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9B18N027

Ford motor company: Basic Financial Ratios[[1]](#footnote-1)

Xiaojun Zhu, Daniela Zapata, and Tabish Munir wrote this case under the supervision of Professor Zhichuan (Frank) Li solely to provide material for class discussion. The authors do not intend to illustrate either effective or ineffective handling of a managerial situation. The authors may have disguised certain names and other identifying information to protect confidentiality.

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On January 16, 2018, John Smith, a portfolio manager at Uria Investment, was made aware of the Ford Motor Company (Ford) safety recall schedule. Ford announced that it would recall more than one million vehicles worldwide as a result of faulty airbags that had failed to deploy upon collision, causing multiple deaths. It turned out that Ford had been aware of these faulty airbags but had not taken proactive measures to mitigate potential damage. This information was uncovered by the U.S. regulators who were investigating the multiple deaths in Ford vehicles.[[2]](#footnote-2)

Because of the investigation, Ford’s share price dropped from US$13.10 to US$12.18 per share on January 17,2018.[[3]](#footnote-3) Smith was trying to anticipate the future of Ford, as the holding of the Ford equity represented a significant portion of his investment portfolios. Investors had already started contacting him about the future of the company and the state of their investments. Smith anticipated that given the recent announcement, Ford’s share value would drop drastically, so he needed to act fast to mitigate the loss of value for his investors. Smith wondered whether Ford could recover from this disaster in the long term and whether its product safety would continue to be an issue and negatively affect its shareholders. While exploring different companies as potential places to reinvest the money, Smith wanted to remain in the automotive industry to maintain the portfolios’ diversification. He had thus explored other companies such as Toyota Motor Corporation (Toyota), General Motors Company (GM), and Honda Motor Company Ltd. (Honda) as possible alternatives to Ford.

FORD MOTOR COMPANY

Ford Motor Company, headquartered in Dearborn, Michigan, was an American multinational automobile manufacturer founded by Henry Ford in 1903. It was the second-largest automobile manufacturer based in the United States and employed approximately 202,000 workers worldwide.[[4]](#footnote-4) The company had been publicly incorporated since 1956; however, the Ford family continued to retain 40 per cent of its voting rights.[[5]](#footnote-5) Ford sold automobiles under the Ford brand, while its luxury automobiles were sold under the Lincoln brand. Ford specialized in large-scale manufacturing by using an industrial workforce. It had incorporated moving assembly lines into its plant operations and used modern economic and social systems to facilitate mass production. This method of production became known as Fordism and was widely applied to improve productivity within the industry. In addition, Ford aimed to maintain a lean inventory by adopting just-in-time inventory management.

INDUSTRY AND ECONOMIC CONDITIONS

Global automotive sales had increased by 5.6 per cent in 2016. Asian-Pacific markets had seen the highest growth and volume of automotive sales in 2016. The key contributor to the increase in sales was the Chinese market, given its high double-digit growth.[[6]](#footnote-6) In North America, the United States had seen a growth rate of 0.4 per cent in 2016, with 17.55 million cars sold—a record number. [[7]](#footnote-7) It was good news for the shrinking industry in the United States. The slowly improving economy and the increasing demand for trucks and SUVs seemed to finally turn the business around, at least for the time being. Global automotive unit sales continued to grow and reached 86.05 million units in 2017.[[8]](#footnote-8) The growth rate of the global automotive industry was expected to be about 3 per cent annually in 2017 and 2018.[[9]](#footnote-9) Sales of electric cars were expected to take up a larger share of the overall market, with most of the growth coming from China and Europe.[[10]](#footnote-10)

Overall, the 2017 year-end conditions were positive, with both global and domestic conditions showing improvements. Analysts and consumers expected these positive trends to continue into the near future. The World Bank forecasted global economic growth to increase to 3.1 per cent, with advanced economies expected to grow at a more conservative 2.9 per cent.[[11]](#footnote-11) Overall, consumer confidence increased; however, this consumer confidence was accompanied with the risk of overinflated asset prices and heightened equity prices.[[12]](#footnote-12) The auto manufacturing industry had seen a trend toward electrification and digitalization solutions. In addition, autonomous driving was just becoming another key trend expected to continue into the long-term future. In both technologies, Tesla Inc. had been a market leader, but other major players were also ramping up their investments by partnering with non-traditional technology companies to introduce new car models powered by new technologies. In January 2018, Ford pledged to spend $11 billion on electric cars by 2022, which doubled its original investment estimate.[[13]](#footnote-13) Regional start-ups were also entering the electric vehicle market, spurred by the $2 billion that had been invested in these start-up companies.[[14]](#footnote-14) The share of diesel engines in Europe was declining and expected to continue shrinking due to tightening regulations.[[15]](#footnote-15) Besides Europe, countries across the world, including major markets such as China and India, were planning to introduce bans and regulations on diesel cars.[[16]](#footnote-16) As a result, automotive companies saw a rise in environmental regulations, increasing their overall costs, while the increasing cost of fuel had reduced the demand for fuel-engine cars.

THE ALTERNATIVES

Smith and his team identified Ford’s main competitors to be GM, Toyota, and Honda. These companies competed directly with Ford, and thus represented viable alternatives to the Ford stock.

GM was an American multinational corporation headquartered in Detroit’s Renaissance Center. The company designed, manufactured, and distributed vehicles and vehicle parts, and was the second-largest automobile manufacturer in the world and the largest in the United States. GM had a strong position in the U.S. automotive market. The company’s best-known auto brands were Cadillac, Chevrolet, GMC, Holden, and Wuling.[[17]](#footnote-17)

Toyota, the biggest automotive manufacturer in the world, was a Japanese multinational automotive manufacturer headquartered in Toyota, Japan. Toyota was by far the world’s leader in the sales of hybrid electric vehicles, having successfully applied its mass-production strategy to its line of hybrid electric vehicles. According to Toyota, 80 per cent of Toyota cars sold in 1998 were still on the road.[[18]](#footnote-18)

Honda was a Japanese public multinational conglomerate corporation primarily known as a manufacturer of automobiles, aircraft, motorcycles, and power equipment. Since 1959, Honda had been the world’s largest motorcycle manufacturer. Furthermore, Honda was the world’s largest manufacturer of internal combustion engines measured by volume. In 2013, Honda became the first Japanese automaker to be a net exporter to the United States.[[19]](#footnote-19)

THE ANALYSIS

The team at Uria Investment had all of the information available to make their decision. They had the comparative financial information—balance sheets (see Exhibit 1), income statements (see Exhibit 2), and statements of cash flow (see Exhibit 3)—for the four companies, as well as the financial ratios (see Exhibits 4 and 5). Smith had also reviewed Ford’s stock price and was taking into consideration analyst forecasts for the stock price, as compared with its competitors (see Exhibits 6 and 7). Ford’s stock had fluctuated slightly during 2017, but the closing stock price was within the same range as at the beginning of the year. When Smith initially invested in Ford, he believed it would translate into long-term growth and profits for his clients. However, as he analyzed the situation, Smith was unsure whether Ford could recover from the numerous safety scandals while simultaneously catching up to competitors in terms of innovation. Smith and his team wondered what this information would uncover and how it would lead to the final decision.

EXHIBIT 1: BALANCE SHEETS OF FORD, TOYOTA, GENERAL MOTORS, AND HONDA, 2016–2017

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **In millions of US$**  **(except per share)** | **Ford** | | **Toyota** | | **General Motors** | | **Honda** | |
| 2017 | 2016 | 2017 | 2016 | 2017 | 2016 | 2017 | 2016 |
| **Assets** |  |  |  |  |  |  |  |  |
| Cash & marketable securities | 38,927 | 38,827 | 26,879 | 26,153 | 23,825 | 24,415 | 18,919 | 15,126 |
| Accounts receivable | 62,809 | 11,102 | 78,520 | 83,027 | 8,164 | 8,700 | 23,744 | 24,468 |
| Inventories | 10,277 | 8,898 | 21,436 | 18,342 | 10,663 | 11,040 | 12,255 | 11,673 |
| Prepaid expenses & other current assets | 3,889 | 49,634 | 33,209 | 34,492 | 26,092 | 32,048 | 3,974 | 4,211 |
| **Total current assets** | 115,902 | 108,461 | 160,044 | 162,014 | 68,744 | 76,203 | 58,892 | 55,478 |
| Net plant, property & equipment | 35,327 | 32,072 | 91,511 | 86,662 | 36,253 | 32,603 | 65,627 | 60,601 |
| Investments | 31,320 | 32,133 | 175,563 | 166,799 | 9,073 | 8,996 | 27,586 | 27,396 |
| Deferred income taxes | 10,973 | 9,705 | 0 | 8,601 | 23,544 | 33,172 | 1,091 | 1,607 |
| Other assets | 64,286 | 55,580 | 12,912 | 6,497 | 74,868 | 70,716 | 17,120 | 16,953 |
| Total long-term assets | 141,906 | 129,490 | 279,986 | 268,559 | 143,738 | 145,487 | 111,424 | 106,557 |
| **Total assets** | 257,808 | 237,951 | 440,030 | 430,573 | 212,482 | 221,690 | 170,316 | 162,035 |
| **Liabilities** |  |  |  |  |  |  |  |  |
| Short-term borrowings & notes payable | 48,265 | 46,984 | 91,368 | 85,069 | 26,965 | 23,797 | 10,440 | 9,846 |
| Accounts payable | 23,282 | 21,296 | 53,197 | 48,570 | 23,929 | 23,333 | 9,103 | 8,547 |
| Other current liabilities | 23,053 | 22,001 | 10,860 | 9,823 | 25,996 | 38,051 | 29,228 | 30,231 |
| **Total current liabilities** | 94,600 | 90,281 | 155,425 | 143,462 | 76,890 | 85,181 | 48,771 | 48,624 |
| Long-term debt | 102,666 | 93,301 | 88,949 | 86,944 | 67,254 | 51,326 | 36,758 | 33,829 |
| Other liabilities | 25,611 | 25,131 | 33,939 | 47,041 | 33,337 | 41,347 | 19,247 | 19,480 |
| **Total liabilities** | 222,877 | 208,713 | 278,313 | 277,447 | 177,481 | 177,854 | 104,776 | 101,933 |
| **Shareholders’ equity** | |  |  |  |  |  |  |  |
| Common equity | 41 | 41 | 3,567 | 3,529 | 14 | 15 | 773 | 765 |
| Retained earnings | 21,218 | 15,634 | 158,127 | 149,282 | 17,627 | 26,168 | 60,308 | 55,060 |
| Treasure stock, reserves & other equity | 13,672 | 13,563 | 23 | 315 | 17,360 | 17,653 | 4,459 | 4,277 |
| **Total equity** | 34,931 | 29,238 | 161,717 | 153,126 | 35,001 | 43,836 | 65,540 | 60,102 |
| **Total liabilities and equity** | 257,808 | 237,951 | 440,030 | 430,573 | 212,482 | 221,690 | 170,316 | 162,035 |

Source: Created by the case authors using data from Bloomberg, Bloomberg Professional, accessed March 9, 2018.

EXHIBIT 2: INCOME STATEMENTS OF FORD, TOYOTA, GENERAL MOTORS, AND HONDA, 2016–2017

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **In millions of US$**  **(except per share)** | **Ford** | | **Toyota** | | **General Motors** | | **Honda** | |
| 2017 | 2016 | 2017 | 2016 | 2017 | 2016 | 2017 | 2016 |
| **Revenue** | 156,776 | 151,800 | 255,286 | 236,786 | 145,588 | 149,184 | 129,498 | 121,724 |
| ­–Cost of goods sold | 140,436 | 135,087 | 210,302 | 188,453 | 114,869 | 120,499 | 100,513 | 94,474 |
| **Gross profit** | 16,340 | 16,713 | 44,984 | 48,333 | 30,719 | 28,685 | 28,985 | 27,250 |
| ­­–Operating expenses | 11,527 | 10,927 | 26,535 | 24,540 | 20,703 | 18,723 | 21,208 | 23,054 |
| ++Selling, general & administrative | 11,527 | 10,972 | 16,937 | 15,740 | 9,575 | 10,354 | 14,812 | 17,580 |
| ++Other operating expenses | 0 | 0 | 9,597 | 8,800 | 11,128 | 8,369 | 6,396 | 5,474 |
| **Operating income** | 4,813 | 5,786 | 18,449 | 23,793 | 10,016 | 9,962 | 7,777 | 4,196 |
| –Non-operating (income) loss | –3,335 | –1,055 | –1,845 | –1,079 | –1,847 | –2,046 | –1,538 | –1,101 |
| ++Interest expense, net | 1,023 | 608 | 271 | 295 | 309 | 381 | –184 | –86 |
| +++Interest expense | 1,133 | 894 | 271 | 295 | 575 | 563 | 115 | 151 |
| –––Interest income | 110 | 286 | 0 | 0 | 266 | 182 | 299 | 237 |
| ++Other non-operating (income) loss | –4,358 | –1,663 | –2,116 | –1,374 | –2,156 | –2,427 | –1,354 | –1,015 |
| **Pre-tax income** | 8,148 | 6,841 | 20,294 | 24,872 | 11,863 | 12,008 | 9,315 | 5,297 |
| Income tax | 520 | 2,189 | 3,358 | 5,592 | 15,727 | 2,581 | 3,612 | 2,425 |
| **Net income** | 7,628 | 4,652 | 16,936 | 19,280 | –3,864 | 9,427 | 5,703 | 2,872 |
| **Reference items** |  |  |  |  |  |  |  |  |
| EBITDA | 13,266 | 14,458 | 33,350 | 37,346 | 22,277 | 19,781 | 14,014 | 9,704 |
| EBIT | 4,813 | 5,741 | 18,449 | 23,793 | 10,016 | 9,962 | 7,777 | 4,197 |
| Common shares outstanding | 3,901 | 3,902 | 3,263 | 3,338 | 1,420 | 1,524 | 1,811 | 1,811 |
| Earnings per share | 1.91 | 1.16 | 5.60 | 6.18 | -2.65 | 6.12 | 3.16 | 1.59 |

Note: EBITDA = earnings before interest, taxes, depreciation, and amortization; EBIT = earnings before interest and taxes.

Source: Created by the case authors using data from Bloomberg, Bloomberg Professional, accessed March 9, 2018.

EXHIBIT 3: CASH FLOW STATEMENTS OF FORD, TOYOTA, GENERAL MOTORS, AND HONDA, 2016–2017

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **In millions of US$**  **(except per share)** | **Ford** | | | **Toyota** | | **General Motors** | | **Honda** | |
| **2017** | **2016** | | **2017** | **2016** | **2017** | **2016** | **2017** | **2016** |
| **Cash flows from operating activities** | | | | |  |  |  |  |  |
| Net income | 7,602 | | 4,596 | 16,938 | 19,280 | –3,864 | 9,427 | 5,703 | 2,872 |
| Non-cash Items | −792 | | 3,612 | 293 | 1,451 | 11,956 | −2,833 | −4,127 | 2,252 |
| Depreciation & amortization | 8,453 | | 8,717 | 14,902 | 13,554 | 12,261 | 9,819 | 6,237 | 5,508 |
| Change in net working capital | 2,833 | | 2,925 | −551 | 2,903 | −3,015 | 580 | 373 | 963 |
| **Cash used for operating** | 18,096 | | 19,850 | 31,582 | 37,188 | 17,338 | 16,993 | 8,186 | 11,595 |
| **Cash from investing activities** | | | |  |  |  |  |  |  |
| Investments in property, plant, and equipment | −7,049 | | -6,992 | −10,940 | −10,341 | −8,453 | −8,384 | −5,724 | −7,055 |
| Net change in long-term Investment | −14,713 | | −17,173 | −22,233 | −7,337 | 0 | 0 | 0 | 0 |
| Other investing activities | 2,370 | | −1,187 | 5,290 | −8,854 | −15,619 | −26,635 | −413 | −239 |
| **Cash used for Investing** | −19,392 | | −25,352 | −27,883 | −26,532 | −24,072 | −35,019 | −6,137 | −7,294 |
| **Cash flows from financing activities** | | | | |  |  |  |  |  |
| Dividends paid | −2,584 | | −3,376 | −5,869 | −5,875 | −2,233 | −2,368 | −1,500 | −1,322 |
| Share repurchase | −131 | | −145 | −6,512 | −2,528 | −3,507 | −2,500 | −0.1 | −0.1 |
| Increase (decrease) in debt | 6,260 | | 11,028 | 9,536 | 5,492 | 18,455 | 21,027 | 3,312 | 1,280 |
| Other financing activities | −151 | | −107 | −626 | −620 | -305 | −163 | −744 | −752 |
| **Cash from financing** | 3,394 | | 7,400 | −3,471 | −3,531 | 12,410 | 15,996 | 1,068 | −794 |
| Effects of exchange rate changes | 489 | | −265 | −125 | −1,666 | 348 | −213 | −12 | −1,124 |
| Net change in cash | 2,587 | | 1,633 | 103 | 5,459 | 6,024 | −2,243 | 3,105 | 2,383 |
| **Reference items** |  | |  |  |  |  |  |  |  |
| Cash & cash equivalents | 38,927 | | 38,827 | 52,999 | 48,736 | 23,825 | 24,415 | 18,919 | 15,126 |

Source: Created by the case authors using data from Bloomberg, Bloomberg Professional, accessed March 9, 2018.

EXHIBIT 4: COMPARATIVE FINANCIAL RATIOS OF FORD, TOYOTA, GENERAL MOTORS, AND HONDA, 2016–2017

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | **Ford** | | | **Toyota** | | **General Motors** | | **Honda** | |
|  | | **2017** | **2016** | | **2017** | **2016** | **2017** | **2016** | **2017** | **2016** |
| **Liquidity ratios** | | |  | |  |  |  |  |  |  |
| Cash ratio | 0.41 | | 0.43 | | 0.34 | 0.34 | 0.31 | 0.29 | 0.39 | 0.31 |
| Acid test ratio  (Quick ratio) | 1.08 | | 0.55 | | 0.68 | 0.76 | 0.42 | 0.39 | 0.87 | 0.81 |
| Current ratio | 1.23 | | 1.20 | | 1.03 | 1.13 | 0.89 | 0.89 | 1.21 | 1.14 |
| **Efficiency** |  | |  | |  |  |  |  |  |  |
| Days receivables | 146 | | 27 | | 112 | 127 | 21 | 21 | 67 | 73 |
| Days payables | 61 | | 57 | | 92 | 94 | 76 | 71 | 33 | 33 |
| Days of inventory | 27 | | 24 | | 37 | 36 | 34 | 33 | 45 | 45 |
| **Financial leverage** | | |  | |  |  |  |  |  |  |
| Debt to total assets | 0.86 | | 0.88 | | 0.63 | 0.64 | 0.84 | 0.80 | 0.62 | 0.63 |
| Leverage ratio | 6.38 | | 7.14 | | 1.73 | 1.81 | 5.07 | 4.06 | 1.60 | 1.70 |
| Long-term leverage ratio | 2.94 | | 3.19 | | 0.55 | 0.57 | 1.92 | 1.17 | 0.56 | 0.56 |
| Total debt to EBITDA | 16.80 | | 14.44 | | 8.41 | 7.43 | 7.97 | 8.99 | 7.48 | 10.50 |
| Interest coverage ratio | 4.25 | | 6.42 | | 68.08 | 80.65 | 17.42 | 17.69 | 67.63 | 27.70 |
| **Profitability** |  | |  | |  |  |  |  |  |  |
| Return on common equity | 21.8% | | 15.9% | | 10.5% | 12.6% | −11.0% | 21.5% | 8.7% | 4.8% |
| Return on assets | 3.1% | | 1.9% | | 3.8% | 4.8% | −1.8% | 4.5% | 3.3% | 1.9% |
| Return on invested capital | 1.4% | | 3.3% | | 6.8% | 5.3% | −1.5% | 7.8% | 3.4% | 1.8% |
| Gross margin | 10.4% | | 11.0% | | 17.6% | 20.4% | 21.1% | 19.2% | 22.4% | 22.4% |
| EBITDA margin | 8.5% | | 9.5% | | 13.1% | 15.8% | 15.3% | 13.3% | 10.8% | 8.0% |
| Operating margin | 3.1% | | 3.8% | | 7.2% | 10.1% | 6.9% | 6.7% | 6.0% | 3.5% |
| Pre–tax margin | 5.2% | | 4.5% | | 7.9% | 10.5% | 8.1% | 8.0% | 7.2% | 4.4% |
| Net income margin | 4.9% | | 3.1% | | 6.6% | 8.1% | –2.7% | 6.3% | 4.4% | 2.4% |
| **Growth and valuation** | | | | |  |  |  |  |  |  |
| One-year sales growth | 3.3% | | | 0.7% | 7.8% | 5.1% | –2.4% | –12.9% | 6.4% | 11.7% |
| One-year operating income growth | −16.8% | | | –17.8% | –22.5% | –5.4% | 0.5% | 79.9% | 85.3% | –31.5% |
| One-year net income growth | 64.0% | | | –37.7% | –12.1% | –3.0% | –141.0% | –2.7% | 98.6% | –38.3% |
| Enterprise multiples | 2.95 | | | 2.54 | 8.99 | 7.19 | 2.36 | 2.10 | 7.32 | 9.17 |
| Enterprise value-to-sales | 0.25 | | | 0.24 | 1.17 | 1.13 | 0.36 | 0.28 | 0.79 | 0.73 |
| Price earnings ratio (P/E) | 7.85 | | | 6.92 | 5.60 | 6.18 | 5.80 | 5.51 | 9.82 | 16.11 |
| **Activity ratio** |  | | |  |  |  |  |  |  |  |
| Asset turnover | 0.61 | | | 0.64 | 0.58 | 0.55 | 0.69 | 0.67 | 0.76 | 0.75 |
| Accounts receivable turnover | 2.50 | | | 13.67 | 3.25 | 2.85 | 17.83 | 17.15 | 5.45 | 4.97 |
| Inventory turnover | 13.67 | | | 15.18 | 9.81 | 10.27 | 10.77 | 10.91 | 8.20 | 8.09 |
| Accounts payable turnover | 6.36 | | | 6.57 | 9.31 | 9.39 | 4.84 | 4.97 | 11.06 | 10.52 |
| Cash conversion cycle (days) | 108 | | | 104 | 104 | 100 | 26 | 27 | 82 | 82 |

Note: EBITDA = earnings before interest, taxes, depreciation, and amortization.

Source: Created by the case authors using data from Bloomberg, Bloomberg Professional, accessed March 9, 2018.

EXHIBIT 5: FINANCIAL RATIO FORMULAS

|  |  |
| --- | --- |
| **Liquidity ratios** |  |
| Cash ratio | (Cash equivalents + cash) ÷ Current liabilities |
| Acid test ratio (Quick ratio) | (Cash + marketable securities + Accounts receivables) ÷ Current liabilities |
| Current ratio | Current assets ÷ Current liabilities |
| **Efficiency** |  |
| Days receivables | Accounts receivable ÷ Sales × 365 |
| Days payables | Accounts payable ÷ Cost of sales × 365 |
| Days of inventory | Inventory ÷ Cost of Sales × 365 |
| **Financial leverage** |  |
| Debt to total assets | Total debt ÷ Total assets |
| Leverage ratio | Total liabilities ÷ Shareholders’ equity |
| Long-term leverage ratio | Long-term debt ÷ Shareholders’ equity |
| Total debt to EBITDA | Total debt ÷ EBITDA |
| Interest cover ratio | EBIT ÷ interest |
| **Profitability** |  |
| Return on common equity (ROE) | Net income ÷ Shareholders’ equity |
| Return on assets | (Net income + Interest ÷ (1 − tax rate)) ÷ Total assets |
| Return on invested capital | (Net income – Dividends) ÷ Total capital |
| Gross margin | (Sales – Cost of sales) ÷ Sales |
| EBITDA margin | EBITDA ÷ Total revenue |
| Operating margin | Operating profit before taxes ÷ Sales |
| Pre-tax margin | (Net income + Income tax) ÷ Sales |
| Net income margin | Net income ÷ Sales |
| **Growth and valuation** |  |
| One-year sales growth | (Salest – Salest−1) ÷ Salest |
| One-year operating income growth | (Operating incomet – Operating incomet-1) ÷ Operating incomet |
| One-year net income growth | (Incomet – Income-1) ÷ Incomet |
| Enterprise multiple | EV ÷ EBITDA |
| Enterprise value-to-sales | EV ÷ Sales |
| P/E ratio | Market price of common share ÷ Earnings per share |
| **Activity ratio** |  |
| Asset turnover | Sales ÷ Total assets |
| Accounts receivable turnover | Sales ÷ Accounts receivable |
| Inventory turnover | Cost of goods sold (COGS) ÷ Inventory |
| Accounts payable turnover | Purchases ÷ Accounts payable |
| Cash conversion cycle (days) | Days inventory + Days receivable outstanding – Days payable outstanding |

Note: EBITDA = earnings before interest, taxes, depreciation, and amortization; EBIT = earnings before interest and taxes; “t” represents year t; “t − 1” represents the year before year t; EV = enterprise value = (market capitalization) + (value of debt) + (minority interest) + (preferred shares) − (cash and cash equivalents).

Source: Created by the case authors.

EXHIBIT 6: STOCK PERFORMANCE OF FORD, GENERAL MOTORS, TOYOTA, AND HONDA, 2016–2018

**HONDA**

**FORD**

**General Motors (GM)**

Source: Created by the case authors using data from Yahoo Finance, finance.yahoo.com, accessed October 30, 2018, https://ca.finance.yahoo.com/quote/F/.

EXHIBIT 7: FORD STOCK PRICES, 2016–2018

Source: Created by the case authors using data from Yahoo Finance, finance.yahoo.com, accessed October 30, 2018, https://ca.finance.yahoo.com/quote/F/.

1. This case has been written based on published sources only. Consequently, the interpretation and perspectives presented in this case are not necessarily those of Ford Motor Company or any of its employees. [↑](#footnote-ref-1)
2. Ford Motor Company, “Ford Issues Safety Compliance Recall; Expands Safety Recall for Vehicles Containing Certain Takata Airbag Inflator,” press release, January 18, 2018, accessed May 7, 2018, https://media.ford.com/content/fordmedia/fna/us/en/

   news/2018/01/17/ford-issues-safety-compliance-recall--expands-safety-recall-for-.html. [↑](#footnote-ref-2)
3. Ford Motor Company, Stock Price Data for January 17, 2018, MarketScreener, accessed May 7, 2018, www.4-traders.com/FORD-MOTOR-COMPANY-12542/company/; All currency amounts are shown in U.S. dollars. [↑](#footnote-ref-3)
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