From Gucci to Old Navy: The Role of Politics in U.S. Luxury and Mass-Market Brands

DATA 450 Capstone

Janelle Calalang

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1 Introduction

Consumer spending in fashion and automotive industries often shifts in response to political and economic events. Brand goodwill and reputation also play an important role in determining how well companies navigate these events.

Goodwill is an asset reflecting brand loyalty, reputation, and consumer trust. This is typically impacted by political instability, economic downturns, and shifts in public perception. A key question in this study is whether strong brand equity and goodwill help brands handle economic turbulence more than others.

This research will analyze how goodwill fluctuates alongside sales performance, focusing on luxury vs. mass-market brands across the fashion and automotive industries. Using quarterly financial reports, goodwill evaluations, and consumer sentiment data from 2012–2024, this study will assess:

- How major political/economic events influence sales and goodwill.
- Whether goodwill stability correlates with better financial resilience.
- How consumer sentiment on social media aligns with goodwill and sales trends.

By integrating financial reports [Tapestry (2012--2024); Inc. (2012--2024); (lvmhReports?); Group (2012--2024); Fitch Co. (2012--2024); (toyotaReports?); (hondaReports?); (nissanReports?); (teslaReports?); (mercedesReports?);], economic data (Center 2012; (FRED) 2012--2024; blsData?), and consumer sentiment analysis (Trends 2012--2024; redditSentiment?), this research aims to provide a better understanding of how brand value evolves in response to external pressures.

2 Dataset

2.1 Brand Categories

These luxury and mass-market brands have been selected based on their financial transparency and historical impact on consumer behavior. The brands' financial data will be retrieved from public annual and quarterly reports.

For luxury fashion brands, I have selected Kate Spade, Coach, and Stuart Weitzman, Louis Vuitton, Christian Dior, Celine, Loewe, Kenzo, Givenchy, Fendi, Emilio Pucci, Marc Jacobs, Berluti, Loro Piana, and Patou.

The mass-market brands selected for this research include Gap, Old Navy, Banana Republic, Intermix, and Athleta, H&M, and Abercrombie, Hollister, and Gilly Hicks.

The luxury automobile brands for this analysis include Audi, Porsche, Mercedes-Benz, and Tesla.

For affordable automobile brands, I selected Toyota, Honda, Nissan, Mazda

2.2 Dataset

Company Financial Reports (Annual & Quarterly): Includes sales revenue & goodwill valuation for each brand across each fiscal year to provide insight on their financial health and profitability. I will manually collect this data spanning across 12 years and focus on each election cycle.

- Variables:
 - Date: Year, Quarter (2012–2024).
 - Brand: Fashion, beauty, or automotive brand
 - Luxury vs. Mass-Market: Brand category
 - Sales Revenue: Total U.S. sales in millions which will be analyzed for growth trends.
 Will also consider sales revenue according to U.S. region.
 - Goodwill: Total amount of money invested in millions devoted to maintaining a positive reputation.

2.3 Economic Indicators Data:

• Federal Reserve Economic Data (FRED) site is an online database that was created by the research department at the Federal Reserve Bank of St. Louis. It provides data sets that can be filtered by year and month containing GDP rates, inflation, and the consumer price index which can also be filtered by state.

- Economic Indicators Variables:
 - Date: Year, Quarter (2012–2024).
 - State: Data can be filtered by state.
 - GDP growth: Since GDP growth is usually associated with more consumer spending leading to increased economic activity, I want to delve into whether consumers have a tendency to spend more on luxury or on cheaper brands.
 - Inflation: Want to analyze if luxury/mass-market brands have more resilience during periods of high inflation rates.
 - Consumer Price Index: measure of average change in price over time paid by consumers for goods and services, which will help indicate shifts in American spending patterns.

2.4 Political Event Data:

- I will focus on U.S. presidential elections and major policy changes based on Mercatus Center's "Economic Situation" reports that are released on a monthly basis. I will specifically hone in on end-of-quarter months based on a fiscal year to be able to compare this data to each of the brand's financial report data.
- Electoral Data Variables:
 - Date: Year, End-of-quarter Month (2012-2024)
 - Winning Candidate: Name and party
 - Economic Policy: Will focus on policies that directly affect spending such as tariffs, fiscal stimulus, stabilization policies, etc.
 - Policy Category: Will categorize policies based on type whether it is fiscal, regulatory, monetary, trade, or structural.

2.5 Consumer Sentiment Data:

- The Google Trends site allows you to select a topic and it shows you the "search interest" over time in a graph. The time period is customizable which will aid my research and will show how often each brand is googled during each month/year, reflecting peaks and dips in brand popularity for every political event.
- Since the official Reddit API is limited in terms of historical data, I will use Pushshift which is a third party API service that can extract older Reddit posts and comments and form a dataset based on what topics I select (ex: r/Gucci). I will use this data for consumer sentiment analysis by filtering comments with brand keywords by date and categorizing them as positive, negative, or neutral.

3 Data Acquisition and Processing

The data will be collected from annual and quarterly financial reports, as well as economic and consumer sentiment sources. Since financial reports provide detailed, disaggregated U.S. sales figures, the data will have to be manually extracted and converted into a data set.

3.1 Steps:

• Brand Data:

- Download annual and quarterly reports for all selected companies and focus on data based on electoral year and on fiscal quarters.
- Record U.S. net sales data for each brand from tables in the reports.
- Record goodwill values from financial statements to analyze brand equity.
- Record sales data by U.S. Region for comparison

• Economic Data:

- Collect economic indicator data from the FRED database which are conveniently offered in a CSV format and can be filtered by specific dates and U.S. states.
- Will merge data sets on GDP growth, inflation, and on CPI to create one data set from the years 2012-2024 based on electoral year and on fiscal quarters.

• Consumer Sentiment Data:

- Google Trends provides search popularity data which can be filtered by region, time range, and by specific brands. This is also offered in CSV format, which makes it easy to integrate with the rest of my data sets.
- Will the Pushshift API to collect historical Reddit posts and comments related to selected brands and filter data by brand name and dates that align with election cycles and economic events. Will look into Natural Language Processing models (since I've never had experience using them), which will parse the data and categorize sentiment as positive, negative, or neutral.
- Organize all data into a structured CSV format with columns for:
 - Year, quarter, or month
 - Brand
 - Sales revenue (inflation-adjusted)
 - Goodwill value
 - Economic indicators
 - Consumer sentiment score
- Clean and standardize data by:
 - Adjusting monetary values for inflation.

- Changing fiscal years to a standard calendar format.
- Removing duplicate or missing entries in sentiment data.
- Store processed data in CSV files.

This manual data preparation ensures a quality dataset, enabling direct comparisons across luxury and mass-market brands in fashion, beauty, and automotive industries.

4 Research Questions and Methodology

Research Question 1: How do sales trends and goodwill valuations shift during major political and economic events?

- Plan: For this, I will be using a single line graph that tracks quarterly sales revenue and goodwill from 2012 to 2024 then grouping them into Luxury vs. Mass-Market.
 - The X-axis will be years from 2012 to 2024, and the Y-axis will show Net Sales (M) and Goodwill(M).
 - * Luxury Sales (\$M) (solid line)
 - * Mass-Market Sales (\$M) (dashed line)
 - * Luxury Goodwill (\$M) (solid squares)
 - * Mass-Market Goodwill (\$M) (dashed squares) Will mark major economic and political events using annotations to see how these moments impacted each category.
- Output: Line graph with tracking sales revenue and goodwill trends with all brands averaged together and separated by luxury and mass-market.
- Estimated Time: 7 hours.

Research Question 2: How do each of the brands respond differently to economic downturns and political instability?

- Plan: Two dots line graph for each brand comparing their performance within specific quarters during periods of economic instability. Will show election effects from Q4 2016 to Q1 2017 to show how brands performed right before and after the 2016 election. COVID-19 impact with Q4 2019 to Q2 2020 which will compare brand sales before the pandemic hit and right after.
- Each brand gets two dots (one for before, one for after) so I can easily see which brands grew, stayed stable or lost sales during these major events.
 - The X-axis will have the quarter periods and the Y-axis will show net sales.

- Output: Around 40 graphs comparing each individual brand's performance during these specific quarters.
- Estimated Time: 7 hours.

Research Question 3: How do consumer sentiment and search trends correlate with industry performance and goodwill?

- Plan: I will create a line graph how number of google searches compares to previous quarters for each brand during electoral years/major events. I will calculate this by taking each quarter's average google search interest rate and find the difference between that value and the previous quarter's to get the percent change.
 - Create a visualization for search interest versus change in sales for each brand
- For the Reddit consumer sentiment analysis, I will use a scatter plot to see if consumer sentiment affects brand sales. To pull this data, I will utilize Reddit PushShift API then use the Vader analysis model to assess sentiment (where -1 = negative, 0 = neutral, +1 = positive)
- Correlation Tests:
 - Search interest vs. Change in Sales
 - Brand Sentiment vs. Change in Sales
 - Search interest vs. Brand Sentiment
- Outputs: Correlation analysis regarding consumer sentiment and search interest with average sales performance across all brands.
- Estimated Time: 7 hours.

5 Work plan

Week 7 (3/3 - 3/9):

- Data set tidying (4 hours)
- Work on RQ1 1 and ideally get a headstart RQ2 by 3/9 (4 hours)

Week 8 (3/10 - 3/16): Presentations given on Wed-Thu 3/12-3/13.

- Work on RQ2 + RQ3 (5 hours)
- Create/prepare for presentation (1 hour)
- Peer feedback (1 hour)
- Get started on poster (1 hour)

Week 9 (3/24 - 3/30):

- Peer feedback (2 hours)
- Poster work/revisions (4 hours)

Week 10 (3/31 - 4/6):

- Peer feedback (1.5 hours)
- Poster revisions (2 hours)
- Project work/updates (4 hours)

Week 11 (4/7 - 4/13):

• Will use this week to work on all general parts of project I need to tidy up/focus on (7 hours)

Week 12 (4/14 - 4/20):

• General project work (7 hours)

Week 13 (4/21 - 4/27): Blog post draft 1 due Sunday night 4/28. [All project work should be done by the end of this week. The remaining time will be used for writing up and presenting your results.] * Project work (3 hours) * Draft blog post (4 hours)

Week 14 (4/28 - 5/4):

- Peer feedback (3 hours)
- Blog post revisions (4 hours)
- [Do not schedule any other tasks for this week.]

Week 15 (5/5 - 5/8): Final blog post due Tues 5/7. Blog post read-throughs during final exam slot, Thursday May 8th, 8:00-11:20am.

- Blog post revisions (2 hours)
- Peer feedback (2 hours)
- [Do not schedule any other tasks for this week.]

References

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