**Dunkin' Brands Group, Inc. (NasdaqGS:DNKN)**

**Risks and Derivative Recommendation**

**BU423 Options, Futures and Swaps**

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**1.0 COMPANY BACKGROUD**

**1.1 Background, Industry and History**

Dunkin' Brands Group franchises operate worldwide within the restaurant industry's quick-service restaurants (QSRs) segment. It primarily serves breakfast, including coffee, baked goods, and ice cream. (Bloomberg, Dunkin' Brands Group Inc 2020) The company licenses Dunkin' brand products sold in retail outlets and franchises its restaurants under Dunkin' and Baskin-Robbins brands. There are 13,137 Dunkin' Restaurants (73.3% in the U.S. and 26.7% internationally) and 8,160 Baskin-Robins restaurants (69% internationally and 31% in the U.S.) as of Dec. 28th, 2019. The company's operation has five segments: Dunkin' U.S., Dunkin' International, Baskin-Robbins International, Baskin-Robbins U.S., and U.S. Advertising Funds. (S&P Capital IQ, 2020)

QSR generally hope to provide quality and convenient food at low prices, with limited or no seating. From January 4th, 2019 to January 5th, 2020, the U.S. commercial foodservice industry is around a total of $501 billions of sales in the U.S. During this time, the QSR segment accounted for around $332 billion of sales, with an annual compounded growth rate of 1.4% over last five years. The QSR segment attribute to 91% of nearly 12 billion sales of commercial foodservice serving coffee in the U.S. The competitors include 7-Eleven, Burger King, Cold Stone Creamery, Cumberland Farms, Dairy Queen, McDonald's, Panera Bread, Quick Trip, Starbucks, Subway, Taco Bell, Tim Hortons, WaWa, and Wendy's, among others. Additionally, Dunkin competes with QSRs, specialty restaurants, and other retail concepts for prime restaurant locations and qualified franchisees. The Dunkin' brand historically competes on the breakfast daypart, but it increased its focus in its coffee offerings due to its approximately 58% of Dunkin' U.S. systemwide sales. (S&P Capital I.Q., 2020)

Both of our brands have a rich heritage dating back to the 1940s. Bill Rosenberg founded his first restaurant, subsequently renamed Dunkin' Donuts, and Burt Baskin and Irv Robbins. Each established a chain of ice cream shops that eventually combined to form Baskin-Robbins. The Dunkin' Donuts and Baskin-Robbins brands were created in the 1940s individually and then acquired by Allied Domecq PLC and renamed Dunkin' Brands. In 2011, it completed its IPO and listed on the Nasdaq Global Select Market as "DNKN" and it is recognized globally as Dunkin. (S&P Capital IQ, 2020)

**1.2 Business Model and Current Financial Position**

The business model for Dunkin’ Brand Group is franchising. Franchising is a business arrangement where the franchisor grants the franchisee a license to use its trademarks, system, and sell its products and services in a given area. The typical franchise agreement in the U.S. has a 20-year term. They have two types of contracts: the master franchise and joint venture. There are majority five sources of revenue for Dunkin: 1) restaurants’ franchised fees and royalty income 2) advertising fees from franchisees 3) sublease rental income from 4) ice cream and other product sales to franchisees 5) others (licensing fees for packaged coffee, ice cream, franchising gains, and online training fees). The growth is dependent on its franchisees’ ability to access funds to finance such development. (S&P Capital IQ, 2020)

Exhibit 1 displays Dunkin’s last five years of financial ratios, calculated using their quarterly filing to the SEC. Over the five years, they had shown stable profitability through consistent return on assets, return on capital and gross margin %. The company has a higher gross profit margin than most of its competitors (Exhibit 2). Its stable total asset turnover and a decreasing fixed asset turnover shows high operational efficiency and some level of operational resilience toward crisis. It had recently announced the closing of 800 U.S. stores (Bloomberg Markets, 2020) and extended payment terms and reliefs for the franchisees (Dunkin’ Brands Group,2020). The impact of COVID-19 has not fully reflected on the ratios. The operational resilience and flexibility had allowed those actions feasible for the company. The highlights of the ratios are its leverage and liquidity. The company maintained over 100% indebtedness comparing to its capital over the past five years, with the majority of its debt are long term.

Moreover, the total debt/EBITDA is mostly over six times. According to Appendix 2, Dunkin has higher leverage than its competitors. This fact emphasizes Dunkin’s increased reliance on external financial capital, the importance of having enough liquid assets to pay interests, and its strategy to roll over debts by creating new long-term debts once one expires. In terms of liquidity, It remains mostly four times available cash flow to pay its current debt obligation and greater than one current ratio over the past five years. Overall, despite high leverage, the company has increased profitability, strong operational efficiency, and low liquidity risks.

**2.0 RISKS**

**2.1 Foreign Exchange Risks**

**2.1.1 Company’s Exposure**

Dunkin is exposed to foreign exchange risk from royalty income from its international franchisees and its investment and equity income from joint ventures. B-R 31 Ice Cream Company. Ltd. is based in Tokyo, Japan. Is a public company with Dunkin’ Brands Group, Inc. is holding 43.32% of common shares. BR-Korea Co., Ltd. established in Seoul, South Korea is a private joint venture between Dunkin Brands, Inc. and SPC Group. Palm Oasis Ventures Pty. Ltd. is based in Australia, with Dunkin’ Brands Group, Inc. holding 20% of its stake. (S&P Capital IQ., n.d.) As of Sept. 26th, 2020, the company has 3.7 million receivables from its equity investees. During the nine months ended, as of Sept. 28th, 2020, the company has 7.43 million revenues from those international investments (Dunkin’ Brands Group, 2020). Those revenues are subject to foreign currency fluctuation.

**2.1.2 The use of selected Peers and overall Industry**

There are low barriers to enter the industry and a high concentration in the QSR segment. Many QSR companies entered international markets on some level and were exposed to foreign exchange risks. McDonald’s takes advantage of foreign currency debt and derivatives to hedge the foreign currency risk associated with certain royalties, intercompany financings, and long-term investments in foreign subsidiaries and affiliates. The Company uses foreign currency forwards to mitigate the change in the fair value of specific foreign currency denominated assets and liabilities. (Annual Report 10-K, 2020) To protect against the reduction in the value of forecasted foreign currency cash flows (such as royalties denominated in foreign currencies), the Company uses foreign currency forwards to hedge a portion of anticipated exposures. (Quarterly Report 10-Q, 2020)

Cross-currency rate swaps are commonly used in this industry. Restaurant Brands International Inc. (RBI - operating Tim Hortons®, Burger King®, and Popeyes® brands) hedged a portion of foreign equity investments using cross-currency rate swaps between the Canadian and U.S. dollar and between the Euro and U.S. dollar. (SEC Filings - Latest 10-K, 2020) Starbucks had entered in foreign currency forward and swap contracts to offset foreign currency-denominated payables, receivables, and net earnings. (Form 10-K Starbucks, 2020)

**2.1.3 Current Use of Derivatives and Potential Opportunities**

Dunkin is currently not using any financial instruments to hedge its exposure to foreign exchange risks. Dunkin is considering as underhedged against its competitors. Since it addressed its international revenue are payable in U.S. dollars. Its significant concerns are the equity revenues from the three Joint Venture. The company could use currency forward contracts to hedge some foreign currency exchange rate risks and lock in a satisfactory exchange rate to American dollars. Details will be elaborated on in section 4.1.1. Since the COVID-19 outbreak, American dollars had weakened in the global economy, especially against Asia. According to JPMorgan AM’s Callegari, U.S. Dollars will continue to weaken against Asia rates. (Bloomberg Market, 2020). Given that Dunkin’s significant exposure is in Asia (Australia, Japan, and South Korea), this allows Dunkin to lock in a high exchange rate using currency forward contracts to hedge its receivables from its foreign investment.

**2.2 Interest Rate Risk**

**2.2.1 Company’s Exposure**

Its securitized financing facility is its subsidiary, DB Master Finance LLC, as its Master Issuer. As of April 2019, It had issued and closed 2015 A1 Variable Funding Senior Secured Notes and 2015 Fixed Rate Senior Secured Notes with a principal amount of 100 million and 2.5 billion, respectively. The Master Issuer issued 2017 class A2-I, 2017 class A2-II, 2019 class A2-I, 2019 class A2-II, 2019 class A2-III Secured Notes. Those notes have fixed interest rates of 3.629%, 4.030%, 3.787%, 4.021%, and 4.352% and the principal amount of 600 million, 200 million, 600 million, 400 million, 700 million, respectively. It had closed most of its commitments with its 2017 A1 Variable Funding Secured Notes with 32.4 million letters of credits outstanding (expecting to repay by Nov. 2022). In April 2019, the company issued 2019 A1 Variable Funding Senior Secured Notes with a principal amount of 150 million and interest rate of 3 month LIBOR (Eurodollars Funding Rate) or lenders' commercial paper funding rate add 1.5%. As of Sept 2019, it has 33.1 million letters of credits outstanding with 2019 A1 Notes. (S&P Capital IQ, 2020) Exhibit 3 displays all its debt obligation and future payment schedule until 2024.

The legal maturity dates of 2017 and 2019 notes are Nov. 2047 and May 2049. However, both 2017 A2-I and 2019 A2-I are expected to be fully repaid by 2024. The incapability of doing so will trigger the convent in other borrowing contracts to raise the interest rate to 5.00%. Therefore, renewing a debt instrument to cover the total principal amount of 1.14 billion due in 2024 is crucial to the business operation's health.

**2.2.2 The use of selected Peers and overall Industry**

Fixed-rate debt structure and Interest rate swaps are relatively commonly used in the industry. Wendy’s reduced its exposure to an increasing interest rate using a predominantly fixed-rate debt structure (SEC Filings 10-K Annual Report, 2020). RBI entered into a series of receive-variable, pay-fixed interest rate swaps to hedge its variable rate debt (SEC Filings - Latest 10-K, 2020). McDonald’s converts a portion of its fixed-rate debt into floating-rate debt by using interest rate swaps (Annual Report 10-K, 2020). Similarly, Starbucks uses fair value hedges with interest rate swaps to offset its fixed-rated debt of adverse changes in benchmark interest rates.

**2.2.3 Current Use of Derivatives and Potential Opportunities**

The company currently uses predominately fixed-rate notes to reduce interest rate uncertainty. The renewal of the debt and current interest expenses are subject to interest rate risk. Dunkin’s has a floating rate of LIBOR / commercial funding rate + 150 basis points and an average of 3.964 % fixed rate for outstanding notes as of Sept. 28th, 2019. Dunkin’s interest rates are relatively lower than its peers, which Dunkin should take advantage of. Due to COVID-19, the American government had issued monetary stimulus policies, which had lowered the interest rates since March 2020. The current Commercial Paper A2/P2 Rate - USD - 3 Month is 0.27% per annum (S&P Capital IQ, 2020). Dunkin’s past floating rate policy puts its variable funding note at an interest rate of 1.75%, which significantly lower borrowing costs than its existing fixed-rate notes. Therefore, Dunkin should consider hedging a portion of its fixed-rate debts’ fair value using interest rate swaps to lower borrowing interest costs quarterly. Details will be explained in section 4.1.2.

**2.3 Commodity Risks**

**2.3.1 Company’s Exposure**

Dunkin outsources the manufacturing and distribution of ice cream products to Dean Foods internationally and domestically, and soft drinks to Coca-Cola Company and KDP. Its primary donut mix suppliers are Continental Mills and Pennant Ingredients Inc. Centralized manufacturing locations (“CMLs”) are franchisee- owned and - operated facilities. Dunkin’ franchisees rely on supplies from approved vendors and produce donuts and bakery goods from CMLs. (S&P Capital IQ, 2020)

**2.3.2 The use of selected Peers and overall Industry**

Overall, the industry’s standard practice is to use fixed-price forward contracts with its suppliers to limit commodity price volatility exposure. Wendy’s independent supply chain purchasing co-op negotiates contracts with approved suppliers to hedge the variability in its food costs. (SEC Filings 10-K Annual Report, 2020) In RBI’s Tim Horton business, the company hedges commodities’ pricing uncertainty by employing pricing forward contract techniques to set fixed prices for periods of up to one year with suppliers. (SEC Filings - Latest 10-K, 2020) Starbucks purchases commodity inputs, such as coffee, dairy, diesel through fixed-priced contracts. However, Starbucks is an example of using other financial instruments other than fixed-price forward contracts. It entered into forwards and futures contracts to hedge anticipated cash flows under its dairy and green coffee contract and forecasted demands. Starbucks entered swap contracts, futures, and collars, to mitigate the price uncertainty of a portion of its future purchases, such as diesel fuel and other commodities (Form 10-Q Starbucks, 2020).

**2.3.3 Current Use of Derivatives and Potential Opportunities**

Dunkin was contingently liable for supply chain agreements for approximately 67.3 million as of Sept. 26th, 2020. The majority of the deal has terms of one year or less, and the latest of which expires in 2022. The purchasing for the Dunkin’s brand is facilitated by a franchisee-owned cooperative - National DCP, LLC (the “NDCP”) (Dunkin’ Brands Group, 2020). Its services include strategic sourcing, distribution services, and transportation services (National DCP, LLC, 2020). It is recommended to continue to use its current forward contract hedging method matching industry standards.

**3.0 Derivatives Strategy and Course of Action**

This section addresses most urgent to least urgent risks and expands detailed proposals of an interest rate swap, foreign exchange rate forwards, and commodity forward hedging strategies.

**3.1 Interest Rate Swaps**

As discussed above, the company currently has high leverage comparing its peers. Therefore, interest rate risk is a priority that the firm should hedge. Moreover, the current low-interest-rate should be taken advantage of immediately. Since the firm has a relatively lower floating interest rate than its peers, it has a relatively low fixed interest rate. The firms can look into creating a paying floating rate, receiving a fixed rate swap. It is recommended to do such swaps with one of its current established relationships, Netflix, Inc. A visualization of the swaps is displayed in Appendix 12.

Netflix currently has a 750 million revolving credit facility with Adjusted LIBOR plus 1.00% (S&P Capital IQ, 2020). It carries both USD and EUR debts with an average fixed interest rate of 5.24% and 3.821%, respectively (S&P Capital IQ, 2020). Comparing two companies' interest rates, Dunkin has a comparative advantage in the U.S. Debt's fixed interest rate. Dunkin has fixed-rate notes 2017 A2-I and 2019 A2-I with a principal of 600 million each with a fixed interest rate of 3.629% and 3.787% respectively and quarterly payment expected to be fully repaid by 2024 February (S&P Capital IQ, 2020). Dunkin is recommended to create a quarterly interest rate swap with Netflix expiring on 2024 February were 1) Netflix loans 600 million with adjusted LIBOR rate, plus 1.25% to Dunkin 2) Dunkin loans 600 million to Netflix with 4% fixed interest rate. The swap is an attractive offering for Netflix since its current rate structure (as Appendix 4) shows that the offering fixed interest rate is the top 2 of its lowest fixed interest rate. Netflix is also able to profit 25 basis points interest from its floating rate lending.

Dunkin would obtain a floating rate 25 basis points lower than its current floating rate and profit 29.2 basis points with fixed interest. The swap is a partial hedge of the 2017 A2-I and 2019 A2-I notes, with consideration of Netflix’s debt facility’s current floating rate debt capacity of 750 million and 50% of Dunkin’s expected repayment principal. Based on Appendix 4 and 5, we can see that the interest rate had been around 0.23% since the COVID-19 announcement from the U.S. government. Based on assumptions in Appendix 6, the best, middle, and the worst-case scenario of LIBOR rates are forecasted. Based on the assumptions, the interest rate swap is predicted to have scheduled payments in Appendix 7. Overall, Dunkin’s forecasted profit based on best, middle, and worst scenarios is displayed in Appendix 8 range from 0.8205 to 2.4401 million. Therefore, it is highly recommended that Dunkin takes actions to take advantage of the low floating interest rate during COVID-19.

**3.2 Foreign Exchange Rate Forward**

There are two possible exposure sources from the Joint Ventures: Receivables and foreseeable asset sales (lead to foreign cash inflow).

The company is recommended to do a partial hedge on its receivables. Specifically, 5partial hedge using foreign exchange rate forward with notional values of 0.6 million, 4.5 million, 1.5 million USD with rates of 0.689 AUD/USD, 0.09 JPY/USD, and 0.00084 KRW/USD on revenues from Japan, South Korea, and Australia, respectively. The rates are estimated as the average exchange rate throughout 2020 shown in Appendix 9. The notional amounts are chosen through 51%, 80%, 48% partial hedge on the forecast of 2020 receivable from Japan, South Korea, and Australia, respectively. South Korea has a higher hedging percentage since it is the majority of the foreign revenue, and it demonstrates strong growth in revenues over the past three years (shown in Appendix 10), whereas the other two JVs have shown a decline in revenues. Terms of proposed foreign exchange contracts are listed in Appendix 12.

Due to COVID-19, Dunkin is closing 800 U.S. stores - 8.3% of its current number of stores, including selling some of the lease, properties, and assets. (Bloomberg Markets, 2020) Based on the assumption of a similar strategy in its Joint Ventures, we expect an inflow of foreign currencies from selling off an equal portion of assets in 2021/2020. The amount of asset sales is forecasted in Appendix 11. Based on such assumption, a partial hedge on such transaction is recommended to use foreign exchange rate forwards with 10 million notional amounts and rates of 0.689 AUD/USD, 0.09 JPY/USD, and 0.00084 KRW/USD as 50% hedge on selling asset transactions (shown in Appendix 12). Since the sales are expected to be one-time-only, the forward term would be expiring in the same year as the transaction year. The year of the transaction is expected to be 2020/2021.

Since March 13th is the day of the national emergency announcement from the U.S. government, the comparison of the exposed currencies’ volatility and price changes foreign exchange rates in Appendix 9, based on daily foreign exchange rates (JPY/USD, AUD/USD, and KRW/USD) in 2020 and 2019 during the period March 12th to December 2nd. It shows that the average 14 days volatility of foreign exchange rate had increased from 2019 to 2020, and the highest volatility had increased 216.15%, 79.98%, 94.35% of JPY/USD, AUD/USD, and KRW/USD, respectively. The facts indicate an increased uncertainty of the exchange rate exposure for annual receivables from the three joint ventures. This fact urges Dunkin to secure a fixed and satisfactory exchange rate and avoid uncertainty for foreign exchange rate exposure. Overall, the foreign exchange rate has a medium level of emergency to hedge, and the timeline for the implementation is contingent on the business arrangement of closure and expansion.

**3.3 Commodity Forward**

The power of purchasing and distribution is in NDCP, which is privately owned by the franchises. Dunkin is only liable as a guarantor for a set amount of purchases during a set period. Most of the guarantee agreements are due within a year. Those arrangements are made with its major suppliers such as Dean Foods, Coca-Cola, and KDP (S&P IQ Capital, 2020). Those suppliers have a long history and lasting relationships with Dunkin, providing a consistent supply with low costs. Dunkin is recommended to renew its guarantee arrangement with internally forecasted demands in collaboration with NDCP. Overall, commodity risk is not a significant concern for Dunkin. However, NDCP is strongly recommended to make commodity forward contracts secure stable supply and low costs, matching competitors' and industry's standard practices.

Appendix 1 Financial RatiosTable

Description automatically generated Source: S&P Capital IQ, https://www.capitaliq.com/CIQDotNet/Financial/Ratios.aspx?CompanyId=20801430

Appendix 2 Competitor Ratio Analysis



Source: S&P Capital IQ, https://www.capitaliq.com/CIQDotNet/Comps/Comparables.aspx?companyId=20801430&statekey=2039149803554f00b2be2e2bf7dd5954

Appendix 3 Dunkin’s Debt Structure and Expected Repayment Schedule 2020 - 2024

 Source: S&P Capital IQ, <https://www.capitaliq.com/CIQDotNet/Financial/CapStructureDetails.aspx?CompanyId=20801430>

Source:

Appendix 4 Netflix U.S. Debt Structure Table

Description automatically generated

Source: S&P Capital IQ, https://www.capitaliq.com/CIQDotNet/Financial/CapStructureDetails.aspx?CompanyId=32012

Appendix 4 YTD LIBOR rate 2020Chart, line chart

Description automatically generated

Source: S&P Capital IQ, <https://www.capitaliq.com/CIQDotNet/MacroEconomics/InterestRate.aspx?companyId=36183729>

Appendix 5 CE LIBOR - USD 3 Month Stats



Source: S&P Capital IQ, <https://www.capitaliq.com/CIQDotNet/MacroEconomics/InterestRate.aspx?companyId=36183729>

Appendix 6 LIBOR Rate forecast



Appendix 7 Interest rate swaps forecast and arrangement



Appendix 8 Forecast profit



Appendix 9 2019 and 2020 foreign exchange rate 

Appendix 10 Quarterly and Annual Revenue Receivable forecast





Source: S&P Capital IQ. Dunkin27\_Brands\_Group\_Inc\_-\_Form\_10-K <https://www.capitaliq.com/CIQDotNet/company.aspx?companyId=20801430>

Appendix 11 Joint Ventures Balance sheet and forecasted asset sale

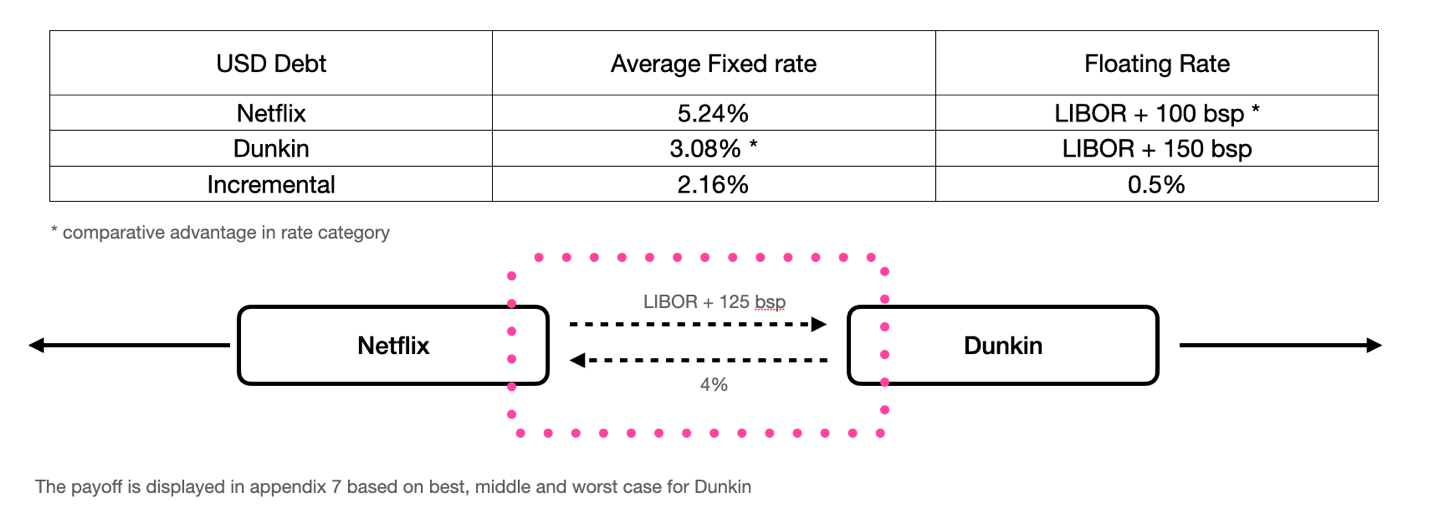


Source: S&P Capital IQ. Dunkin27\_Brands\_Group\_Inc\_-\_Form\_10-K <https://www.capitaliq.com/CIQDotNet/company.aspx?companyId=20801430>

Appendix 11 Proposed Forward Contracts



Appendix 12 Proposed Interest Rate Swaps Visualisation



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