United Technologies Corporation, April 2008[1]

On April 17, 2008, United Technologies Corporation ('UTC;' *Ticker: UTX*) announced its first quarter results for fiscal year (FY) 2008. Revenue was 12% higher compared to a year prior and profit up 22%, resulting from higher demand for its Pratt & Whitney jet engines and Otis elevators. In addition, a weaker dollar helped to increase the value of foreign revenue: while 7% in revenue increase came from organic growth, much of the rest came from the beneficial effects of the dollar depreciation, primarily against the Euro.

The company reiterated its earnings-per-share (EPS) guidance of $4.65 - $4.85 for FY 2008 (UTC's fiscal year ends on December 31). "As we see the US and a few of the European economies slowing, we are preparing by taking costs out of the business," said Greg Hayes, VP of accounting and finance, adding "There is a little bit of economic uncertainty on the horizon, but we are very confident in our guidance."

Although profits and orders were higher in all six of the company's key business units, the company's operating margins in five out of six units fell slightly short of analysts' estimates.[2] Combined with concerns about impacts of rising commodity costs and potential moderation in the growth in the global construction sector, UTC's stock price fell $1.84 upon the earnings announcement, declining 2.5% relative to the previous day's closing price. With 973 million shares outstanding and a share price of $70.79 at the end of the day, the company's equity was now worth $69.0 billion. From the start of the year, the stock had fallen slightly over 7%, mirroring a similar decline in the value of the S&P 500 index of US stocks in that time.

One week prior to this, UTC announced that, in a long-planned transition, the COO of the company, Louis Chenevert, 50, would take over the role of CEO from George David, 66. Mr. David would remain with the company as Chairman. During his 14-year tenure as CEO, Mr. David presided over a nearly ten-fold increase in UTC's share price, a period during which the value of the S&P500 index of stocks increased three-fold, and the share price of a key competitor, GE, rose five-fold.[3]

United Technologies

United Technologies is a multi-industry company that operates in six business segments (with globally recognized brand names in each segment): commercial and home heating, ventilation, and air-conditioning systems (Carrier), elevators and escalators (Otis), jet engines for commercial and military aviation (Pratt & Whitney), commercial and military helicopters (Sikorsky), advanced aerospace and industrial products (Hamilton Sundstrand), and security and fire safety products & services (Kidde). Some analysts observed that, in a broader sense, the company can be really thought of as operating in two markets: building infrastructure (Otis, Carrier, Kidde), and aerospace/defense (Pratt & Whitney, Hamilton Sundstrand, Sikorsky).

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[1] *This case was developed by Professor Anant K. Sundaram of the Tuck School of Business at Dartmouth College as a basis for class discussion. Any errors of fact or interpretation are those of the casewriter. © June 2008.*

[2] 'Operating margin' is earnings before interest and taxes (EBIT) as a percentage of revenue.

[3] Put differently, in order to replicate Mr. David's performance, Mr. Chenevert would need to take the stock from its current level to slightly over $700 per share by the year 2022.

The company had 2007 sales of $54.8 billion, with 27.1% gross margin (i.e., sales minus cost of goods sold as percent sales), and 12.9% operating margin. To put these numbers into perspective, the gross margin and operating margin for a typical firm in the S&P 500 index of stocks are 35% and 18%, respectively. Net income for UTC in 2007 was $4.2 billion (i.e., 7.7% net margin), and the company paid 30% of its net income as dividends. About 60% of revenue comes from operations and exports outside the US. *Exhibit 1* shows UTC's key financials for fiscal years 2005, 2006, and 2007.

UTC has a history of steady revenue, earnings and EPS growth, with a compounded annual growth rate (CAGR) over the past ten years of 8.7%, 14.4%, and 14.5% per year, respectively, on these metrics. In 2006-07, revenue grew 14.5%. Of this revenue growth, 9% was from organic growth, 2% from acquisitions, and 3% from favorable currency movements.

A 2004 *Business Week* cover story on the company called UTC a classic decentralized industrial conglomerate with successful business units that "…derive little of their identity from UTC."[4] The article goes on to say: "What ties it all together is that each of UTC's businesses involve basic manufacturing – operations that are susceptible to quality improvements, efficiency improvements, and technological improvements. The ability to continually wring out incremental gains in those areas [which the CEO calls] 'process disciplines' is UTC's greatest strength."

Current Business Challenges, Valuation Implications, and Assumptions

While analysts were generally bullish on UTC's prospects – 16 out of 18 analysts had either a 'buy' or 'buy/hold' rating on the company – there were some concerns being expressed. The primary macro-risks that were cause for concern included a slowdown in global economic growth, reversal of the dollar depreciation, increase in raw material costs, a slowdowns in the commercial aerospace and in US and Chinese non-residential construction segments. The company-level issues most commonly mentioned by analysts were: Improvements in Pratt & Whitney's installed base of large transport carriers, and higher levels of organic growth in the Carrier, Sikorsky, and Fire & Security divisions. *Exhibit 2* provides information on UTC's segment financials for fiscal year 2007.

Revenue growth rates for FY2008 are forecasted to be 7%-8%, declining slowly over time in subsequent years to 3%-4% per year by 2012. Cost of goods sold (including depreciation charges) during the forecast period is expected to be 73% of sales, and SGA plus R&D expenses (including depreciation charges), 14.25% of sales. Net working capital is expected to be 6%-7%% of sales and Capital Expenditure 2% of sales during the forecast period. Depreciation will equal Capital Expenditure.

Long-run growth rate in free cash flows would be determined by the long-run assumed return on invested capital (ROIC) and a "Re-investment Rate", which, in turn, is a function of operating profits and net capital investments in the last forecast period.[5] ROIC in the long run could be assumed to be 14% to 16%. (Capital markets data relevant to UTC, and for the US financial markets, are shown in *Exhibit 3*.)

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[4] "The Unsung CEO," *Business Week*, October 25, 2004.

[5] Specifically, Reinvestment Rate = [Capex – Depreciation + Change in Net Working Capital]÷[EBIT×(1–t)]. For details, see *Sundaram (2005) "Terminal Values in Corporate Valuation."* The tax rate is estimated to be 30% during the forecast period.

Exhibit 1

United Technologies Corporation: Financials for 2005 – 2007

(US$ millions, unless otherwise mentioned; Fiscal Year-end is December 31)

	2005	***2006***	***2007***
Net Sales	42,725	47,829	54,759
Product Sales	*30,641*	*34,271*	*39,240*
Service Sales & Other	*12,084*	*13,558*	*15,519*
Cost of Goods Sold	30,935	34,740	39,922
R&D	1,367	1,529	1,678
SG&A	5,241	5,462	6,109
Depreciation & Amortization	*984*	*1,033*	*1,173*
Operating Income	5,182	6,098	7,050
Net Financial Expenses	498	606	666
Earnings before Taxes	4,684	5,492	6,384
Income Taxes	1,253	1,494	1,836
Minority Interests and Other Income	362	266	324
Net Income	3,069	3,732	4,224
Dividends	872	1,087	1,262
Assets			
Cash & Short Term Investments	2,247	2,546	2,904
Accounts Receivable	8,667	8,940	10,111
Inventories	5,659	6,657	8,101
Other Current Assets	633	701	955
TOTAL CURRENT ASSETS	17,206	18,844	22,071
Net Property Plant & Equipment	5,623	5,725	6,296
Goodwill	13,007	14,146	16,120
Net Intangible Assets	3,059	3,216	3,757
Other Assets	7,030	5,210	6,331
TOTAL ASSETS	45,925	47,141	54,575
Liabilities			
Accounts Payable	3,820	4,263	5,059
Short-term Borrowings	1,612	857	1,085
Current Maturities of LTD	693	37	48
Accrued Liabilities	9,220	10,051	11,277
TOTAL CURRENT LIABILITIES	15,345	15,208	17,469
Long Term Debt	5,935	7,037	8,015
Benefit and Pension Obligations	2,813	2,926	2,562
Other Long Term Liabilities	4,063	3,837	4,262
Equity	16,991	17,297	21,355
TOTAL LIABILITIES + EQUITY	45,925	47,141	54,575

Sources: SEC Filings, Annual Reports, Company website. Capital expenditure for 2005, 2006, and 2007 were $929 million, $954 million, and $1153 million, respectively.

Exhibit 2

United Technologies: Segment Data for and Source of Segment Revenue Growth in 2007

Panel A: Segment Data – 2007

(US$ billions, unless otherwise mentioned)

	Sales	*Operating Income*	*Operating Margin (%)*	*Total Assets*	*Capital Exp.*	*Depreciation & Amort'n*
Otis	11.90	2.32	19.5%	7.72	0.14	0.19
Carrier	14.64	1.38	9.4%	10.33	0.18	0.19
Fire & Security	5.75	0.44	7.7%	11.14	0.10	0.20
Pratt & Whitney	12.13	2.01	16.6%	9.27	0.38	0.31
Hamilton Sundstrand	5.63	0.97	17.2%	8.97	0.16	0.16
Sikorsky	4.79	0.37	7.8%	3.41	0.06	0.08

Source: Company website.

Panel B: Source of Segment Revenue Growth - 2007

	Total Growth	*Organic*	*Inorganic*	*Currency-Related*	*Other*
Otis	16%	8%	NA	6%	1%
Carrier	9%	5%	--	4%	--
Fire & Security	21%	2%	12%	7%	--
Pratt & Whitney	9%	NA	NA	NA	NA
Hamilton Sundstrand	13%	9%	NA	2%	NA
Sikorsky	48%*	48%	--	--	--

Source: Company website. 'NA' = not available.

** Sales were lower than normal in 2006 because of a six-week strike by Sikorsky's unionized workforce.*

Exhibit 3

United Technologies: Capital Markets and Other Data

(US$ millions, except per share items; data for Dec 31 2007 except noted otherwise)

Data Item	
No. of Shares Outstanding	973 million
Stock Price	$76.54
EPS for 2007	$ 4.27
EPS Guidance for 2008	$4.65 - $4.85
Current P/E Ratio	17.92
Forward P/E Ratio	16.46 - 15.78
Market-to-Book Ratio	2.94
Price-to-Sales Ratio	1.36
UTC Credit Rating *(April 2008)*	A
UTC Equity Beta @ Current Debt/Capital* *(April 2008)*	1.01
UTC Size Premium	0.29%
UTC Value Premium	0.06%
Estimate of US Market Risk Premium *(April 2008)*	5.00%
US Government 30-Year T-bond Yield *(April 2008)*	4.60%
'A' Spread Over 30-Year T-bond Yield *(April 2008)*	220 bp
Average Annual S&P500 Return (1900-2007)	11.20%
Average Annual S&P500 Return (1996-2007)	9.79%

Sources: Company filings, company website, Bloomberg, Ibbotson Associates, finance.yahoo.com, finance.google.com

** UTC's debt-to-equity at market value is 12.3%, implying a debt-to-capital ratio of 11%.*