BSVI
Value Investing

EQUITY RESEARCH REPORT
DOLLAR GENERAL

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SECTOR & STRATEGY ANALYSIS

COMPANY OVERVIEW

Valuation Date: 29/11/2024
Price: $77.4
52-week range: 72.12 – 168.07
30D average volume: 3,842,198
PE Ratio: 12.10
EPS: 6.43

Dollar General, **founded in 1955** by James Luther Turner, is a chain of retail discount stores, operating across the United States and Mexico. The company has **158,000 employees** and more than 21,100 stores. As of 2024, Dollar General recorded $38.7 billion in sales revenue. The Market Size in the 2023 is estimated for **$527.4 billion in sales worldwide** ($128 billion in sales in US specifically), predicted to become $659 billion dollars in sales worldwide in the 2028 and $834 billion in the 2030. Over the past three years the consumer retail industry growth of 10.9% and in the past 5 years the **CAGR grow of 5.35%.**

PRODUCTS AND PRODUCTION

Dollar General offers products across various categories, including food, cleaning suppliers, health & beauty, home products, and basic apparel. These products are often lower-end and non-branded, focusing on affordability and convenience. The product selection is broad but focuses on core categories that are frequently needed by customers, especially in rural and low-income areas. According to Dollar General's 2024 annual report, the proportion of revenues received by seasonal products was only 10%, as compared to 81% of revenues coming from consumables. This indicates that the company has very little seasonality in demand as consumables, generally associated with necessary consumption, don't depend on seasonality or general economic trends. The products are typically purchased on an as-needed basis (una tantum), rather than through subscription models.

The products which Dollar General offers are generally not subject to rapid technological change. The main categories (grocery, cleaning suppliers, household items, etc...) have low innovation cycles, meaning that they do not require large investments by Dollar General in the R&D department. The share of Dollar General's revenue committed to R&D is undisclosed. Most of the internal investments made are focused on improving the supply chain efficiency, and expanding private-label products, rather than developing new products.

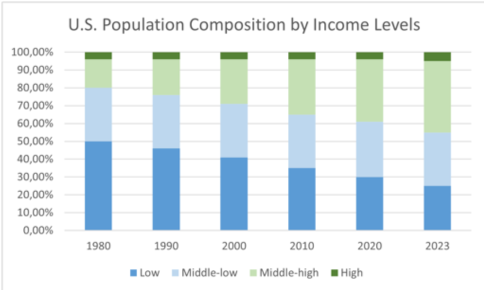
Despite the large range of product offerings that Dollar General boasts, the category which results in highest revenue sales is

'Household & Pet care', followed by 'Health & Beauty'. The respective revenues of each product category in 2021, and their estimated revenue in 2026, are detailed below:

Product Category	Net Sales ($B) - 2021	Net Sales ($B) – 2026E
Household & Pet Care	9.9	12.0
Health & Beauty	8.6	10.4
Edible Grocery	7.5	9.1
Leisure & Entertainment	1.9	2.2
Home & DIY	1.8	2.2

CLIENTS

The customers are extremely price-sensitive, meaning that the ability to keep prices low whilst managing supply chain and operational costs is critical to success. Their typical customer falls into the low-to-moderate income bracket, often earning less than $50,000 annually. Repeat purchases are common, as Dollar General caters to everyday needs. On average, customers visit Dollar General 32 times per year (once every 11 days) and in 2022, it reported an average weekly foot traffic of approximately 20-25 million customers across its stores. Maintaining high in-stock levels of frequently purchased goods, especially essential items, is vital for sustaining customer loyalty and regular store visits.



Store placement is also an important variable. Dollar General's strategy focuses on convenient locations in rural and underserved areas.

Demand for Dollar General's products has increased, as urban areas have become more expensive, and the cost of living has risen, pushing people to turn to discount retailers.

Over the years, Dollar General has observed a consistent year-on-year growth of its store count, gaining around 1,000 new locations every year. The table demonstrates this evolution from 2019 to 2024

Year	Number of stores
2019	16 278
2020	17 266
2021	18 190
2022	19 147
2023	20 022
2024	21 100
2025	21 823 (projection)

While Dollar General primarily operates in physical retail, the company has been increasing its investment in e-commerce and digital solutions, such as the "DG Pickup" (a click-and-collect service). However, the customer base traditionally prioritizes convenience and proximity to physical stores, making it less dependent on e-commerce compared to other retailers.

SUPPLIERS

Most Dollar General's suppliers are located in China, exposing them to potential risks associated with cheap Chinese imports during a time of geopolitical tensions. According to the 2024 annual report, Dollar General's two largest suppliers accounted for 8 and 10 percent of purchases, indicating both a degree of diversification and reliance on certain suppliers.

CAPITAL STRUCTURE

Dollar General Corporation is a publicly traded company listed on the New York Stock Exchange under the ticker symbol DG. The main shareholders of Dollar General are largely institutional investors based in the United States, with a few prominent names regularly holding most shares. As of the latest filings, the largest shareholders are Institutional investors:

Capital International Investors (25.22M; 11.47%; 1,894,180,691), Vanguard Group Inc (24.94M; 11.34%; 1,873,169,401), Price (T.Rowe) Associates Inc. (21.72M; 9.88%; 1,631,562,289), Blackrock Inc. (17.95M; 8.16%; 1,348,075,249), Capital World Investors (11.55M; 5.25%; 867,687,864). The compensation package is designed to reward executives for hitting growth targets and delivering shareholder returns, balancing fixed and variable compensation components to incentivize strong performance. In 2023, for example, CEO Jeffery Owen's total compensation package included a combination of salary (792,439$), Stock Award Value (3,103,843$) and Option Award Value (2,926,934$), with a substantial focus on long-term equity incentives.

CORPORATE STRATEGY

Dollar General's growth strategy focuses on organic growth. The company has a strong emphasis on increasing its footprint in underserved markets, particularly in rural areas where it faces less competition. Organic growth allows Dollar General to control costs, keep pricing competitive, and build brand loyalty within communities. In recent years, Dollar General has added hundreds of stores annually, enhancing its reach in communities that benefit from affordable and convenient shopping options.

The company has also used inorganic growth strategies in the past, allowing it to accelerate growth by acquiring companies that complements its operations, or expand its reach in new ways.

While Dollar General has not traditionally been aggressive in pursuing acquisitions compared to some competitors, it has done some acquisitions:

- DG Fresh - 2019 - a supply chain initiative, allowing Dollar General to strengthen its supply chain independence
- Walmart Express - 2016 - Dollar General acquired 41 Walmart Express stores after Walmart closed these smaller-format stores, which allowed Dollar General to quickly expand its footprint in targeted markets

The business model is highly scalable, thanks to the standardized store format and product offering. The simple store layout, which is inexpensive to set up and easy to replicate, enables Dollar General to easily scale up the store count. Furthermore, the company's emphasis on low-cost operations, with minimal staffing and streamlines store layouts, attempt to reduce overhead costs. This lean model is highly scalable, as it minimizes the operational complexity that often accompanies rapid expansion.

Dollar General has engaged in several partnerships, as they help the company enhance its customer experience, expand its product offerings, and strengthen its supply chain – all while keeping costs low and staying true to its business model. The company has also explored partnerships to expand its financial services, such as money transfer services, bill payments, and mobile financial transactions, through Western Union, Paypal and Chime. Dollar General has also tested partnerships with third-party delivery services like DoorDash in select markets. This allows the company to explore delivery options without investing heavily in its own delivery infrastructure.

Dollar General does not have direct, major contracts with the United States federal government, nor is it heavily financed by the public sector. While Dollar General does not receive direct financing or large-scale contracts from the U.S. government, it plays an indirect role in supporting public initiatives like:

- SNAP (Supplemental Nutrition Assistance Program): Dollar General accepts SNAP benefits (commonly known as food stamps), which is a government-funded program that helps low-income individuals and families purchase food
- WIC (Women, Infants, and Children Program): In some locations, Dollar General may also participate in the WIC program, which provides nutritional assistance to women,

infants, and children. This expands Dollar General's appeal to families using public assistance for food.

Dollar General benefits from large economies of scale, which are key to its competitive advantage in its market.

1. **Bulk-Buying Discounts**: As one of the largest discount retailers, Dollar General can negotiate lower prices from suppliers due to its large volume orders. This reduces the per-unit cost of goods sold compared to smaller competitors.
2. **Exclusive Supplier Deals:** Its scale allows Dollar General to form long-term partnerships and negotiate exclusive products or favorable terms with manufacturers.
3. **Centralized Distribution Centers**: Dollar General operates a vast network of distribution centers strategically located across the U.S., enabling efficient stocking and restocking of stores.
4. **Cost-Effective Logistics**: The company uses its scale to optimize shipping routes and consolidate deliveries, reducing transportation costs per unit.
5. **Overhead Costs:** Fixed costs like technology investments, R&D, and corporate administration are spread across a vast number of stores and products, reducing the per-unit cost.

COMPETITORS

The discount retail sector is dominated by a few major players like like Dollar General, Target, and Walmart. However, there are also many smaller regional discount stores, local independent operators, and online competitors with market share.
Many smaller and mid-sized players face significant challenges due to the competitive landscape, rising costs, and labor shortages. Industry margins have declined; for example, grocery retailers' average EBIT margin dropped by 1.6 percentage points from 2018 to 2022, reflecting downward pressure despite price increases. Large players are leveraging economies of scale to sustain operations, while smaller ones struggle to compete effectively.
Gross margins for retailers and suppliers have been squeezed over the past five years due to rising operational costs, commodity price fluctuations, and inflation. Many companies are adopting cost-efficiency strategies like investing in private-label products and streamlining supply chains to counteract these pressures.

PORTER'S FIVE FORCES

THREAT OF NEW ENTRY – RELATIVELY LOW

The threat of new entrants can be low for a multitude of reasons. The first and foremost are the extremely large barriers to entry, caused by high overhead costs needed to run, supply, and maintain a large quantity of physical shops. Adding on the high costs of creating functional and long-lasting supply chains further reduces the threat of new entrants. Another reason for which the threat can be low is the already fierce competition of the market that Dollar General is aiming to serve. With conglomerates such as Aldi and Walmart fighting over the smallest of margins, entering the market is likely perceived as a high risk and low reward operation.

SUPPLIER POWER – MODERATE/STRONG

Seeing as the business model of Dollar General revolves around cheap imports, especially those coming from China, the bargaining power of suppliers can be seen as moderately strong. In the case that suppliers threaten to increase prices, Dollar General may have a hard time finding substitute suppliers. Although they claim to be searching for opportunities to diversify away from China, Chinese exports remain the cheapest.

If we consider the fact that the company has been diversifying its suppliers and the potentially high churn rates of suppliers, then the bargaining power of suppliers can be seen as reduced.

BUYER POWER – HIGH

Most of Dollar General's products are both homogeneous and substitutable. Pairing this with the target consumers' spending habits, lower income households searching for the cheapest

prices, and the bargaining power of consumers goods can be considered very high. It must be noted that the power of consumers lies within their consumption habits due to the retail nature of the business.

One can argue that since Dollar General aims to serve sparkly populated regions of the United States that consumers have little choice but to purchase from Dollar General. This is often likely the case as smaller local businesses is unlikely to be able to compete with the prices that Dollar General offers.

THREAT OF SUBSTITUTES – LOW

Due to brand loyalty, thin margins and most importantly the fact that Dollar General sells necessary goods, the threat of substitutes can be seen as extremely low.

COMPETITION – MODERATE

Currently, on a more micro-scale, Dollar General's competitors aren't competing with the prices that they have to offer on goods with low elasticity of demand. Consumers have created shopping habits based on the low prices that are offered on a large scale by Dollar General which cannot be met by small scale local businesses. On a more macro scale, large retail competitors such as Walmart, Dollar Tree, Family Tree and Aldi cause relatively high competition in the served markets. That is to say that for lower income households, Dollar General will have to continue to compete to provide the lowest prices to these consumers. This is largely due to the homogeneity of necessary goods that are largely associated with the consumption habits of lower income households searching for the lowest price possible. On the other hand, Dollar General's presence in less populated regional areas allows for less competition.

PESTEL ANALYSIS

POLITICAL FACTORS

International Relations: Trade wars between the United States and China can affect the foreign trade policies of the United States, impacting the state of tariffs and quotas on imports. These fluctuations in regulations have a direct impact on the cost of supplies, thus influencing the pricing strategies which Dollar General will adopt.

Governmental factors: Changes in the taxation policies of the United States government can directly impact the cost of operations in the supply chain, thus impacting the price of its products.

ECONOMIC FACTORS

Macroeconomic Situation: The state of the economy of the United States has an impact on the disposable income of Dollar General's customers. An economic crisis will result in a reduction of disposable income, thus possibly increasing demand for Dollar General's products, as people will turn to discount retail stores rather than traditional brands. An economic boom could also lead to an increase in demand, as people will have a larger disposable income to spend on products.

SOCIAL FACTORS

Serving rural areas: By focusing on implementing its stores in rural areas, which tend to be underserved by large chain retail stores, Dollar General serves the local communities by facilitating access to necessities.

Employment opportunities: Through its missions of “serving others”, Dollar General aims at creating sustainable and attractive employment opportunities, stimulating the local economy and serving local communities.

TECHNOLOGICAL FACTORS

Improvement of efficiency: Dollar General implements technology in its supply chain and operations, in order to increase its efficiency. Mobile apps, Digital Coupons and Online Shopping with in-store pickup have been introduced to Dollar General’s stores.

Online Marketing: The growth in technology has also been channeled to the marketing, with an increase in online marketing to stimulate demand

ENVIRONMENTAL FACTORS

Regulations: Dollar General has adopted stricter chemical policies, banning 8 harmful chemicals from its supply chain and products.

Sustainability: The implementation of more sustainable and environmentally friendly behavior, with the goal of reducing the environmental footprint of Dollar General’s supply chain and operations.

LEGAL FACTORS

National Legislation: The retail discount chain has an obligation to follow national legislation regarding product safety, product recall, as well as health & safety standards. If these regulations are not respected, the right of Dollar General to operate in the United States would be jeopardized.

SWOT ANALYSIS

STRENGTHS

Consistent growth: Dollar General has observed a consistent year-on-year store count growth, growing by approximately 1,000 per year throughout the United States and Mexico.

Economies of scale: The harnessing of economies of scale has enabled Dollar General to achieve low prices for everyday necessities, which a large demand.

WEAKNESSES

Lack of Global Presence: Implemented strictly in the United States and Mexico, Dollar General has a severe lack of global presence. By not harnessing the opportunities that come with globalization, any possibilities of significant market share growth are limited.

OPPORTUNITIES

Global opportunities: The possibility of entering the global discount retail market, particularly in emerging economies where the low-cost approach would be especially attractive, would enable Dollar General to increase its global market share.

Use of real estate: The extensive presence of Dollar General stores across the United States and Mexico indicate that the brand has a significant real estate portfolio, with over 19,000 stores. This portfolio can be used as a method to capture growth, aside from its primary retail discount business.

THREATS

Intense rivalry: The extremely competitive state of the retail discount market makes it difficult for Dollar General to significantly increase its market share.

Regulatory changes: The constantly fluctuating regulations regarding labor laws, minimum wage, and changes to environmental regulations can lead to higher expenses for Dollar General.

MARKET TRENDS AND PREDICTIONS

As **domestic market saturation approaches**, international markets could offer a path to continued revenue and market share growth. Such expansion could provide Dollar General with a hedge against domestic economic fluctuation, **enhancing revenue diversity**. In developing markets where affordable retail is in demand, Dollar General's low-price, high-convenience model could resonate with new customer bases.

The standardized store format and product offering, characterized by small-format store layouts with an inexpensive setup, is easy to replicate. **The efficient supply chain** enables Dollar General to quickly open new stores in different regions without disrupting the functioning of operations.

Entry of new competitors in the market is unlikely, due to the **high barriers of entry**, such as technology adaptation, regulatory compliance and capital outlay, making the market difficult to penetrate without significant resources and strategic planning. Retailers need sophisticated Point of Sales (POS) Systems to handle sales, inventory tracking and customer data analytics. Building and acquiring this technology requires investment and expertise. The initial store setup, including building (or leasing) retail space, stocking inventory and hiring staff, require substantial upfront investment

ESG COMMITMENT

The "**FY23 SERVING OTHERS ESG REPORT**", published by the company, underscores the DG's intention to follow the UN's 17 goals for sustainability.

The company's commitment to its 185,000 employees. Dollar General offers tuition-free degree programs, career advancement opportunities, and diverse leadership initiatives. Dollar General promotes inclusive practices through Employee Resource Groups and partnerships with historically Black colleges and universities (HBCUs). Efforts to ensure supply chain integrity and ethical labor practices reflect a strong commitment to governance.

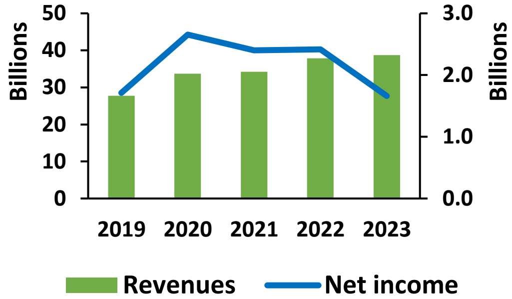
Sustainability initiatives include LED lighting in most stores, reducing energy usage by 24%. Dollar General has committed to reducing greenhouse gas emissions by 15% per square foot by 2026 and 30% by 2031. **Recycling programs in 2023 diverted over 274,000 tons of cardboard and nearly 2,000 tons of plastic**. Dollar General focuses on reducing food insecurity by offering fresh produce in over 5,000 stores, with 1,000 located in food deserts. The company donated over 12 million meals through Feeding America and supported literacy programs through the Dollar General Literacy Foundation, which has donated over $239 million since its inception.

FINANCIAL STATEMENT ANALYSIS

INCOME STATEMENT

Over the past few years, Dollar General has experienced **persistent net sales growth.** In 2021 (the company closes the fiscal year in January 2021, so in the graph it is represented as 2020), sales rose by 21.6%, but growth has since fluctuated, reaching just 2.2% in the most recent year (January 2024). This growth is largely driven by Dollar General's retail operations, which focus on selling consumables, seasonal items, home products, and apparel. In 2023, the increase in net sales was generated by the **sales of new stores** and a rise in same-store sales by 0.2% compared to the previous year, partially offset by the impact of store closures. Consumables remain the largest revenue segment, and in 2023, they comprised an even larger share of sales, accounting for 81.01% of net sales, up from 79.68% in 2022.

REVENUES AND NET INCOME



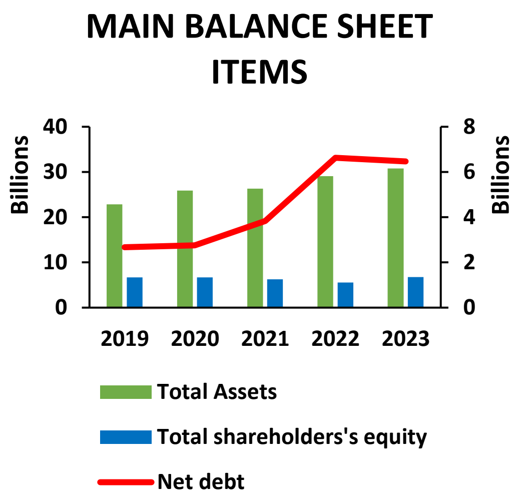
Despite the increase in net sales, **Dollar General's profitability declined in 2023**. Net income dropped significantly, falling to $1.66 billion from $2.42 billion in 2022, a consequence of a 26.5% decrease in operating profit (from $3.33 billion in 2022 to $2.45 billion in 2023) and a decline in gross profit margin, dropping by 94 basis points to 30.3% from 31.2% in 2022. This reduction can be attributed to increased selling, general, and administrative expenses, which rose by 153 basis points to 24% of net sales, up from 22.4% in the prior year. Factors influencing this decline were increasing retail labor and store occupancy expenses **due primarily to market forces** such as labor availability, minimum wage rates, and property rents. In addition, the company **invested approximately $150 million** in retail labor, and interest expenses rose substantially, increasing by $115.5 million to $326.8 million in 2023, primarily due to rising interest rates.

Furthermore, in 2023, the company opened 987 new stores, including the first three stores in Mexico, which expended $390 million. They also allocated around $683 million to update, remodel, and relocate 2,007 existing stores; $542 million for distribution and transportation improvements, and $67 million for technology and systems upgrades.

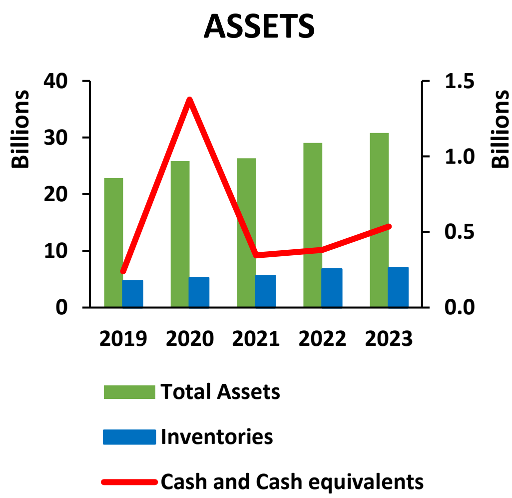
All these factors have caused an inferior financial performance compared to the last years.

BALANCE SHEET

Regarding the balance sheet, **total assets have increased over the past years**. Last year, there was an increase of 5.9%, lower than the rise of 10.5% in 2022. Among the assets, inventory management is crucial for the company's performance, as it is a discount store. Dollar General has shown an **increase in inventories** despite shrinkage and damages during 2023 due to higher levels in the first half of the year, the macroeconomic environment, and operational challenges. Last year, merchandise inventories increased by 3.5%, a lower increase than in 2022 (20.4%). This could also be a consequence of low turnover due to higher prices (inflation). At the end of the year, Dollar General stated that it had reduced inventory levels by addressing challenges related to self-checkouts and investing in retail labor to improve store standards.



Moreover, **net debt has consistently increased**, with a significant rise in 2022. In fact, in April 2020, the company issued $1.0 billion aggregate principal amount of 3.5% senior notes due 2030, net of a discount of $0.7 million, and $500.0 million aggregate principal amount of 4.125% senior notes due 2050, net of a discount of $5.0 million. As a result, cash and cash equivalents also increased exponentially in 2020 and then reduced in 2021. Last year, cash increased by 41%. In 2022, net debt peaked due to an increase in **long-term obligations and a decline in cash**. This issuance of debt was to cover any liquidity issues arising from COVID-19.



Finally, due to the constant opening of new stores, net property and equipment increased in both 2023 and 2022 by 16.3% and 20.5% respectively.

RATIO ANALYSIS

PROFITABILITY

ROA decreased below the safe level of 8%, potentially due to declining sales efficiency. Moreover, ROE, despite being still strong, experienced a sharp drop, which can be attributed to a reduction in net income by 31% over the four years analyzed, therefore generating less return on shareholder equity. The high values of ROE are mostly boosted by high leverage which increases profitability, but it should be kept under control to assure the financial stability of the company. **Operating Margin has also shrunk** from 10.5% in 2020 to 6.3% in 2023 due to rising

Year	ROA	ROE	Operating Margin
2023	5.3%	24.6%	6.3%
2022	8.4%	43.6%	8.8%
2021	9.1%	38.3%	9.4%
2020	10.3%	39.9%	10.5%
2019	7.5%	25.5%	8.3%

operational costs and pressure from competitors like Dollar Tree or Walmart. It can be seen that the company's profitability has been weakening over the years, which may affect its long-term growth.

LIQUIDITY

The company's ratios show **a consistent but relatively low level of liquidity**. The quick ratio, which has remained well below the adequate threshold of 0.8, indicates that Dollar General **may struggle to cover short-term liabilities** without relying on third-party support and the yearly fluctuations of current ratio from 1.05 to 1.29 hint at the potential risks that DG might face if the overall cash flow decreases. This significant deviation between the quick ratio and the current ratio shows that Dollar General **rely heavily on inventory** (which is a less liquid asset) to satisfy current liabilities; this can lead to liquidity problems if the company is not able to generate on time enough cash from its inventory sales.

Year	Quick Ratio	Current Ratio
2023	0.15	1.19
2022	0.14	1.29
2021	0.12	1.05
2020	0.29	1.21
2019	0.11	1.14

EFFICIENCY

Although still in the safe range of above 1, **inventory turnover dropped** from 4.64 in 2020 to 3.92 in 2023, implying that the products are moving more slowly, which could result from weaker demand or operational inefficiencies inside the firm. This issue is further reflected in the **cash conversion cycle**, which increased from 27 days in 2020 to 45 days in 2023, which means that it takes a longer time to convert investments in inventory back into cash, consequently hurting liquidity.

Year	Inventory Turnover	Cash Conversion Cycle
2023	3.92	45
2022	4.21	36
2021	4.31	27
2020	4.64	27
2019	4.39	33

SOLVENCY

The company's solvency has weakened over time, with the **debt-to-equity ratio rising**, indicating an increased reliance on debt financing and undercapitalization. Interest coverage ratio experienced a significant drop, which also shows a **reduced ability to cover interest expenses** from operating profits. If DG's profitability continues to decrease, the company may struggle to sustain its current high debt levels, compared to the industry average

Year	Debt to Equity	Interest Coverage Ratio
2023	3.6	7,5
2022	4.3	15,8
2021	3.2	20,5
2020	2.9	23,6
2019	2.4	22,9

COMPANY VALUATION

REVENUES

This table presents the **historical and forecasted revenue growth** for Dollar General. The post-pandemic growth has been slow but is expected to pick up to about **4.7%** in 2024 and stay at the same level for the succeeding three years. Beyond this period, growth rates are assumed to taper off gradually to eventually reach the **perpetual growth rate of 2%.** This is in line with long-term inflationary tendencies in the United States market, where Dollar General's main activities are located.

Year	Revenues (in M $)	Growth rate
2020	$ 33,747	21.59%
2021	$ 34,220	1.40%
2022	$ 37,845	10.59%
2023	$ 38,692	2.24%
2024E	$ 40,506	4.69%
2025E	$ 42,405	4.69%
2026E	$ 44,393	4.69%
2027E	$ 46,076	3.79%
2028E	$ 47,411	2.90%
TV	$ 48,359	2.00%

WACC

COST OF EQUITY

The cost of equity is calculated using the **Capital Asset Pricing Model (CAPM)**. A risk-free rate of 4.5% was selected, based on the current yield of 10-year American Treasury Bonds. A beta of 0.66 was used, which represents a **3Y adjusted beta** provided by FactSet. We then multiplied this value by a **market risk premium of 5.9%**, given by the difference between the expected market return of 10.4% (using S&P average returns throughout the last 20 years) and the risk-free rate. Using the values computed above, we arrived at a conclusive **cost of equity of 8.39%.**

Cost of equity	
Risk free rate	4.5%
MRP	5.9%
Beta	0.66
Ke	8.39%

COST OF DEBT

We initiate the computation of the **cost of debt** using the same risk-free rate assumed for the cost of equity (4.50%).

We added to this value the **default spread** indicated by Dollar General's corporate ratings from **Fitch (B+), S&P (BBB), and Moody's (Ba1).** These ratings correspond to a default spread of 1.46%. Consequently, a pre-tax cost of debt of 5.96% is established. Considering the American tax shield of about 25%, we thereby computed an **after-tax cost of debt of 4.47%.**

Cost of debt	
Risk free rate	4.5%
Rating	BBB
Credit spread	1.46%
Kd	5.96%

WACC

The **Weighted Average Cost of Capital (WACC)** is computed by weighing the cost of debt and the cost of equity according to their respective proportions in the capital structure.

As of December 31, 2023, Dollar General holds $16,520 million of outstanding **equity (46.6%)** and $18,939 million of outstanding **debt (53.4%).** The calculated **WACC is 6.3%,** reflecting Dollar General's relatively high debt ratio, which amplifies the weighted cost of debt in the overall calculation.

The following tables display a comprehensive list of all the data points that were used in the computation of the Weighted Average Cost of Capital (WACC).

WACC	
MV of equity	$16.5bn
MV of net debt	$18.9bn
Tax rate	25%
E/(D+E)	46.6%
D/(D+E)	53.4%
WACC	6.3%

DISCOUNTED CASH FLOW MODEL

Discounting Dollar General's projected cash flows with the above-mentioned WACC yields an **enterprise value of $39.5 billion and an equity value of $20.6 billion.** This corresponds to an intrinsic share price of $93.40, representing a **20.7% increase** over the current **share price** (as of 29/11/2024) of **$77.4**. A more detailed overview of the DCF can be found in the appendix.

Recognizing the heavy reliance of the DCF model on underlying assumptions, we have decided to include a **sensitivity analysis** reflecting potential changes in the WACC and the perpetual growth rate, which are the two variables with the greatest impact on the DCF model.

SENSITIVITY ANALYSIS

In the table here on the left we calculated the different price Dollar General can assume changing the WACC and the perpetual growth rate we estimated. In the most **pessimistic scenario**, reflecting both a 1% decrease in the perpetual growth rate and a 1% increase in WACC compared to the base scenario, the resulting share price is $42.0 **(-41% downside)**. Conversely, in the most **optimistic scenario**, featuring a 1% higher perpetual growth rate and a 1% lower WACC, the calculated share price is $233.8 **(150% upside).**

Share price sensitivity analysis

g / WACC	5.3%	5.8%	6.3%	6.8%	7.3%
1.0%	99.8	80.8	65.5	52.7	42.0
1.5%	120.1	96.6	78.0	62.9	50.4
2.0%	146.5	116.5	**93.4**	75.2	60.4
2.5%	182.3	142.3	112.9	90.3	72.4
3.0%	233.8	177.5	138.3	109.4	87.3

COMPARABLE COMPANIES ANALYSIS

To approach valuation from a different angle, we decided to take a look at **comparable companies** on the market that operate in similar fields as Dollar General. We selected a range of comparable based on **criteria of size, market and risk profile**. The identified companies include:

- Walmart
- Target
- Five Below
- Dollar Tree
- Costco
- Kroger
- Walgreens Boots Alliance
- CVS Health

The multiples that we used are **EV/Revenue, EV/EBITDA, EV/EBIT, P/E and P/Book**. To come to a conclusion, we firstly calculated the median multiples and then multiplied them (respectively by Revenue, EBITDA, EBIT, Earnings, Shareholder Equity) to get an enterprise value or directly the equity value (for equity-side multiples). For asset-side multiples we obtained equity value by subtracting the net debt ($18.9bn).

We then calculated an **average equity value** with the most significant multiples (EV/EBITDA, P/E and P/Book) considering outliers and further analysis and we obtained an **equity value of roughly $21.7bn** and a **share price of $98.25** (26.9% upside).

Multiples' Median Values	
EV/Revenue	0.8x
EV/EBITDA	7.6x
EV/EBIT	15.2x
P/E	18.5x
P/Book	3.3x

EV or EqV using Multiples	
EV/Revenue	30,760
EV/EBITDA	25,076
EV/EBIT	37,208
P/E	30,800
P/Book	22,103

RECOMMENDATION

BUY

Our analysis makes it quite clear that Dollar General is **undervalued**, with great potential upside. All this leads to an intrinsic valuing of **share price from $93.40 up to $98.25**, making quite a good case for investments with about **20-26% upside**. The sensitivity analysis shows that in most of such cases, albeit important assumptions, this would prove to be a **solid and strong stock**.

DCF APPENDIX

EBIT ESTIMATION

	Historicals				Explicit forecast					
(Data in $ million)	2020A	2021A	2022A	2023A	2024E	2025E	2026E	2027E	2028E	2029E
Income statement										
Sales	**33,747**	**34,220**	**37,845**	**38,692**	**40,506**	**42,405**	**44,393**	**46,076**	**47,411**	**48,359**
Growth	*21.59%*	*1.40%*	*10.59%*	*2.24%*	*4.69%*	*4.69%*	*4.69%*	*3.79%*	*2.90%*	*2.00%*
COGS (excluding D&A)	(22,454)	(22,766)	(25,300)	(26,124)	(27,125)	(28,397)	(29,728)	(30,855)	(31,749)	(32,384)
% of sales	*(66.54%)*	*(66.53%)*	*(66.85%)*	*(67.52%)*	*(66.97%)*	*(66.97%)*	*(66.97%)*	*(66.97%)*	*(66.97%)*	*(66.97%)*
Gross profit	**11,293**	**11,454**	**12,545**	**12,568**	**13,381**	**14,008**	**14,665**	**15,221**	**15,662**	**15,975**
Other SG&A expenses	(7,164)	(7,592)	(8,492)	(9,273)	(9,261)	(9,695)	(10,150)	(10,535)	(10,840)	(11,057)
% of sales	*(21.23%)*	*(22.19%)*	*(22.44%)*	*(23.97%)*	*(22.86%)*	*(22.86%)*	*(22.86%)*	*(22.86%)*	*(22.86%)*	*(22.86%)*
EBITDA	**4,129**	**3,862**	**4,053**	**3,295**	**4,120**	**4,313**	**4,515**	**4,686**	**4,822**	**4,918**
Margin	*12.24%*	*11.29%*	*10.71%*	*8.52%*	*10.17%*	*10.17%*	*10.17%*	*10.17%*	*10.17%*	*10.17%*
D&A	(574)	(641)	(725)	(849)	(808)	(846)	(885)	(919)	(946)	(964)
% of sales	*(1.70%)*	*(1.87%)*	*(1.92%)*	*(2.19%)*	*(1.99%)*	*(1.99%)*	*(1.99%)*	*(1.99%)*	*(1.99%)*	*(1.99%)*
EBIT	**3,555**	**3,221**	**3,328**	**2,446**	**3,312**	**3,467**	**3,630**	**3,767**	**3,876**	**3,954**
Margin	*10.53%*	*9.41%*	*8.79%*	*6.32%*	*8.18%*	*8.18%*	*8.18%*	*8.18%*	*8.18%*	*8.18%*

DCF

(Data in $ million)	2020A	2021A	2022A	2023A	2024E	2025E	2026E	2027E	2028E	2029E
EBIT	3,555	3,221	3,328	2,446	3,312	3,467	3,630	3,767	3,876	3,954
Operational taxes	(889)	(805)	(832)	(612)	(828)	(867)	(907)	(942)	(969)	(988)
NOPAT	**2,666**	**2,416**	**2,496**	**1,835**	**2,484**	**2,600**	**2,722**	**2,825**	**2,907**	**2,965**
Depreciation	574	641	725	849	808	846	885	919	946	964
Gross cash flows	**3,240**	**3,057**	**3,221**	**2,684**	**3,292**	**3,446**	**3,608**	**3,744**	**3,853**	**3,930**
Change in noncash WC	458	(262)	(1,437)	(303)	504	(113)	(118)	(100)	(79)	(56)
% of sales	*1.36%*	*(0.77%)*	*(3.80%)*	*(0.78%)*	*1.24%*	*(0.27%)*	*(0.27%)*	*(0.22%)*	*(0.17%)*	*(0.12%)*
CAPEX	(1,028)	(1,070)	(1,561)	(1,700)	(1,725)	(1,806)	(1,891)	(1,962)	(2,019)	(2,060)
% of sales	*(3.05%)*	*(3.13%)*	*(4.12%)*	*(4.39%)*	*(4.26%)*	*(4.26%)*	*(4.26%)*	*(4.26%)*	*(4.26%)*	*(4.26%)*
FCFF	**2,671**	**1,724**	**223**	**680**	**2,070**	**1,528**	**1,599**	**1,682**	**1,755**	**1,814**
TV cash flow										
Year					0.5	1.5	2.5	3.5	4.5	
Discount factor					0.9699	0.9125	0.8584	0.8075	0.7597	
PV FCFF					**2,008**	**1,394**	**1,373**	**1,359**	**1,333**	
Terminal Value										42,208
PV terminal value										**32,065**

Enterprise Value	**39,530**
(Net Debt)	(18,939)
Equity Value	**20,591**
NOSH	220.46
Share Price	**93.40**
Current Share Price	77.4
Upside/Downside	20.67%
Recommendation	**BUY**