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Case Study

# Geely: How a Chinese Upstart Became a Global Automobile Maker

John Kraft<sup>1</sup>, Arthur Kraft<sup>2</sup>\*

<sup>1</sup>Eugene F. Brigham Finance, Insurance, & Real Estate Department, University of Florida, Gainesville, USA

<sup>2</sup>George L. Argyros College of Business and Economics, Chapman University, California, USA

E-mail: akraft@chapman.edu

#### Abstract

Zhejiang Geely Holding Group Co., Ltd (ZGH) became a Chinese multinational automotive company. Li Shufu established the privately held company in 1986. It entered the automotive industry in 1997 with its Geely Auto subsidiary which became the seventh largest automobile manufacturer in China, with 1.328 million sales in China in 2021. Globally, Geely sold over 2.2 million cars in 2021 and over 17,926 plug-in electric vehicles in 2022.

ZGH successfully acquired several renowned automotive brands. In 2010, Geely acquired Volvo Cars from Ford Motor Company, marking a major milestone. This gave it access to advanced automotive technology and engineering expertise to elevate its brand image and global presence.

Geely produced and sold vehicles under its own brand, such as Geely Auto, Geometry, Maple, and Zeekr and under foreign subsidiaries, such as Volvo Cars, Polestar, Lynk & Co, Proton, and Lotus as well as commercial only vehicles under the London EV Company, Ouling Auto, Farizon Auto brands, and AB Volvo, Swedish manufacturer of trucks.

ZGH focused on innovation, research, and development. It invested heavily in electric vehicles and autonomous driving technologies. Its electric vehicle brand, Geometry, gained recognition for stylish design and impressive range capabilities.

**Keywords:** Core Competencies, Cost Pressures, Economies of Scale, Foreign Direct Investment, Horizontal Integration, Joint Venture, Localization, Location Economies, Supply Chain, Vertical Integration.

## INTRODUCTION

Zhejiang Geely Holding Group Co., Ltd (ZGH), commonly known as Geely, became a Chinese multinational automotive company headquartered in Hangzhou, Zhejiang. Chinese billionaire entrepreneur Li Shufu established the privately held company in 1986. Geely entered automotive production in 1997 with its Geely Auto subsidiary (Yahoo! Finance. 2019). Geely Auto became China's largest privately owned automobile manufacturer and the seventh largest overall, with 1.328 million sales in China in 2021. Globally, Geely sold over 2.2 million cars in 2021 (Tan. 2022). Suddenly, Geely became a global automobile maker. The firm produced and sold vehicles under its own brand, such as Geely Auto, Geometry, Maple, and Zeekr and foreign-subsidiaries such as Volvo Cars, Polestar, Lynk & Co, Proton, and Lotus - as well as commercial only vehicles under the London EV Company, Ouling Auto, and Farizon Auto brands. It acquired an 8.2 percent stake in AB Volvo, Swedish manufacturer of trucks, in 2017, for \$3.2 billion to become the truck maker's largest shareholder (Wee, 2017). Geely produced motorcycles under Zhejiang Geely Ming Industrial (Jiming and Geely brands), Qianjiang Motorcycle (QJMotor and Keeway brands) and Benelli. In September 2022, Geely acquired a 7.6 per cent shareholding in Aston Martin Lagonda Global Holdings plc, the ultra-luxury British performance brand Aston Martin (Bloomberg.com, 2022).

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When Geely started to manufacture its vehicles, it focused on making and selling vehicles for the Chinese market. Even though China became the world's largest automobile market, Geely wanted to become a global automobile manufacturer. It made numerous attempts at a variety of vehicles without much success beyond China. While it possessed strong core competencies in engineering and manufacturing, it lacked skills in design as well as marketing and sales. After numerous attempts to achieve its goal, Geely realized that the only path to success involved acquiring firms that possessed the core competencies that Geely lacked.

The automobile markets in Europe and North America were dominated by Korean, Japanese, German, and US brands. To enter these markets Geely realized that entry by exporting the Geely brand had not worked. Geely realized that success in these markets required the acquisition of underperforming recognized brands in these markets. Entry was accomplished by acquisition and rivalry was minimized. The existing brands had established suppliers and customers. What the underperforming brands needed was an infusion of capital and significant upgrading of manufacturing facilities. To preserve the culture of these brands they remained as separate divisions within ZHG and retained a separate management structure. Geely also realized that it needed to upgrade and establish manufacturing facilities for these acquired brands in North America, Europe and China to avoid tariffs and import quotas.

When Geely embarked on its foreign acquisition strategy, it benefited from the Chinese government policy that encouraged foreign direct investment. The government saw this as a path to acquire technological know-how, management know-how and other core competencies that Chinese firms lacked. The policy allowed Chinese firms to gain access to valuable resources and to acquire strong firms who produced high quality products and services. This was especially true for firms that fit China's strategic trade policy and qualified for China's "Made in China 2025" strategy to achieve dominance in key sectors. Geely's acquisition strategy proved successful since I was the first Chinese automobile firm to succeed outside China through its various subsidiaries.

Geely's ability to compete globally was limited by poor design capabilities and lack of brand awareness outside of China. Geely's acquisition strategy was the means of entry into foreign markets, and it did not increase rivalry since the number of competitors remained unchanged in those markets. By acquiring existing brands Geely produced and sold those brands globally and in China.

Even when the Chinese government's clampdown on money leaving the country began in 2016, Geely continued

to make investments abroad (Los Angeles Times, 2017). Geely fit into Beijing's "Made in China 2025" initiative, a 10-year plan designed to promote 10 strategic sectors, so it avoided many of the restrictions on outward foreign direct investment suffered by other firms in China (Hayashi, Wei, and Leary, 2022). Made in China 2025, issued in May 2015, was the national strategic plan and industrial policy of the Chinese Communist Party (CCP) to further develop the manufacturing sector of China. The industrial policy aimed to upgrade the manufacturing capabilities of Chinese industries, growing from labor-intensive workshops into a more technology-intensive powerhouse. Made in China 2025's focused on increasing the Chinese-domestic content of core materials to 40 percent by 2020, and then to 70 percent by 2025 (Curran, Enda, 2017). The Chinese Communist Party implemented strategic initiatives which specifically included Geely as a key industry (Agarwala, Chaudhary and Divyank, 2021).

#### **Geely Acquires Volvo**

Geely completed a \$1.8 billion acquisition of Volvo brand, based in Sweden, from Ford Motor in 2010. This helped the company expand its global footprint (particularly in Europe and North America) and improve its technology. It marked the first time a Chinese carmaker acquired 100 per cent of a foreign rival. Geely expanded Volvo's global market share without compromising its characteristics, such as a focus on safety. The acquisition gave Geely the design and marketing core competences to be a global automobile manufacturer. Volvo remained based in Sweden under separate management with factories in Belgium (Nicholson, 2010).

Geely and Volvo built vehicle and component assembly facilities in China in 2012. Geely planned a Volvo Chinese based headquarters, research and development center, and sales center (Shirouzu and Fletcher. 2010).

Volvo invested \$10 billion to \$11 billion world-wide over five years (2010-2016) to upgrade its products and technology as part of a strategic plan to become a "true" global luxury brand with China as a major manufacturing base to raise annual sales to 800,000 cars globally by 2020, more than double the 373,000 cars Volvo sold in 2010. Its goals involved a major expansion in China, the world's biggest auto market where it hoped to boost sales to 200,000 cars by 2020. Volvo faced challenges managing the relationship with Geely. Since Volvo retained separate management, they avoided clashes in corporate culture that stymied other Chinese mergers overseas (Shirouzu, 2011).

Volvo planned to raise sales in Europe to 380,000 cars a year from the 242,000 it sold in 2010. It hoped growth in markets including Russia, Brazil and India boosted global sales outside China, in Europe and the U.S. to 100,000 cars, from the 46,500 Volvo sold in 2010, in those markets. Volvo

aimed to more than double sales in the U.S.to 120,000 cars a year (Shirouzu, 2011). Volvo also planned to build production capacity in North America and build additional capacity within the European Union.

Volvo and Geely planned to build three assembly plants in China—in Chengdu, Shanghai and the north-eastern city of Daqing with total production expected to be 300,000 Volvos a year. Geely and Volvo integrated their parts operations. In addition to boosting production, Volvo planed more luxurious models to revive the brand in China and around the world to compete with other luxury car brands, such as BMW and Mercedes-Benz (Shirouzu, 2011).

Geely allowed Volvo to set its own course in the decade after it left Ford Closer integration built on the cooperation between Volvo and Geely with brands like Lynk & Co. This model applied to all Geely's subsidiaries: Polestar, Lynk & Co, Proton, Lotus, London EV Company, Ouling Auto, and Farizon brands they operated as standalone divisions within Geely and enjoyed significant independence. The ventures retained their own management structure. A unified business structure enabled the brands to cooperate more closely on electric vehicles while saving development costs along the way (Ramey, 2020).

In 2010, Zhejiang Geely Holding Group purchased Volvo from Ford. After a decade of mostly hands-off management, Geely thought about a closer partnership with Volvo. This included combining the business sides of the automakers, which also included Geometry, Polestar and Lynk & Co brands owned by each. It did not include Lotus. The combination enabled closer sharing of technology, planning and platforms among the brands along with a more unified financial structure. It preserved the distinct identity of each of the brands Volvo, Geely, Lynk & Co and Polestar.

One of the main motivating factors was shared development costs as Geely headed into a decade dominated by New Energy vehicles, which in China included hybrids of all types, as well as electric vehicles (EVs). This allowed the hybrid- and EVcentered brands like Polestar and Geometry to work together on EV platforms for various markets (Ramey, 2020).

The combination of the two companies created a strong global group; however, many were concerned about Volvo losing its unique identity (Ramey, 2020). In the end, they called off the combination. They feared that a merger presented integration issues and distracted them during a period of industry wide transformation in the shift to electric vehicles (Boston and Chopping, 2021).

A full merger required too much internal focus, organizational disputes and power plays. The companies realized that the bulk of savings they could achieve together came from sharing software, rather than conventional savings from using common hardware components such

as chassis and powertrains (Boston and Chopping, 2021) The preference for deep cooperation over a full merger highlighted a growing trend favored by investors who pushed large automotive companies to spin off individual businesses into separate companies, a move that investors cheered (Boston and Chopping, 2021).

The collaboration continued as both combined their powertrain operations into a new stand-alone provider of internal combustion engines, transmissions, and nextgeneration dual-motor hybrid systems for use by both companies as well as other manufacturers. The agreement saw Volvo and Geely expand the use of shared modular systems for electric vehicles, enhanced further collaboration in autonomous and electric drive technologies, and combined joint procurement to cut purchasing costs (Boston and Chopping, 2021). Both companies retained independent corporate structures, but the collaboration led to a new governance model supported by Geely Holding, the lead shareholder in both companies. Now, Volvo might seek its own stock listing (Boston and Chopping, 2021).

#### **Global Strategy and Market Entry**

Based in China, Zhejiang Geely Holding Group (ZGH) operated all over the world through its many subsidiary brands (Zhejiang Geely Holding Group, 2021). The Group's core business within the automotive industry included many automotive groups and vehicle brands. ZGH acquired technological know-how, management know-how and strong organizations to expand into markets and better serve customers. ZHH's subsidiaries included Geely Auto, Volvo Cars, Geometry, Maple, Zeekr, Polestar, Lynk & Co, Proton, Lotus, London EV Company, Ouling Auto, Farizon Auto, and AB Volvo (Swedish manufacturer of trucks). Geely produced motorcycles under Zhejiang Geely Ming Industrial (Jiming and Geely brands), Qianjiang Motorcycle (QJMotor and Keeway brands) and Benelli. Geely acquired a share in Aston Martin Lagonda Global Holdings plc, the ultra-luxury British performance brand Aston Martin (Bloomberg.com, 2022).

Geely and Volvo established a joint venture (Lynk & Co), to compete directly with Volkswagen and appeal to younger buyers. It offered a Lynk-branded SUV and smaller cars in China and Europe. Lynk blended the best features of Chinese low-cost manufacturing with attractive European design and quality (Campbell, 2016). Proton, an automobile manufacturer in Malaysia, allowed Geely to expand its footprint in Southeast Asia and India. Geely, through its growing international footprint and ability to absorb foreign technology, positioned itself for global expansion. Geely laid the groundwork when it acquired Volvo. With new acquisitions and brand launches, Geely's portfolio spanned from trucks to supercars (Moss and Boston, 2018). Volvo operated production facilities in the world's three big automotive markets: China, Europe, and United States.

ZGH's foreign direct investment strategies were similar in various markets. Its subsidiaries operated as relatively independent entities under ZGH. However, its products were extensively customized in each market.

#### **Geely Focused on Europe**

In 2013, Geely paid £11m for the 80 per cent it did not own of Manganese Bronze, parent of the London Taxi Company (LTC) which made the famous black cab for 60 years. LTC produced the vast majority of 22,000 black cabs on London 'streets. Geely restarted production in 2013. They planned a new plant in Coventry that included research and development, assembly operations, and the development of electric and ultra-low emission black cabs (Brown, 2013).

London Taxi Company (LTC) produced 2,000 black cabs a year but expected the new facility to reach 36,000 cars. LTC launched the new version of the famous London black cab late in 2017 and in international markets in 2018. About 90 per cent of black cabs made in Coventry served the UK market, predominantly London, with a small number exported. Geely planned to produce about 20 per cent of the taxis' production capacity for the UK, with the remaining 80 per cent, including a left-hand drive version, shipped elsewhere in Europe and beyond (Brown, 2013).

In 2016 Geely and Volvo established a joint venture (Lynk & Co), to compete directly with Volkswagen and appeal to younger buyers. It offered its Lynk-branded SUV in China in 2015 and in Europe by 2018, followed by smaller cars, such as a saloon and a hatchback. Lynk blended the best aspects of Chinese low-cost manufacturing (Geely) with attractive European design and quality (Volvo) (Campbell, 2016). Geely manufactured Lynk-branded vehicles in China with plans to establish a production facility in Europe in the future. It did not use a traditional dealer network or advertising to promote the new car. Instead, it focused on social media to reach its target market of younger drivers (Campbell, 2016).

Volvo and Geely outlined a wide-ranging technical collaboration to further its transformation into an all-electric brand. They created a China-based joint venture to build on their technology that accelerated electric-car development. The Geely Auto and Volvo owned Lynk joint venture allowed lower prices in global markets, more resources, and faster development of technology.

#### **Geely and Volvo Go Electric**

When Volvo limited all new models from 2019 to fully electric or a hybrid, it became the first traditional auto maker to abandon the internal combustion engine that powered the auto industry for more than a century. Volvo leveraged its brand recognition to become a force in new technology such as electric vehicles, hybrids and self-driving cars (Boston and Chopping, 2017).

Volvo and Geely already shared technology, including a system that allowed Volvo, Geely and Lynk models to share components. The joint venture lowered development costs by sharing technology across the three car companies as Volvo prepared to offer three electric vehicles by 2025. Lynk expanded offerings after the launch of its Model 01 sport-utility vehicle. The collaboration included development of battery cells, electric motors and charging systems with components shared across Geely Holding's three auto brands (Boston and Chopping, 2017).

Lynk launched a small SUV in major Western markets. It used technology to transform car use and ownership. A smartphone app locked and unlocked cars and facilitated shared ownership. It allowed third parties to develop their own apps like smartphones. This flexibility provided limitless opportunities that made car travel more interesting and versatile (Green, 2017).

#### **Geely Expands Investments**

ZHG expanded its portfolio in 2016 (Table 1). It included a 49.9 per cent stake in Malaysia's Proton, British race-car legend Lotus, and the London EV Co., maker of the black

<b>Table 1:</b> Geely Expanded its Product Portfolio Modeled on Volkswagen AG.	
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Year	Product Model	
August 2010	Buys Swedish auto maker Volvo Cars from Ford for \$1.8 billion	
February 2013	Acquires bankrupt U.K. black-cab producer London Taxi for \$15 million, since renamed London EV Co.	
October 2016	Launches domestic commercial-vehicle line Yuan Cheng	
June 2017	Launches premium EV company Polestar, meant to rival Tesla.	
June 2017	Assumes control of British super-car maker Lotus Cars by taking 51% stake	
June 2017	Takes 49.9% stake in Malaysian auto maker Proton.	
November 2017	Acquires U.S. flying-car startup Terrafugia for undisclosed price	
November 2017	Lynk & Co. unit offers its first model for sale in China.	
December 2017	Buys 8.2% stake in Swedish truck maker Volvo AB for \$3.2 billion	
February 2018	Chairman and founder Li Shufu confirms \$9 billion acquisition of 9.7% of Mercedes-Benz parent, Daimler AG	

Source: Moss, Trefor and Boston, William, (2018). How China's Geely Turned a Disassembled Mercedes Into a Global Car Company, Wall Street Journal.

taxicab. In 2017 Geely and Volvo co-launched two new brands: Lynk & Co and Polestar Geely invested in Terrafugia, a Woburn, Mass.-based startup developing flying cars (Moss and Boston, 2018).

Continuing its brand acquisition strategy Geely purchased a 51 per cent stake in Lotus, the British sports-car manufacturer, and acquired a minority stake in Proton an automobile manufacturer is Malaysia to expand its footprint in Southeast Asia and India. Geely hoped to harness Lotus's technology. Its Eco Elise project, for example, developed materials that lowered emissions in its cars (Economist, 2017).

On February 24, 2018, ZGH acquired a 9.7 per cent stake in Mercedes' parent Daimler AG worth \$9 billion that made it the German auto maker's biggest shareholder. Geely, through its growing international footprint and ability to absorb foreign technology, positioned itself for global expansion. Geely laid the groundwork when it acquired Volvo. With new acquisitions and brand launches, Geely's portfolio spanned from trucks to supercars (Moss and Boston, 2018).

#### **Geely Revenues Grow**

For the first time in its history, Volvo operated production facilities in the world's three big automotive markets: China, Europe, and United States. This included Volvo's first automotive factory in the U.S., a \$500 million plant near Charleston, S.C. Volvo rode the wave of China's global push to electric vehicles. It produced only pure-electric or hybrid models starting in 2019. Geely intended for 90 per cent of its cars to be electric by 2020 (Moss and Boston, 2018).

In 2019 Geely became China's third-largest carmaker after six months as profits rose 53 per cent on strong sales despite tougher conditions in its home market. Geely passed Japanese rivals Nissan, Toyota and Honda to become the third highest car seller, trailing only General Motors and Volkswagen in the world's largest car market. It posted Rmb53.7bn (\$7.8bn) revenue in the first six months, 36 per cent higher than the previous year. Geely sold 766,630 cars in the period, 44 per cent more than the previous year. Profit climbed to Rmb6.7bn (Mitchell and Fei Ju, 2018). Kraft J, et al.

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#### Geely Enters Luxury Market

Lotus began manufacturing in China within three years, making it the first prestige brand to produce in the world's largest car market. The "Lotus Project" factory opened in 2021 in Wuhan. The plant planned to make 150,000 vehicles per year (Hancock, 2019).

Daimler teamed up with Geely in a 50-50 joint venture to transform its Smart brand into an electric carmaker for China's vast market. The brand's focus on urban mobility and electric technology made it attractive to Geely in the world's largest market for electric cars. China encouraged carmakers to develop and sell electric cars by offering generous subsidies and tax breaks. China accounted for about half of global electric car sales (Riley, 2019).

Geely launched a premium all-electric car brand, Geometry, as it continued to boost production of new energy vehicles. The move came as automakers raced to develop vehicles powered by means other than petrol to meet official production quotas to reduce smog (Reuters Staff, 2019).

In 2019, 1,700 cars rolled off the production line at Lotus' Norwich factory, with production capacity to build 10,000. Lotus suffered from a string of unsuitable prior owners. Geely succeeded where others failed because it came with financial backing and a track record as it expanded abroad and turned around struggling car firms (Economist, 2020).

#### **Automotive Divisions and Products**

Based in China, Zhejiang Geely Holding Group (ZGH) operated all over the world through its many subsidiary brands (Zhejiang Geely Holding Group, 2021). The Group's core business within the automotive industry included many automotive groups and vehicle brands (Table 2).

The first serious attempt by China's carmakers to enter Europe 15 years ago, failed because of terrible cars. Then, China's car industry became the world's biggest, and its products improved immeasurably. China produced more electric vehicles than any other nation (Economist, 2022).

Division	Subsidiaries		
Geely Auto Group	Geely Auto, Geometry, Lynk & Co, Proton Cars(JV)		
Zeekr Intelligent Technology	ZEEKR		
Lotus Group	Lotus Cars(JV), Lotus Technology(JV)		
Smart Automobile	Smart(JV)		
Volvo Car Group	Volvo Cars, Polestar		
LEVC	London Electric Vehicle Company		
Geely New Energy Commercial Vehicle Group	Farizon Auto, Hanma Technology(JV), Ou Ling Auto, Green Intelligent Link, Oneworld Technology		
Shanghai Maple Automobile Co., Ltd	Maple/Livan.		

Source: Zhejiang Geely Holding Group, (2021) Our Business-Zhejiang Geely Holding Group, Zhejiang Geely Holding Group Co., Ltd (ZGH), September 10, 2021

China failed to establish trusted brands from scratch, so Geely acquired Volvo and owned 10 per cent of Mercedes-Benz. Geely bought 8 per cent of Aston Martin, a struggling British sports-car firm. Competition proved tougher in the more lucrative premium segment where larger models cost about as much as similar Western cars (Economist. 2022).

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#### **Geely's Technology Bet**

Geely planned to use a platform developed with input from Volvo and Lotus to build new models in Malaysia for its partly owned Proton brand, a strategy that showed how it accelerated its push to become China's first global auto giant (Sun and Goh, 2020).

The plans for Proton represented one strand of a Geely project to revamp factories at home and abroad using joint platforms it perfected with Volvo in 2013. A project dubbed Compact Modular Architecture (CMA) allowed Geely to develop, design and build different types of compact cars with similar mechanical layout faster than before and at lower cost. Along with a platform for smaller cars known as B-segment Modular Architecture (BMA) that Geely planned for Proton, allowed them to harness Volvo's technologies and Geely's capabilities in cost control, supply chain management and local production (Sun and Goh, 2020).

The CMA platform allowed Geely and Volvo to design vehicles more quickly and cost-effectively as it provided a technological springboard to higher market share while the auto industry embraced electric and autonomously driven transport. While giants from Toyota Motor Corp to Volkswagen and General Motors Co followed similar shared platform projects for their brands, Geely's strategy marked a first for a Chinese company (Sun and Goh, 2020).

Geely developed an electric car production system that it planned to sell to rivals, and a global battery system it expected to dominate the industry in coming decades. Geely talked with several car manufacturers to license the technology, including Mercedes-Benz owner Daimler. This new architecture offered higher driving ranges of up to 700km for lighter vehicles from two-seaters to large minibuses carrying a dozen people (Campbell, 2020). As the industry shifted from traditional engines to battery power, carmakers worked together to avoid duplicating investments in expensive battery technology. All Geely brands committed to using the system for future electric vehicles. Geely built the system from scratch to achieve better performance than simply adapting an existing car platform for electric vehicles. The system gave better acceleration and braking, elimination of road noise and vehicle stiffness, a key attribute of safety and performance (Campbell, 2020).

Volvo committed its entire lineup to battery power by 2030 as it abandoned selling cars with internal combustion engines including hybrids. In a break from traditional carmakers, Volvo limited electric models exclusively to online sales at fixed prices. Volvo moved toward battery-powered cars based on pressure from governments, many of which announced bans on internal combustion engines in coming years. While the European Union planned to ban the production of gasoline and diesel vehicles by 2035, many municipalities planned to ban gasoline and diesel vehicles from city centers prior to then because of concerns about air quality (Ewing, 2021). Technology became strength for the ZHG brands.

#### The Move Away from Combustion Engines

Geely Auto and Volvo focused on deepening their electric vehicle and software development. Through the Zeekr brand, Geely demonstrated the competitiveness of its system for building electric cars that it planned to sell to rivals. The architecture represented a core part of Geely's strategy to position itself at the center of the global industry's pivot towards battery-powered vehicles (Shepherd, 2021A).

Geely invested £2.5bn in Lotus to plan new products and a major global expansion. Lotus developed new vehicle architectures to make electric sports cars and electric SUVs, rather than trying to develop battery cars from existing models. Lotus projected the majority of sales to be SUVs with the bulk of production at its Wuhan plant in China (Campbell, 2021),

Renault announced a partnership with Geely to sell hybrid cars in China, marking the French group's first big deal since it exited its main joint venture in 2020. The partnership shared resources and technology to sell hybrid vehicles in Asia in an attempt by Renault to tap into China's rapidly growing electric car market (Shepherd, 2021B).

Volvo Cars announced a €1.2bn dedicated electric car factory in Slovakia to strengthen its shift to only selling battery vehicles and to expand its production capacity within the European Union. The Slovakian government provided twenty per cent of the investment. Europe represented Volvo's biggest market with extremely high demand for electric vehicles. The plant projected an initial capacity of 250,000 cars when it opened in 2026, with an adjacent site for expansion and a battery factory. The site used clean

energy with higher levels of automation and more efficient use of floor space (Campbell, 2022).

Volvo aimed to become a pure electric car maker by 2030. In 2022, pure battery electric cars accounted for 7 per cent of Volvo sales, and they sold at a 12 per cent premium compared to conventional vehicles. Gross profit margins for battery electric vehicles reached 15 per cent, up from 13 per cent in the prior quarter, but they remained less profitable than combustion engine vehicles, which posted 22% gross profit margins (Boston, 2022).

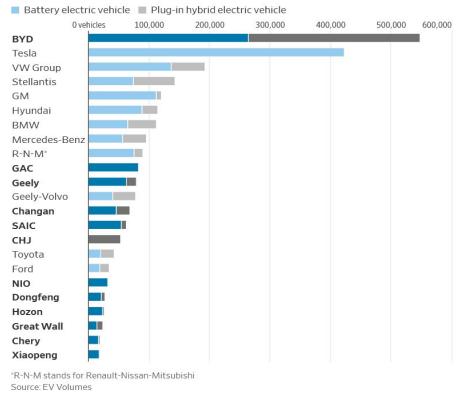
#### The Future

Zhejiang Geely Holding Group Co., Ltd (ZGH) adopted an aggressive growth strategy focused on innovation, research, and development, and expanding its product portfolio. It invested heavily in electric vehicles and autonomous driving technologies as it recognized the future of the automotive industry. Geely's electric vehicle brand, Geometry, gained recognition for stylish design and impressive range capabilities.

ZGH experienced steady growth over the years as it expanded its market share both domestically and internationally. The company's global ambitions became evident through its establishment of manufacturing plants and research centers in various countries, including the United States, the United Kingdom, Sweden, and Malaysia. Despite its achievements, ZGH faced challenges. The global automotive industry underwent significant transformations, with increasing competition, stricter environmental regulations, and evolving consumer preferences. It adapted to such changes, invested in sustainable technologies, and effectively navigated the complexities of the international market by investing in its brands and locating production capacity in Europe and North America to counter rising trade barriers.

While ZHG brands made a big bet on electric vehicles, the demand for electric vehicles failed to meet expectations. This proved to be the case in the U.S. with more abundant and cheaper gasoline. Furthermore, except for California with a 2035 deadline, the U.S. did not set a deadline for ending the production of combustible engines like the European Union in 2035, and China in 2050. Geely's aggressive move to electric created excess capacity in the interim.

Chinese electric vehicles stunned rivals at the Shanghai auto show with their quality, features, and price. In the first quarter of 2023, China dethroned Japan as the largest exporter of electric vehicles (Figure 1). When it came to powering electric vehicles, China dominated. The U.S. lagged in the battery-making process (Ip, 2023).



Global electric vehicle sales in first quarter 2023, Chinese companies in bold

Figure 1. Global Electric Vehicle Sales in first quarter of 2023.

Volvo made a big bet that a smaller, cheaper all-electric SUV, EX30, motivated budget-minded buyers to go electric. In the U.S., Volvo priced the EX30 at \$35,000, significantly less expensive than the electric XC40, previously Volvo's cheapest electric car. Volvo ranked among the first conventional carmakers to stake its future on going completely electric (Boston, 2023).

ZGH evolved from a humble refrigerator maker to a global automotive powerhouse (Table 3).

ZGH became a major player in the automotive industry with strategic acquisitions, joint ventures, investments in cutting-edge technologies and focus on innovation and establishing production facilities around the world in its biggest markets. With its commitment to electric vehicles and autonomous driving, ZGH positioned itself to shape the future of transportation. It demonstrated adaptation and resilience crucial to success as it evolved.

Competitive pressures and creativity made Chinese designed and built electric cars formidable competitors. China used a combination of industrial policy, protectionism, and homegrown competitive dynamism to dominate market share (Ip, 2023). Such factors contributed to ZGH's development as China became the world's largest automobile exporter.

Lotus established a US factory to ramp up production beyond its UK home base. The plant became the third for Lotus, after Geely opened a factory in Wuhan, China in 2023, with a capacity of 150,000 cars a year, to produce Lotus's first core electric model. The U.S. site offered expanded scale. It expected to sell 150,000 cars by 2028, a level beyond the Wuhan facility, which opened in 2023 (Campbell, Peter, 2023B).

While Lotus models proved too expensive to benefit from green incentives offered under the US Inflation Reduction Act, the U.S. site put Lotus in the largest sports and luxury market globally (Campbell, Peter, 202B3). Russia accounted for a significant part of the surge. Sanctions on Russia left a big hole to fill, especially for gas-powered vehicles (Wong, 2023).

China became the largest exporter of EVs, and its lead appeared to grow. Around 35% of EVs exported globally came from China last year, compared with 25% in 2021 (Wang, 2023). This offered Geely a significant opportunity given its extensive production facilities in China.

So far, Geely's aggressive acquisition strategy has proved to be a good recipe for success. They developed a diversified portfolio of vehicles and distributed production and supply chains around the globe. Continued investment in innovation and technology is required for future growth, continued knowledge sharing among the units must occur to keep costs in check and maintain efficiency. Geely must be prepared for future disruptions, such as conflicts, trade wars and natural disasters. The momentum must be maintained.

Most of ZGH's acquisitions occurred without extensive regulatory approvals or obstacles. They were even able to avoid Chinas limitations on foreign direct investment. The future offered more challenges. The start of the global trade war, sanctions against Russia, and geopolitical tension with China created obstacles. While Volvo honored the sanctions against Russia, Geely did not.

Table 3: Geely shares jump after automaker beats revenue expectations for 2022.

#### Shares

- Geely reported its 2022 revenue surged 45.6 per cent from a year ago to 148 billion yuan (\$21.49 billion), while profit jumped 8.5 per cent to reach 5.26 billion yuan.
- Analysts expected Geely to report 135.4 billion yuan in revenue.
- Geely made "significant progress" in increasing sales of its new energy and electrified models, as sales surged over 300 per cent last year to more than 328,000 units.
- For 2023, Geely targeted sales of 1.65 million units and said aimed to double the share of new energy and electrified vehicle sales. To hit that target, Li leaned on its collaborations in its supply chain, which allowed it to lower costs and subsequently selling prices.
- Geely surpassed revenue expectations for 2022, sending shares surging.
- Shares of Geely spiked 7 per cent, before settling down to trade nearly 3 per cent above its previous close.
- The company described this as a "resilient financial and operational performance... achieved despite challenging market conditions and continued pandemic-related disruption."
- Sales climbed 8 per cent last year to over 1.4 million units. This figure exceeded China's 5 per cent forecast for its overall auto industry.
- High-end models accounted for 23 per cent of total sales in 2022, or 252,787 units.
- Geely made "significant progress" in increasing sales of its new energy and electrified models, as sales surged over 300 per cent last year to more than 328,000 units.
- The company's collaborators include Mercedes, Renault and Aramco in efforts ranging from the revival of the all-electric Smart brand to a new venture related to internal combustion and hybrid powertrain technologies.
- Geely and Renault aimed to produce 7 billion engines and transmissions per year and considered providing service and support to other brands transitioning from ICE to electric cars.

Source: Cnbc.com, (2023). Geely shares jump after automaker beats revenue expectations for 2022, Cnbc.com, March 22, 2023

The United States and South Carolina welcomed Volvo and offered numerous incentives. The times changed and future investments faced scrutiny. While most ZGH subsidiaries earned respect and trust, Geely faced more significant scrutiny in the United States and Mexico as part the U.S. Mexico Canada Agreement (USMCA). ZGH subsidiaries faced considerable restrictions regarding electric vehicle technology, battery development, autonomous driving technologies and other sensitive areas. The Committee on Foreign Investment in the United States (cfius) expanded its powers to include technological development and economic development in addition to national security when reviewing foreign investments in the United States.

#### **Comparative Analysis**

Geely's growth trajectory compared favorably with that of other emerging automotive firms. Geely followed an approach significantly different from other firms in the industry since its primary emphasis was growth through acquisitions.

Much of Geely's growth was in China, the world's largest automobile market. Its growth matched that of other domestic brands, such as BYD (Believe Your Dreams), along with international firms. Geely also benefitted from rising Polestar and Volvo sales in Europe.

Geely gained prominence globally with its strategic acquisitions and focus on electric, hybrid, and autonomous vehicles. Generally, its global sales trajectory reflected the following trends.

- 2010-2015: Growth in the Chinese domestic market with expanded sales internationally.
- 2016-2019: Acquisitions and development of new energy vehicles.
- 2020-2023: Continued expansion with new models (like the Geometry series), acquisitions and partnership, such as with Daimler-Benz for electric vehicles.

Geely's global sales have improved significantly since it acquired Volvo and moved forward with its acquisition strategy. Its rank in global sales improved from 19th in 2016 to 14th in 2022 (Table 4). Even though its global sales increased by 18% from 2022 to 2023, it regressed to 15th place in the rankings due to Tesla's phenomenal 32% increase in global sales (Table 5). As demonstrated in Exhibit 5 and Exhibit 6. Geely moved Chinese competitors BAIC and SAIC in the rankings and closed the gap in the rankings on Changan, the only Chinese competitor ranked ahead of it in global vehicle sales. Geely already ranked ahead of its Chinese competitor, Great Wall, in 2016, and it maintained its strategic ranking over Great Wall.

Given its strategic acquisitions and focus on electric, hybrid, and autonomous vehicles, continued progress seemed to be part of Geely's future. Despite the many challenges faced by Geely in the U.S. and Europe it appeared that Geely was more likely than its other Chinese competitors to gain traction in these markets. This was especially true of its foreign subsidiaries, such as Volvo and Lotus.

Rank	Group	Country	Vehicles	
Jan-00	Toyota	Toyota Japan		
Jan-00	Volkswagen Group	oup Germany		
Apr-24	Hyundai / Kia	South Korea	78,89,538	
	General Motors (with SAIC-GM-Wuling) <sup>[e]</sup>	United States (China)	77,93,066 (9,937,434)	
Jan-00	Ford	United States	64,57,773	
Jan-00	Nissan Japan		55,56,241	
Jan-00	Honda Japan		49,99,266	
Jan-00	FCA	Italy / United States	46,81,457	
9	Renault	France	33,73,278	
10	Groupe PSA	France	31,52,787	
11	Suzuki	Japan	29,45,295	
12	SAIC	China 25,64,		
13	Daimler	Germany 25,20		
14	BMW	BMW Germany		
15	Changan China		17,15,871	
16	Mazda Japan		15,86,013	
17	BAIC	BAIC China 1		
18	Dongfeng Motor	Dongfeng Motor China 13,15,490		
19	Geely	China	12,66,456	
20	Great Wall	China	10,94,360	

Table 4: 2016 Global Auto Sales by Manufacturer.

**Source:** International Organization of Motor Vehicle Manufacturers, (2017), World Motor Vehicle Production: World Ranking of Manufacturers, Year 2016, International Organization of Motor Vehicle Manufacturers, 2017

Automaker	Year	Sold Autos	Status	World Rank
Toyota	2023	10,307,395	↑ 8%	1
	2022	95,66,961	↑ 1%	1
	2021	95,62,483	↑ 1%	1
VW	2023	92,39,575	↑ 12%	2
	2022	82,63,104	↓ 7%	2
	2021	88,82,346	↓ 5%	2
Hyundai Kia	2023	73,02,451	↑ <b>7%</b>	3
	2022	68,48,198	↑ <b>3%</b>	3
	2021	66,68,037	∱ 5%	3
Stellantis	2023	63,92,600	↑ 6%	4
	2022	60,02,900	↓ 2%	4
	2021	61,42,200	↓ 1%	5
GM	2023	61,88,476	↓ 1% ↑ 4%	5
	2022	59,41,737	↓ 6%	5
	2021	62,94,385	↓ 8%	4
Ford	2023	44,13,545	↓ 0 % ↑ 4%	6
1 old	2022	42,35,737	↑ 7%	6
	2022	39,42,755	↓7%	8
Honda	2023	41,88,039	↓ 7 % ↑ 8%	7
TIONUA	2023		↓ 9%	7
		40,74,372		
Nissan	2021	44,56,728	↓ 6% ↑ 5%	6
NISSan	2023	33,74,271	↑ 5%	8
	2022	32,25,478	↓ 21%	8
	2021	40,64,999	↑ 1%	7
BMW	2023	25,55,341	↑ <b>7%</b>	9
	2022	23,99,636	↓ 5%	10
	2021	25,21,596	↑ 8%	10
Changan	2023	25,53,052	↑ 9%	10
	2022	23,47,163	↑ 1%	11
	2021	23,14,547	↑ 15%	12
Mercedes	2023	24,93,177	↑ 2%	11
	2022	24,56,063	↑ 5%	9
	2021	23,30,169	↓ 5%	11
Renault	2023	22,35,345	↑ 9%	12
	2022	20,51,174	↓ 24%	12
	2021	26,89,454	↓ 5%	9
Maruti Suzuki	2023	20,66,219	↑ 7%	13
	2022	19,40,067	↑ 17%	13
	2021	16,52,653	↑ 13%	13
Tesla	2023	18,08,581	↑ 32%	14
	2022	13,69,611	↑ 47%	15
	2021	9,30,422	↑ 83%	18
Geely	2023	16,86,516	↑ 18%	15
	2022	14,32,988	↑ 8%	14
	2021	13,28,029	∱ 1%	14

Table 5: 2021 to 2023 Global Auto Sales by Manufacturer.

Source: F&I Tools (2024), Top 15 Automakers in the World | Car Sales Rank Worldwide, Year 2021-2023, F&I Tools.

Geely made the right moves to expand its global market position. The expanded global market sales reinforced its position among global automobile manufacturers. Expanded research and development in electric vehicle technology, batteries, and autonomous driving technologies reinforced and enhanced its position as it ranked among the global leaders. Continued steps must remain focused on expanded investments in those subsidiaries to expand its ownership position.

The future appeared bright, but Geely faced many obstacles. The trade war and geopolitical tensions remained along with supply chain disruptions and technology challenges as well as the pending presidential election in the United States.

### REFERENCES

- Agarwala, N, & Chaudhary, R.D (2021). 'Made in China 2025': Poised for success? India Q, 77(3), 424-461.
- Bloomberg (2022). Aston Martin Attracts Chinese Carmaker Geely as Shareholder.
- Boston, William (2022). Volvo Moves Closer to All-Electric Goal.
- Boston, William (2023). Volvo Rolls Out All-Electric SUV Aimed at First-Time Buyers. Wall Street Journal.
- Boston, William & Chopping, Dominic (2017). Volvo Accelerates Toward Electric Future with China's Geely. Wall Street Journal.
- Boston, William & Chopping, Dominic (2021). Volvo, Geely Back Away from Merger. Wall Street Journal.
- Brown, John Murray (2013). Geely restarts black cab production. Financial Times.
- Campbell, Peter (2016). Geely targets VW with Lynk launch in Europe. Financial Times.
- Campbell, Peter (2020). Geely develops new electric car technology to sell to rivals. Financial Times.
- Campbell, Peter (2021). Lotus to build electric sports cars in UK in £2.5bn production boost. Financial Times.
- Campbell, Peter (2022). Volvo to open dedicated electric car plant in Slovakia. Financial Times.
- Campbell, Peter (2023A). Volvo Cars' electric sales triple despite rising costs. Financial Times.
- Campbell, Peter (2023B), Chinese-backed carmaker Lotus 'studying' US factory. Financial Times.
- Cnbc.com (2023). Geely shares jump after automaker beats revenue expectations for 2022.
- Curran, Enda (2017). From 'Made in China' to 'Made by China for Chin, Alexa. Bloomberg News.
- Economist (2017). Business this week, Economist.
- Economist (2022). Chinese marques try to make inroads into Western markets. Economist.
- Ewing, Jack (2021). Volvo Plans to Sell Only Electric Cars by 2030. New York Times.
- F&I Tools (2024). Top 15 Automakers in the World Car Sales Rank Worldwide. F&I Tools.
- Green, Gavin (2017). Is this the most connected car ever? Economist.
- Hancock, Tom and Fei Ju, Sherry (2019). Lotus to start production in China under new owner Geely. Financial Times.
- Hayashi, Yuka, Wei, Lingling and Leary, Alex (2022). U.S. Moving to Confront China on Trade, Industrial Policy. Wall Street Journal.
- Hufford, Austen and DeBarros, Anthony (2023). Cars, Parts Help Drive A Rise in U.S. Imports. Wall Street Journal.

- International Organization of Motor Vehicle Manufacturers (2017). World Motor Vehicle Production: World Ranking of Manufacturers, Year 2016. International Organization of Motor Vehicle Manufacturers.
- Ip, Greg (2023). China's EV Juggernaut Is a Warning for the West. Wall Street Journal.
- Los Angeles Times (2017). China's clampdown on foreign investments raises questions for Hollywood as Wanda's Dick Clark deal stalls. Los Angeles Times.
- Mitchell, Tom and Fei Ju, Sherry (2018). Geely becomes China's third-largest carmaker. Financial Times.
- Monaghan, Angela (2015). Taxis! Black cabs jobs boost for Coventry. The Guardian.
- Moss, Trefor and Boston, William (2018). How China's Geely Turned a Disassembled Mercedes into a Global Car Company. Wall Street Journal.
- Nicholson, Chris V (2010). Geely of China Completes Acquisition of Volvo. New York Times.
- Ramey, Jay (2020). Volvo and Geely Are Thinking about Merging: Here's What's behind It. Autoweek.
- Reuters Staff (2019). China's Geely launches new electric car brand 'Geometry'. Reuters.
- Riley, Charles (2019). Daimler and Geely team up to build Smart cars in China, CNN.
- Shepherd, Christian (2021A). China's Geely challenges Tesla with launch of premium electric car brand. Financial Times.
- Shepherd, Christian (2021B). Renault targets China electric vehicle market with Geely tie-up. Financial Times.
- Shirouzu, Norihiko (2021). Volvo Details Strategic Plan Under Geely. Wall Street Journal.
- Shirouzu, Norihiko and Fletcher, Owen (2010). Geely to Unveil Plans for Volvo Plant in China. Wall Street Journal.
- Sun, Yilei and Goh, Brenda (2020). Fueled by Volvo, China's Geely seeks launchpad to enter auto giant orbit. Reuters.
- Tan, Danny (2022). Geely group sales exceed 2.2m units in 2021, up 5%. Paultan.
- Wang, Yifan (2023). Geely Auto's 2022 Profit Edged Higher While Revenue Jumped. Wall Street Journal.
- Wong, Jacky (2023). Your Next Electric Vehicle Could Be Made in China. Wall Street Journal.
- Wee, Sui-Lee (2017). Geely Buys Stakes in Volvo Trucks. New York Times.
- Yahoo! Finance (2019). Geely's Li Shufu is betting billions on global push. Yahoo! Finance.
- Zhejiang Geely Holding Group (2021). Our Business-Zhejiang Geely Holding Group. Zhejiang Geely Holding Group (ZGH).