoil across almost all industries. Originating in the United States with the bursting of the housing bubble and the failure of complex financial instruments, the crisis quickly spread across closely interconnected financial and manufacturing networks as a global shock.

Liquidity drained away and faith in credit systems was broken, squeezing companies across sectoral lines of credit and demand. The automotive sector—extremely capital-intensive, heavily credit-dependent, and deeply embedded in global supply chains—suffered the most.

The crisis exposed the stark divide between U.S. and East Asian manufacturers. General Motors and Chrysler walked into the crisis facing liquidity shortages and long-standing structural rigidities that impeded internal restructuring. Their survival relied on federal intervention—TARP aid, bankruptcies managed by the government, negotiated stakeholder agreements. Resilience was rooted in institutional substitution, in which the state made up for the lack of internal dynamic capacities.

East Asian automakers such as Toyota and Hyundai were able to adapt to the crisis internally and survive. Working in richer institutional environments, they came into the crisis with relatively stronger finances and more adaptable production systems. These companies recalibrated production, restructured operations, and extended long-term investment without calling for direct bailouts.

Despite extensive research on the 2008 Global Financial Crisis, prior studies have tended to examine either firm-level capabilities or institutional environments in isolation. Work on dynamic capabilities has clarified how firms sense, seize and transform during instability, but it rarely accounts for how national institutional structures constrain or enable these processes. Conversely, institutional studies have shown how financial systems, labour markets and state policies shape industrial outcomes, yet they do not explain why firms within the same institutional setting vary in their adaptive performance. This gap matters because resilience during systemic crises emerges from the interaction between the two levels, not from one alone. This study addresses this deficiency by integrating Dynamic Capabilities Theory with Institutional Theory and applying this combined lens to U.S. and East Asian automakers during the financial crisis.

Against this backdrop, this paper investigates the interaction between institutional structures and firm-level dynamic capabilities during systemic financial crises. The key research question is:

- How do institutional contexts shape the creation and application of dynamic capabilities that underpin resilience in the automotive sector in a systemic financial crisis?

Three sub-questions guide the analysis:

- What kinds of dynamic capabilities (for sensing, seizing, transforming) are identified in the literature as critical for firm resilience in crises?
- How do the institutional contexts—financial systems, labour relations, policy structures, and governance structures—shape the development and use of these capabilities?
- How does a comparative institutional-capability model account for the diverse responses of automakers in different national contexts?

The study employs a qualitative comparative case-based approach, using GM and Chrysler in the United States and Toyota and Hyundai in East Asia. These cases reflect extremely different institutional contexts and crisis-response flows, allowing for a direct comparison between capability evolution, institutional assistance, and resilience responses.

Using secondary data (company reports, policy documents, academic studies, industry analysis), this research reconstructs firm strategies and institutional responses to the crisis. It advances understanding of organizational resilience by integrating Dynamic Capabilities Theory and Institutional Theory, showing that organizational resilience emerges from the congruence between institutional environments and firms' adaptive capabilities. The results have theoretical implications for understanding how institutions shape dynamic capability development and performance, as well as policy implications for strengthening industrial resilience in future crises.

The remainder of the thesis is structured as follows. Chapter 2 reviews the literature on systemic financial shocks, dynamic capabilities, institutional theory, and comparative resilience. Chapter 3 outlines the research design and case study methodology. Chapter 4 presents the comparative findings from U.S. and East Asian automakers. Chapter 5 discusses the implications of these results for theory and policy. Chapter 6 concludes with contributions, limitations, and avenues for future research.

2. Literature Review

2.1 Systemic Financial Shocks and Industry Vulnerability

The 2008 subprime mortgage crisis soon turned from a statewide financial ripple into a systemic financial crisis around the globe, and one of the most disruptive in the history of financial systems since the Great Depression. A systemic crisis is a failure of confidence and credit that concurrently makes interrelated financial institutions and markets unstable, which will cause cascading effects across national economies (Hellwig, 2009).

The crisis spread primarily through credit contraction and a collapse in aggregate demand. The bursting of the U.S. housing bubble and the default of complex, securitized financial products such as collateralized debt obligations (CDOs) led to major losses in the banking sector, eroding trust within interbank markets (Hellwig, 2009). As the leading between financial institutions stalled, liquidity in the global economy evaporated. Manufacturers, who depend heavily on durable goods consumption, were hit especially hard as households postponed major spending decisions and firms halted expansion plans (Gersick & Hackett, 2015).

Broyer and Fava (2011) described this phenomenon as “financial Fordism,” highlighting how the industry’s functioning relied on the continuous availability of external financing to support both production and consumption. When financial institutions withdrew credit, automakers faced simultaneous shocks on the supply and demand sides: consumers were unable to access affordable loans to purchase vehicles, and manufacturers struggled to secure operational funding. The tight integration between financial markets and automotive operations meant that disruptions in banking liquidity directly translated into a sudden contraction of industrial output (Romero, 2017).

Moreover, the globalized nature of automotive production amplified its vulnerability. The industry's extensive international supply networks, organized through complex global value chains (GVCs), transmitted financial distress rapidly across borders (Sturgeon & Van Biesebroeck, 2011). The interruption of financing for suppliers or component manufacturers could halt production in distant plants, illustrating how systemic risks propagate through interconnected industrial structures (Gersick & Hackett, 2015).

Firms that relied heavily on debt-financed operations found themselves exposed to multiple pressures: declining demand, frozen credit markets, and disrupted production networks. As a result, resilience depended less on immediate financial recovery and more on firms' and institutions' ability to adapt strategically.

2.2 Global Impacts on the Automotive Industry

The global automotive industry was not equally affected by the 2008 financial crisis. The response and recovery within regions were varied depending on each market's conditions. (Madugba et al., 2016).

In the United States, the crisis acted as a catalyst for a structural collapse and a state-imposed transformation. The domestic automotive industry, dominated by the 'Big Three,' had already been weakened by rising operating costs, heavy dependence on consumer credit, and rigid labour agreements. When the financial system froze, these vulnerabilities translated into a severe liquidity crisis that threatened the survival of major companies (Moosbeckhofer, 2010; ILO, 2010). The government intervened with large-scale stabilization programs under the Troubled Asset Relief Program (TARP), which led to forced bankruptcies and institutionally managed restructuring (Bai, 2012).

European manufacturers experienced a sharp but more heterogeneous contraction. The severity of the crisis varied across national economies due to differences in industrial relations systems, labour market institutions, and the strength of domestic financial sectors (Madugba et al., 2016). Although governments across the continent introduced emergency measures – including loan guarantees, scrappage incentives, and job protection programs – there was no coordinated restructuring effort at the European level. According to the International Labour Office (2010), European governments sought to preserve employment and productive capacity, often at the expense of long-term competitiveness.

Automobile firms in East Asia, especially in Japan and South Korea, were more resilient because of their strong domestic capabilities and less fragmented systemic influences (Oh, 2014; Bai, 2012). Despite sharply lower export demand, Asian firms with conservative financial practices, long-standing bank relationships, and lean production systems were able to hold steady when it came to operations. Even during a period of global uncertainty, many Asian producers continued to invest in technological advancement, especially hybrid and fuel-efficient vehicles (Oh, 2014).

Firms in the U.S. survived largely due to state intervention; in Europe, it was due to institutional coordination and partial restructuring; in Asia, it was due to high internal capabilities and innovation (Oh, 2014).

2.3 Firm-level Resilience and Strategic Responses

The different regional outcomes discussed earlier can be better understood by looking at how individual automakers responded to the financial crisis. Most car manufacturers initially focused on financial stabilization and cost reduction in order to survive the immediate shock. In the United States, companies such as General Motors and Chrysler reacted in a highly defensive manner. Their survival strategies depended on government support, and the restructuring that followed was shaped primarily by political and institutional pressures rather than internal strategic choices (Danielsson et al., 2025).

In contrast, East Asian Manufacturers, including Toyota and Honda, demonstrated greater internal stability and a more measured strategic adaptability. These companies faced the crisis from a position of greater financial strength and more flexible production systems. Instead of relying on external aid, they adjusted production levels, reallocated workers, and maintained long-term relationships with suppliers and employees (Afzal et al., 2013).

Innovation was another important feature of resilience in the crisis. As most companies were pressured to reduce their investments, some took the opportunity to enhance their technological and competitive advantages in the declining economic environment. An example of this is Toyota, which took a bet by investing in hybrid and fuel-efficient cars despite a challenging process of recall that threatened its image (Santos et al., 2012). Hyundai used the same approach to strengthen its quality-based strategy and use customer trust to increase its market share, especially in markets where consumer confidence had sunk (Afzal et al., 2013).

The ability to manage relationships with key stakeholders also became a decisive factor. U.S. automakers' resilience depended on their capacity to negotiate with the government, labour unions, and creditors to secure state support – a form of institutional navigation that required political as much as managerial skill (Danielsson et al., 2025). Asian automakers, on the other hand, relied on pre-existing trust-based relationships with banks, suppliers, and employees, which allowed them to adjust operations without severe disruption (Afzal et al., 2013).

The most important distinction was that the Asian manufacturers applied their own resources, including innovation, flexibility, and collaboration with stakeholders, to adjust themselves without external help, whereas in the U.S., manufacturers were more dependent on external institutional help to survive.

2.4 Government Interventions and Policy Responses

The depth and systemic nature of the 2008 financial crisis caused governments in most automotive-producing regions to intervene on a scale never before seen. In the United States, the crisis response focused on large-scale bailouts and state-enforced restructuring. The federal government provided large sums of money to General Motors and Chrysler, which were nearly bankrupt, through the TARP (Moosbeckhofer, 2010). The aid was conditional and included forced bankruptcy proceedings, debt restructuring, and major revisions to labor agreements. The state became an active political and institutional actor in the corporate world, wielding crisis leverage to push through changes that had long been politically or organizationally blocked (Bai, 2012).

European governments adopted a more cautious and fragmented approach, relying on a mix of state-backed loans, liquidity guarantees, and consumer incentives such as scrappage schemes (ILO, 2010). Germany’s employment protection policies and short-time work programs helped preserve industrial capacity, while France tied state aid to domestic job retention and production commitments (Reimers, 2018).

In Asia, crisis management followed a different logic. Governments in the region, particularly China and South Korea, viewed the downturn as an opportunity to strengthen domestic industries and advance strategic industrial goals. China implemented far-reaching fiscal stimulus that supported both infrastructure investment and automotive consumption, thereby increasing domestic demand and offsetting excess global capacity (Oh, 2014). At the same time, industrial policies promoted technological upgrading and the development of local brands. By increasing the competitiveness of key automakers, South Korea applied selective state funding and even R&D incentives to balance short-term stabilization with long-term development (Oh, 2014).

While they played an essential role in stabilizing the global automotive industry, they also produced complex consequences. Demand-side measures, such as the U.S. "Cash for Clunkers" program, provided a quick boost to car sales but had only temporary effects on overall consumption patterns (Mian & Sufi, 2012). Asian and European interventions, by contrast, illustrated how policy philosophy shapes resilience. Asian governments used the crisis as a tool to modernize and expand industrial capacity, while European governments sought mainly to protect existing systems and employment.

2.5 The U.S. Auto Bailouts and Their Critics

The U.S. government's response to the 2008 global financial crisis, known as the Emergency Economic Stabilization Act (EESA) and which created the Troubled Asset Relief Program (TARP), was one of the most significant state interventions in recent U.S. industrial history. Usually referred to as the U.S. Auto Bailout, it was more than a financial rescue: it stood for an institutional substitution for firm adaptability – a state-initiated transformation that replaced failed corporate reform with government-orchestrated restructure (Parnell & Emerson, 2018).

The bailout, managed by the U.S. Treasury under the authority of TARP, was justified as an urgent necessity to prevent the collapse of General Motors and Chrysler, whose failure would have jeopardized millions of jobs and destabilized the broader manufacturing supply chain (Wiggins et al., 2022). The intervention combined liquidity provision, government-supervised Chapter 11 reorganizations, and major stakeholder restructuring (Parnell & Emerson, 2018).

These measures showed that, within a liberal market economy, survival depended not only on firm-level capabilities but also on the ability to mobilize political and institutional resources. The bailout thus became a form of externally imposed adaptation – a transformation achieved through state coercion rather than managerial initiative.

Critics described it as political favoritism and “crony capitalism,” arguing that it rewarded managerial failure, distorted competition, and created moral hazard by signaling that large firms would always be rescued (Sawyer, 2008). Supporters responded that the intervention of the government was necessary in order to prevent systemic failure and avoid a more severe Great Recession (Wiggins et al., 2022).

GM and Chrysler re-emerged as leaner, financially stable companies with more competitive labor agreements (Parnell & Emerson, 2018). Yet this outcome also revealed that resilience was externally imposed, not internally generated. This crisis exposed how decades of managerial inertia and institutional rigidity had eroded firms’ dynamic capabilities, leaving state intervention as the only viable mechanism of renewal.

2.6 Comparative Resilience: U.S. vs. East Asian Automakers

2.6.1 U.S. Automakers: Bailout-Dependent and Institutionally Driven Transformation

U.S. automakers functioned in the liberal market economy context, characterized by competitive labor markets, short-term shareholder orientation, and dependence on external capital markets (Reimers, 2018). These structural characteristics created conditions of chronic rigidity: firms failed to develop the sensing and transforming capabilities necessary to adjust to evolving consumer demand, technological change, and financial vulnerability (Bai, 2012).

When the financial system collapsed, U.S. manufacturers lacked the internal flexibility to implement timely self-restructuring. Their eventual recovery was instead achieved through institutional substitution, in which the state intervened directly through the bailout and government-managed bankruptcies. This forced restructuring enabled companies like General Motors and Chrysler to shed unprofitable operations, renegotiate labor terms, and reset cost levels (Afzal et al., 2013).

2.6.2 East Asian Automakers: Capability-Driven and Internally Managed Adaptation

In contrast, East Asian automakers—particularly Japanese and South Korean firms—functioned within institutional contexts closer to Coordinated Market Economies (CMEs), where long-term relational finance, cooperative labor systems, and stakeholder alignment supported collective strategic flexibility (Oh, 2014).

These firms entered the crisis with stronger internal buffers, including high cash reserves and lean operational structures. They were able to sense the market disruptions early and capture corrective opportunities through effective inventory control and production management, and transform through ongoing technological innovation (Afzal et al., 2013).

2.6.3 Europe and Emerging Markets: Mixed Outcomes

European automakers presented an intermediate pattern. Scrappage and liquidity guarantees were established by governments across the whole continent to keep employment and demand stable (Reimers, 2018). They averted mass bankruptcies, but frequently slowed the process of deeper structural change. And emerging markets, especially China, seized on the crisis to expand. Massive fiscal stimulus and industrial policy accelerated domestic automotive growth, absorbing global overcapacity and shifting the industry's center of gravity eastward (Sturgeon & Van Biesebroeck, 2011).

2.6.4 Synthesis of the Comparative Framework

The evidence consolidates a key insight: condition the effectiveness of dynamic capabilities. The 2008 crisis exposed two dominant models of resilience:

Resilience Model	Primary Mechanism	Dynamic Capability Deployed	Institutional Context
U.S. (Bailout-Dependent)	State-enforced, coercive restructuring	Political Seizing (securing state aid) & Coerced Transformation (bankruptcy)	Liberal Market Economy (LME)
East Asia (Capability-Driven)	Internal financial and operational adaptation	Operational Seizing (production adjustment) & Organic Transformation (innovation, learning)	Coordinated Market Economy (CME-influenced)

Overall, the crisis revealed that dynamic capabilities alone are insufficient without an enabling institutional framework. The distinction between bailout-dependent and capability-driven resilience underscores the central argument of this research: organizational recovery during systemic financial shocks emerges from the interplay between institutional structures and firm-level adaptive capabilities, not from either dimension in isolation.

2.7 Institutional Theory and the Influence of the Context on Industrial Resilience

Institutional theory explores the ways in which organizations are integrated and influenced by wider systems of rules, norms, and beliefs. According to North (1990), institutions shape the way organizations act, what courses they take, and what resources they are able to garner during stability and crisis. Scott (2014) identifies the regulative, normative, and cognitive pillars. The regulative pillar includes rules, laws, and policies; the normative pillar concerns common values and expectations; the cognitive pillar involves assumptions and shared understandings.

DiMaggio and Powell (1983) explain how coercive, normative, and mimetic pressures lead to organizational isomorphism, especially under uncertainty. Crisis conditions magnify these mechanisms as governments set demands, professional communities define standards, and firms imitate seemingly successful peers.

Hall and Soskice’s (2001) Varieties of Capitalism framework distinguishes between Liberal Market Economies (LMEs) and Coordinated Market Economies (CMEs). LMEs rely on market coordination, equity financing, and arm’s-length relations, while CMEs depend on non-market coordination, relationship banking, and negotiated labor relations. These differences affect how firms access resources and build capabilities. Whitley (1999) shows that national business systems create distinct patterns of organizational competence and strategic orientation.

Campbell (2011) argues that crises create windows for rapid institutional change, allowing governments to override established interests. The effectiveness of such interventions depends on state capacity and government-industry relations.

Financial systems determine liquidity and emergency capital; labor market institutions shape employment flexibility; industrial policy influences restructuring. Even strong capabilities may not be effective when institutions restrict necessary action, while supportive interventions may sustain firms with weak internal capacity.

2.8 Incorporating Dynamic Capabilities and Institutional Perspectives

Dynamic capabilities and institutional theory have developed largely in parallel. Dynamic capability studies focus on sensing, seizing, and transforming, emphasizing managerial cognition, routines, and resource reconfiguration. Institutional theory focuses on how organizations are shaped by rules, norms, and beliefs that restrict and facilitate action.

Oliver (1997) integrates institutional and resource-based perspectives, arguing that sustainable advantages result from the interaction between organization resources and supportive institutional conditions. Institutions define which capabilities are valued, what resources are accessible, and which strategies are legitimate. Thus, dynamic capabilities emerge within – not outside – institutional environments.

Peng (2002) positions institutions as a third pillar of strategy, alongside industry structure and firm resources. In emerging and transitional economies, institutional factors often explain more performance variation than industry or firm characteristics. Their influence grows during systemic crises, when institutional volatility is high.

Teece (2018) incorporates institutional considerations into dynamic capabilities, noting that opportunities, innovation regimes, and strategic choices depend on institutional support. Strong capabilities can be limited by poor institutional infrastructure, and supportive institutions can compensate for weaker firm-level capacities. The success of sensing, seizing, and transforming depends partly on institutional architecture.

This combined perspective suggests several implications. Dynamic capabilities are partly shaped by institutional contexts, and the form they take varies accordingly. Firms with strong capabilities may still fail if institutions block necessary action, while supportive institutions may enable effective adaptation. Capabilities and institutions also interact dynamically, as firm behavior can influence institutional change.

2.9 Theoretical Framework and Research Gap

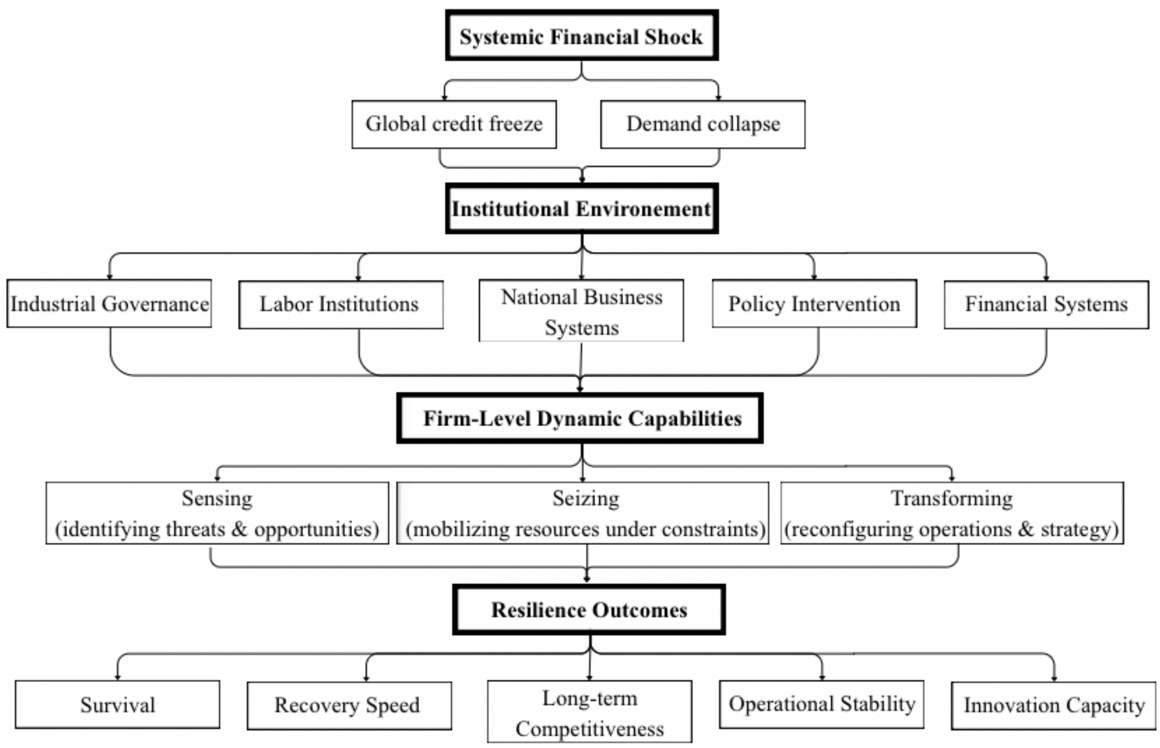
The review above has affirmed that the relationship between institutional environmental settings and firm-level dynamic capabilities is important in determining organizational resiliency in the face of systemic financial crisis. This section is a synthesis of the literature reviewed into a combined theoretical framework and determines the specific research gap that is addressed by this study.

2.9.1 Conceptual Model

The theoretical framework on the concept of resilience conceptualizes resilience as a response generated by interaction between systemic shocks, institutional environments, firm capabilities, and strategic responses.

Figure 1

Integrated Theoretical Model of Institutional-Capability Interaction in Crisis Resilience



Note. The model illustrates how systemic financial shocks interact with institutional environments, shaping the deployment of firm-level dynamic capabilities and resulting resilience outcomes.

As illustrated in Figure 1, systemic shocks are mediated by institutional structures, which then shape how firms can deploy their dynamic capabilities. This process unfolds as: systemic shock → institutional mediation → capability deployment → resilience outcomes. Institutions establish what is possible, accessible, and legitimate for firms during crisis, while dynamic capabilities determine how effectively firms act within those boundaries. The framework therefore reinforces the research gap by highlighting that resilience must be studied as a joint institutional-capability process, particularly during systemic crises such as the 2008 financial shock.

3. Methodology

3.1 Research Design

This study uses a qualitative comparative case study design to examine how the institutional environments shaped dynamic capabilities development and deployment in the automotive industry under systemic financial shocks. A qualitative case study approach is appropriate because the aim of the research focuses on how and why automakers responded differently to the 2008 Global Financial Crisis. In addition, it focuses on the relation between firm-level strategic action and institutional structures. Instead of attempting to find universal causal laws, the research explores complex mechanisms for how organizations become resilient and adapt to specific contexts. Using multiple cases strengthens the explanatory power of this design because it allows for cross-case replication, the identification of pattern similarities and differences, and stronger analytical generalization across contrasting institutional settings.

This comparative design will facilitate the comparison of two contrasting institutional and industrial contexts. The first is the U.S., where automakers operated in a liberal market economy and eventually required state help to survive. The second is East Asia where firms adapted capability-driven internal adjustments within coordinated institutional settings. The aim is not only to show differences but also to reveal through what processes institutional systems conditioned the deployment of dynamic capabilities. Within-case analyses follow a chronological structure, tracing each firm’s trajectory from pre-crisis conditions, through the onset of the financial shock, and into the post-crisis period to show how sensing, seizing, and transforming capabilities unfolded over time.

The choice of method is aligned with established research on comparative case studies, showing their relevance in examining the responses of organizations to crises and adaptation in different countries. This method can track strategic decision-making, institutional challenges, capability development, and theoretical refinement processes as they unfold over time. Hence, the study applies an explanatory model that is theoretically informed. Existing institutional and dynamic capability frameworks are applied to reveal the mechanisms of resilience in the case of systemic disruption.

The unit of analysis is the firm's adaptive response during the crisis, understood as an embedded process shaped by national institutional environments; firms are therefore examined in relation to the financial systems, labor relations, and governance arrangements in which they operate.

3.2 Case Selection

The study adopts a purposeful comparative case selection strategy to explore instances of resilience and strategic adaptation in the world's automotive sector during the 2008 financial crisis. This constitutes a purposeful and theoretically informed sampling approach, in which cases are selected because they best exemplify the institutional contrasts central to the research question. Two contrasting cases were selected: the automakers in the United States, which needed direct state intervention to survive, and the automakers in East Asia, which mostly adapted through internal dynamic capabilities. With this approach, resilience can be compared systematically across different countries.

The study focuses on four major firms:

Region	Cases	Rationale for Selection
United States	General Motors (GM), Chrysler	Most severely affected; required government intervention; represent LME institutional constraints and bailout-dependent transformations
East Asia	Toyota, Hyundai	Demonstrated capability-driven adaptation; represent coordinated institutional contexts and internal strategic resilience

General Motors (GM) and Chrysler are selected as emblematic cases of U.S. automakers operating within a liberal market economy. Both firms experienced acute liquidity crises, entered government-supervised restructuring, and relied on institutional support to restore viability. Their responses illustrate how limited internal flexibility and accumulated structural rigidities shaped strategic action during the crisis. The two U.S. firms are treated analytically as part of a single LME cluster, given their shared institutional environment and parallel crisis trajectories, while still allowing for firm-level distinctions where relevant.

Toyota and Hyundai were chosen to represent East Asian manufacturers operating within institutional environments characterized by long-term finance, coordinated labor relations, and incremental innovation cultures. Despite facing significant demand contraction, both firms preserved operational stability, maintained investment in technological capabilities, and adjusted production without government bailouts, demonstrating capability-driven resilience. These firms are selected because they are widely recognized in the literature as typical and emblematic cases of the coordinated institutional systems found in East Asia

Selecting these firms allows for a focused comparison in which the crisis serves as a common external shock while internal and institutional conditions vary systematically. The chosen cases offer clear contrasts in ownership structures, industrial governance, financial systems, and strategic philosophies – conditions that are theoretically expected to shape dynamic capability development.

This comparative logic follows an embedded multiple-case approach, enabling the analysis of firm-level behavior in relation to broader national institutions. Within this design, the U.S. cases function as the focal cases for understanding bailout-dependent resilience, while the East Asian cases serve as comparative counterparts that reveal how capability-driven resilience emerges under different institutional conditions. The cases therefore provide a robust empirical foundation for examining how institutional context mediates resilience strategies during systemic economic disruption.

3.3 Data Sources

A secondary data approach is used; it is the most appropriate method given the historical nature of the 2008 financial crisis and the large corpus of available data. Since the events and decisions of interest have already taken place, secondary data allows for a structured and well-documented reconstruction of how automakers reacted to these events. Source triangulation was applied systematically across all themes to strengthen validity, ensuring that company narratives, policy documents, academic analyses, and media accounts were cross-checked against one another.

3.3.1 Company and Industry Documents

A large part of the evidence comes from the companies themselves. This includes:

- Annual reports and financial statements
- Public announcements and press releases
- Strategy documents and crisis updates shared with investors

These materials help show how each automaker framed the crisis internally, what actions were prioritized, and how they communicated their strategies to the market.

3.3.2 Government and Policy Records

Because the role of institutions is central to this research, government sources are essential. These include:

- U.S. Treasury reports on the auto intervention and bailout funds

- Legislative and policy documents related to TARP
- Court filings related to GM and Chrysler's restructuring
- Policy papers and industrial programs in Japan and South Korea

These materials help clarify how public policy shaped firm behavior and what constraints or opportunities governments created in each context.

3.3.3 Academic Researchers

In theory and history, academic articles and working papers provide context. They explain how the crisis unfolded, how the automotive industry was affected, and what prior scholarship tells us about resilience, institutions, and firm strategy during times of crisis. And these also help ensure that the analysis does not simply rely on media coverage or company accounts, and is rooted in established scholarship.

3.3.4 Media and Professional Analysis

Finally, business journalism and industry commentary are employed so as to record real-time reactions and practical responses. Newspapers, financial media outlets, and automotive publications documented how markets, analysts, and the public understood the crisis as it developed. These sources provide more detail and often underscore managerial choices or friction that is rarely apparent in official documentation.

A key limitation of secondary sources is the potential for retrospective bias, corporate self-presentation bias, and selective disclosure in company reports. To adress this, the study uses multiple independent sources for each major theme so that interpretations do not rely on any single narrative.

Table 1
Overview of Data Sources Used in the Study

Data Category	Sources Included	Number of Documents	Purpose in Analysis
Company & Industry Documents	GM (2007; 2009 Form 10-K); Chrysler (2009); Toyota (2009); Hyundai (2009; 2010 fact book)	6	To reconstruct firm-level actions, financial conditions, crisis framing, and internal strategic responses.
Governments & Policy Records	U.S. Dept. of Treasury (2015); GAO (2011); U.S. DOE (2009); BEA (2010); TARP legislative/policy material (included in Treasury reports); restructuring filings (included in GM/Chrysler docs)	4	To understand institutional interventions, bailout structures, regulatory constraints, and state–industry coordination.
Academics Research & Working Papers	Afzal et al. (2013); Bai (2012); Broyer & Fava (2011); Danielsson et al. (2025); Gersick & Hackett (2015); Madugba et al. (2016);Moosbeckhofer (2010); Oh (2014); Parnell & Emerson (2018); Reimers (2018); Romero (2017); Santos et al. (2012); Sawyer (2008); Sturgeon & Van Biesebroeck (2011); Wiggins et al. (2022); Mian & Sufi (2012)	16	To build theoretical and historical context, explain crisis mechanisms, and support comparative institutional analysis.
Media & Professional / Industry Analysis	Sawyer (2008), economic commentary; additional contemporary news articles from financial media (e.g., Bloomberg, Reuters, WSJ)	5	To capture real-time market reactions and crisis interpretations absent from formal and corporate documentation.

3.4 Analytical Framework and Data Analysis

This research uses a cohesive analytical framework that integrates Institutional Theory and Dynamic Capabilities Theory to provide insights about how automotive firms responded to the 2008 Global Financial Crisis in disparate national institutional contexts.

This dual-theoretical lens is founded on the argument that resilience in the face of systemic shocks is co-produced by organizational capabilities and the institutional context. Neither theoretical lens explains the cross-national variation in responsiveness of firms to events enough and the interaction between the two provides a richer analytical understanding for understanding empirical information.

Institutional Theory adds macro explanatory power as it sheds light on the role of national economic systems, regulatory structures, labour relations and state–industry coordination on firms' strategic options and constraints. Utilizing Varieties-of-Capitalism (VoC) frameworks, the analysis explores the different patterns of resource access, governance, incentive structures, and crisis mediation of Liberal Market Economies (LMEs) compared to their Coordinated Market Economies (CMEs). Institutional conditions are perceived of being the structural context in which firms make sense of environmental signals, and they create adaptive strategies to adapt.

Dynamic Capabilities Theory offers the micro-level perspective for the understanding of how firms sense, seize, and adapt to crisis pressures. This analysis enables an organized comparison of organisational routines, learning processes and resource reorganizations between firms in the time of crisis. With emphasis on the dynamic capability triad, the chapter follows how adaptive behaviors were developed, stalled or enacted by external forces.

The analysis is guided by deductive coding categories derivered directly from both theoretical frameworks. From Dynamic Capabilities Theory, coding focuses on "sensing," "seizing," and "transforming." From Institutional Theory, coding categories include financial system constraints, labor relations, state coordination, and industrial governance structures. These categories structure the identification and interpretation of key emperical patterns. For example, a statement such as “Toyota reduced output early in response to falling U.S. demand” was coded as sensing, whereas “GM negotiated labor concessions under government supervision” was coded as both state coordination and seizing

The analytical process follows two stages. First, the crisis trajectory of each firm is explored through systematic within-case analysis, elucidating the visible processes of sensing, seizing, and transforming. Theme identification follows a structured content analysis approach, in which recurring patterns are extracted, coded, and grouped according to the deductive categories above. Results are interpreted by comparing the cases to explore how institutional contexts shaped the development and adaptation of these capabilities. This two-level structure allows for a nuanced understanding of resilience as a result of institutional enablement or substitution meeting firm-level strategic action.

Finally, the findings are analytically generalized to theory rather than to populations. The aim is to refine and extend existing institutional and dynamic capability frameworks by showing how their interaction shapes resilience under systemic crisis, rather than to produce statistically generalizable findings.

4. Findings and Analysis

This chapter presents the comparative findings of the study and is structured in three main sections. Section 4.1 examines the divergent resilience trajectories of U.S. and East Asian automakers during the 2008 financial crisis. Section 4.2 analyses firm-level dynamic capabilities (sensing, seizing, transforming) within their institutional constraints. Section 4.3 evaluates the role of government interventions as either capability-enabling or capability-substituting mechanisms. Together, these sections provide a comparative, theoretically informed account of how institutional contexts shaped organizational resilience.

4.1 Comparative Resilience: U.S. vs. East Asian Automakers

U.S. light vehicle production declined by over 34% in 2009 (from the prior year) (U.S. Bureau of Economic Analysis, 2010), which was a systemic shock threatening the survival of major manufacturers. As emphasized in the Varieties of Capitalism literature, institutional environments condition the likelihood of firms to adapt and respond (Hall & Soskice, 2001). The crisis, therefore, exposed fundamental differences in the way in which institutional structures influenced dynamic capability deployment among U.S. and East Asian automakers.

4.1.1 Types of Divergent Performance Trajectories

The size of the sales collapse differed greatly among companies and regions. In November 2008, GM’s automobile sales declined by 41%, while Chrysler’s automobile sales declined by 47% (General Motors Company, 2009; Chrysler LLC, 2009), compared to the decline of about 34% for Toyota Motor Corporation, whose automobile sales fell by 32% (Toyota Motor Corporation, 2009). While all of the automakers were facing severe demand contraction, the differential impact demonstrated underlying differences in financial stability, product-market alignment, and adaptive capacity, which are central to the theory of dynamic capability (Teece, 2007).

GM's global sales fell 10.8% in 2008 to 8.36 million vehicles (General Motors Company, 2009), which allowed Toyota to overtake GM as the world's largest automaker for the first time in 77 years, with global sales of 8.97 million vehicles (Toyota Motor Corporation, 2009). This shift highlighted deeper dissimilarities in organizational resilience and capability development, consistent with the literature on cumulative institutional advantages.

To improve clarity, key performance indicators across firms and regions are summarised in Table 2 below.

Table 2

Key Performance Indicators of Selected Automakers During the 2008-2009 Crisis

Firm	**Country / Institutional Type**	**Sales Change (2008-2009)**	**Production Change**	**U.S. Market Share**	**Key Notes**
General Motors (GM)	United States (LME)	-10.8% global; -21% North America	-48%	Fell from ∼23% pre-crisis	Severe liquidity crisis; required large-scale TARP bailout
Chrysler	United States (LME)	-47% (Nov 2008)	Production suspended Jan 2009	Declining	Financing arm froze lending; major capacity shutdowns
Toyota	Japan (CME)	-32% global	Declines but stabilized	Maintained ∼17%	Preserved workforce; continued tech investment; strong supply chain coordination
Hyundai	South Korea (CME)	+11.7% global	Expanded	3% → 4.2%	Counter-cyclical growth; profits +104.5%; Assurance Program boosted demand

Note. Data compiled from firm annual reports and government statistics (GM, Chrysler, Toyota, Hyundai; BEA; U.S. DOE).

Table 3 below provides a comparative summary of institutional characteristics and dynamic capability outcomes across the four automakers.

Table 3

Comparative Institutional and Capability Indicators (GM, Chrysler, Toyota, Hyundai)

Firm	Institutional Context	Sensing	Seizing	Transforming	Type of Resilience
GM	LME: adversarial labor, short-term finance, fragmented suppliers	Weak	Weak	Absent/Blocked	Institution-substituted
Chrysler	LME: fragmented governance, heavy legacy costs	Weak	Weak	Blocked	Institution-substituted
Toyota	CME: long-term finance, coordinated supply chains	Strong	Strong	Strong	Institution-enabled
Hyundai	Developmental-CME hybrid, industrial upgrading	Strong	Strong	Strong/Accelerating	Capability-driven

Note. This table synthesizes comparative performance, institutional features, and capability outcomes to support Section 4.2 and 4.3.

GM's market share of the U.S. market had dropped from just over 50% in 1962 to about 23% in 2007 (U.S. Bureau of Transportation Statistics, 2008), indicating decades of eroding competitiveness. The crisis accelerated this decline: by 2009, GM's North American sales fell 21%, and its production fell by nearly 48% (General Motors Company, 2009). These outcomes show the vulnerability of firms that did not have sufficiently developed sensing and transformation capabilities.

In contrast, East Asian manufacturers exhibited counter-cyclical performance consistent with coordinated market economic dynamics. Hyundai increased its U.S. market share from 3% to 4.2% between 2008 and 2009, selling 401,742 and 435,064 vehicles respectively, even as the overall market contracted (Hyundai Motor Company, 2009). Hyundai's global sales in 2009 rose

11.7% to 3,106,178 units, and the company reported net profit growth of over 100% year-over-year (Hyundai Motor Group, 2010). Toyota maintained a U.S. market share of nearly 17% in 2009 (Toyota Motor Corporation, 2009), underscoring its ability to preserve competitive positioning despite extreme market stress. These divergent trajectories were shaped by institutional contexts that influenced the dynamic capabilities of firms.

4.1.2 Institutional Configurations and Capability Development

The differing outcomes were the result of how distinct institutional configurations did or did not allow for dynamic capabilities over time. In the context of the U.S. liberal market economy, short-term pressures of shareholder interest, unfriendly labor relations, and arm's-length supplier ties tended to lead to organizational rigidities that slowed down sensing, seizing, and transformation capabilities (Hall & Soskice, 2001).

U.S. automakers heavily relied on SUVs and trucks for profitability throughout the late 1990s, with the latter representing approximately 50% of total light-vehicle sales in the United States (U.S. Department of Energy, 2009). When fuel prices rose dramatically in 2008, this product portfolio became a strategic liability. The inability of the companies to sense the changing preferences of consumers and adjust their portfolio of products showed capability deficiencies built into institutional constraints, as explained by Teece, Pisano, and Shuen (1997).

Every GM vehicle represented huge "legacy costs," including health-care and pension obligations for large retired populations, about ten retirees per active worker (General Motors Company, 2007). These commitments, formed through adversarial collective bargaining as is typical of LMEs (Rubinstein & Kochan, 2001), imposed serious financial burdens that limited transformation capabilities.

4.1.3 The Function of Institutional Support

Government responses contributed to the further differentiation of resilience pathways. The U.S. and Canadian governments gave about $85 billion in financial support to GM and Chrysler to engage in Chapter 11 restructuring (U.S. Department of the Treasury, 2015). GM alone received over $50 billion through TARP, with the United States Treasury receiving a 60.8% equity stake in the restructured company (Government Accountability Office, 2011). This intervention is an example of institutional substitution, where functions of transformation that firms cannot carry out themselves are executed by the state.

In contrast, the governments of East Asia pursued institution-enabling, as opposed to firm-specific, rescue strategies. Rather than bailing out individual firms, Japan and South Korea provided support for the industry as a whole – liquidity guarantees, consumer subsidies, and R&D incentives – that allowed firms to bring existing internal capabilities to bear (Wong, 2004). This approach displayed coordinated market economy assumptions about the state's role in supporting long-term industrial competitiveness rather than taking place of firm-level capabilities.

4.2 Capabilities at the Firm Level in Institutional Constraints

This section is an analysis of the development of firm-level dynamic capabilities (sensing, seizing, and transforming) that were shaped and restricted by institutional environments, based on the theoretical considerations of Teece (2007) and the comparative institutional literature (Hall & Soskice, 2001). The experience of GM and Chrysler illustrates the potential for eroding the overall adaptability and long-term economic fortunes of firms that rely on Liberal Market Economy (LME) conditions, while that of Toyota and Hyundai is used to illustrate the potential advantages of Coordinated Market Economy (CME) structures in supporting capability building.

4.2.1 U.S. Automakers: Institutionally Dependent Resilience

General Motors and Chrysler entered the crisis with highly deficient dynamic capabilities in all three dimensions of the Teece capability framework, demonstrating decades of capability erosion within constraining institutional contexts. These deficiencies were not only the result of managerial decisions but were also embedded in structural features of U.S. automotive governance such as adversarial labor relations, short-term capital pressures, and fragmented supplier networks.

4.2.1.1 Sensing Deficiencies

Both companies showed that they continually failed in their environmental scanning and threat assessment. This misalignment mirrors Teece’s (2007) view that sensing failures arise when organizational routines favor immediate financial performance over long-term market adaptation. Prior to the crisis, GM’s management and production systems were still geared toward market segments with high margins but poor fuel economy, even as market indicators clearly pointed to weakening demand.

When fuel prices soared in 2008, the demand for these vehicles collapsed. GM and Chrysler had no institutionalized process to identify and interpret environmental changes, which resulted in a structural sensing gap consistent with the long-term pressures on LME companies to return short-term value to shareholders (Hall & Soskice, 2001). Their product portfolios had become strategically inflexible and poorly aligned with rapidly changing market conditions.

4.2.1.2 Seizing Limitations

When crisis conditions intensified, U.S. automakers did not have the financial flexibility or organizational responsiveness required to capitalize on emerging opportunities or to restructure voluntarily. Chrysler's sales declined 47% in November 2008, while its financing wing tightened lending terms and discontinued leases (Chrysler LLC, 2009). In December 2008, Chrysler announced that it was suspending all production in January; the number of Chrysler employees who missed work amounted to 46,000. Such reactive measures represent a state of incapacity – firms could not mobilize resources strategically and instead resorted to emergency cash-preservation actions.

Similarly, GM shut down 30% of its manufacturing capacity in the first quarter of 2009, wiping out about 250,000 units of planned production (General Motors Company, 2009).

By April 2009, both GM and Chrysler were facing imminent liquidity crises. They lacked the internal resources or financing alternatives to take advantage of restructuring opportunities or reposition their assets strategically. As such, their ultimate stabilization was dependent on the intervention of the state via the Troubled Asset Relief Program (TARP), which shows dependence on external institutional support for survival (Government Accountability Office, 2011).

4.2.1.3 Transforming Barriers

Long-term institutional rigidities prevented such transformations from being implemented by both companies. Chrysler held approximately $6.9 billion in debt when the U.S. Department of the Treasury sought creditor concessions, and lenders initially refused, resulting in the restructuring remaining at a standstill (U.S. Department of the Treasury, 2015). Suppliers held up shipments despite federal assurances, exposing systemic breakdowns across the supply chain.

Transformation was stymied by institutional veto points characteristic of LME governance – inflexible unions contracts, enormous legacy payments, and powerful dealer networks (Rubinstein & Kochan, 2001). These constraints made internal reorganization almost impossible. Consequently, both automakers filed for Chapter 11 bankruptcy by June 1, 2009. GM emerged as the "New GM," owned primarily by the U.S. Treasury, while Chrysler entered a partnership with Fiat (U.S. Department of the Treasury, 2015).

4.2.1.4 Substituting Institutions Mechanism

The bailout process showed how effective state intervention overcame a lack of dynamic capabilities. In March 2009, the Obama administration sacked GM CEO Rick Wagoner and gave Chrysler 30 days to settle a merger with Fiat and committed almost $77 billion in TARP funding to both automakers (Congressional Oversight Panel, 2010). It used its financial power to force changes that had been thwarted for decades.

GM's restructuring narrowed the operations in the Chevrolet, Cadillac, Buick, and GMC brands and dropped the old Pontiac, Saturn, and Hummer brand names (General Motors Company, 2009). The federal government forced renegotiation of labor agreements, consolidation of dealer networks, and large-scale debt restructuring. Such changes were imposed from without by state coercion, rather than arising out of organizational resources.

4.2.2 East Asian Manufacturers: Resilience by Capability

Toyota and Hyundai exhibited stronger dynamic performances shaped by institutional contexts that favored long-term learning, workforce stability, and coordinated industrial upgrading. CMEs offer relational financing, cooperative production structures, and integrated supply networks – conditions associated with deepening capabilities.

4.2.2.1 Toyota: Perceiving and Adapting Response

Toyota entered the crisis with relative financial stability despite unprecedented demand contraction worldwide. The company identified early on that the crisis required simultaneous short-term cost adjustments and long-term strategic positioning for recovery. This is consistent with Teece's (2007) view that effective sensing involves scanning the external environment, engaging stakeholders, and acting in anticipation.

Toyota's close relationship with suppliers and employees – supported by Japan's institutional emphasis on long-term employment and keiretsu networks – provided early warning signals and facilitated coordinated responses. Rather than resorting to massive layoffs, Toyota implemented work-hour reductions and temporary pay cuts to avoid them and preserve human capital (Toyota Motor Corporation, 2009). Supplier relations were maintained rather than sacrificed for short-term cash savings, consistent with the CME model of collective adjustment.

Most critically, Toyota continued investing in hybrid technology and fuel-efficient vehicles during the downturn. This transformative capacity, built on long-standing R&D commitments, positioned Toyota for post-crisis competitive advantage – unlike U.S. firms whose crisis responses centered on cost-cutting and downsizing.

4.2.2.2 Hyundai: Counter-Cyclical Capability

Hyundai, however, provided one of the best examples of capability-driven resilience. Since the Asian financial crisis of 1997, Hyundai has been systematically raising its technological capabilities, quality standards, and global brand strategy (Kim, 1997; Chang, 2006). These reforms created a core of internal strengths that proved decisive during the global crisis.

As market research conducted by Hyundai in the U.S. showed, its sensing capabilities identified a key constraint on consumer purchases from 2008 through 2009: fear of job loss. In response, Hyundai introduced the Assurance Program in January 2009, allowing customers who lost their jobs to return their vehicles without penalty (Hyundai Motor Company, 2009). This initiative is a clear example of strategic seizing – addressing psychological rather than financial barriers to demand.

Hyundai achieved an 11.7% increase in sales in 2009 and a 104.5% increase in net profits (Hyundai Motor Group, 2010). U.S. market share grew from 3% to 4.2% while the Genesis won the 2009 North American Car of the Year award – demonstrating transformative capability through sustained quality improvement. These outcomes reflect effective long-term capability development supported by the institutions of South Korea's developmental state.

4.2.2.3 Institutional Enabling vs. Substitution

The essential difference between the U.S. and East Asian cases concerns the way institutional interventions related to firm capabilities. In the U.S., government intervention replaced lacking capabilities – state action substituted for missing sensing, seizing, and transforming capabilities. In East Asia, institutional support enabled existing firm capabilities – governments provided macroeconomic stability, industrial incentives, and coordinated responses but did not have to impose restructuring directly.

This contrast indicates the underlying differences between LMEs and CMEs documented in comparative capitalism research. In LMEs, embedded resources needed to adapt to systemic shocks are often absent among firms, making state intervention coercive and firm-specific. In CMEs, firms generally possess strong internal capabilities, allowing state support to act as a platform rather than a substitute.

4.3 Policy and Institutional Mediation

Government policy responses to the 2008 crisis demonstrated either the substitution of institutional frameworks for lacking dynamic capabilities or the enabling of such capabilities, producing distinct resilience pathways. As underscored in comparative capitalism literature, there are systematic differences in state-market relations in liberal and coordinated market economies, and these differences shape how governments intervene during systemic shocks (Hall & Soskice, 2001). The responses of the United States and East Asia to the automotive crisis demonstrate these opposing institutional logics.

4.3.1 U.S. Policy: Coercive Restructuring & Ownership

The Bush administration provided emergency aid to GM and Chrysler in December 2008 under the Troubled Asset Relief Program (TARP), which provided $13.4 billion to GM and $4 billion to Chrysler (U.S. Department of the Treasury, 2015). This intervention blossomed into broader state management of corporate restructuring, as the Obama administration expanded oversight. TARP had supplied funding to over 700 firms, yet the government acquired stakes in only a handful of them – GM, Chrysler, GMAC, AIG, and Citigroup – based on LME's notion that support should be directed to a limited number of systemic risks (Congressional Oversight Panel, 2010).

In the auto industry, the federal government leveraged its financial power to force structural changes businesses couldn't pull off on their own. Bankruptcy proceedings allowed decision makers to override the demands of creditors, traditional labor agreements, and dealer network protections — veto points that are common in LMEs, and generally hinder restructuring (Rubinstein & Kochan, 2001). The state was a direct participant in corporate governance by replacing GM's CEO, establishing new boards, and engaging in strategic priority decisions, including brand consolidation and labor cost reduction (General Motors Company, 2009).

Of the approximately $82 billion spent on the auto rescue by both the Bush and Obama administrations, taxpayers recovered around 85% through recoveries and equity sales (Government Accountability Office, 2011). The estimated loss incurred by the U.S. government amounted to $9.26 billion (U.S. Department of the Treasury, 2015). The policy response illustrated the scope of institutional substitution, which is likely to be unsuccessful if firms do not possess capabilities in dynamical processes of reformation that allow them to be autonomous.

4.3.2 East Asian Policy: Facilitating Frameworks

East Asian governments adopted different approaches by enabling rather than substituting for firm capabilities. In response to the dynamic of coordinated market economies, policy interventions bolstered and sustained whole industries rather than rescuing individual firms, in line with the region's traditions of the developmental state.

A South Korean economic stimulus program, a policy that focuses on many sectors and aims to boost domestic demand and industrial upgrading, was implemented. The crisis had been regarded by the government as an opportunity to bolster national technological capabilities, investing in green technologies, consumer rebates, and facilitation of R&D for internationally competitive provinces (Hyundai Motor Group, 2010), auto manufacturing also (Wong, 2004). Such measures enhanced the capability of firms to implement their existing dynamic capabilities instead of forcing externally imposed ones.

Japan's response involved preserving jobs and keeping the country's macroeconomic balance on its stride. Liquidity guarantees, consumer subsidies in the form of eco-car incentives, and funding for the automotive industry as a whole was introduced in part as a way of avoiding outright ownership by the government of automotive companies (Toyota Motor Corporation, 2009). This took into account the assumption that CME theory held that firms had sufficient internal capacity to adapt when supported by positive macroeconomic environments. Long-term finance, cooperative labor relations and relational supply chains (institutional complementarities) gave Japanese automakers the means to respond effectively regardless of the imposed changes and coercive state restructuring.

Such policy approaches illustrate systemic institutional differences. In LMEs, the absence of coordination and short-term financing, results in the state's direct intervention during times of crisis to do functions that firms are unable to perform. Firms tend to have deeper embedded capabilities in CMEs, enabling governments to pursue enabling strategies that reinforce firms' internal adaptive capacity.

4.3.3 Implications for the Capabilities of Dynamics

The comparative analysis reveals how institutional contexts influence dynamic capability development and deployment, highlighting the co-production of resilience between firms and their environments. Firms do not evolve capabilities in a vacuum – the nature of sensing, seizing, and transforming processes is highly dependent on institutional frameworks that either constrain or support learning, collaboration, and long-term investment (Teece, 2007).

Liberal market economy institutions in the U.S., with their arm's-length finance, adversarial labor relations, and lack of industrial coordination, constrained the development of dynamic capabilities. When the crisis hit, GM and Chrysler were not adaptable due to insufficient internal capacities for adjustment and had to rely on institutional substitution through federal intervention and bankruptcy restructuring. These outcomes align with research indicating that LMEs are more sensitive to large systemic shocks because they possess weaker institutional support for long-term capability accumulation.

By way of contrast, coordinated market economy institutions in East Asia fostered patient capital, cooperative stakeholder relationships, and extensive integration of industrial policy. Such conditions supported stronger internal capabilities and allowed firms, such as Toyota and Hyundai, to cope with crisis pressure by adopting capability-driven and institution-enabled, rather than through coercive restructuring, modes of management (Wong, 2004).

The three models of resilience identified – capability-driven (Hyundai), institution-enabled (Toyota), and institution-substituted (GM/Chrysler) – emerged from specific types of institutional supports and firm capacities. Understanding these interactions is key to explaining why identical external shocks lead to completely different results for organizations operating across different institutional contexts.

Overall, the comparative results show that the three resilience pathways identified in this chapter—capability-driven (Hyundai), institution-enabled (Toyota), and institution-substituted (GM and Chrysler)—emerged from the interaction between firm-level capabilities and institutional structures. Identical systemic shocks produced divergent outcomes because institutional architectures shaped how sensing, seizing and transforming processes could be developed and activated. This synthesis provides the basis for the theoretical discussion that follows in Chapter 5.

5. Discussion

This chapter demonstrates that resilience in the automotive sector during the 2008 financial crisis emerged not from firm capabilities alone, but from the interaction between those capabilities and the institutional environments in which firms were embedded.

It is demonstrated that automakers' responses to the 2008 financial crisis were shaped not only by firm-level capabilities but also by the institutional environments in which firms operate. Comparing U.S. automakers, such as General Motors (GM) and Chrysler, with East Asian manufacturers, such as Toyota and Hyundai, shows how resilience emerges from the interaction between internal dynamic capabilities and the surrounding institutional structures.

The study confirms that sensing, seizing, and transforming enhanced firms' ability during the crisis to adapt. However, their effectiveness was heavily shaped by institutional supports, constraints and incentives. This challenges the view that resilience has only firm-level strategic implication. Consequently, the results show that resilience is jointly created: dynamic capabilities work in institutional architectures that either facilitate or constrain their creation and use.

Two distinct resilience models emerge from the comparison. In the United States, the automobile companies operated in a Liberal Market Economy (LME) dominated by short-term pressures from shareholders, adversarial relations, an arm's-length financing, and limited industrial coordination. These institutional conditions caused chronic rigidity. Moreover, they eroded firms' sensing and transformation capabilities. Furthermore, GM and Chrysler became dependent on the state when the crisis hit. These institutions recovered via institutional substitution, where the federal government filled in for missing internal capabilities, enforcing restructuring through bailouts, bankruptcy procedures and renegotiated labor agreements.

On the other hand, the East Asian carmakers operated in a Coordinated Market Economy (CME). As a result, they had long-term financial relations, cooperative labor relations, and stable supply networks. Thus, they were able to keep building capabilities. Toyota and Hyundai arrived at this crisis with more substantial finances and adaptable production systems. They adjusted their production, kept workforce stable and continued to invest in technology development. The resilience displayed by these firms was capability-driven, enable by, not substituted with, supportive institutions.

Through this comparison, we can see how institutional environments affect firms in exercising dynamic capabilities. In LMEs, weak institutions weakened long-term capacity creation thus delaying acknowledgment of the crisis and limiting adaptation possibilities. CME institutions work better together to allow organizations to respond to opportunities in their environment. As a result of the crisis, one learns that dynamic capabilities cannot be studied in isolation; their institutional context shapes who has access to what resources, how resources may be governed, and what strategies may be pursued.

Theoretical implications regarding international business and crisis management are high. First, this study challenges the dominant view, which is that resilience is an internal phenomenon, located at the level of organization of the firm. The evidence is suggestive of the fact that resilience is, in fact, co-produced by dynamic interaction between the capabilities of firms and the institutional settings they are embedded in. Policymakers should recognise the importance of the institutional frameworks in building resiliency, as we know that firms operating in a supportive institutional context are better able to build and deploy dynamic capabilities in times of crisis. Second, a comparative perspective adopted in this study indicates the need for carrying out more work on the interaction between the institutional environment and firm-level strategic actions. Future research should take into account what factors differ in different institutional settings (not just the U.S. and East Asia) that are likely to impact the ability of firms to respond to systemic financial shocks.

Practical implications in terms of policy and industry practice are also inherent in these findings. Policymakers can use these insights to develop interventions to stabilize industries in a time of crisis, but they can also help industries make even longer-term resiliency. For instance, it's important that governments in liberal market economies, like the US, pay attention to strengthening industrial coordination, access to long-term finance, and stable labor relations towards helping adaptation at the firm level. In contrast, the policy makers in coordinated market economies may be concerned with ensuring that the conditions that enable firms to build dynamic capabilities on the internal level are maintained, e.g., through investments in R&D or creating innovation ecosystems.

Lastly, although this study contributes to the understanding of resilience by combining dynamic capabilities with institutional theory, there are a number of limitations in the study. The foundation of the research is one crisis, namely the financial crisis of 2008, in the automotive industry; thus, findings may not always be generalised to other industries, and/or crises, in turn. Future research may look at resilience by other sectors or also in the context of other types of systemic shocks, such as environmental or technological shocks. Additionally, this research is based on secondary information, which, while being very comprehensive and thorough, may not be able to capture all the details of the strategies of individual firms, nor the complexity of institutional dynamics.

Therefore, the resilience of the firms during the financial crisis of 2008 was not just a matter of internal capabilities of these firms being managed, but was also deeply influenced by the institutional environments in which these firms were embedded. The study illustrates that dynamic capabilities, despite being quintessential, need to be kept in perspective of institutional frameworks that favor, or discourage, their deployment. By integrating the above two aspects, this study provides a more holistic understanding of the resiliency of an organization and has implications for both researchers and practitioners of organizational change to assist the firms in becoming more adaptive during future crises.

6. Conclusion

This study examined how institutional environments shape the development and use of dynamic capabilities during systemic financial crises, using the 2008 Global Financial Crisis and the automotive industry as a comparative setting. The analysis of GM and Chrysler in the United States and Toyota and Hyundai in East Asia showed that resilience cannot be attributed to firm-level capabilities alone. Instead, it emerges from the interaction between what firms can do internally and the institutional systems in which they operate.

U.S. automakers, embedded in a liberal market economy, entered the crisis with weakened sensing, seizing, and transforming capabilities and became dependent on government intervention to survive. Their recovery was largely the result of institutional substitution. In contrast, Toyota and Hyundai, operating within coordinated market economies, were able to rely on long-term finance, cooperative labour relations, and stable supply networks.

By integrating Dynamic Capabilities Theory with Institutional Theory, the study shows that dynamic capabilities do not function independently from institutional structures. Supportive institutions enable firms to build and deploy adaptive capabilities, while restrictive ones can undermine them.

The findings carry practical implications. Policymakers in LMEs may strengthen resilience by improving industrial coordination and expanding access to long-term finance, while CMEs should preserve the conditions that support learning, innovation, and stable stakeholder relationships. The study is limited to one industry and one crisis; future research could examine other sectors, shocks, and institutional settings to broaden these insights.

Overall, the study demonstrates that organizational resilience during systemic shocks is co-produced by internal capabilities and external institutional environments. Recognizing this interaction is essential for firms and policymakers seeking to enhance adaptability in future crises.

By demonstrating how institutional architectures fundamentally shape adaptive capacity, this thesis contributes to a broader understanding of why industries diverge so sharply under systemic shocks and why building resilience must be approached as both an organizational and institutional project.

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