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CS FIRST BOSTON

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Kellogg Company

An Open Letter to Warren Buffett

K (BUY)

- Kellogg matches the criteria for a compelling investment based on business, management, financial, and market tenets.
- Current uncertainty allows investors to buy a great business at a reasonable price.
- Outstanding operating and financial characteristics mitigate risk.
- Multiyear share price underperformance places the shares at a discount to value.

Open Letter to Warren Buffett

Dear Mr. Buffett:

I am a great admirer of your intellectual framework and sensational long-term investment results. Over the years, I have found the common-sense advice in your annual reports to be of great value. Unfortunately, your investment tenets and my latest diet have much in common: both are relatively easy to understand but awfully difficult to stick to.

While I realize you spend time with savvy people and allocate time to the investment process itself, I feel compelled to outline an investment case for a stock in my coverage: Kellogg Company. Kellogg appears to offer all the characteristics you look for in an attractive business, and the shares can be purchased at a reasonable price as the result of current investor consternation (Mr. Market sometimes feels a little down, doesn't he?). The result should be above-average shareholder returns with modest risk.

In making my case, I have followed the outline put forth by Robert Hagstrom in his excellent book, *The Warren Buffett Way*[1]. Hagstrom lays out four general "tenets" for consideration: business, management, financial, and market. All of these tenets were gleaned from your writings and comments over the years.

Business Tenets

Most long-term investors agree that the decision to purchase shares in a company and the decision to purchase the company itself should be approached in the same way. As such, investors have to focus more on understanding the basics of a business than on macroeconomic issues.

Hagstrom suggests focusing on three questions:

- Is the business simple and understandable?
- Does the business have a consistent operating history?
- Does the business have favorable long-term prospects?

Simple and Understandable Kellogg clearly has a straightforward business model. Over 80% of its sales come from ready-to-eat cereals around the world, with the balance derived from grain-based convenience foods, including Pop-Tarts toaster pastries, Nutri-Grain cereal bars, and Eggos frozen waffles. The company's margin structure is very stable. As an example, the mean operating margin over the past 15 years has been 17.6% and the standard deviation has been a modest 0.97%.

Beyond company-specific attributes, the cereal industry has exhibited an attractive industry structure over time[2], the product is easy to relate to and the cost per serving, at about $0.25, is reasonable.

Consistent Operating History In this case, the statistics speak for themselves. Kellogg has posted 51 consecutive years of sales gains, 39 years of dividend increases, and has suffered only one down earnings year since 1952. As far as I can measure, Kellogg has consistently earned returns in excess of its cost of capital over the past 50 years.

Not only has Kellogg achieved consistent growth, but its *rate of growth* has been outstanding. To illustrate, the company has grown sales at a 10.1% compound annual rate over the past 30 years and has increased its net income, excluding unusual items, at a 10.7% clip. Over 30 years, the difference between growing at a market rate (6-7%) and at Kellogg's rate (10-11%) is profound. One dollar of earnings grows to $6.60 over 30 years at 6.5%, versus one dollar of earnings growing to $21.10 over 30 years at 10.7%. Is that why you say your holding period is forever?

Favorable Long-Term Prospects I would break long-term prospects down into two pieces: attractive business economics and growth opportunities. The first element is generally associated with a strong franchise, and the latter with a product with innate—and generally global—appeal.

[1] Robert G. Hagstrom, Jr., *The Warren Buffett Way: Investment Strategies of the World's Greatest Investor* (New York: John Wiley & Sons, Inc., 1994), pp. 75-98.

[2] This point was made by Berkshire Hathaway's vice chairman, Charlie Munger, in an outstanding speech he made at the University of Southern California. Fortunately for Berkshire Hathaway shareholders who do not subscribe to *Outstanding Investor Digest*, you mailed out transcripts of the speech in 1995.

I believe Kellogg has an outstanding franchise. Beyond the consistency in financial performance outlined above, the business commands a market leadership position. Kellogg holds a 45% dollar share of the global ready-to-eat cereal market, and owns 12 of the top 15 selling cereal brands worldwide. Kellogg is three times the size of its nearest competitor, and has over 50% of the market outside the United States.

The product is needed and desired. Cereal is a basic food that is nutritious, convenient, tasty, and affordable. While there are substitutes both within the cereal aisle and outside the aisle, the Kellogg brand name and consistent quality have allowed the business to generate above-average growth and profitability over time. Finally, there are no government regulations of significance hampering the industry, allowing the extraordinary economics to translate into wealth creation for owners.

Tables 1 and 2 speak to the growth potential of the core cereal business by highlighting the changes of recent years. Two points stand out. First, while per capita consumption growth remains satisfactory at about 4% in developed markets, the introduction of cereal products in new markets offers an outstanding opportunity for long-term volume growth. Second, the acceptance and consumption of cereal have been strong in a number of markets not associated with the product. While cereal will never be as ubiquitous as Coca-Cola, the concept of increased consumption applies, if on a much smaller scale.

Table 1
Global Ready-to-Eat Cereal Market
in millions, except per capita

	1988	1995	CAGR
Category size (pounds)	4,165	5,860	5.0%
Population reached	1,500	2,100	5.0
Per capita consumption	2.7	2.8	0.5
Core population	1,500	1,600	0.9
Core per capita	2.7	3.6	4.2
New population	0	500	NM
New per capita	0	0.2	NM

Source: Kellogg Company.

Table 2
Per Capita R-T-E Cereal Consumption
pound basis

Country	1988	1995	CAGR
France	1.1	3.2	16.5%
Mexico	0.9	2.2	13.6
Brazil	0.1	0.1	0.0
Spain	0.4	1.5	20.8
Italy	0.3	0.6	10.4
South Korea	0.1	0.4	21.9

Source: Kellogg Company.

Management Tenets
It is always great to start with a strong business proposition, as Kellogg offers, but it is also very important to have management that is astute in allocating capital to maximize value for owners. Kellogg's current senior management team seems to possess the right philosophy regarding capital allocation, and its deeds support this contention.

The questions that need to be answered in this section include:

- Is management rational?
- Is management candid with shareholders?
- Does management resist the institutional imperative?

Rationality Rationally allocating the resources of any organization—that is, investing only in opportunities that offer returns in excess of opportunity cost—is central to the success of capitalism. It is also very difficult, especially when you have lots of money to play with as Kellogg does.

It is worth noting the change in capital allocation philosophy that occurred with the appointment of Kellogg's current CEO, Arnold Langbo. During his tenure (he started January 1, 1992), capital expenditures have come down, seven divestitures of noncore businesses have been effected, the share buyback program has accelerated, the dividend payout ratio has been reduced, and the company has formally adopted value-based management as its principal financial measurement tool.

The net result has been an upswing in returns on invested capital and a surge in owner earnings (more on owner earnings, later). Acquisitions, certainly in vogue in the food industry, have been

shunned, as Kellogg realized there is no business that can be acquired offering the returns and growth prospects of the worldwide cereal industry.

The bottom line is that Kellogg has invested sufficiently in its core, growth business—new plants in China, India, Thailand, Argentina, and Latvia have gone up in recent years—and has returned excess cash to shareholders in the form of dividends and share repurchases. In the last three reported years, Kellogg returned approximately $2.2 billion to shareholders, over 11% of net sales during that period. Even taking into account the change in net debt, the company returned almost 10% of sales, on average, over the past three years.

Finally, I estimate that Kellogg's return on *incremental* investment has exceeded 50% over the past three years. To the best of my knowledge, only Coca-Cola has achieved returns as high in the large-capitalization, consumer nondurable area.

Candor Kellogg is a reasonably simple business to understand. However, over the years management has been relatively cryptic in the area of disclosure. It now appears that information is flowing a bit more freely: in 1994, for the first time, the company disclosed operating profit for each major geographic region.

Management laid out six core strategies about 24 months ago, and has stuck close to the script. The core strategies themselves are noteworthy. Three deal with the operations—focus on core business, new products, and new markets—and three deal with financial matters—managing capital prudently, reducing costs, and repurchasing shares with excess cash.

Institutional Imperative The institutional imperative is the tendency of managements to act in a similar fashion. It has two major applications: an unwillingness to change, and a desire to imitate other managers, even if those other managers are pursuing value-destroying activities.

The simplicity of Kellogg's business belies profound change under the surface. In recent years, head count has been reduced 13%, North American cereal capacity has been cut by 20%, U.S. cereal prices have been cut 12%, share buybacks have accelerated, and the capital allocation focus has sharpened. It does not appear that any of these actions would have taken place if it had been "business as usual."

Financial Tenets

Terms like "franchise value" or "competitive advantage" are hollow unless they are supported by objective, quantifiable financial performance. "Growth" in and of itself says little about wealth creation unless it is accompanied by attractive returns.

Questions to answer here include:

- Are returns in the business attractive?
- What are "owner earnings," as distinct from reported earnings per share?
- Are the operating margins attractive?
- Does the business pass the $1.00 test?

Attractive Returns By this standard, Kellogg is a world-class business. The company's return on equity has averaged 36% over the past decade and was 45% in 1995 (both figures exclude extraordinary items). Return on invested capital, an unlevered measure, averaged 22% over the past ten years. During the same time, the company's weighted average cost of capital was in the 12-14% range. As Kellogg has sharpened its capital allocation focus, it is likely that returns in five or ten years will be higher than they are today.

In order to specifically manage value, Kellogg has adopted the value-based metric of "economic profit." Economic profit is the same as economic value added. Economic profit is determined by taking the difference between net operating profit after tax (NOPAT) and a capital charge. The capital charge consists of invested capital in the business times the opportunity cost of capital. Kellogg's economic profit was $485 million in 1995 ($785 million in NOPAT minus a $300 million capital charge), and the company believes it can double its economic profit by the year 2000.

It is also important to note that Kellogg has achieved these returns without the use of much financial leverage. In fact, Kellogg is one of the few industrial companies in the U.S. with an AAA-rated balance sheet. The operating profit-to-interest ex-

pense ratio has consistently exceeded 20. This is one of the few companies that could leverage its operational strength with the selective use of debt.

Owner Earnings Traditional GAAP-based earnings have limited utility in the valuation process. The primary reason for this, as you have pointed out, is that earnings do not directly account for the required investment in the business. Your notion of owner earnings—levered free cash flow for finance wonks—accounts for invested capital growth, and hence makes more sense as a tool for assessing intrinsic value.

Table 3 shows Kellogg's owner earnings progression over the past ten years. Two things stand out. First, owner earnings were negative as recently as 1989. This was the result of overinvestment in the business and poor earnings results. Second, owner earnings have soared under the watch of new management and have exceeded GAAP earnings in each of the past two years.

Table 3
Kellogg's Owner Earnings, 1985–1995

Year	Owner Earnings Per Share
1995	$3.77
1994	3.40
1993	2.27
1992	1.63
1991	2.42
1990	1.78
1989	(0.02)
1988	(0.35)
1987	0.13
1986	0.72
1985	0.59
CAGR (1985-1995)	20.3%

Owner earnings = net income + depreciation - capital expenditures - change in working capital - net acquisitions.
Source: Kellogg Company.

It is reasonable to assume that owner earnings per share will grow at a 10-12% rate over the next 10-20 years, driving significant value.

Margins As noted above, Kellogg has high and stable margins. Table 4 shows Kellogg's gross margin, operating margin, and SG&A expense as a percentage of sales over the past 25 years in five-year increments. Three points appear noteworthy. First, gross margins have steadily ascended. While the gross margin expansion in recent years has been fueled by price increases, productivity seems to be the central long-term driver. Sales per employee, for example, have improved at better than a 9% clip compounded annually since 1970. Second, operating margins have demonstrated little variance, suggesting that the company manages for operating margin stability. Finally, SG&A—the bulk of which is marketing spending—has risen sharply as a percentage of sales, effectively offsetting the gross margin improvement.

Table 4
Kellogg's Margins, 1970–1995

Year	Gross Margin	Operating Margin	SG&A as a % of Sales
1970	39.0%	15.9%	23.2%
1975	34.1	16.9	17.1
1980	37.6	16.0	21.6
1985	45.2	19.1	26.2
1990	48.3	17.1	31.2
1995	54.6	18.0	36.7
Average	43.1%	17.2%	26.0%

Source: Kellogg Company.

The recent price reductions in the U.S. can best be framed by considering the gross margin/SG&A increase. More directly, the company is giving up some gross margin, to be funded with lower SG&A spending, in an effort to deliver more value to consumers.

The $1.00 Test One point is axiomatic for a value-creating company: $1.00 invested in the business is worth more than $1.00 in the market. This has been true for Kellogg over the years. At year-end 1995, the stock traded at a price-to-book value ratio of 10.5 times and enterprise value (market value of equity plus debt) was 5.3 times greater than invested capital. Kellogg's market value-added—the difference between enterprise value and invested capital—was in excess of $14 billion.

Market Tenets

Once a business and management check out on the criteria reviewed above, the final determination is whether an investor can buy part of the company at a reasonable price. This looks to be the case with Kellogg today.

Table 5 is a straightforward dividend discount model. Instead of using a 30-year Treasury rate as a

discount rate, I added 300 basis points to the risk-free rate.[3] Assuming Kellogg's owner earnings grow approximately 12%, intrinsic value is about $100 per share.

Given the prevailing expectation set, the economics of the business, and management's owner orientation, it appears that the probability of excess returns versus the market comfortably outweighs the risk of substandard results. Mr. Buffett, not only does Kellogg appear to fit into your investment regimen, it can probably be worked into your personal regimen as well. Between shaving with a Gillette razor and sipping cherry Cokes, you could sneak in a bowl of Frosted Flakes. (This idea could work big all around.)

Sincerely,

Michael Mauboussin

N.B.: CS First Boston Corporation has, within the last three years, served as a manager or co-manager of a public offering of securities for Kellogg. Closing prices are as of July 10, 1996.

Berkshire Hathaway (BRK, 31,500)
Coca-Cola (KO, 47 1/2, Buy)*
Gillette (G, 60 1/8, Buy)*
Kellogg (K, 74 1/4, Buy)

*Followed by a different CS First Boston analyst.

Table 5
Kellogg Dividend Discount Model

Discount rate = 10%

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Prior year cash flow		673	787	882	988	1,106	1,239	1,388	1,554	1,741
Growth rate		17%	12%	12%	12%	12%	12%	12%	12%	12%
Cash flow	673	787	882	988	1106	1239	1388	1554	1741	1950
Discounted value	642	651	663	675	687	699	712	725	738	752

Sum of present value of discounted cash flows = 6,943

Cash flow in year 10 = 1,950
Growth rate = 5%
Capitalization rate = 5%
Value at end of year 10 = 38,992

Present value of residual value = 13,666
Market value = 20,609
Shares outstanding = 212
Value per share = $97

[3]This is consistent with your comments at the 1994 annual meeting, as reported by *Outstanding Investor Digest*, June 23, 1994, p. 27.

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