# Guzman y Gomez: Pre-IPO Report
## Attractive Business Model and Growth Prospects but Price Too High

**Morningstar Equity Research**
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**Contents**



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**Executive Summary**

We initiate coverage on Guzman y Gomez, a Mexican-inspired quick-service restaurant operator and franchisor. Following a tremendous sales growth spurt, the QSR is ranked sixth in terms of market share in Australia. However, it is still relatively small, in a highly fragmented industry. The major QSR brands like Guzman are consolidating the market, and we forecast its store network to triple over the next decade.

However, it's too early to grant an economic moat. Returns on investments are below its cost of capital, despite its impressive growth, and earnings lag the investments in stores and support systems. We expect Guzman will maintain attractive store economics over the next decade. However, we need to see firm evidence that the brand and store economics are holding up as the store rollout progresses to award a moat and extend our optimism beyond the next 10 years.

**Key Takeaways**

- Our fair value estimate for Guzman is AUD 15 per share, and we will provide a star rating once the stock closes on its first day of trade, June 20, 2024.
- To reach a valuation near the AUD 22 offer price, we need to assume Guzman's new-store economics persist well beyond a decade, and that it has a moat. But given that the emerging brand is still in growth mode, we are hesitant to fully bake in management's 20-year store-count aspirations.
- The Australian market is the main game where the brand and growth profile are strongest. Guzman has a measured and capital-efficient approach to international expansion, which is sensible, but even successful QSR chains need time to gain critical mass. We do not expect material offshore contributions for the next decade.

**Companies Mentioned**

| Name/Ticker | Economic Moat | Currency | Fair Value Estimate | Current Price | Uncertainty Rating | Morningstar Rating | Market Cap (Bil) |
|---|---|---|---|---|---|---|---|
| Guzman Y Gomez GYG | None | AUD | 15.00 | - | High | - | - |
| Collins Foods CKF | None | AUD | 14.40 | 9.34 | High | ★★★★ | 1.10 |
| Domino's Pizza DMP | Narrow | AUD | 61.00 | 38.35 | High | ★★★★ | 3.49 |

**Australia's Fastest-Growing Major QSR Chain to List on the ASX**

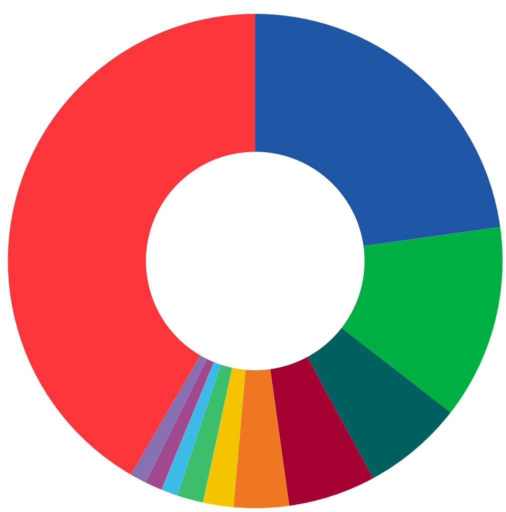
Guzman y Gomez is on a growth tear. In a little under a decade, the Mexican-inspired QSR chain has almost quadrupled its Australian store count, to 183 at the end of 2023 from 53 in 2014. Over the same period, Euromonitor estimates Guzman's share of Australian QSR sales has increased to 2.0% from 0.5%. By turnover, Guzman is the country's sixth-largest QSR brand.

Guzman operates a hybrid store ownership model, running corporate-owned restaurants and licensing its brand to franchisees. The company expects around one third of stores will be corporate-owned by the end of fiscal 2024, approaching 40% over the long run. The vast majority of stores are in Australia, but Guzman also has a nascent presence in Singapore and Japan through a master franchisee agreement and runs a handful of corporate stores in the US.

Rolling out stores under a franchise model significantly reduces Guzman's capital investment and funding needs. Franchisees are responsible for new-store capital expenditure and ongoing maintenance. In return for use of its brand and operating model, Guzman collects a royalty fee. The royalty rate flexes with store turnover and averaged about 8% of global franchisee sales in fiscal 2023. This is a higher royalty rate than KFC-franchisee Collins Foods pays to Yum! Brands. However, after adjusting for other fees, we estimate a franchisee's total payments to the brand owners, as a share of sales, are on par.

The more capital-intensive corporate stores provide Guzman with greater control over customer experience and serve as a testing ground for new ideas. While the mix of franchisee to corporate stores varies widely across global QSR franchisors and between jurisdictions, lowering the share of corporate stores in the portfolio below the 40% we forecast could free up cash to be either reinvested or returned to shareholders.

**Exhibit 1** Australian QSR Market Is Highly Fragmented, With Plenty of Opportunity to Consolidate



| | % |
|---|---|
| McDonald's | 22.80 |
| KFC | 12.70 |
| Hungry Jack's | 6.60 |
| Domino's Pizza | 5.70 |
| Subway | 3.60 |
| Guzman y Gomez | 2.00 |
| Red Rooster | 1.70 |
| Grill'd | 1.10 |
| Zambrero | 1.10 |
| Oporto | 1.10 |
| Other | 41.60 |

Source: Euromonitor. Data as of June 4, 2024.

The Australian QSR market is highly fragmented. The five largest brands by turnover—McDonald's, KFC, Hungry Jack's, Domino's, and Subway—collectively represent around one half of industry sales. Guzman has positioned itself as a youth-focused health-conscious QSR brand. As a result of its premium offering, average spend per transaction is around 15% higher than major QSR peers. We estimate that average unit volumes of around AUD 4 million per store, a key determinant of restaurant profitability, are close to best-in-class QSR peers McDonald's and KFC in Australia.

## Promising Early Signs, but No Moat Yet

Despite a strong brand presence in Australia, Guzman has yet to carve out an economic moat. The restaurant space is highly competitive. Switching costs are nonexistent for patrons, and barriers to entry are relatively low. Those restaurants which manage to carve out a durable competitive advantage typically do so by building intangible brand assets and cost advantages through scale.

### Despite Rapid Growth, Guzman Is Still Emerging

Established in 2005, Guzman is still a relatively young brand when compared with the bulk of our restaurant coverage, and the larger players in the Australian QSR market. Domino's Pizza started operating in 1983 and is managed by master franchisee narrow-moat Domino's Pizza Enterprises. Yum! Brands' KFC started in Australia in 1968—no-moat Collins Foods is a franchisee. The QSRs with the largest store counts, Subway and McDonald's, started in 1988 and 1971, respectively.

Within the Mexican-inspired niche, Guzman's 183 stores places it behind Zambrero with over 200 stores. As Zambrero is privately held, sales data is scant. But Guzman's QSR market share of about 2.0% is significantly higher than Zambrero, with a 1.1% share, per Euromonitor. Part of this discrepancy is in store format. Guzman has a much higher proportion of stores with drive-thru, which are more lucrative, generating one third more sales than its strip venues. About 36% of Guzman stores have drive-thru, compared with about 12% for Zambrero, which is predominantly located on retail strips.

### Ambitious Long-Term Growth Aspirations

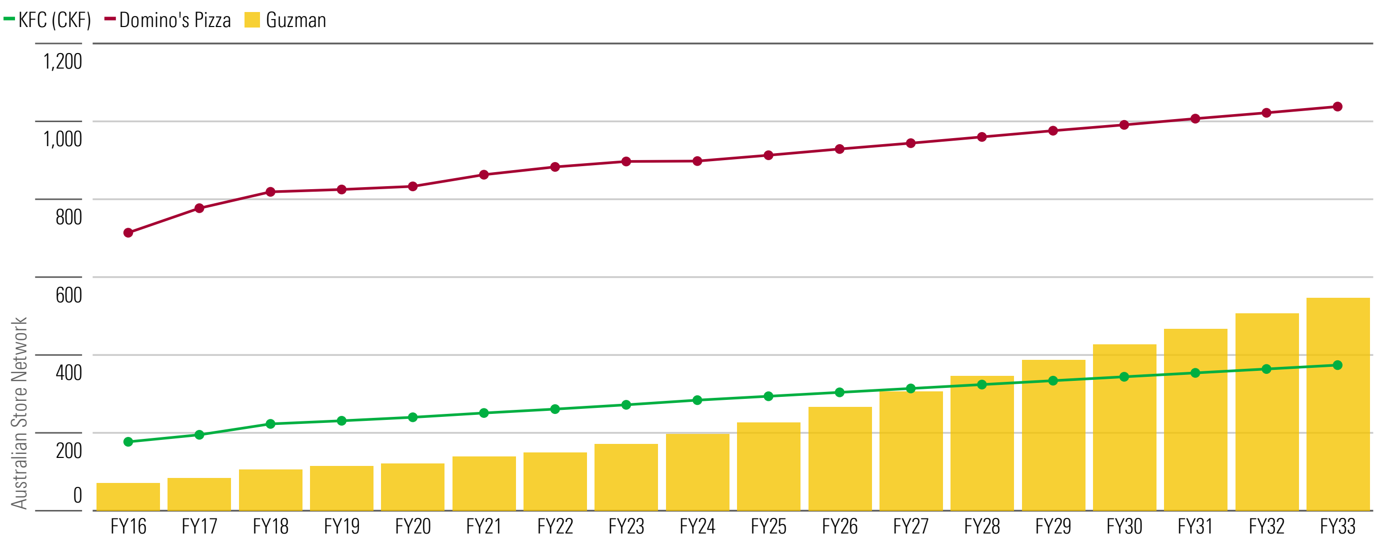
Guzman aims to expand its Australian network to more than 1,000 stores. This goal reflects the company's estimate of 3-kilometer catchments with a population of 30,000. A network of this size would be broadly comparable to McDonald's Australian footprint today.

Guzman's market share has grown rapidly, supported by its store rollout and strong same-store sales growth. But there is some uncertainty around the company's long-term ambitions. Healthy-store-level economics are crucial for Guzman's corporate stores and for franchisee willingness to invest behind the Guzman brand. The company needs its target store economics to hold to roll out its ambitious new-store plan.

In the core Australian market, Guzman targets new-store buildout costs of around AUD 2 million, a corporate restaurant margin of about AUD 1 million, and a franchise margin of about AUD 500,000. This implies a cash-on-cash payback period of three to four years for franchisees and just under two years for corporate stores. This is comparable with KFC-franchisee Collins Foods, which typically has a payback period of a little over three years. Domino's targets a payback of three to five years for its franchisees.

Based on recent return metrics, we think Guzman franchisees will support the rollout of around 40 new stores per year for the next decade—of which, on average, we estimate franchisees open 24 and the company operates the other 16. However, because the brand is still relatively young and its strength yet to be fully tested, the planned rapid rollout may need to slow longer term if store economics worsen. Beyond our explicit forecast, we expect Guzman's return on invested capital, or ROIC, to converge to our weighted average cost of capital assumption as the company pushes into less lucrative catchments and faces competition from QSR operators with stronger brands, including McDonald's, KFC, and Domino's. We forecast the mature Australian networks of KFC-franchisee Collins Foods and Domino's to increase by a 3% and 1% CAGR over the next decade, respectively. In contrast, we forecast Guzman, still in growth mode, to expand its network at an average rate of 12% per year.

**Exhibit 2** On Our Forecasts, Guzman's Store Growth Vastly Outstrips Listed QSR Peers




Source: Company filings, Morningstar estimates. Notes: Collins Foods (CKF) accounts for around one third of the Australian KFC network.

Guzman is also at a modest cost disadvantage compared with global franchisor peers. We expect general and administrative expenses to be about 7% of network sales in fiscal 2024, improving to around 5% by 2033. This is still significantly worse than international peers like McDonald's, which achieve general and administrative expenses of typically less than 3% of network sales.

### International Expansion Likely Tough

Guzman's international operations are more challenged. Restaurants in Japan and Singapore are included in the Australian segment, with little capital tied up in these jurisdictions, as they operate under a master franchise agreement, representing about 2% of EBITDA at midcycle. The US stores are currently loss-making, and we are not expecting them to turn a profit in our explicit forecast period. We think Guzman is likely to struggle to achieve a meaningful presence in the US against well-established and strong competitors both within the Mexican niche, like wide-moat Chipotle, and QSR in general, like wide-moat McDonald's.

### We See a Path to a Moat in Australia

We forecast average ROICs over the next five years of about 7%—below our 9% WACC estimate. ROICs trail WACC in the initial forecast years as capital is invested today, both in new stores and investments in supporting infrastructure and administrative capacity, but earnings take some time to catch up as new stores ramp up.

If store economics prove resilient despite the rapid planned rollout, and the brand matures and strengthens, we will revisit our no-moat thesis. Indeed, many QSR brand owners under our coverage enjoy economic moats. Next to capital expenditures, same store sales growth is the key driver of store economics. The strongest brands can maintain sales growth ahead of inflation—defending, or improving, store-level economics.

Guzman's recent history is promising. Double-digit Australian same store sales growth for the past five years compares favorably with Domino's and Collins in the single digits. This strong growth has supported stable same-store margins in the high teens over the past three years, indicating Guzman has significantly increased sales volumes while also passing through some cost inflation. But this growth in part could be explained by Guzman's early positioning in its lifecycle. Operational changes like increasing trading hours, optimizing store formats, and improving the menu can increase sales, but we believe most of the easy tweaks have been exhausted.

### Without a Moat, Our Valuation Is Below the Offer Price

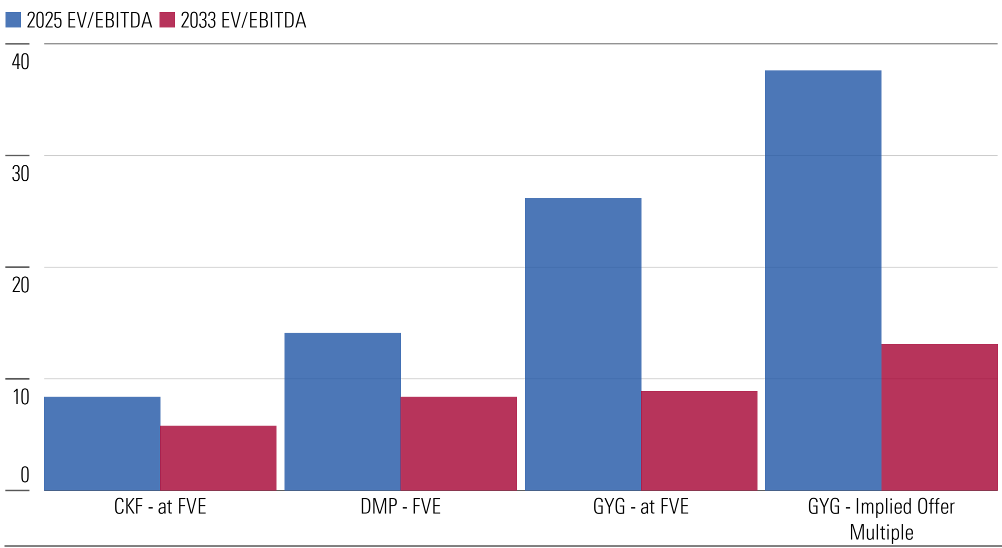
Our fair value estimate for Guzman is AUD 15 per share. Against this, the AUD 22 offer price is too high. Our fair value estimate implies an adjusted fiscal 2025 EV/EBITDA ratio of 26, and a P/E ratio of 250. While Guzman's valuation multiples look excessive on fiscal 2025 earnings compared with peers, they reflect the earlier stage of Guzman's rollout story. We see Guzman differently, with the story centered on rapid growth, and strengthening and monetizing an emerging brand.

Rolling our fair value estimates forward by a decade to capture a tripling of Guzman's global footprint from fiscal 2023, the difference in adjusted EV/EBITDA multiples fades between peers. Guzman's fiscal 2033 EV/EBITDA multiple of 9 is broadly in line with Domino's at 8, with both still ahead of Collins Foods at 6. Collins Foods is leveraged to the more mature KFC brand, and we think this means it has fewer long-term growth prospects. Guzman's higher multiple relative to Domino's reflects some of the remaining rollout potential after our explicit forecast period, with the 1,000 Australian store target in two decades' time almost twice the 570 stores we forecast by fiscal 2033.

To reach a valuation near the AUD 22 offer price, we would need to assume Guzman's new-store economics persist over the longer term. But without a moat, we are hesitant to fully bake in management's 1,000-store long-term projection. However, if we valued Guzman with a narrow moat and extended the period of rapid store growth by five years, our valuation would be AUD 19 per share. A wide moat, which would assume an additional 10 years of rapid store growth, would see our valuation lift to AUD 22.50.

Our valuation is also highly sensitive to our discount rate assumption. We assume a cost of equity of 9.0% for Guzman, in line with Australian QSR peers Domino's Pizza and Collins Foods. For some of the largest global QSR players with brand-based economic moats we cover, such as McDonald's and Yum Brands, we assume a cost of equity of 7.5%. In part, this reflects the more mature and diversified nature of these businesses. If we were to lower our cost of equity to 7.5%, but leave our no-moat rating unchanged, our valuation would lift to AUD 18.50.

**Exhibit 3** Varying Medium-Term Growth Prospects Among Peers Are Reflected in Multiples




Source: Morningstar. Fiscal 2025 EBITDA after Australian Accounting Standards Board 16. EV adjusted for capitalized leases.

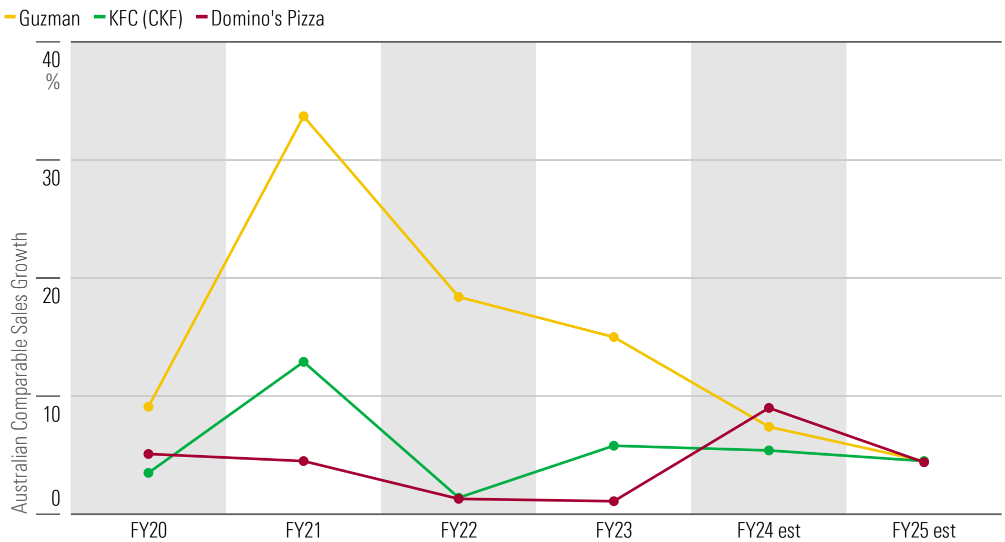
We see more-attractive valuations in Australian QSR peers Domino's and Collins Foods, both trading at discounts of around 40% to our fair value estimate. We think the market is underappreciating the ability of both companies to meaningfully expand operating margins in the near term, as input cost pressures subside on stabilizing food commodity prices, and consumer demand picks up—fueled by fiscal stimulus and rising incomes.

### Mouthwatering Earnings Growth Prospects

We assume 10-year CAGRs for network sales and adjusted profit before tax of 17% and 39%, respectively. We forecast a rapid expansion of the Australian store network to account for most of the sales growth, with domestic network sales accounting for 94% of group total in fiscal 2033, virtually unchanged from current levels.

The ambitious rollout program, averaging 40 net new stores per year, is main driver of Australian network sales. The store CAGR of 13% is supplemented by like-for-like sales growth averaging 4% per year for the next decade, underpinned in roughly equal parts by volume growth and price rises. While this is lower than the 7% management expects in fiscal 2024, it's broadly in line with fiscal 2025 guidance and our same-store sales growth at Domino's and Collins.

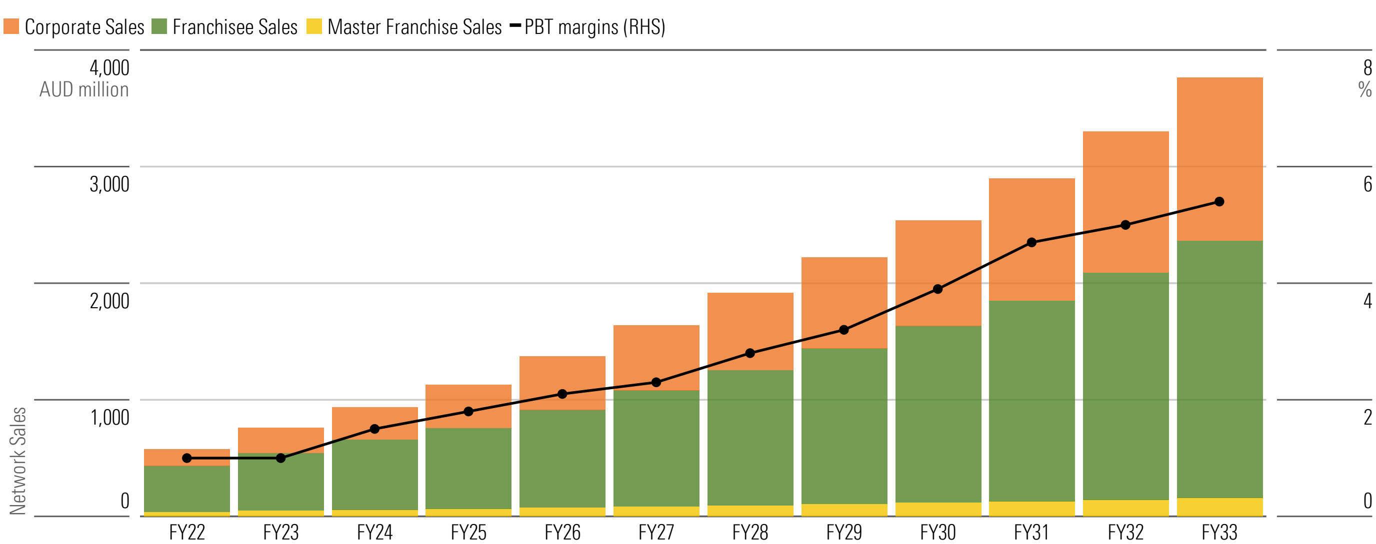
**Exhibit 4** Guzman's Comp Sales Growth Approaching Peer Levels After a Period of Material Outperformance




Source: Company filings, Morningstar estimates. Domino's Pizza comparable sales include New Zealand stores.

Forecast improving pretax profit margins are predominantly driven by fractionalizing of centralized costs, steadily increasing royalty revenue, as more franchisee income is subject to a 15% royalty rate versus the base rate of 8%, and a material improvement in corporate restaurant margins from fiscal 2024.

**Exhibit 5** Operating Leverage From Strong Sales Growth and Higher Franchisee Royalties to Gradually Lift Profit Margins




Source: Company filings, Morningstar estimates.

US expansion offers blue sky, but the potential for meaningful contributions is many years away. As a rule of thumb, a successful brand takes about a decade to reach a footprint of 100 stores.
And the US entry is also likely to be far more challenging than the rapid and successful growth in Australia so far. Australia was a virtual blank canvas for Mexican-style food, whereas the US is much more competitive and has numerous established options, including Taco Bell and Chipotle.

While current investments are measured, aggressively expanding in the US before store profitability is proven could lead to material value destruction. However, we think this scenario is unlikely, and we think that the current approach of a small number of stores to prove or disprove the concept is appropriate.

The difficulties and lead time for a new entrant to resonate with customers protects established Australian chains from overseas disruptors. For instance, Yum! Brands' Taco Bell is struggling to take hold in Australia, despite being a major QSR chain in the US, with some 8,000 stores. Taco Bell's struggles in Australia, and Guzman's contrasting success, suggests Guzman is doing something right with its offering and format and is on its way to building a moat.

**Key Risk: Missing Store Growth**
The Australian store rollout is the most significant contributor to Guzman's sales outlook but could be impeded by a number of factors. As the company expands, it may be forced to move into less profitable catchments or cannibalize sales of existing stores. Capital expenditure for new stores may prove higher than expected, reducing returns on investment and franchisee appetite for new stores. Deteriorating macroeconomic conditions, or changes in royalty rates and levies, could weigh on restaurant economics and make it difficult to maintain existing or attract new franchisees. All else equal, if the rollout slowed to around 20 new stores per year—around half the target pace—our valuation would fall to AUD 11.50 per share.

Guzman's growth strategy also assumes ongoing sales growth and margin improvement, given its success to date. But direct competition comes from other Mexican-inspired chains, such as Zambrero's, Mad Mex, and Taco Bell, for market share. It also competes with other QSR chains with larger store networks and greater brand recognition, including McDonald's, KFC, and Domino's Pizza. Consumer tastes change, and while Mexican-inspired is one of the fastest-growing QSR categories in Australia currently, this may not persist.

While less material to the growth strategy, Guzman's international rollout is subject to risks. Guzman does not yet have brand recognition outside of Australia but is attempting to establish a meaningful presence in Asia and the US. We like the low-capital low-risk approach to expansion. This means there is little risk of material value destruction if the brand fails to gain traction in those regions. Guzman operates under a master franchise agreement in Singapore and Japan, meaning franchisees pay to build the new stores and Guzman doesn't put capital at risk. In the US, Guzman owns and operates its stores, but given the very small footprint, exiting the market would be immaterial to our fair value estimate.

The main environmental, social, and governance issue for QSR operators is food safety risk. Food safety breaches can be widely reported in the media and damage a brand's reputation. Reputational damage can also arise from a food safety incident in a franchisee restaurant, over which Guzman has less operational control. To manage this risk, Guzman has implemented a food safety management system and delivers food safety training via structured programs to all corporate, franchise, and master franchise restaurants. We believe this mitigates the risk to an appropriate level. We assess the risk of material value destruction from ESG issues as low.

## Appendix

**Exhibit 6** Initial Public Offering Timeline

| Event | Indicative Date |
|---|---|
| Prospectus date | Friday, May 31, 2024 |
| Offer opens | Monday, June 10, 2024 |
| Offer closes | Thursday, June 14, 2024 |
| GYG shares commence trading on ASX on a conditional and deffered settlement basis | Thursday, June 20, 2024 |
| Settlement of offer | Friday, June 21, 2024 |
| Issue and allotment of offer shares | Monday, June 24, 2024 |
| GYG shares commence trading on ASX on a nomal settlement basis | Tuesday, June 25, 2024 |

Source: Company filings.

**Exhibit 7** Key Offer Statistics

| Key Offer Details | |
|---|---|
| Offer price | AUD 22 per share |
| Franchisee offer price | AUD 18 per share |
| Total number of shares to be issued or transferred under the offer | 11.1 million |
| Total proceeds of the offer | AUD 335.1 million |
| Proceeds raised by the issue of new shares | AUD 200 million |
| Proceeds to be paid to selling securityholders | AUD 135.1 million |
| Total number of shares on issue at completion of the offer | 101.3 million |
| Total number of options on issue on completion of the offer | 8.3 million |
| Market capitalization based on the offer price | AUD 2.2 billion |

Source: Company filings.

**Exhibit 8** Use of Funds

**Use of Funds**

| | |
|---|---|
| Fiscal 2025 restaurant network expansion | AUD 49.1 million |
| Post-fiscal 2025 restaurant network and general corporate purposes | AUD 133.5 million |
| Payment for costs of the offer | AUD 17.4 million |
| Payment to selling securityholders | AUD 133.4 million |
| Payment to Guzman to fund the exercise price of the sale options | AUD 1.7 million |
| Total uses | AUD 335.1 million |

Source: Company filings.

**Exhibit 9** Guzman Y Gomez Forecasts

Note: star rating to be determined following first day of trade, June 20, 2024.

**Morningstar Equity Research** | 6 June 2024

# Guzman Y Gomez (ASX:GYG)

| Last Price | Fair Value | Uncertainty | Stewardship | Economic Moat | Moat Trend | Morningstar Credit Rating |
|---|---|---|---|---|---|---|
| 22 AUD | 15 AUD | High | Standard | None | Stable | N/A |

| | |
|---|---|
| Analyst | Johannes Faul |
| Phone & Email | 61-9276-4419 |
| | johannes.faul@morningstar.com |
| Sector | Consumer Cyclical |
| Industry | Restaurants |

| | |
|---|---|
| Five-Star Price | 9.00 |
| Fair Value Estimate | 15.00 |
| One-Star Price | 23.25 |
| Market Price | 22.00 |
| P / FVE | 1.47 |

| | |
|---|---|
| Estimated COE | 9.0% |
| Pre-Tax Cost of Debt | 5.8% |
| Estimated WACC | 8.3% |
| ROIC * | 7.4% |
| Adjusted ROIC * | 7.4% |

* 5-Yr Projected Average

| | | |
|---|---|---|
| Adjusted P / E | 674.2 | 459.7 |
| EV / Adjusted EBITDA | 52.3 | 35.6 |
| EV / Sales | 7.9 | 5.4 |
| Price / Book | 8.7 | 5.9 |
| FCF Yield | -1.1% | -1.6% |
| Dividend Yield | 0.0% | 0.0% |
| (2024 Estimates) | (Price) | (Fair Value) |

| All values (except per share amounts) in: AUD Millions | 3-Yr CAGR/AVG | 2023 | Forecast 2024 | 2025 | 2026 | 2027 | 2028 | 5-Yr Projected CAGR/AVG |
|---|---|---|---|---|---|---|---|---|
| **Income Statement** | | | | | | | | |
| Revenue | | 259 | 278 | 372 | 461 | 558 | 664 | |
| Gross Profit | | 189 | 203 | 271 | 336 | 407 | 485 | |
| Operating Income | | 4 | 12 | 20 | 36 | 53 | 72 | |
| Net Income | | -2 | -14 | 6 | 23 | 34 | 45 | |
| Adjusted Income | | 3 | 3 | 6 | 23 | 34 | 45 | |
| Adjusted EPS | | 0.03 | 0.03 | 0.06 | 0.21 | 0.31 | 0.41 | |
| Adjusted EBITDA | | 43 | 42 | 60 | 86 | 112 | 142 | |
| **Growth (% YoY)** | | | | | | | | |
| Revenue | | 50.8% | 7.3% | 33.7% | 24.0% | 21.1% | 19.0% | 20.7% |
| Gross Profit | | 47.8% | 7.6% | 33.7% | 24.0% | 21.1% | 19.0% | 20.8% |
| Operating Income | | -49.3% | 223.7% | 62.9% | 84.7% | 47.2% | 36.6% | 81.3% |
| Net Income | | -158.5% | 496.8% | -143.5% | 274.9% | 43.6% | 35.4% | NM |
| Adjusted EPS | | | 13.0% | 74.1% | 274.9% | 43.6% | 35.4% | 70.4% |
| Adjusted EBITDA | | 44.8% | -2.9% | 43.4% | 42.2% | 30.9% | 26.3% | 26.8% |
| **Profitability (%)** | | | | | | | | |
| Gross Margin | | 72.8% | 73.0% | 73.0% | 73.0% | 73.0% | 73.0% | 73.0% |
| Operating Margin | | 1.4% | 4.3% | 5.3% | 7.8% | 9.5% | 10.9% | 7.6% |
| Net Margin | | -0.9% | -5.2% | 1.7% | 5.1% | 6.0% | 6.8% | 2.9% |
| Adjusted EBITDA Margin | | 16.7% | 15.1% | 16.2% | 18.6% | 20.1% | 21.3% | 18.3% |
| Return on Equity | | -6.5% | -8.8% | 2.4% | 9.0% | 12.6% | 16.7% | 6.4% |
| Adjusted ROIC | | 5.1% | 3.8% | 5.0% | 7.5% | 9.5% | 11.4% | 7.4% |
| Adjusted RONIC | | -0.5% | 8.1% | 7.8% | 20.7% | 21.7% | 25.2% | 16.7% |
| **Leverage** | | | | | | | | |
| Debt / Capital | | 3.9% | 1.2% | 1.2% | 1.1% | 1.1% | 1.1% | 1.1% |
| Debt / EBITDA | | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 |
| EBITDA / Interest Expense | | | | | | | | |
| FCFE / Total Debt | | -1.57 | -8.18 | -6.24 | 3.84 | 8.29 | 13.37 | 2.22 |
| **Cash Flow** | | | | | | | | |
| Dividends per Share | | 0.00 | 0.00 | 0.02 | 0.17 | 0.25 | 0.34 | |
| Free Cash Flow to the Firm | | -21 | -25 | -19 | 13 | 28 | 45 | |
| FCFE (CFO-Capex) | | -5 | -25 | -19 | 12 | 25 | 40 | |
| Dividend Franking | | 0.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | |
| Dividend Payout Ratio | | 0.0% | 0.0% | 31.7% | 81.2% | 81.1% | 81.1% | |

Source: Company filings, Morningstar estimates.

## Research Methodology for Valuing Companies

**Overview**

At the heart of our valuation system is a detailed projection of a company's future cash flows, resulting from our analysts' research. Analysts create custom industry and company assumptions to feed income statement, balance sheet, and capital investment assumptions into our globally standardized, proprietary discounted cash flow, or DCF, modeling templates. We use scenario analysis, in-depth competitive advantage analysis, and a variety of other analytical tools to augment this process. We think analyzing valuation through discounted cash flows presents a better lens for viewing cyclical companies, high-growth firms, businesses with finite lives (mines, for example), or companies expected to generate negative earnings over the next few years. That said, we don't dismiss multiples altogether but rather use them as supporting cross-checks for our DCF-based fair value estimates. We also acknowledge that DCF models offer their own challenges (including a potential proliferation of estimated inputs and the possibility that the method may miss short-term market-price movements), but we believe these negatives are mitigated by deep analysis and our long-term approach.

Morningstar's Equity Research Group ("we," "our") believes that a company's intrinsic worth results from the future cash flows it can generate. The Morningstar Rating for stocks identifies stocks trading at a discount or premium to their intrinsic worth—or fair value estimate in Morningstar terminology. Five-star stocks sell for the biggest risk-adjusted discount to their fair values, whereas 1-star stocks trade at premiums to their intrinsic worth.

Four key components drive the Morningstar rating:

- our assessment of the firm's economic moat.
- our estimate of the stock's fair value.
- our uncertainty around that fair value estimate.
- the current market price.

This process ultimately culminates in our single-point star rating.

**Economic Moat**

The Morningstar Economic Moat Rating is a structural feature that Morningstar believes positions a firm to earn durable excess profits over a long period of time, with excess profits defined as returns on invested capital above our estimate of a firm's cost of capital. The economic moat rating is not an indicator of the investment performance of the investment highlighted in this report. Narrow-moat companies are those that Morningstar believes are more likely than not to achieve normalized excess returns for at least the next 10 years. Wide-moat companies are those that Morningstar believes will earn excess returns for 10 years, with excess returns more likely than not to remain for at least 20 years. Firms without a moat, including those that have a substantial threat of value destruction-related risks related to environmental, social, and governance; industry disruption; financial health; or other idiosyncratic issues, are more susceptible to competition. Morningstar has identified five sources of economic moats: intangible assets, switching costs, network effect, cost advantage, and efficient scale.

**Fair Value Estimate**

Each stock's fair value is estimated by using a proprietary discounted cash flow model, which assumes that the stock's value is equal to the total of the free cash flows of the company is expected to generate in the future, discounted back to the present at the rate commensurate with the riskiness of the cash flows. As with any DCF model, the ending value is highly sensitive to Morningstar's projections of future growth.

**Fair Value Uncertainty**

The Morningstar Uncertainty Rating represents the analysts' ability to bound the estimated value of the shares in a company around the fair value estimate, based on the characteristics of the business underlying the stock, including operating and financial leverage, sales sensitivity to the overall economy, product concentration, pricing power, exposure to material ESG risks, and other company-specific factors. Based on these factors, analysts classify the stock into one of several uncertainty levels: Low, Medium, High, Very High, or Extreme. Our recommended margin of safety—the discount to fair value demanded before we'd recommend buying or selling the stock—widens as our uncertainty of the estimated value of the equity increases.

**Market Price**

The market prices used in this analysis and noted in the report come from exchanges on which the stock is listed, which we believe is a reliable source.

**Morningstar Rating for Stocks**

The Morningstar Rating for Stocks is a forward-looking, analyst-driven measure of a stock's current price relative to the analyst's estimate of what the shares are worth. Stock star ratings indicate whether a stock, in the equity analyst's educated opinion, is cheap, expensive, or fairly priced. To rate a stock, analysts estimate what they think it is worth (its "fair value"), using a detailed, long-term cash flow forecast for the company. A stock's star rating depends on whether its current market price is above or below the fair value estimate. Those stocks trading at large discounts to their fair values receive the highest ratings (4 or 5 stars). Stocks trading at large premiums to their fair values receive lower ratings (1 or 2 stars). A 3-star rating means the current stock price is close to the analyst's fair value estimate.

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