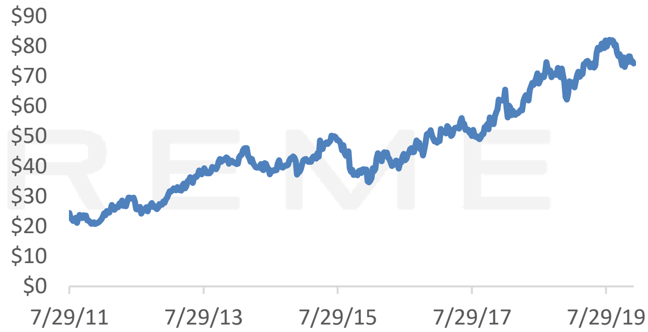
Bireme Capital 2/5/2020	**Dunkin' Brands (DNKN)**	Evan Tindell Chief Investment Officer

Net Debt		$3,100
Enterprise Value		$9,500
Price (2/5/20)		$77.00
Market Cap		$6,400
	Revenue	EBIT
2015	$811	$345
2016	$819	$401
2017	$835	$406
2018	$867	$432



THE LOW-VOLATILITY ANAMOLY

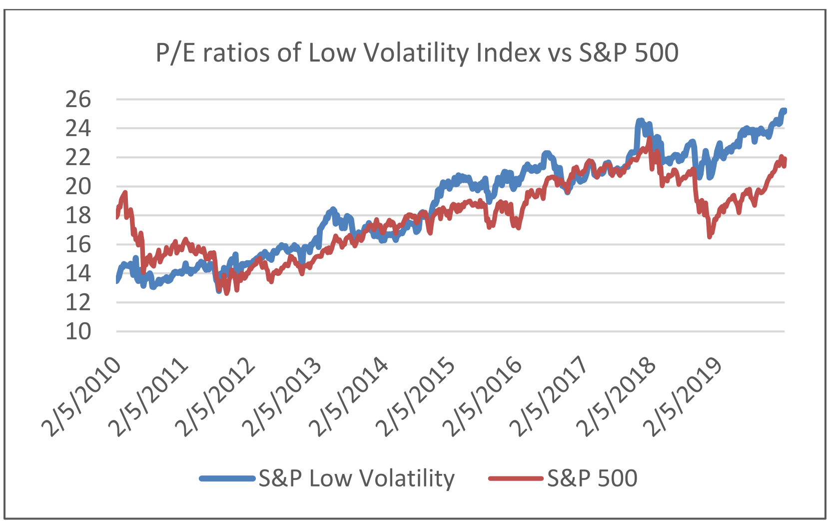
For most of its existence (Jan 2010 to today), the S&P Low Volatility Index (SP5LVI Index on Bloomberg) traded in line with the S&P 500 on a valuation basis. However, investor interest in these stocks has grown materially, likely due to academic research[1] showing the outperformance of stocks whose prices varied less than the market.

This interest has meant asset growth for ETFs that employ a low-volatility strategy. For example, AUM for the iShares US Minimum Volatility ETF, USMV, has skyrocketed, up about 15x in the last five years.

	Assets Jan 2014	Assets Nov 2019
Invesco Low Vol (SPLV)	$3,900m	$11,800m
iShares US Min Vol (USMV)	$2,400m	$36,900m

Source: Bloomberg

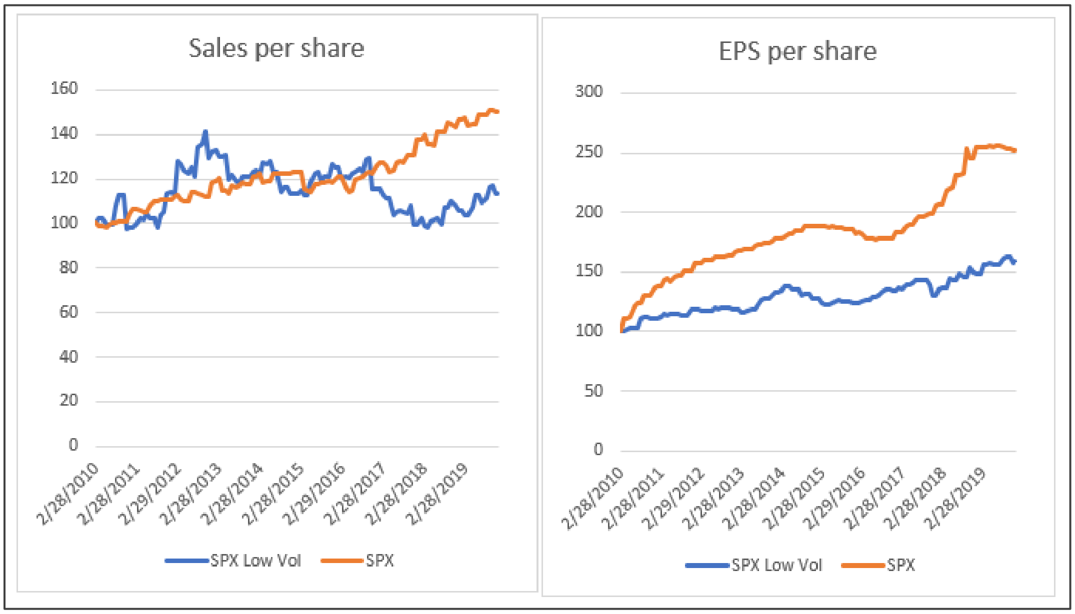
Unsurprisingly, the surge in assets thrown at low-vol has resulted in higher valuations, and these stocks now trade at >25x earnings vs 22x for the S&P 500.



Source: Bloomberg

[1] For example, see AQR "The Low-Volatility Anomaly: Market Pricing on Systemic Risk vs Mispricing" from 2016.

This rise in valuation is not justified by higher growth. In fact, low volatility stocks have trailed the S&P both on sales and EPS growth. One reason for their lagging growth is that low-volatility strategies tend to have more mature, stable businesses than the overall market. They tend to exclude today's fast-growing technology stocks – such as Google, Amazon, and Salesforce – which have driven a material portion of the S&P 500's sales and earnings growth.



Source: Bloomberg

Today, an investor in low-vol stocks is paying above-market multiples for below-average growth. We do not think this is justified, despite the academic research and impressive trailing returns.

Low-vol investors appear to be relying on a simple extrapolation heuristic – low-vol has outperformed in the past, and therefore will outperform in the future – rather than doing analysis beyond the summary statistics. A deeper analysis indicates that low-vol is historically expensive and thus unlikely to continue to outperform[2].

Our investment strategy is predicated on exploiting mispricings that occur when other investors rely on simple heuristics rather than sophisticated cash flow valuation. We think low-vol today is a nexus of heuristic-based, valuation-agnostic buying. As such, we have recently gone hunting in low-volatility sectors such as consumer staples and utilities for short candidates.

We believe we have found a good prospect in Dunkin' Brands (DNKN), which is included in various low-volatility ETFs. In fact, the ETF with the largest portion of its assets in DNKN is Invesco's S&P MidCap Low Volatility ETF (XMLV), which has seen a 40x increase in AUM over the last four years.

[2] There's nothing wrong with factor investing; in fact, our philosophy is centered around the value factor. But we do not buy value indiscriminately; value is merely the starting point for deeper analysis. In contrast to low-vol, our work on value indicates that value is both historically cheap and high-quality.

DUNKIN' BRANDS VALUATION AND GROWTH

DNKN trades at a robust valuation, as it has for years. At current prices, the stock is valued at 20x EBIT, 25x earnings, and 30x FCF. While this might be reasonable for a franchise business with lots of growth ahead of it, most of DNKN's growth is in the past.

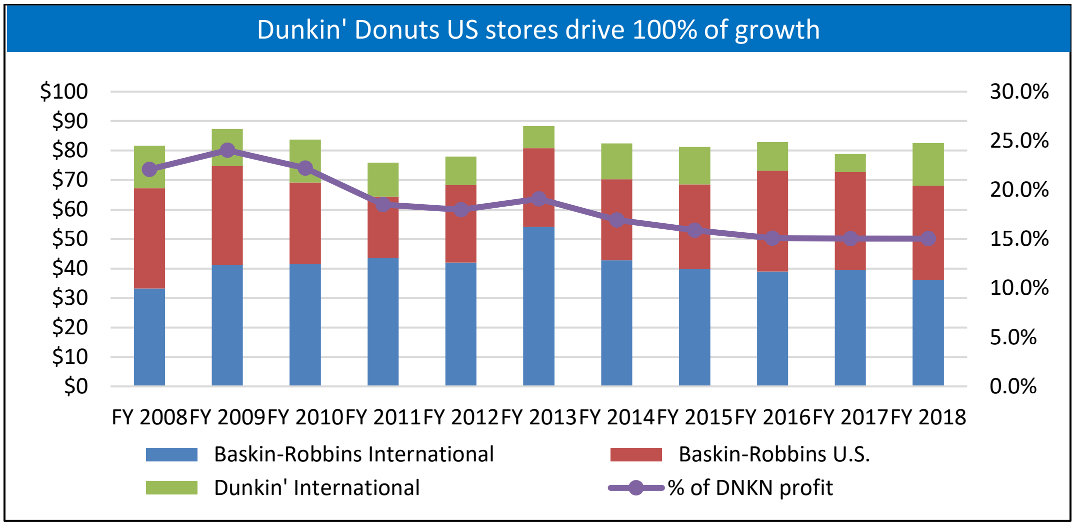
When the stock came public in 2011, DNKN's "Dunkin' Donuts" concept (recently shortened to "Dunkin'") had ~6,800 US locations, a figure which was growing at a rate of 400-500 per year (about 6%). Today there are over 9,400 US locations, and growth has slowed to a rate of about 250 net US additions per year (<3%). Based on DNKN's guidance, this growth rate is not likely to increase.

Due to saturation and the increases in competition we describe below, we think DNKN franchisees may open only 150 net new stores in the US in 2023 and 2024.

Source: Dunkin' Brands annual reports

Slower US growth is important given the fact that DNKN's brands – including Baskin Robbins (BR) – have seen little international growth over the past decade. BR has thousands of stores internationally, but revenue has been stalled out at $115-120m over the last few years.

In fact, Dunkin' US generates 85% of the company's total profits. This share has been growing due to BR's mediocre performance and Dunkin' Donuts lackluster international profits. Below is a chart of total profits among DNKN's three smaller segments: Dunkin' Int'l, BR Int'l, and BR US.



Source: Dunkin' Brands annual reports

Meanwhile, the only segment that has grown profits, Dunkin' Donuts US, is seeing increasing competition.

COMPETITION FOR DUNKIN' US

Let's look at each of their major competitors in turn.

Starbucks – SBUX has been executing nearly flawlessly of late. Their innovations around a core espresso-based drink platform have driven material SSS growth. Starbucks has guided to ongoing 3-4% unit growth in the US, which will add about 500-600 new locations annually. They are not dependent on franchisees to pursue this expansion, and the strong cash returns these stores generate make this growth almost guaranteed to occur (even if they cannibalize some existing SBUX revenue). SBUX is also far ahead of DNKN in terms of digital strategy, including mobile ordering and contactless payments.

McDonald's – It's no secret that McDonald's has made a big push to expand sales of breakfast items and coffee over the last decade. They introduced lattes and cappuccinos in 2009, and cold brew coffee in 2017.

The quotes below, from recent earnings calls, gives you an idea of how focused MCD is on competing even more with DNKN in breakfast and coffee:

Jul 2019	*"There's plenty of other entrants who are competing in the breakfast market. We have more work to do"* *"Breakfast is the biggest opportunity to regain some of the guest counts that we lost"*
Apr 2019	*"Coffee has become the most frequently ordered item on our McDonald's app. We also introduced Donut Sticks at the breakfast daypart, which resonated with our customers."*
Jan 2019	*"We believe there are a lot more legs left in the McCafé brand, both drip coffee and premium coffee"* *"More personalized offers is just one example of the focus we have on breakfast, particularly in the US"*
Nov 2018	*"Breakfast remains an opportunity. We want to do better in breakfast."* *"It's very competitive out there in breakfast."*

With nearly 14,000 US locations and reputation for low prices and speed that is similar to DNKN, McDonald's increased emphasis on breakfast could draw away Dunkin's core customers.

Panera Bread – While Panera has participated in breakfast for a long time, they have made a concerted effort in the past year to up their game, with the stated goal of generating >25% of sales from the morning daypart. Here are some of the changes they announced in April 2019:

- New on-the-go sandwiches
- Added cold brew and rolled out a new line of hot coffee, freshly ground on-premises
- Revamped bakery line
- Breakfast delivery with its own drivers
- Rapid pick-up via the Panera App

Given Panera's 2,000 large locations and breakfast-friendly brand, we believe an improvement in their breakfast menu could impact Dunkin'.

Wendy's **–** While Wendy's has been unsuccessful in breakfast in the past, it recently revealed a new breakfast menu which it will be implementing in 2020. Wendy's highlights "strong customer demand, simple menu execution, and franchisee alignment" as the reasons for its decision. They are putting significant resources behind the initiative: their 5,800 locations plan to hire 20,000 employees and the corporate parent is spending about $20m. If they have success, some of it will be at DNKN's expense.

Caffé Nero and Costa **–** These are European brands, but both have big US ambitions. The Coca-Cola Company did not buy Costa for over $5b to keep the store count at 3,800 worldwide. They have no US locations at this time, but it is safe to assume that will change. A US rollout of the brand will impact competitors like Dunkin'.

Caffé Nero is a smaller chain, having only 1,000 locations in the UK. However, they seem to be making US expansion a high priority. In fact, they have been growing quickly right in Dunkin's backyard, with more than 15 locations popping up around downtown Boston in the last few years.

Competition from all these companies is perhaps why DNKN's same store sales (SSS) have flattened out from the 5% increase seen in 2011. FY 2018 saw less than 1% growth in SSS. We forecast this trend towards lower growth to continue.

This lower SSS, coupled with expense growth in line with recent ~3% recent growth in US hourly wages, could negatively impact franchisee profitability and hurt their ability to expand store counts.

MANAGEMENT AND INSIDER TRADES

There is nothing notable about the quality of DNKN's management team. The current CEO was recruited from MCD and started in his role in 2018. The old CFO resigned in 2017 to become CFO at Yeti Coolers, a smaller (albeit faster growing) company, and an insider was promoted to CFO.

What is notable is the lack of a single insider purchase at DNKN in the 8 years since it went public. Bain Capital and TCG sold out long ago, and management's share sales include a recent disposition of $1.1m worth of shares by the CFO. The red markers below indicate share sales.

Source: Bloomberg

OUR FORECAST

Given the increase in competition and the fact that Dunkin has already expanded into the vast majority of the white space in the US, we think that growth in US store count and revenue per store will continue to fade, from current levels of 3% and 1% to 1.5% and 0%, respectively.

Over the five-year period of our forecast, this means that US stores will grow from 9,300 to 10,400, and US EBIT will grow from $350m to $422m. We project international EBIT to remain flat, in line with historical trends.

We do expect Dunkin's US profit growth to occur at a high incremental margin. However, since the segment is already at >50% EBIT to sales, we expect only a small increase in margins over the period (from 58% to 60.5%).

All in all, we expect net income to increase from $240m in 2018 to $294m in 2023, equivalent to growth in EPS from $2.90 to $3.55. We think that the final year EPS growth figure of 2.2% supports a multiple of 18x earnings, in line with the broader market.

This implies a mere 1.0% IRR from current prices of ~$77. Should the market at any time begin to demand a higher return from DNKN, the stock price could contract materially.

STORE COUNT		FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Dunkin US Locations	6,300	6,395	6,566	6,772	6,990	7,278	7,677	8,047	8,392	8,828	9,141	9,419	9,704	9,947	10,165	10,369	10,524
Net additions			171	206	218	288	399	370	345	436	313	278	285	243	219	203	156
US store % growth			2.7%	3.1%	3.2%	4.1%	5.5%	4.8%	4.3%	5.2%	3.5%	3.0%	3.0%	2.5%	2.2%	2.0%	1.5%
Average store count in period		6,348	6,481	6,669	6,881	7,134	7,478	7,862	8,220	8,610	8,985	9,280	9,562	9,825	10,056	10,267	10,446
DUNKIN' US REVENUE																	
Revenue per Dunkin' US store		$ 62,572	$ 59,758	$ 60,338	$ 63,614	$ 68,040	$ 69,700	$ 69,791	$ 71,910	$ 70,611	$ 65,338	$ 65,389	$ 66,043	$ 66,373	$ 66,639	$ 66,839	$ 66,972
YoY US rev/ Dunkin US store			-4.5%	1.0%	5.4%	7.0%	2.4%	0.1%	3.0%	-1.8%	-7.5%	0.1%	1.0%	0.5%	0.4%	0.3%	0.2%
Dunkin' US Revenue		$397	$387	$402	$438	$485	$521	$549	$591	$608	$587	$607	$631	$652	$670	$686	$700
DUNKIN' US EBIT (incl corporate)																	
Dunkin' U.S.		$288	$276	$293	$334	$355	$374	$404	$430	$467	$445	$466					
Corporate & Other		-$112	-$107	-$118	-$150	-$136	-$122	-$120	-$166	-$113	-$110	-$114					
Total Dunkin' US EBIT		$176	$169	$175	$184	$219	$252	$283	$264	$354	$335	$352	$373	$388	$402	$414	$423
margin		*44.2%*	*43.6%*	*43.4%*	*42.0%*	*45.1%*	*48.4%*	*51.7%*	*44.6%*	*58.2%*	*57.1%*	*58.0%*	*59.0%*	*59.5%*	*60.0%*	*60.3%*	*60.5%*
incremental margins			*69.4%*	*39.5%*	*26.3%*	*73.1%*	*93.1%*	*113.8%*	*-46.7%*	*535.1%*	*90.6%*	*85.7%*	*83.2%*	*74.8%*	*78.1%*	*72.8%*	*70.8%*
cumulative incr margin since 2008			*69.4%*	*-17.3%*	*20.6%*	*49.0%*	*61.7%*	*71.2%*	*45.4%*	*84.7%*	*84.0%*	*84.2%*					
BR + INT'L EBIT																	
BR Int'l		$33	$41	$42	$44	$42	$54	$43	$40	$39	$40	$36					
BR US		$34	$33	$28	$21	$26	$27	$27	$29	$34	$33	$32					
Dunkin' Int'l		$15	$13	$15	$12	$10	$7	$12	$13	$10	$6	$14					
Total EBIT BR + Int'l		$82	$87	$84	$76	$78	$88	$82	$81	$83	$79	$83	$83	$83	$83	$83	$83
Total EBIT		**$257**	**$256**	**$258**	**$260**	**$297**	**$340**	**$366**	**$345**	**$437**	**$414**	**$435**	**$455**	**$471**	**$485**	**$496**	**$506**
Interest							$68	$96	$100	$101	$122	$119	$119	$119	$119	$119	$119
PBT							$272	$270	$245	$336	$292	$316	$337	$352	$366	$378	$387
Taxes							$65	$65	$59	$81	$60	$76	$81	$84	$88	$91	$93
Tax rate							24.0%	24.0%	24.0%	24.0%	20.4%	24.0%	24.0%	24.0%	24.0%	24.0%	24.0%
Net Income							**$207**	**$205**	**$186**	**$255**	**$233**	**$240**	**$256**	**$268**	**$278**	**$287**	**$294**
YoY								*-1.1%*	*-9.2%*	*37.3%*	*-8.8%*	*3.2%*	*6.6%*	*4.6%*	*4.0%*	*3.2%*	*2.5%*
EPS							$2.50	$2.47	$2.24	$3.08	$2.81	$2.90	$3.09	$3.23	$3.36	$3.47	$3.56
																	$63.99
IRR											**IRR flows**	**-$77.00**	**$3.09**	**$3.23**	**$3.36**	**$3.47**	**$67.55**

Other Variables	
Price	$77.00
Shares	82.8
Terminal Multiple	18.00x
IRR	1.03%

RISKS TO THE SHORT

- More international growth than projected
- Growth in SSS from espresso-based drinks
- Buyout from JAB Holdings
- Material growth in margins

International growth

Both Baskin Robbins and Dunkin' Donuts have been growing their international unit counts. Baskin' Robbins has grown from 3500 to 5500 and Dunkin' from 2400 to 3400 over the past decade. However, these segments have not substantially grown revenues in the past five years, which appears to indicate that these brands have hit a ceiling in terms of the quality of new international locations.

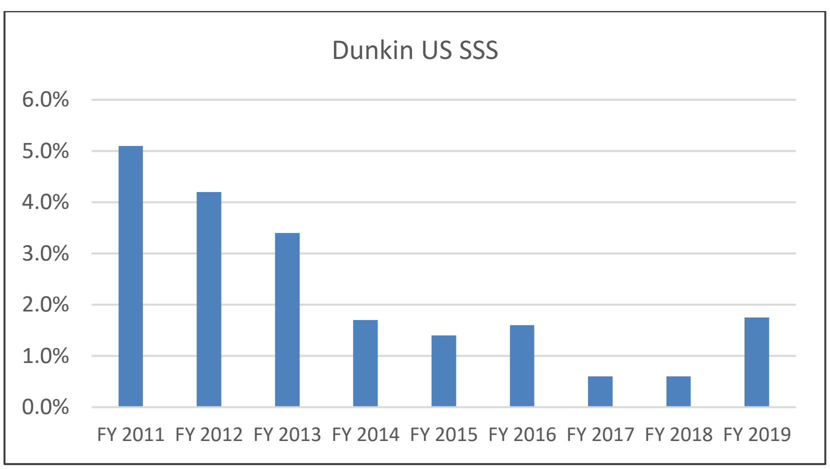
In the case of Baskin Robbins, this should not be much of a surprise. The brand struggles even in its home market of the US, and US-based ice cream franchises (in general) have not had much success internationally. Baskin's international profits have declined since 2013, from $54m to $36m.

Dunkin' Donuts revenue, by contrast, has grown internationally since 2013. But the small absolute level, at $22m last year, makes it clear that it will be tough for this segment to move the needle. Even a doubling of Dunkin' Donuts International profits would only increase DNKN EBIT by 3%.

Espresso-based growth

Dunkin' is not known for its espresso drinks. In fact, it waited until 2018 to make a major investment in espresso-based menu products, which included $65m for espresso machines.

Since then it has seen some growth in sales of lattes and cappuccinos, with espresso-based drinks now making up 10% of total sales and growing 40% last year. Unfortunately for Dunkin' shareholders, this has not translated to material same store sales growth. Although YTD 2019 has seen ~100 bps higher growth relative to 2018, the overall trend since 2011 is decidedly negative. We suspect that current trends may worsen over time as the novelty and initial marketing push of 'handcrafted' espressos fades into history.



Source: Dunkin' Brands earnings releases

Buyout from JAB Holdings

Acquisitions are a risk for any short position. It's even more of a risk when a multi-billion holding company has acquired 80% of the other public companies in the target's industry. This is what has happened in coffee, as much of the industry has been rolled up by the German conglomerate JAB Holdings.

JAB's push into coffee began in 2012 with the purchase of Peet's Coffee. Below is their full coffee-related timeline:

Date	JAB Acquiree	Price	EBITDA Multiple
2012	Peet's	$940m	20.0x
2012	Caribou Coffee	$340m	11.2x
2013	D.E. Master Blenders	$7,700m	15.0x
2014	Einstein Noah Bagels	$468m	10.9x
2016	Keurig Green Mountain	$13,900m	12.8x
2016	Krispy Kreme	$1,300m	19.4x
2017	Panera Bread	$7,480m	18.1x
2018	Pret A Manger	$2,000m	15.0x

Source: Bloomberg

JAB has been by far the most aggressive buyer in this segment, for example having paid a 75% premium for GMCR in 2016. Given this aggression and JAB's focus on publicly traded coffee and snack companies, we find it reasonable to view the risk of a DNKN buyout through the lens of JAB.

While we don't doubt that they would be interested in the business, the current market valuation of DNKN implies to us that JAB is unlikely to offer a large premium for the company. At 18x EBITDA, the stock is just 2 turns from the highest multiple JAB ever paid. DNKN's debt, at 6x EBITDA, also make it difficult for a private equity buyer to pay a much higher price simply by levering the balance sheet.

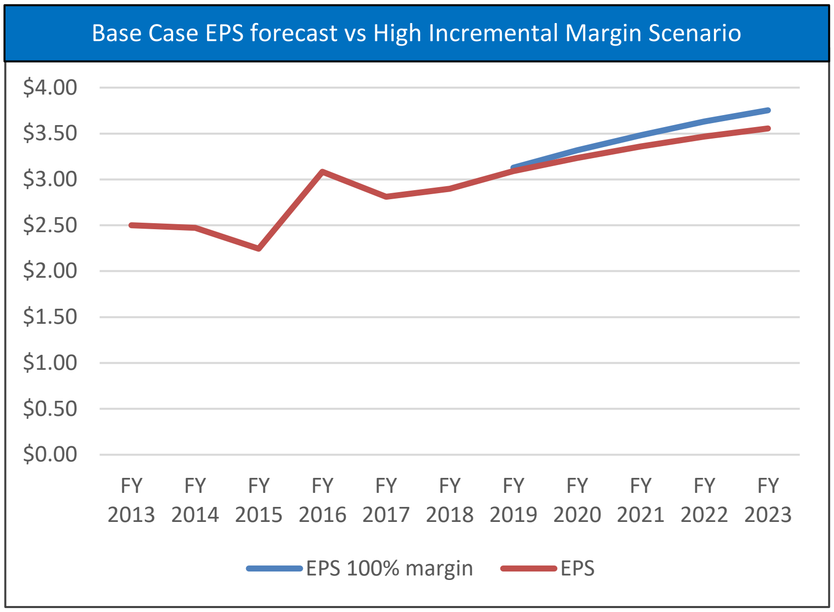
Still, a buyout will always remain a risk, and the possibility will increase if the company can grow into its valuation.

Material growth in margins

Dunkin's business, as a franchisor primarily collecting royalties, is very high margin. In fact, if you subtract corporate-level costs from their Dunkin' US segment profits (which is how we model the business), the EBIT margin of that key segment is 58%, up from 44% in 2008.

We model DNKN's US revenue growth as generating 70-80% incremental margins, leading to a roughly 2.5% increase in margins over the course of our forecast. This is consistent with Dunkin's historical incremental margins. While we are skeptical that Dunkin's future growth will have as much operating leverage as in the past, we think it is prudent and conservative to assume that it does.

There would be upside to our earnings forecast (i.e., downside to our short position) if incremental margins approached 100%. If DNKN was able to keep its US costs completely flat and 100% of revenue drops down to profits, EPS would increase to $3.75 rather than $3.55.



Source: Bireme Capital estimates

CONCLUSION

Low-vol stocks have been driven to above-market valuations by simplistic, heuristic-based, valuation-agnostic buying. This has created opportunities for value-sensitive short sellers such as us. At $77 per share, DNKN trades at 30 times free cash flow and 21 times our projected earnings *five years out.* We think the stock will generate a near-zero IRR from current levels and should handily underperform a concentrated portfolio of value stocks. Should markets correct, the downside in DNKN could be substantial.