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Toyota Recalls (A): Hitting the Skids

The past few weeks ... have made clear that Toyota has not lived up to the high standards we set for ourselves. More important, we have not lived up to the high standards you have come to expect from us. I am deeply disappointed by that and apologize.

— Akio Toyoda, President of Toyota Motor Corporation,
February 9, 2010, *Washington Post Op Ed*¹

My advice is, if anybody owns one of these vehicles, stop driving it.

— Ray LaHood, United States Secretary of Transportation
February 3, 2010 to U.S. House Appropriations Sub-Committee²

Now I have to drive around and worry if I'm going to get killed.

— Marilyn Bauer, Toyota Owner, January 28, 2010, to *New York Post* reporter
upon leaving Toyota dealership with a new 2010 Toyota Rav4³

On August 28, 2009, an off-duty California Highway Patrol officer was driving with his wife, daughter, and brother-in-law in a 2009 ES350 Lexus, made by Toyota, the world's largest carmaker since 2007. Released on September 10, 2009, the 911 call the driver made when he realized that he could not stop the car horrified audiences in the United States and around the world:

Driver: Our accelerator is stuck. We're on 125.

911 Dispatcher: Northbound 125. What are you passing?

Driver: We're going 120. Mission Gorge. We're in trouble. We can't ... there is no brakes. End freeway half mile.

911 Dispatcher: You can't do anything like turn off your engine?

Driver: We're approaching the intersection. We're approaching the intersection. We're approaching the intersection. Hold on. Pray Pray. Oh shoot there's. OH OH

A crash is heard, the call is lost, and all four passengers were killed after the vehicle accelerated to more than 100 mph before careening off the San Diego highway. For Japan-based Toyota Motor Corporation, a company once revered for its commitment to quality and reliability,⁴ this incident touched off a series of recall announcements of over 8.5 million cars worldwide, including 6 million

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in the U.S.⁵ The total number of cars recalled approximated a year's worth of Toyota sales: Toyota sold 8.97 million cars and trucks in 2008, of which 443,000 were Lexus,⁶ and 7.81 million in 2009,⁷ including 310,000 Lexus.⁸ In 2009, Toyota Motor Sales USA held a 15.4% share of the U.S. market and U.S. sales accounted for 23% of Toyota's total sales.⁹ About 56% of the Toyota vehicles sold in the U.S. were made in U.S. plants. No Lexus models were made in the U.S.¹⁰

Recall reasons varied: on September 29, 2009, 3.8 million vehicles¹¹ were recalled after reports of brake pedals sticking under floor mats; four months later, 2.3 million vehicles were recalled for sticking accelerator pedals.¹² A third recall involved a company bestseller, the Prius Hybrid, for braking problems.¹³ Details of the problems, initially blamed on an improperly placed floor mat and then on the mechanical design of an accelerator pedal, were slow to emerge. U.S. regulators linked the problems that prompted these recalls to 51 deaths.¹⁴ At the same time, vehicle recalls were normal in the auto industry. Ford Motor Company alone had recalled over 20 million cars in the U.S. over 38 years, with its highest annual recall total reaching 7.6 million vehicles in 1996.¹⁵

While the first Toyota recall was met with widespread disbelief but continuing support for the brand, subsequent revelations and recalls tested the brand's resilience in the U.S. The firm's initial public response to the problems—a mixture of silence from top executives and vague, misleading public statements—frustrated U.S. government officials and the public. Not until weeks after the news first broke did Toyota organize a clear message around its commitment to return to quality. Using multiple media outlets, the marketing team focused on loyal Toyota customers. Both Main Street and Wall Street punished the firm. Toyota vehicle sales in the U.S. fell 16% in January 2010 and 8.7% in February compared to the same months in 2009. Shares of Toyota lost 11.6% through February 23, 2010, while the Dow Jones Industrial Average lost only 0.23%.¹⁶

Toyota President Akio Toyoda accepted an invitation to testify to the U.S. Congress on February 24, 2010, 148 days after the first recall announcement. Heading to Washington, he faced a double challenge: how to return Toyota to producing high-quality products on a zero-defect basis and how to convince Congress and the public of Toyota's sincere commitment to this cause. Congress was investigating Toyota's handling of the recalls, but it was unclear what action it could take against the car maker. To one analyst this was about "Congress appearing to be on top of things."¹⁷ On the other hand, Toyota had political support—it operated 9 U.S. plants, employed 35,000 people in five states and, at its peak, was selling 2.6 million cars annually at an average retail price of \$25,000 through 1,450 dealers all over the country.¹⁸

The Making of a Global Player

The Toyota Story

The company known in 2010 as Toyota Motor Corporation sprang from the entrepreneurial mind of Kiichiro Toyoda, son of Sakichi Toyoda, founder of the textile manufacturer Toyoda Automatic Loom. Kiichiro had a great interest in automobiles.¹⁹ After establishing a successful textile business and earning a small fortune in the nineteenth century, the Toyoda family in the mid-1930s was investigating small gas engines and opportunities within the automobile industry.²⁰ In 1937, the Toyota Motor Co, Ltd. was founded. Production began in 1938 and, after a slow start, Toyota had produced 100,000 cars by 1947.

Toyota Production System By the 1950s, Taiichi Ohno and fellow Toyota executives devised a catalog of precepts that defined Toyota's production system, promoted superior quality and efficiency by eliminating defects, cutting inventory, and reducing waste.²¹ Years of continuing improvements to the production system led to just-in-time (JIT) manufacturing, "making only what

is needed, when it is needed, and in the amount needed.”²² Inventory was considered “waste” when it was used to cover up production line inefficiencies.²³ Toyota’s adoption of JIT forced suppliers to improve their own production quality, reducing defects and guaranteeing prompt delivery of components to Toyota plants for immediate assembly. To eliminate defects, Toyota adopted a system known as *jidoka*,²⁴ “automation with a human touch.”²⁵ If a problem occurred, employees could stop machines immediately to prevent the production of more defective items.²⁶ *Jidoka* allowed for a level of visual control on the production line via display boards that flashed any problem with an individual machine; a single operator could monitor and control many machines.²⁷ Ohno and Toyota sought to instill innovation and the idea of continuous improvement (“*kaizen*”) on the factory floor. Worker empowerment came with the 1951 introduction of a “Creative Idea Suggestion” system—a form that anyone at a plant could fill out with a suggestion for how to make processes and production better. Ohno strived to create a culture in which the discovery of a problem was exciting and encouraged because it allowed for growth and improvement.²⁸ The focus on improving the car assembly process as much as improving the cars themselves revolutionized manufacturing.²⁹

Toyota culture Toyota culture stressed quality, safety, duty, family atmosphere, and creativity. The culture was built through practice and documented in quotes and precepts from the founders and early leaders of the firm. The simplest stated goal of this culture was to “contribute to society through making things.”³⁰ The customer came first. Quality in all aspects of the manufacturing line and in the final product was central. The first president of Toyota Motor Sales Co. famously said, “Customers come first; then the dealers; and lastly, the maker.”³¹ Frugal practices ran deep: heat was cut in employee dormitories during working hours and photocopy machines showed the cost per copy.³² Long-time Toyota leader Eiji Toyoda said, “Over the years we have concentrated our efforts and abilities on quality, reliability and value for the automotive market.”³³

Toyota in the U.S.

The company marked its twentieth birthday in 1957 by establishing Toyota Motor Sales, U.S.A., Inc. and introduced the Toyota Crown, the first Japanese passenger car exported to the U.S.³⁴ While the Crown was very popular in Japan for its ability to navigate tight, twisting streets, it was ill-suited to American highways and tastes.³⁵ Sales for 1958 amounted to 287 Crown sedans and one Land Cruiser, a four-wheel-drive SUV that gradually developed a reputation as a durable all-terrain vehicle. By 1961 the Crown was discontinued³⁶ and for the next four years, the Land Cruiser was the sole Toyota export to the U.S. By 1965, Toyota had built over 1 million cars in Japan but had yet to make inroads in the U.S. market, which accounted for 45% of global new car sales.³⁷ With the U.S. market in mind, Toyota developed and built the larger and more powerful Corona in 1965, followed in 1968 by the Corolla, an affordable but technologically advanced sedan.

The Corona, Corolla and Land Cruiser garnered a reputation for quality and reliability. U.S. sales helped Toyota to reach one million car exports by 1969 and, by 1972, the firm had sold one million vehicles just in the U.S. During the 1970s Toyota made a marketing push in the U.S., rolling out memorable ads with catchy tag lines such as, “Oh What A Feeling!” These efforts, along with an improving reputation, consumer concern for fuel economy as a result of the 1974 oil crisis, and the perceived declining quality of U.S.-made cars made the firm the number one import brand in sales of both cars and trucks in 1978.

Despite strong anti-import sentiment within the U.S., Toyota’s market share grew steadily through the 1980s and 1990s. In 1980, Toyota held an 8% unit share of new cars sold in the U.S. and bumped up against production capacity. Toyota increased its capital investment by 50% in 1980 in order to boost production.³⁸

During the 1980s Toyota was associated in the U.S. with affordable and dependable commuting vehicles. In 1983, Toyota executives began brainstorming a possible Japanese luxury vehicle to compete with the German brands to which many Toyota owners aspired and switched when they could afford to. Loyal Toyota drivers who had driven Corollas and Tercels in the 1970s and 1980s upgraded to mid-sized Camrys once they graduated from college and started families but, in cases where their household incomes rose, many were lured away from the brand by BMW and Mercedes. The notion of developing a luxury vehicle came as Toyota was feeling pressure during the 1980s to adopt Voluntary Export Restraints that would limit the number of cars exported to the U.S. from Japan. If quantity was going to be limited, Toyota's profit growth would have to come from increasing the average profit margin earned per vehicle sold.³⁹

In 1989, Toyota broke into the crowded luxury vehicle market by unveiling the Lexus. The Lexus LS 400 sedan retailed at \$35,000, priced similarly to Cadillac and Lincoln models. Toyota marketed the vehicle as a less expensive yet better performing version of comparable German sedans. In its first year on the market in 1989, the Lexus sold 20,000 units. Sales climbed each year into the early 1990s.

Localized Manufacturing

As the company grew, Toyota sought to overcome protectionist pressures by dispersing its manufacturing plants outside Japan, an effort called "Localized Manufacturing."⁴⁰ In 1984, Toyota partnered with General Motors to set up a joint venture plant in Fremont, California, known as NUMMI.⁴¹ The partnership was meant to be mutually beneficial, with Toyota sharing secrets of its manufacturing prowess in return for valuable insight into the American worker and U.S. management-labor relations.⁴² The NUMMI experience emboldened Toyota to set up its own U.S. manufacturing operations by 1988.⁴³

In the 1980s and early 1990s Toyota defined its growth as "*jojo*," slow and steady, as its global market share of new car unit sales grew from 3% in 1980 to 8% in 1990, and 9% in 2000.⁴⁴ Toyota's culture and philosophy were enhanced and codified.⁴⁵ (See **Exhibit 1** for guiding principles.) However, largely due to the slumping Japanese economy, the company began losing global market share in 1995. Exports declined and trade tensions with the U.S. increased. Toyota was suffering from a string of poor decisions and questionable execution: a new truck had an underpowered engine, and a new Corolla design had fallen flat in the market.⁴⁶ After then-president Tatsuro Toyoda had a stroke, management passed out of the founding family's hands for the first time since 1967.⁴⁷

Growing into the Twenty-first Century

Hiroshi Okuda replaced Toyoda in 1995. A no-nonsense, energetic, hard charger,⁴⁸ Judo black belt Okuda addressed the product issues head on, but also pursued aggressive overseas expansion.⁴⁹ By the time Okuda stepped down as Chairman in June 2006, staying on the board as senior advisor, he was widely credited with transforming Japan's biggest automaker into a global powerhouse.

Despite global expansion, Toyota was still viewed by the media and industry observers as insular and Japan-focused. Okuda's strategy, dubbed "2005 vision" focused on establishing factories in new country markets⁵⁰ and set aggressive global resource allocation and profitability targets.⁵¹ Further, Okuda, and his two successors, Fujio Cho (1999–2005) and Katsuaki Wantanabe (2005–2009), promoted a new precept, "*kakushin*," meaning revolutionary change or radical innovation, in seeming conflict with Toyota's fundamental precept of continuous improvement. In the past, "Toyota could achieve its goals through *kaizen*," Watanabe explained. But "in today's world, change can be produced by *kaizen*, but it may also need to be brought about by *kakushin*. When the rate of change is too slow, we have no choice but to resort to drastic changes or reform."⁵²

Watanabe oversaw the major cost reduction and profit growth push started in 1998 under Okuda. This top-to-bottom review of parts procurement and pricing cut \$10 billion over six years.⁵³ Material procurement costs were slashed by 40% and labor time by 75%. Working with suppliers, Toyota cut the number of overhead handles in cars from 35 to 3 across its 90 models; the number of parts in grip handles for most car doors fell from 34 to 5, cutting installation time to three seconds.⁵⁴

This effort led to Watanabe's becoming president in 2005. Toyota then rolled out "2010 Vision," which upped the global market share goal from 10% to 15%.⁵⁵ As part of this program, Toyota in 2005 announced new cost reductions via a program called "Value Innovation." Watanabe saw it as "going beyond the item-based approach we used before. Our goal is to shrink the number of components we use by half."⁵⁶ With this program Toyota moved models from design to production to 12 months, while competitors averaged 24 and 26 months.⁵⁷

Profitability, global presence and production increased dramatically. Through 2007, Toyota's global annual sales grew by around 600,000 vehicles; operating profit margins hit an industry high of 8.6%. By 2007, Toyota's U.S. sales had increased 80% since 2000 as its market share rose from just over 9% to 16%,⁵⁸ achieving its 2010 Vision three years early. Toyota sold 8.97 million units in 2008 and outsold General Motors for the first time in January 2009.⁵⁹ Toyota had gained U.S. market share "at a kind of speed no other carmaker has ever experienced in the past," a Japan-based analyst wrote.⁶⁰

*Growth at a Cost—"Cracks in the Armor"*⁶¹

In 2003, Toyota's market capitalization reached \$110 billion, more than the combined market caps of GM, Ford and DaimlerChrysler.⁶² The rapid rate of growth and production was rarely questioned at Toyota. Fujio Cho, president from 1999 to 2005, admitted his bias toward growth: "I was taught that manufacturing can never say no to sales."⁶³ "It's not true that, by reducing cost, you automatically reduce quality."⁶⁴

However, as rapid growth continued, there were signs that quality was suffering. In 2004 and 2006, Hyundai outscored Toyota in J.D. Power's initial quality survey of new car owners in the U.S.⁶⁵ Even more striking, in 2005, Toyota recalled more cars (2.38 million) than it sold in the U.S.⁶⁶ In 2006, Toyota produced a Camry with a headliner⁶⁷ that occasionally caught fire upon installation because it required so much heat to mold together.⁶⁸ According to a Toyota executive, a cost-cutting supplier used a fiber material not previously approved.⁶⁹ In 2006, Watanabe delayed the introduction of some new models by as much as six months to give engineers more time to refine vehicle and component design.⁷⁰ He also launched a two-month review that revealed that rapid global expansion had strained the product development process. In some instances engineers had rushed products to market with insufficient quality tests that relied too heavily on computer simulations.⁷¹

In 2005, Akio Toyoda, then an executive vice president (who would later become president in June 2009), spoke to engineers and mid-level executives about his concern with the rapid expansion. He called for a shift in mindset and a "resolve to make a big turn from emphasizing volume to quality."⁷² A former president of Toyota Motor Sales U.S.A. remembered the declining quality: "The top management, including myself, found that after the launch of a new product, we had to rectify small errors, one after another. It is costly, and damaging to the image of the product."⁷³

Meanwhile, the complexity of making cars continued to increase. The average vehicle contained 2,000 components, comprising 30,000 separate parts and 10 million lines of software code. Cars had to be safe and to comply with environmental regulations while at the same time being modern, reliable, stylish, with lots of amenities and options for finicky consumers who also expected very high quality at a reasonable price.⁷⁴ Such complexity prompted extensive outsourcing and necessitated practices such as JIT. The role of parts suppliers increased and their products had to be tested and carefully

integrated. However, when something went wrong, the automaker often had to rely heavily on the suppliers' knowledge of their components.⁷⁵

In October 2007, *Consumer Reports* dropped the V-6 Camry and two other vehicles from its recommended list and a *Consumer Reports* team noticed a spike in accidents involving Toyotas.⁷⁶ An executive at a North American parts supplier described the 2007 Camry as "a bare-bones car at that point."⁷⁷ Analysts partially attributed a surge in recalls in 2007 to Toyota's inability to spread its culture to overseas factory workers and non-Japanese managers despite intensive training at the Toyota Institute. One Japanese general manager said, "There is a sense of danger. Before, when everyone was Japanese, we didn't have to make these things explicit. Now we have to set the Toyota Way down on paper and teach it."⁷⁸

In January 2009, Toyota announced that Akio Toyoda would replace Watanabe as president in June, becoming the youngest chief executive since his grandfather in 1941. Toyoda rapidly broke with the past by ending the global profit management plan of his predecessor. At his opening press conference, he stated his concerns clearly: "I do not think we were wrong to expand our business in an attempt to meet the needs of customers around the world. But we may have stretched more than we should have, and that made us unable to capitalize on Toyota's traditional strengths."⁷⁹ In 2000, Lexus placed first in quality rankings for used-car owners; by 2009 Lexus had dropped to third. Among new car owners, Toyota was ranked fourth in 2000; by 2009, sixth.⁸⁰

Recalls Begin

Starting in September 2009 and increasing dramatically in January 2010, news of Toyota recalls flooded American media. However, the scenario had been brewing since March 2007 when the National Highway Transportation Safety Administration (NHTSA) opened an investigation into the Lexus ES350 after fielding consumer complaints about pedal entrapment.⁸¹ On September 13, 2007 the NHTSA concluded that a fatal crash of a Toyota Camry earlier that year was caused by floor-mat pedal entrapment and instructed Toyota to start a recall process. At that time, Toyota quietly recalled all weather mats that had been installed in up to 55,000 Toyota cars.⁸² The firm felt that drivers were improperly placing the mats under the pedals. In 2008, 80 of 166 reported cases of unintended acceleration in the U.S. involved Toyota vehicles.⁸³ Beginning in August 2009, events unfolded that would lead to the largest automobile industry recall in history. These recalls fell into three distinct categories: the pedal entrapment recall; the sticky pedal recall; and the brake system recall.

Pedal entrapment recall The August 2009 911 tape drew intense media attention. The ES350 Lexus in question was equipped with all-weather mats that had previously been recalled by Toyota. When the accelerator was pushed down to the floor, or near the floor, it could become caught in a misplaced or unsecured floor mat. The NHTSA in September pressed Toyota to do more to resolve the mat issue, including altering gas pedals so they would not get stuck on the mats. In September 2009, Toyota recalled 3.8 million vehicles, citing issues with pedal entrapment by the floor mat. This recall was later expanded on January 27, 2010 to include 1 million additional vehicles. Under pressure from the NHTSA, Toyota agreed to develop both a new pedal design and a new floor mat, which would be made available by April 2010. The NHTSA concluded that five deaths in two separate incidents had been caused by the pedal entrapment problem.

Sticky pedal recall Toyota recalled an additional 2.3 million vehicles on January 21, 2010, this time for a structural problem in the accelerator pedal. The apparent manufacturing flaw caused the pedal to be hard to depress and slow to return to resting position. At times it could get stuck in a depressed position. Five days later, on January 26, Toyota announced that it was suspending sales of all vehicles affected by the sticky pedal recall. (See **Exhibit 2** for list of vehicles recalled due to pedal

concerns.) Additionally, Toyota announced it would shut down production at five U.S. plants for the following week while a solution was found and implemented. Toyota did not have an immediate fix for this recall, but on February 1 the company publicized a temporary fix that any of their dealerships could perform. A steel reinforcement bar could be installed into the pedal assembly, eliminating excess friction that caused pedals to stick. Additionally, Toyota planned to manufacture new pedals to install in all cars included in the recall. (See **Exhibit 3** for a diagram of both pedals.)

Prius recall On February 9, Toyota announced an additional recall of 437,000 Prius and other Toyota hybrid vehicles for brake failure. It seemed that these vehicles were susceptible to a momentary loss in braking capability while traveling on uneven surfaces. The Prius recall came as a Toyota media campaign was launched to reassure the public that the company was taking the necessary steps to recommit to quality. Auto industry analysts felt that this recall might hurt Toyota's reputation the most, calling the Prius Toyota's "gold standard."⁸⁴ Analysts added that, "Toyota puts its best engineering and its best talent into that car. This hits at the flagship."⁸⁵

The Prius problem illustrated the problematic convergence of myriad parts, systems, and processes with driver behavior. The brake system software was tuned to draw more heavily on the regenerative brakes to improve fuel efficiency, a highly desirable specification in all cars and especially in hybrids. However, when the car hit rough pavement or a slippery surface, the software automatically switched to antilock braking (ABS), which gave the driver the sensation of a sudden drop in braking power. If the driver in a panic hit the pedal again quickly, hydraulic brakes immediately kicked in; if not, the ABS "takeover" interrupted the driver's anticipated deceleration, creating a feeling of speed increase without actual acceleration. While the real safety risk was zero and drivers could stop the car by continuing to brake, driver unease was such that the recall was deemed necessary.⁸⁶ On February 9, Toyota also announced that it would recall 170,000 Prius hybrid cars in Japan due to braking problems.⁸⁷

Damage Control

Slow response In the last week of January 2010, Toyota's market capitalization dropped by \$21 billion,⁸⁸ (see **Exhibit 4** for share price data) and observers expected uncertainty about the number of cars affected by the recalls to further depress the firm's stock.⁸⁹ Other than a very short Japanese television interview, President Akio Toyoda had not been heard from in the two weeks since the crisis broke. Messages coming from Toyota were unclear regarding critical safety issues. Meanwhile, five U.S. factories were shut down. Sales on eight models making up 57% of Toyota's 2009 sales were halted.⁹⁰

Toyota's 1,239 dealers across 48 states had to simultaneously take cars off their lots and beef up service staff for upcoming repairs. Despite inevitable lost sales, many dealers remained positive and felt the brand would recover.⁹¹ But the dealers needed more direction from Toyota, noting "there's not a lot we can do, until we have the parts for the repairs."⁹² While they waited, dealers attempted to reassure customers and hired and trained new mechanics.

Some analysts were not surprised by Toyota's lack of immediate response. Although car recalls in Japan was not uncommon (see **Exhibit 5**), Japanese companies were known for poor crisis management, moving slowly, communicating poorly, and not addressing the concerns of a nervous public.⁹³ Noted one: "In Japan, they have a proverb: 'When it stinks, put a lid on it.' And clearly, that's the way Toyota has approached this recall problem."⁹⁴ Japanese employees tended to defer to superiors. While the Toyota Way seemingly encouraged innovation on the production line by asking workers to offer time- and money-saving solutions, it could not overcome this culture of deference.⁹⁵ The overarching culture of teamwork and consensus also made it difficult to challenge decisions once

they had been reached.⁹⁶ If an entire team had agreed on certain design and product specifications, reversals were more likely to come from the top than from the floor.

The Toyota Way stressed the tenet of *genchi genbutsu*, or going to the source of the problem to figure it out. When Toyota was a centralized, smaller manufacturer, this concept was relatively easy to implement. In a global corporation with thousands of suppliers, identifying the problem and getting all the players aligned took more time. While Toyota looked for the source of the problem, the American media looked for an answer from Toyota. Silence prevailed.

Saving face On Sunday, January 31, Toyota bought full-page print ads (see **Exhibit 6**) in 20 major newspapers⁹⁷ with the message “A temporary pause. To put you first,” referencing the recent shutdown of two plants in Texas and Kentucky.⁹⁸ A more detailed explanation of the reasons for the shutdown followed. The following day, Jim Lentz, Toyota Motor Sales USA’s president–chief operating officer, appeared on NBC’s *Today Show*. He told viewers that “this will be under control.” He denied that Toyota had moved too slowly while admitting the company had known about the problems since October 2009.⁹⁹ Bloggers immediately questioned Lentz’s honesty.¹⁰⁰ On February 2, 2010, two additional full-page ads were rolled out, open letters from Lentz to Toyota customers, which outlined the steps taken to ensure their safety (see **Exhibit 7**). Three days later, Toyota issued a public apology from Nagoya, Japan, announcing that he would set up a committee to address Toyota’s quality issues and stating that he was “deeply sorry.”¹⁰¹ However, when pressed for a statement in English, Toyota stumbled, saying “Believe me, Toyota’s car is safety, but we will try to increase our product better.”¹⁰² One journalist remarked that this bungled statement summed up Toyota’s apology efforts.¹⁰³ Observers wondered why, given the importance of the U.S. market, a more thorough and precise statement by the CEO of the world’s largest carmaker, with 70% of its business outside of Japan, had not been forthcoming.¹⁰⁴

Toyota continued its public relations blitz: television appearances by executives; full-page print ads in Sunday newspapers; radio advertisements; banner ads on 400 websites; and, in the first week of February, a television commercial reminding consumers of Toyota’s long-standing dedication to quality, and apologizing for falling short in this instance.¹⁰⁵ “In recent days our company hasn’t been living up to the standards that you expect from us, or that we expect from ourselves,” the commercial stated. “We’re working around the clock to make sure we build vehicles of the highest quality—to restore your faith in our company.” In the third week of February, another commercial (“Restore”) spoke of Toyota’s efforts in repairing vehicles and learning from its mistakes. The ad ended with Toyota’s promise “to restore your faith in our company by providing you with safe, reliable vehicles, like we have for over 50 years.”

Toyota also increased its efforts in social media where its brand presence prior to the recalls had been relatively limited.¹⁰⁶ From the end of January to the end of February Toyota’s Facebook fan base increased by 10% to 79,500.¹⁰⁷ Toyota created a social media response team on February 1. This team worked around the clock, answering questions on Toyota’s four Facebook pages, setting up social media interviews with senior executives, and monitoring and responding to all online conversations regarding the recall.¹⁰⁸ The team even reached out to Toyota loyalists with an online presence, asking them to re-tweet, re-blog and embed video of the company’s commercials.¹⁰⁹

Furthermore, Toyota uploaded to YouTube recent commercials and explanations from the CEO and engineers about the problems associated with the recall. These videos, along with information about other issues surrounding the recall, were posted on www.Toyota.com/recall. Analysts felt that getting the information about the problems and their origins to as many people as quickly as possible would help to limit the fear factor associated with the recalls.¹¹⁰ Finally, Toyota shifted its advertising strategy, pulling ads touting its dependability, safety and reliability, and product specific ads in most

markets. It developed print and TV ads directly addressing the recall and reused older ads featuring the Prius that focused on the environmentally friendly car's "harmony with nature" and featured bright colors and a utopian landscape.¹¹¹ Toyota spent approximately \$1.2 billion on media advertising in the U.S. in 2009 (\$1.69 billion in 2008).¹¹²

Despite Toyota's strong efforts, February brought an onslaught from a U.S. media that seemed intent on picking apart not only Toyota's mechanical problems but also its questionable crisis management. Things took a turn for the worse when one media outlet reported that an ad agency which had helped develop Toyota's global advertising campaign, Saatchi & Saatchi, felt that Toyota had made a number of poor moves and should stop advertising until it "got its house in order."¹¹³

"This is devastating and this is not a blip" Despite Toyota's best efforts, the 24-hour news cycle stayed focused on the recalls.¹¹⁴ Headlines streamed throughout the media: "Toyota's Tylenol Moment," was the headline in *Newsweek*, while other attention-grabbers such as "The Humbling of Toyota," and "Oh, What a Hideous Feeling" were published in *BusinessWeek*. *The Wall Street Journal* reported on apparent internal strife among Toyota executives and ran headlines such as, "Toyota's Troubles Deepen."¹¹⁵ Editorial cartoonists had a field day. Industry insiders such as the CEO of Edmunds.com mused that Toyota's experience "clearly demonstrates it is no longer an option for car companies to dismiss consumer complaints, even if the event is difficult to replicate or diagnose."¹¹⁶

The crisis also became grist for late night television comedy as well. A number of "spoof" videos were uploaded on YouTube, poking fun at the fact that Toyotas sped away uncontrollably or could not stop. Comedy show *Saturday Night Live* featured a commercial making fun of Toyota. David Letterman, host of *Late Night with David Letterman*, hired an actor to portray Toyota President Akio Toyoda making outrageous speeches.

Politicians took notice as well. The House Energy and Finance Committee helped make the crisis one of the most publicized investigations of the industry.¹¹⁷ Announcing a hearing on unintended acceleration in Toyota vehicles at the end of February, the committee requested documentation on the timing of firm's knowledge of defects and of NHTSA investigations of Toyota vehicles.

In legal circles, many compared Toyota's predicament with that of Volkswagen's Audi brand, whose Audi 5000 was recalled in 1982 and 1983 after reports of sudden acceleration. After the first two recalls failed to solve the mechanical problem, a third recall had been issued in 1986. A class action lawsuit with over 7,500 plaintiffs was still being fought as of May 2010. Audi sales dropped 60% after CBS News' *60 Minutes* ran "Out of Control," a segment on the recalls.¹¹⁸ ABC News ran a similar segment on Toyota's recall issues on February 22, 2010, illustrating sudden acceleration in a Toyota Avalon.¹¹⁹ A German analyst predicted gloom: "I don't think Toyota will recover from this. They used to have an edge thanks to quality, but surely that's been irrevocably shattered now. The impact of this catastrophe on their pricing power and sales will be enormous."¹²⁰

The controversy also reopened the case of Koua Fong Lee, found guilty of criminal vehicular homicide in 2006 following an accident with his Toyota Camry that killed two children and a man. After claiming his brakes failed, he was sentenced to eight years in prison. In May 2010, a mechanic hired by Lee's attorneys concluded that he did attempt to brake: "brake light filament analysis indicated that the left bulb brake filament had been illuminated prior to impact." Lee's attorneys demanded a new trial and threatened to sue Toyota.¹²¹

Japanese Views Although some in Japan saw the U.S. coverage as protectionist and anti-Japanese, Japan's media mainly argued that the recalls and criticism of Toyota were a consequence of Toyota's poor management. Japan's second largest newspaper, *Asahi*, wrote that Toyota had become "insensitive" towards safety and that its management should be blamed.¹²² A leading weekly

magazine headlined: "The World's Best Has Been Conceited."¹²³ Others saw "Japan-bashing" in the U.S. press treatment of Toyota. One Tokyo restaurant employee said, "I think the Americans are going overboard. Maybe it's Japan-bashing, because the trouble at Toyota, which has the world's No. 1 share, is a big opportunity for its American rivals."¹²⁴ A Japanese press report pointed to an October 2009 recall by Ford of 4.5 million vehicles that did not draw nearly the same amount of attention from the American press.¹²⁵ Some speculated that the U.S. government's ownership position in General Motors motivated the Toyota recalls as a way of rebuilding GM's market share in the U.S.¹²⁶

Business Impact

January 2010 U.S. auto sales exceeded January 2009 by 6.3% but Toyota sales fell nearly 16% to below 100,000 cars for a month for the first time since 1999. (See **Exhibit 8** for changes in market share.)¹²⁷ A representative from Edmunds.com noted: "Toyota owners' confidence is shaken. Most consumers choose the Toyota brand because of its reputation, but where does this prolonged and misunderstood problem leave the company's reputation? This situation opens the doors for competitors to steal away their customers."¹²⁸ They jumped on the opportunity, offering deals for customers who wished to trade in their Toyotas; Ford and GM saw January 2010 sales rise over 2009 by 24% and 14% respectively.¹²⁹ Toyota estimated that it was losing approximately 20,000 sales per week, and that only 3 of 5 cars on dealer lots were available and ready for sale due to recall repairs.¹³⁰ Some dealers reported year-on-year sales declines of 25%. However, at the corporate level, Toyota maintained an air of calm optimism, stating that consumers remained confident in the brand but were delaying purchases pending the outcome of the recalls.¹³¹

For their part, Toyota dealers were impressed by the speed with which Toyota provided repair parts and information needed to perform the repairs. By February 2010, Toyota dealerships were performing repairs at a rate of 55,000 per day.¹³² Dealer frustration was aimed primarily at the media and the government for singling out Toyota, a company that employed nearly 29,000 people in the U.S. and another 163,000 through dealerships and suppliers.¹³³

Some analysts speculated that aggressive new car incentives to boost Toyota sales might hurt the brand's late model used prices and erode the firm's pricing power.¹³⁴ A measure of a car brand's power was how close used vehicle values came to the MSRP one year after purchase. On this dimension, BMW was number one at 78.2% followed by Lexus (77.1%), Infiniti (75.2%) and Toyota (72.1%).¹³⁵ In addition, a website that matched buyers and sellers of car leases reported in early January that, while thousands of people were waiting for Toyota leases, fewer than 30 had cancelled.¹³⁶ Lease demand remained strong in February. Furthermore, resale values seemed to be holding their own, dropping by only 4% for used affected Toyotas in February.¹³⁷

However, the Camry, Highlander and RAV4 experienced immediate and massive price drops on dealer lots right after the January recalls.¹³⁸ Further, the press reported that dealers were instructing their sales managers to reduce the book value of recalled Toyotas including Prius hybrids by 30% to 40%. "You've got to get them fixed," explained one. "You've got to take them in at greatly reduced value."¹³⁹ Finally, a February 10 survey of new car shoppers showed that only 7% of new car shoppers would not consider Toyota because of the recalls, an improvement from the 18% who felt that way right after the third recall.¹⁴⁰

In late January some analysts estimated that Toyota's potential revenue loss in the U.S. could reach \$500 million per week.¹⁴¹ On February 2, the press reported that the company's market capitalization had lost 18% in the preceding seven business days, erasing \$20 billion in shareholder value.¹⁴² Analysts attempted to quantify the short term and longer term damage to the firm and its brand. In addition to the out-of-pocket costs of fixing the recalled cars, lost sales, market share,

pricing power and residual values (estimates of the value of a vehicle at the end of a lease) figured in the company's valuation—and recalls affected them all. Analysts also had to factor in litigation costs and increased incentives. In a February 4 earnings call, Toyota, estimated it would have to spend \$1.1 billion to repair recalled vehicles and would lose \$895 million in sales.¹⁴³ A JP Morgan analyst expected Toyota to take a one-time 500 billion yen, or \$5.5 billion, hit, including recall-related costs and litigation settlements. On February 4, Toyota estimated that the worldwide recall could cost up to 180 billion yen (\$2 billion), with 100 billion yen for repairs and 80 billion yen in lost sales. It said the recalls might reduce global demand for Toyota vehicles by 100,000 units.¹⁴⁴

Analysts expected the company to compete aggressively to recover its lost market share and to be buoyed by continuing strong sales in Asia.¹⁴⁵ Most, however, were bullish on Toyota recapturing some of its lost market value (see **Exhibit 9** for analyst price targets) even though Toyota had seen 36-month residual values falling since 2005 due to prior quality problems and more aggressive fleet incentives. A further lowering of resale and residual values would require the leasing arm to charge higher rates. At the time of the recalls, Toyota's U.S. financing arm, Toyota Motor Credit Corporation, held a leased portfolio worth about \$18 billion.¹⁴⁶

For the fiscal year ending in March 2009, Toyota reported its first loss in 59 years. Another loss was expected for the 2010 fiscal year. Shareholders wanted to cut the workforce, but this was unpalatable in Japan. Declining global sales in the midst of economic downturn, overcapacity in Japan and thousands of idle workers in the U.S. put Toyota leaders under considerable pressure.¹⁴⁷

As the drama unfolded, Japanese media began to argue that Toyota's poor crisis management might damage the credibility of Japanese manufacturing in general. An editorial in Japan's leading business newspaper suggested: "Toyota is a leading company to represent Japan. If Toyota lost its credibility, it would negatively affect all made-in-Japan products...In order to prove Toyota is sincerely working on the issue, we think Toyota should consider sending president Toyoda to the public hearing."¹⁴⁸ Most major newspapers welcomed Toyoda's acceptance, noting it was the right decision but should have been made much earlier. Noted another: "We hope that he [Akio Toyoda] will explain everything sincerely...If Toyota had learned that its initial slow response was the reason why the recall issue had become an increasing problem, Akio Toyoda should have announced that he would attend the hearing much earlier."¹⁴⁹ Another leading newspaper wrote, "Given the seriousness of the issue, there is only one person who can answer questions from the U.S. Congress as a representative of the company, namely CEO Toyoda."¹⁵⁰

Uphill Battle

February saw Toyota focused on protecting its brand and image. Across multiple fronts—television, press, online, and social media—Toyota worked to control the message.¹⁵¹ On Capitol Hill, Toyota showed a willingness to cooperate with the U.S. Congress in its ongoing investigation into the Toyota recalls and Toyota's prior actions.¹⁵² On February 19, Toyoda accepted a formal invitation to testify before Congress, saying, "I will be happy to attend. I will speak with full sincerity."¹⁵³ A Japanese minister called Toyoda's decision to testify a "good decision. But it is regretful to hear that the company kept flip-flopping over whether to send him or not."¹⁵⁴

In the testimony lay risk and opportunity. The previous year had already seen CEOs from Detroit and Wall Street aggressively interrogated about their firms' performance. CEOs endured tough questioning and sat quietly as they were openly criticized, something unheard of in most countries around the world and certainly not in Japan, a country that placed great value on public decorum. To make matters even more tense, just two days before Toyota's top executives were to appear on Capitol Hill, news broke that an internal Toyota presentation had identified the changing political

climate under President Obama in the U.S. as a major challenge for the firm.¹⁵⁵ The document criticized the Obama administration and a Democratic Congress as “activist” and “not industry friendly” and noted “massive government support for Detroit automakers.”¹⁵⁶

While Toyoda’s February 24 testimony would aim to show that the company sincerely wished to make things right and renew its commitment to quality, Toyoda’s mastery of English was limited and he might have to testify in Japanese. How would this be accepted and reflected by the American and Japanese press? Toyoda and his top team had to help Toyota overcome the mounting pressures, assuage the media, deflect the aggressive Congressional questioning, and deliver a poised yet heartfelt address. On February 23, *The Wall Street Journal* published an op-ed by Toyoda entitled “Back to Basics for Toyota” in which he talked about “humbling months” that had led the firm to take “this experience to heart, making fundamental changes in the way our company does business.” A “comprehensive” response included taking care of vehicles on the road today and making them “even safer” in the future and being “more open and transparent” about safety issues that might arise. He reminded his audience that, since taking the helm in June, he had personally placed the highest priority on improving quality over quantity. “All Toyota vehicles bear my name,” he added. “When cars are damaged, it is as though I am as well. I love cars, and I take the utmost pleasure in offering vehicles that our customers love.” He reiterated his belief in his grandfather’s and Toyota’s core principles including “respect for people” and “continuous improvement.”

While highlighting the enduring loyalty of the Toyota customer, he acknowledged that the firm had, in recent years, not listened as carefully nor responded as quickly as it should have. Having investigated malfunctions in good faith, he wrote, “we focused too narrowly on technical issues without taking full account of how our customers use our vehicles.” He then described the nearly 200,000 “dedicated team members” at Toyota plants, dealers and suppliers in the US; the 700 top quality awards from various independent experts Toyota had received in the past two decades; and the firm’s leadership in hybrids and next generation environmentally friendly vehicles. Despite all this, “I recognize that we must do better—much better—in responding to safety issues.”

Then he transitioned to his actions, starting with taking the company back to basics: “Across Toyota, we are putting our customers, and the values on which our company was founded, front and center.” This included deeper and faster customer concern gathering, a company-wide effort to institute more stringent quality control, and being one of the first full-line vehicle manufacturers to include advanced brake-override systems as standard equipment on all new models world-wide. He finished by with pledging that Toyota would set a new standard for transparency and speed of response on safety issues and would continue to advance safety and environmental technologies. Personally, he planned to continue to visit the firm’s sales and manufacturing groups “to reaffirm the Toyota commitment to excellent quality.”¹⁵⁷

At this juncture, what else could Toyoda tell Congress that had not already been said? The intensely private man who rarely met with reporters individually and had given few public speeches as Toyota’s leader was about to take center stage.

Exhibit 1 Toyota's Principles, Revised in 1997***Guiding Principles at Toyota***

1. Honor the language and spirit of the law of every nation and undertake open and fair corporate activities to be a good corporate citizen of the world.
2. Respect the culture and customs of every nation and contribute to economic and social development through corporate activities in the communities.
3. Dedicate ourselves to providing clean and safe products and to enhancing the quality of life everywhere through all our activities.
4. Create and develop advanced technologies and provide outstanding products and services that fulfill the needs of customers worldwide.
5. Foster a corporate culture that enhances individual creativity and teamwork value, while honoring mutual trust and respect between labor and management.
6. Pursue growth in harmony with the global community through innovative management.
7. Work with business partners in research and creation to achieve stable, long-term growth and mutual benefits, while keeping ourselves open to new partnerships.

Five Main Principles of Founder Toyoda

- Always be faithful to your duties, thereby contributing to the Company and to the overall good.
- Always be studious and creative, striving to stay ahead of the times.
- Always be practical and avoid frivolousness.
- Always strive to build a homelike atmosphere at work that is warm and friendly.
- Always have respect for God, and remember to be grateful at all times.

Source: Adapted from Toyota company website, accessed May 2010.

Exhibit 2 Toyota Models Recalled: 2009-2010**Floor Mat Entrapment**

Certain 2007-2010 Camry^a
 2005—2010 Avalon
 2004—2009 Prius
 2005—2010 Tacoma
 2007—2010 Tundra
 2008—2010 Highlander
 2009—2010 Corolla
 2009—2010 Venza
 2009—2010 Matrix

Sticky Pedals

2010 Prius
 2005-2010 Avalon
 2009-2010 Matrix
 2007-2010 Tundra
 Certain 2009-2010 RAV4^a
 Certain 2010 Highlander^a
 Certain 2009-2010 Corolla^a
 2008-2010 Sequoia

Braking

2007—2010 Camry

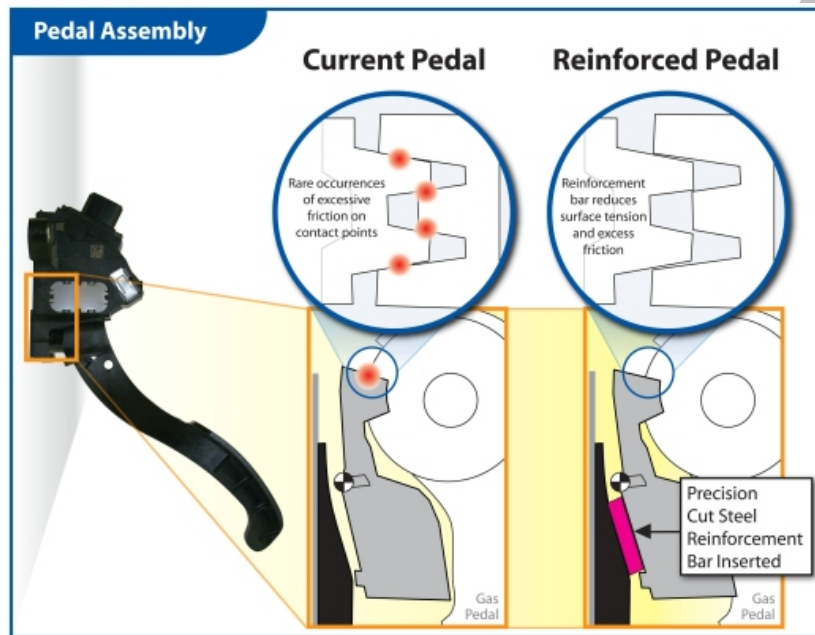
Lexus

2006—2010 IS 250
 2006—2010 IS 350
 2007—2010 ES 350

^aHighlander hybrids and Camry hybrids were not involved in this action and remained for sale. Further, Camry, RAV 4, Corolla and Highlander vehicles with VINs that began with "J" were not involved.

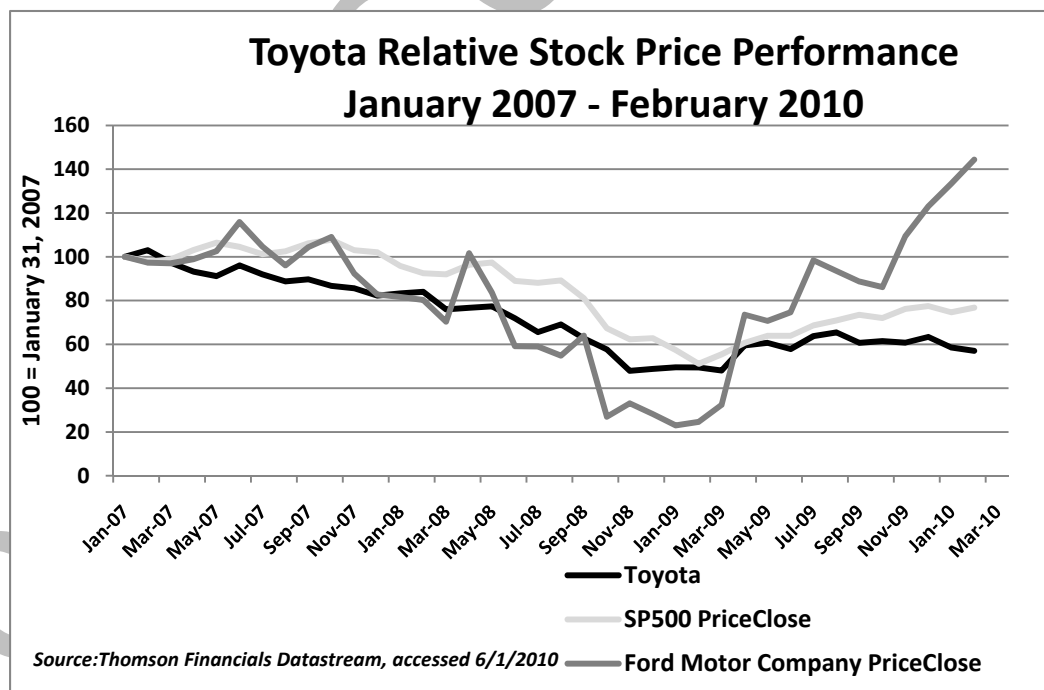
Source: Adapted from data provided via Toyota pressroom, <http://pressroom.toyota.com/pr/tms/customer-faqs-regarding-the-sticking-153495.aspx#link%202>, accessed May 2010.

Exhibit 3 Toyota Pedal Assembly



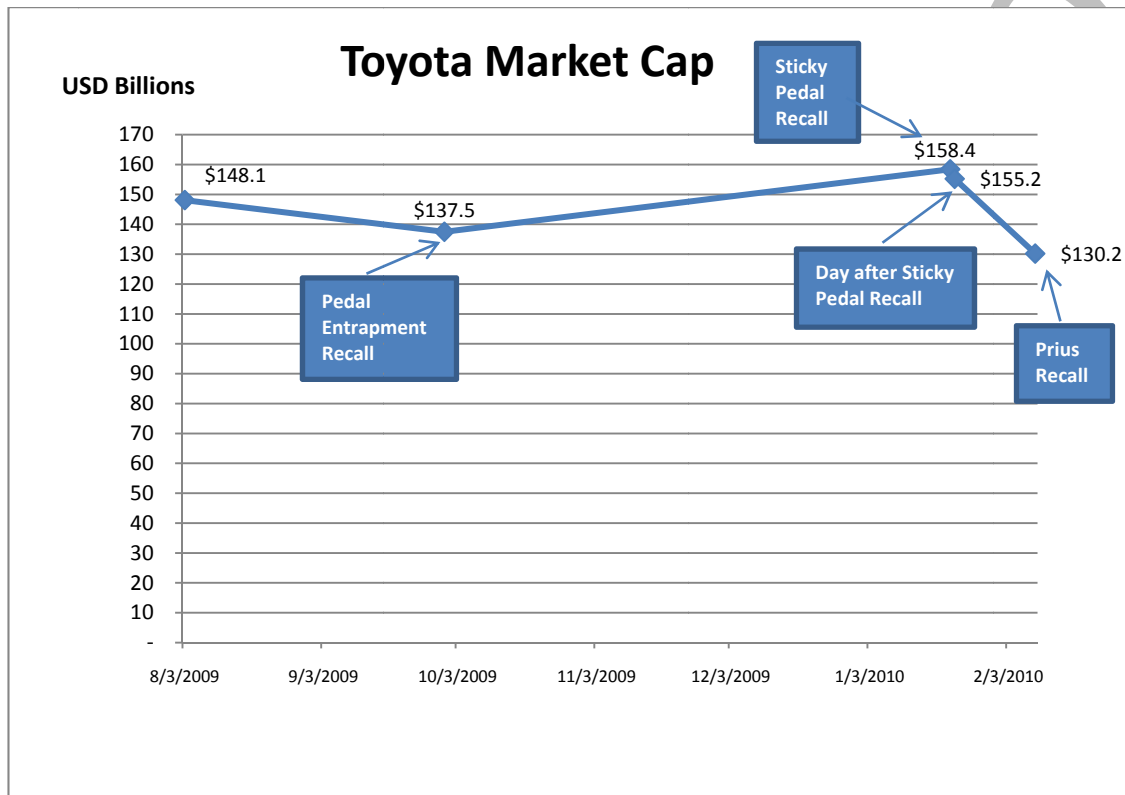
Source: Toyota pressroom, <http://pressroom.toyota.com/pr/tms/toyota/srp-view.aspx?id=93534>, accessed May 19, 2010.

Exhibit 4 Toyota, S&P and Ford Stock Performance: January 2007 - February 2010



Source: Thomson Reuters Datastream, accessed June 2010.

Exhibit 4 (cont'd) Toyota Market Cap, August 2009 – February 2010.



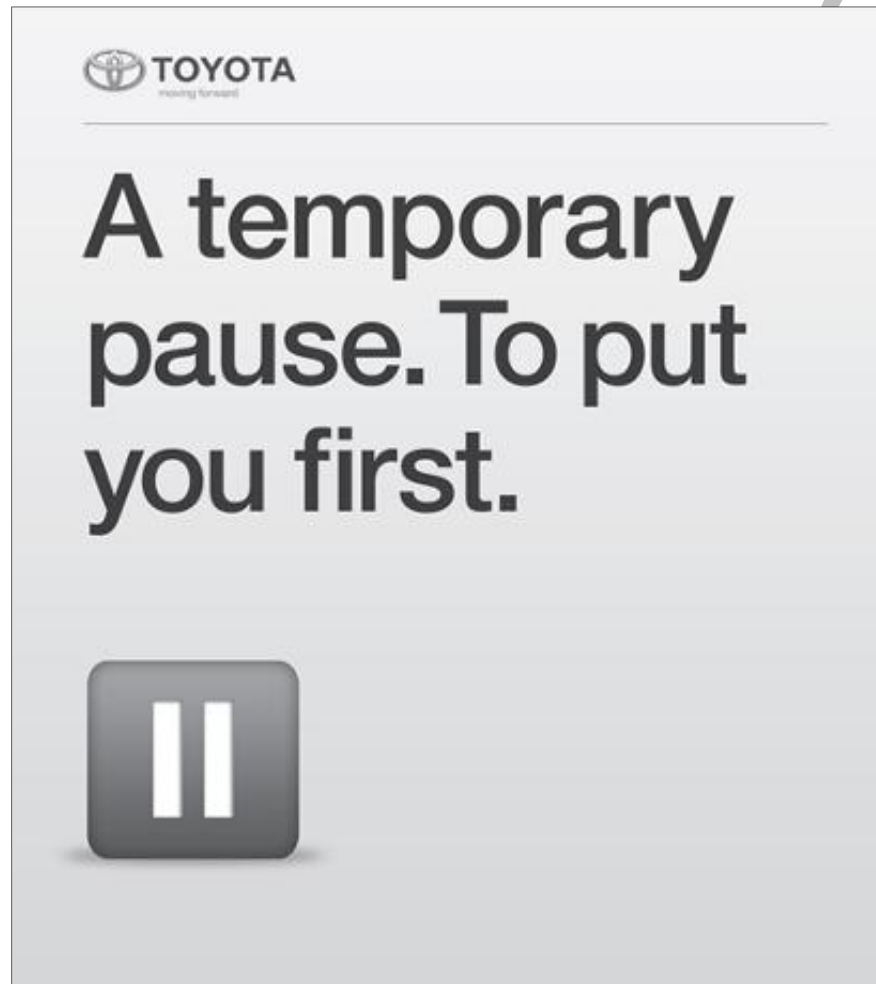
Source: Thomson Reuters ONE Banker, accessed September 2010.

Exhibit 5 Auto Recalls in Japan (Fiscal year)

	FY2007 (April 2007–March 2008)		FY2008 (April 2008 – March 2009)	
	# of Recalls	# of Cars	# of Recalls	# of Cars
Toyota	6	809,394	7	1,168,734
Nissan	11	607,554	7	566,271
Mitsubishi	12	290,122	8	295,672
Mazda	7	323,528	6	241,292
Honda	10	392,486	8	801,714
Isuzu	19	184,996	27	531,975
Fuji	6	44,438	3	227,686
Daihatsu	4	433,033	6	300,488
Suzuki	6	468,654	5	478,075
Total	81	3,792,420	77	5,073,467

Source: Website of Ministry of Land, Infrastructure, Transport and Tourism, http://www.mlit.go.jp/jidosha/carinf/rcl/data_sub/data004.html; http://www.mlit.go.jp/jidosha/carinf/rcl/data_sub/data003.html.

Exhibit 6 Toyota Full Page Newspaper Ad January 2009



Why we've temporarily stopped some of our plants:

As you may have heard, in rare cases, sticking accelerator pedals have occurred in some of our vehicles. We believe we are close to announcing an effective remedy. And we've temporarily halted production at some of our North American plants to focus on the vehicles we've recalled. Why have we taken this unprecedented action? Because it's the right thing to do for our customers.

To find out if your Toyota is affected and to get the very latest information about the recall, please visit:

toyota.com

Source: Toyota pressroom, <http://pressroom.toyota.com/pr/tms/document/ad.1.pdf>, January 2010, accessed May 2010.

Exhibit 7 Toyota Full-Page Letter Advertisement Published in U.S. Newspapers, February 2010.

Source: Toyota pressroom, <http://pressroom.toyota.com/pr/tms/document/ToyotaCustomerLetter.pdf>, February 2010, accessed May 2010.

Exhibit 7 (continued) Toyota Full-Page Letter Advertisement Published in U.S. Newspapers, February 2010.

Toyota's Pledge To You.

More than 70 years ago, Toyota was founded with one mission in mind — to provide our customers with the safest, most reliable vehicles in the world. That's why 80% of all Toyota cars and trucks sold in the United States over the last 20 years are still on the road today.*

We're proud of our heritage and recognize that, lately, we haven't lived up to it. All 172,000 Toyota employees and dealership personnel in North America are working around the clock to make things right for you and earn back your trust.

We've launched a comprehensive program, led personally by our President, Akio Toyoda, to improve quality controls worldwide — from when we design your vehicle to the day you stop using it — and respond more effectively when there's an issue.

Here's what we are doing:

1. We are launching a top-to-bottom review of every process related to quality in design, production, sales and service, and verifying the causes that prompted our recent recalls.
2. We're improving communications with our customers to gather information faster and further strengthening our dialogue with our regulators.
3. When we learn about a problem our customers are experiencing, we'll investigate without delay, and we'll quickly address any safety issues we find.
4. We'll ask outside experts to confirm that the enhanced quality controls we're putting in place conform to best industry practices.

At Toyota, we have always believed that continuous improvement — doing better every day — is the best guarantee of success. And we believe that the best companies learn from their mistakes. We know we need to do better. We are committed to doing just that.

Sincerely,



Jim Lentz
President and Chief Operating Officer
Toyota Motor Sales, U.S.A., Inc.

Source: Toyota pressroom, http://pressroom.toyota.com/pr/tms/document/Pledge_10x21.pdf, February 2010, accessed May 2010.

Exhibit 8 U.S. Retail Automobile Sales by Manufacturer (January 2010)

	January 2009 Sales	January 2009 Market Share	January 2010 Sales	January 2010 Market Share	Percentage Sales Change
General Motors	129,227	19.58%	146,315	21.00%	14.10%
Ford	93,506	15.29%	116,277	16.70%	25.00%
Toyota	117,287	16.73%	98,796	14.10%	-15.80%
Honda	63,175	10.86%	60,347	9.70%	-3.50%
Nissan	53,884	7.27%	62,572	9.00%	16.10%
Chrysler	62,157	8.79%	57,143	8.20%	-8.10%
Hyundai	24,512	4.10%	30,503	4.40%	24.40%
Volkswagen	12,744	2.79%	24,631	3.50%	40.10%
Kia	22,096	2.83%	22,123	3.20%	0.10%
Mazda	15,420	1.96%	15,694	2.20%	1.80%

Source: Adapted from Motorintelligence.com, accessed from The New York Times. Wardsauto.com, accessed August 2010. Inautonews.com accessed August 2010

Exhibit 9 Analyst Reports February 2010

Report Date	Analyst Company	Toyota Stock Price		
		Current	Target*	Type
Feb-01-2010	Deutsche Bank Group	\$36.65	\$48.75	Share
Feb-02-2010	Morgan Stanley	\$38.22	\$57.00	Share
Feb-03-2010	Wall Street Strategies	\$74.36	\$95.00	ADR
Feb-03-2010	JP Morgan	\$39.93	\$37.66	Share
Feb-03-2010	Wall Street Strategies	\$74.36	\$85.00	ADR
Feb-14-2010	Price Target Research	\$77.05	\$62.00	ADR

Source: Thomson Reuters ONE Banker, accessed August 20, 2010.

* Targets dates varied; although typically they were from 12 to 18 months in the future.

Note: Toyota was listed on the Tokyo, London, and New York Stock Exchanges; Toyota's ticker symbol was TM on the NYSE and was listed as an American Depositary Receipt (ADR). Toyota's ADR ratio was 1:2 (one ADR represented two shares). The above reflect one share price. Exchange rate on February 1, 2010 used to convert prices reported in Yen. (1 Yen = .0110772 USD).

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