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NetSuite GMROI vs Inventory Turnover: Which Metric Wins?

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In this article

1. Executive Summary
2. Introduction and Background
3. Inventory Turnover: What NetSuite's Report Measures
4. GMROI: Definition, Variants and Evidence Base
5. The Input Contract for a Same-Basis Category Comparison
6. Feature Comparison: How Definitions Differ Across Sources
7. Reconciliation, Aggregation and Seasonal Pitfalls
8. Performance and Benchmarks
9. Data Analysis and Evidence
10. From Ratio to Review Agenda
11. Governance: Ownership, Cadence and Evidence Retention
12. Implications and Future Directions
13. Frequently Asked Questions (FAQs)
14. Conclusion

Executive Summary

Inventory turnover and gross margin return on inventory investment (GMROI) are built from the same two ingredients, a cost-valued average inventory and a period of sales, yet they can rank categories in opposite order. In the author-designed example used throughout this report, **Category A** turns **3.0 times** a year but earns a **GMROI of 1.0**, while **Category B** turns only **2.0 times** and earns a **GMROI of 2.0**. The example is fictional, and it shows that speed of stock movement alone does not rank inventory investment by gross return. Turnover divides cost of sales by average inventory, and GMROI divides gross profit (sales minus cost of sales) by the same average inventory, so the only difference is the numerator (docs.oracle.com) (selfhelp.windwardoncloud.com).

For NetSuite users, Oracle's Inventory Turnover report averages the on-hand value on the last day of each month in the selected window and is not governed by the Report by Period preference (docs.oracle.com). The Oracle help pages reviewed describe no GMROI report, so GMROI has to be built from a documented input contract. Definitions also differ across filers and systems: Dollar General averages five quarter-end balances (www.sec.gov), Advance Auto Parts used a two-point average in a 2010 filing (www.sec.gov), and Infor's turnover is quantity-based (docs.infor.com). Nordstrom's filing states that retailers do not uniformly calculate inventory turnover (www.sec.gov).

The averaging convention can change the answer materially. In a seasonal fictional category with 180,000 of cost of sales and 90,000 of gross profit, a twelve month-end average of 31,833 yields **5.65 turns and a GMROI of 2.83**, while a beginning/end average of 22,500 yields **8.0 turns and a GMROI of 4.0**. Neither is declared wrong; they are different sampling conventions and must be matched before dashboards are compared. Groups of categories should be aggregated by summing compatible amounts and recomputing the ratio, the weighted approach that statistical guidance prefers over an unweighted mean of ratios (openknowledge.fao.org).

Published rules of thumb do not substitute for local evidence. Vendor pages cite targets such as 2.5 to 3 (www.zoho.com) and 3.2 or greater (hedgescompany.com), and none is a universal break-even or target. A GMROI of 1.0 means gross profit equals average inventory at cost, which ignores operating costs and does not measure cash recovery. Official data help only at macro level: the US Census Bureau reported a seasonally adjusted total business inventories-to-sales ratio of 1.33 for August 2026 (www.census.gov), an end-of-month inventory to monthly sales measure and not annual turns (www.census.gov).

A ratio is a review trigger, not an instruction. Compare turnover and GMROI on one period, one cost basis, one scope and one item population, then route the category to a stock-investment, pricing or assortment review with contribution, labor, storage and service evidence attached.

Introduction and Background

This report is written for inventory-finance controllers, buyers, chief operating officers and financial planning and analysis (FP&A) teams at NetSuite-powered retailers, direct-to-consumer brands and wholesale distributors. The decision it supports is narrow: after comparing inventory turnover with GMROI for a set of categories, should a category receive more stock investment, a pricing review or an assortment review? It proposes no new industry benchmark or dataset, and every example labeled fictional is an author-designed assumption, not a client result, market average or recommended target.

The analysis below rests on third-party documentation and standard arithmetic. It is not accounting or audit advice, and teams should consult qualified accountants before changing any cost basis that feeds financial statements.

A fictional two-category example

Table 1 below sets out the example. Category A sells 120,000 currency units a year at a cost of sales of 90,000, leaving gross profit of 30,000 on an average inventory at cost of 30,000. Category B sells 100,000 at a cost of sales of 50,000, leaving gross profit of 50,000 on an average inventory of 25,000. All figures use the same annual window, cost basis and item population. The example is built to answer three questions:

- **Speed:** which category turns faster (A, at 3.0 times)?
- **Return:** which returns more gross profit per unit of average inventory (B, at 2.00)?
- **Decision:** what review does the gap justify (price and cost mix, assortment, supplier terms or exposure)?

Measure (fictional, annual)	Category A	Category B	Combined (sum, then recompute)	Unweighted mean of A and B
Net sales	120,000	100,000	220,000	not applicable
Cost of sales (COGS)	90,000	50,000	140,000	not applicable
Gross profit (sales minus COGS)	30,000	50,000	80,000	not applicable
Average inventory at cost	30,000	25,000	55,000	not applicable

Measure (fictional, annual)	Category A	Category B	Combined (sum, then recompute)	Unweighted mean of A and B
Turnover (COGS / average inventory), times per year	**3.00**	**2.00**	**2.55**	2.50
GMROI as a return ratio (gross profit / average inventory)	**1.00**	**2.00**	**1.45**	1.50
GMROI as a percentage (ratio × 100)	100%	200%	145%	150%
Gross margin rate (gross profit / sales)	25.0%	50.0%	36.4%	not applicable
Gross markup (gross profit / COGS)	33.3%	100.0%	57.1%	not applicable
Bridge check: turnover × markup	1.00	2.00	1.45	not applicable

The table shows why the faster category is not the better use of stock money on this one metric: each unit of currency held in Category A returns 1.00 of gross profit a year, against 2.00 in Category B. It also shows the aggregation rule. Summing the two categories and recomputing gives a combined GMROI of 1.45, while the unweighted mean of the two category ratios gives 1.50, a figure that overstates the combined result because it gives the smaller inventory base the same weight as the larger one. The example has clear limits: it ignores handling, labor, storage and markdown costs, says nothing about marginal returns, and a GMROI of 1.0 is not a universal operating break-even point because the ratio excludes other operating costs and does not directly measure cash recovery. The buying decision it frames is a prompt for review, for example whether Category A's price and cost mix or its service role justifies its stock, and not an instruction to shift budget.

Why definitions come first

The Chartered Financial Analyst (CFA) Institute's ratio list defines inventory turnover as cost of goods sold over average inventory, and also warns that certain ratios may be defined differently (www.cfainstitute.org). Existing GMROI tools show the same drift, so the sections below compare definitions before results.

Inventory Turnover: What NetSuite's Report Measures

Capabilities

Oracle's Inventory Turnover report lists the cost of sales, average value, turnover rate and average days on hand for each inventory item (docs.oracle.com). Its data window is the time period shown in the report footer. Average inventory value is computed from the on-hand value on the last day of each month in the period (docs.oracle.com), and the turnover rate is cost of sales divided by that average inventory value. Average days on hand uses the number of days in the months of the selected date range divided by the turnover rate.

One configuration detail matters for reconciliation: Oracle states that the report does not support reporting by period even when the Report by Period preference is set to All Reports (docs.oracle.com). That preference otherwise lets users sort and filter reports by period. A finance team that closes by accounting period but reads this report by date window may therefore be comparing two different windows without noticing.

Adoption and related reports

Oracle documents several neighbouring inventory reports that serve different purposes. Oracle's Stock Ledger documentation notes that it can help identify items that are slow-moving, fast-moving or overstocked (docs.oracle.com), which is a speed lens, not a return lens.

A separate NetSuite Analytics Warehouse inventory key performance indicator is also named Inventory Turnover and is described only as how much inventory was sold versus ordered in a given period (docs.oracle.com). Two things carrying one label, with different documented bases, are a reason to record which source a dashboard reads. Nothing in the Oracle help pages reviewed here establishes a native NetSuite GMROI report, and this report does not claim that any universal saved-search formula reproduces the Inventory Turnover report automatically. Saved search summary types such as Group can roll up results by a field, but the formula and the monthly balances still need to be verified in the specific account.

Strengths and limitations

The report's strengths are transparency and a documented formula. Its limitations for a category comparison follow from its own definition:

- **Sampling convention:** a month-end average is a chosen sampling convention, not a daily-average economic exposure measure. Oracle's Demand Signal Repository documentation, a different product, defines annual inventory turns over the total average daily inventory value at cost (docs.oracle.com).
- **Item level, not category level:** the report is organized per item, so category turnover has to be built by summing numerators and denominators, not by averaging item turns.
- **Speed only:** turnover is silent about price. Two categories with identical turns can have very different gross profit on the same inventory.
- **Window behaviour:** the date window is independent of the Report by Period preference, which affects period-based reconciliation.

GMROI: Definition, Variants and Evidence Base

Capabilities

GMROI expresses gross profit per unit of average inventory investment. Windward's System 5 documentation describes it as the dollars returned by each dollar of inventory investment (selfhelp.windwardoncloud.com), with average inventory shown in currency at landed cost. The same documentation computes turns as cost of sales divided by average inventory level. The common formula is therefore GMROI = (net sales minus COGS) / average inventory at cost, expressed as a ratio, with the percentage form equal to the ratio multiplied by 100.

Zoho's public calculator defines gross margin as net sales minus cost of goods sold (www.zoho.com) and uses the mean of opening and closing stock value, valued at cost, as the denominator. It also frames GMROI as a way to compare categories on equal footing (www.zoho.com). That is a vendor claim about a tool, and it uses a two-point average rather than the month-end average in Oracle's report.

Margin versus markup

A frequent source of error is mixing margin and markup. Markup shows profit relative to cost (www.investopedia.com), whereas profit margin is profit divided by sales (www.investopedia.com). For the same sale, markup is always larger than gross margin (corporatefinanceinstitute.com). The algebraic bridge follows from this: GMROI = turnover × gross markup, which equals turnover × gross margin rate / (1 minus gross margin rate), provided the sales and COGS definitions match the turnover numerator. Mindpera's guide uses the markup form and emphasizes mark-up, not margin (www.mindpera.com). Infor's report documents a related form, GMROI as a gross margin turnover rate divided by one minus gross margin (docs.infor.com). If a dashboard instead multiplies COGS-based turnover by the margin rate, it produces a different, lower number. In the seasonal example below that error would give 1.89 against a correct 2.83.

Adoption

Public use of the term spans vendors, filers and academics. Advance Auto Parts' 2010 annual report defined gross margin return on inventory as gross profit divided by an average of beginning and ending inventory (www.sec.gov). A Sears Holdings incentive-plan exhibit described GMROI as a measure of the productivity of the products sold (www.sec.gov). In academic work, a 1984 study in the Journal of the Academy of Marketing Science concluded that GMROI warrants serious consideration for use in retail control and planning (pure.psu.edu). These sources show the metric is established; they do not supply a cross-company target.

Strengths and limitations

The strength of GMROI is that it joins margin and capital intensity in one number, so a slow but high-margin category is not penalized for speed alone. Its limitations are equally concrete:

- **Definitions are not interchangeable.** Infor's GMROI report depends on item sales history updated to Inventory Control (docs.infor.com), and Infor notes that summarized history lacks sales prices for make-to-order kit components (docs.infor.com). Its turnover rate is quantity-based, using sales quantity for the last 12 months over average inventory (docs.infor.com), so it should not be copied into a cost-based report.
- **Average, not marginal.** A category-level GMROI averages existing stock, and says little about the return on the next purchase order.
- **Gross, not net.** It excludes operating costs, so it is not net profit and not a cash return.
- **Retail-versus-cost basis.** Mindpera states that when the denominator is valued at retail, GMROI falls by the margin rate, which is why the cost basis has to be declared (www.mindpera.com).

The Input Contract for a Same-Basis Category Comparison

A comparison is only as good as the basis it shares. The contract below lists the fields that should be agreed before any dashboard displays both ratios. The right-hand column states verification questions, not presumed accounting outcomes: each depends on the account's configuration and has to be tested there.

Table 2 below summarizes the data contract.

Contract field	What to record	Verification question (test in your account)
Period and day count	Start date, end date, days, months included	Is the window a date range or accounting periods? The Inventory Turnover report uses its own date window and ignores Report by Period (see above).
Item-to-category mapping version	Dated mapping table and version label	Which item field defines category? Oracle's item classification lists class, department, location and subsidiary fields (docs.oracle.com); a category dimension may need a class or a custom field. Was item history re-mapped during the window?
Subsidiary and location scope	Included subsidiaries, locations, ownership types	The item Subsidiary field appears only in OneWorld accounts (docs.oracle.com), and without Multi-Location Inventory the item Location field does not track stock by location. Which scope does each number cover?
Currency and translation	Reporting currency, rate policy	Under International Financial Reporting Standards (IFRS), inventories are a non-monetary item (bdo.nz); which rate policy does the extract use for historical balances?
Sales netting policy	Returns, discounts and rebates treatment	Revenue guidance treats rebates and volume discounts as variable consideration (viewpoint.pwc.com) and recognizes revenue only for goods not expected to be returned (viewpoint.pwc.com). Is the sales line net of these items?
Cost-of-sales source	One named source, with its cost basis	Transaction gross profit considers estimated costs only (docs.oracle.com) and excludes landed costs. Does the numerator come from the same cost basis as the inventory valuation?
Monthly cost-valued on-hand balances	Month-end value by category, with run timestamp	The Current Inventory Snapshot gives the latest data at report time (docs.oracle.com). For a past date, NetSuite does not recalculate average cost as of that date. How were historical month-end values captured?
Average inventory convention	Count and timing of points averaged	Month-end average (Oracle's report), beginning/end average, quarterly or daily? State the number of points.
Returned goods	Restock and write-off rules	A return authorization has no accounting impact until items are received (docs.oracle.com); clearing Restock writes the item off as an expense. Which returns re-enter inventory value?
Costing method	Method per item or group	Average costing is NetSuite's default method (docs.oracle.com), with FIFO, group average and standard also available. Is the method uniform across the compared categories?
Exclusions and flags	Items excluded, with reason code	Zero or negative inventory bases, incomplete histories and missing COGS should be flagged, not silently dropped.
Reconciliation owner	Named role, review date	Who signs the reconciliation to the general ledger and to the source report?

The table does not say which answer is correct for a given account, only that each answer changes the number. For instance, landed cost is allocated to eligible items in the inventory asset account (docs.oracle.com), and it is included in the Inventory Valuation unit value (docs.oracle.com). A numerator that excludes landed costs paired with a denominator that includes them is a basis mismatch that no formula repairs.

Cost basis and accounting policy questions

Several upstream accounting policies feed the denominator and the numerator. International Accounting Standard (IAS) 2 measures inventories at the lower of cost and net realisable value (www.ifrs.org) and allows first-in, first-out or weighted average cost formulas for interchangeable items (www.ifrs.org). Grant Thornton's IFRS viewpoint reports that IAS 2 deducts trade discounts and rebates in determining the cost of purchase (www.grantthornton.global). Under US generally accepted accounting principles, PwC's guide describes inventory cost as the applicable expenditures and charges directly or indirectly incurred (viewpoint.pwc.com), and vendor consideration is generally a reduction of the purchase price of goods acquired (viewpoint.pwc.com). Whether supplier rebates reduce unit cost, land in cost of sales at receipt or sit in another account is therefore an accounting-policy question that changes both GMROI numerator and denominator. Readers should confirm treatment with their auditors.

Returns add a further layer. Oracle shows that receiving a return decreases cost of goods sold (docs.oracle.com). Under revenue guidance, an asset with a corresponding adjustment to cost of sales is recorded for the right to recover returned products (viewpoint.pwc.com). These are verification prompts, not predictions of what an account will show.

Feature Comparison: How Definitions Differ Across Sources

The same words describe different calculations in different systems. *Table 3* below compares documented definitions from NetSuite, other enterprise resource planning (ERP) products, two public-company filings and a public calculator. It reports what each source states, and does not rate any of them.

Source (as documented)	Turnover numerator	Averaging basis	GMROI definition
Oracle NetSuite, Inventory Turnover report	Cost of sales (docs.oracle.com)	Average of on-hand value on the last day of each month in the period (docs.oracle.com)	No GMROI report in the help pages reviewed
Windward System 5 report	Cost of sales (selfhelp.windwardoncloud.com)	Average inventory level at landed cost (selfhelp.windwardoncloud.com)	Gross margin divided by average inventory at cost (selfhelp.windwardoncloud.com)
Infor Inventory Control report	Sales quantity for the last 12 months (docs.infor.com)	Built from quantities	Gross margin turnover rate / (1 minus gross margin) (docs.infor.com)
Microsoft Dynamics 365 Business Central	Cost of goods sold (learn.microsoft.com)	Two points: beginning balance and current balance (learn.microsoft.com)	Not defined in the page reviewed
Microsoft Dynamics 365 Finance	Absolute value of sold or consumed issues (learn.microsoft.com)	Beginning and ending balance (learn.microsoft.com)	Not defined in the page reviewed
Acumatica documentation	Cost of goods sold (help.myob.com.au)	Beginning and ending value (www.acumatica.com)	Not defined in the pages reviewed

Source (as documented)	Turnover numerator	Averaging basis	GMROI definition
Dollar General annual report (fiscal year ended January 30, 2026)	Cost of goods sold for the preceding four quarters (www.sec.gov)	Five quarter-end balances (www.sec.gov)	Not defined in the filing reviewed
Advance Auto Parts annual report (fiscal 2009, filed 2010)	Cost of sales (www.sec.gov)	Beginning and ending inventories (www.sec.gov)	Gross profit divided by an average of beginning and ending inventory (www.sec.gov)
Zoho public GMROI calculator	Not applicable	Mean of opening and closing stock at cost (www.zoho.com)	Gross margin over average inventory cost

Several conclusions follow from *Table 3*. First, even among cost-based sources the number of averaging points runs from two to five or twelve, so identical stock movements can yield different turns. Next, one source (Microsoft's Finance product) uses issues as the numerator, not strictly cost of goods sold, and Infor uses quantities; these are legitimate designs but not cross-comparable with a cost-based ratio. Nordstrom's filing builds its numerator from cost of sales and related buying and occupancy costs over a four-quarter average (www.sec.gov), and states that retailers do not uniformly calculate the ratio (www.sec.gov). A NetSuite team should document its own definition in the data contract and compare external figures only after mapping their numerator, denominator and averaging points.

Reconciliation, Aggregation and Seasonal Pitfalls

A worked seasonal reconciliation (fictional)

Consider a fictional seasonal Category C with annual net sales of 270,000, cost of sales of 180,000 and gross profit of 90,000. Its month-end inventory at cost, January to December, is 22,000; 20,000; 20,000; 22,000; 24,000; 26,000; 28,000; 30,000; 40,000; 55,000; 70,000 and 25,000, with a prior December balance of 20,000. The gross margin rate is 33.3% and the gross markup is 50.0%. The same underlying year then produces different readings depending on the averaging convention:

- **Twelve month-end average (Oracle report convention):** 31,833 average inventory, **5.65 turns**, **GMROI 2.83** (283%), and about 64.6 average days on hand using a 365-day window.
- **Beginning/end average (prior December and current December):** 22,500 average inventory, **8.00 turns**, **GMROI 4.00** (400%), about 45.6 days on hand.
- **Year-end balance only:** 25,000, 7.20 turns, GMROI 3.60.
- **Thirteen-point average including the prior December:** 30,923, 5.82 turns, GMROI 2.91.

Sensitivity is large because the year ends just after a seasonal build has sold through. AccountingCoach makes the same general point: using the average of only two days can be misleading when a year ends at the low point of business activity (www.accountingcoach.com). This report does not declare the two-point average wrong; it is a valid, cheaper sampling convention. It does show that a month-end-average figure and a two-point figure are different measures. The bridge still holds under any single convention: 5.65 turns × 0.50 markup = 2.83.

Reconciling two dashboards

Suppose Dashboard 1 reports GMROI 4.00 for Category C and Dashboard 2 reports 1.89, while a third calculation shows 2.83. The reconciliation steps are mechanical:

1. **Align the window and point count.** Dashboard 1 uses two points. Re-running it on twelve month-end values moves 4.00 to 2.83.
2. **Check the numerator pairing.** Dashboard 2 multiplies COGS-based turnover (5.65) by the margin rate (33.3%), giving 1.89. The consistent pairing is sales-based turnover (270,000 / 31,833 = 8.48) × margin rate, which gives 2.83, or COGS-based turnover × markup (5.65 × 50.0% = 2.83).
3. **Confirm the cost basis.** Gross profit must use the same cost as the inventory valuation, for example not estimated transaction costs against actual valuation costs.
4. **Record the residual.** Any remaining difference goes to a named reconciliation owner with a reason code.

Short windows must not be annualized as realized returns

Annualizing a seasonal window can mislead. In the fictional Category C, assume the fourth quarter alone had sales of 135,000, cost of sales of 90,000 and gross profit of 45,000, with an average of the three quarter month-ends (55,000; 70,000; 25,000) of 50,000. The quarterly GMROI is 0.90, and multiplying by four gives 3.60, while the full year realized 2.83 on the twelve-point basis. The 3.60 figure is a run-rate arithmetic, not an annual realized return, and it should be labeled as such or avoided.

Aggregate by summing, then recompute

For groups of categories, sum compatible numerators and denominators and recompute the ratio. A statistical standard for data aggregation states that weighted averages are preferred where the weight is often the value at the denominator (openknowledge.fao.org). That equals the ratio of sums, which is what *Table 1* used for the combined column. Unweighted means of item or category ratios give equal importance to units of very different size and are sensitive to extreme values. The rules for edge cases are:

- **Zero or negative inventory base:** flag the item and exclude it from ratio display, but keep its numerator and denominator visible in the reconciliation. Microsoft's Finance documentation, for instance, returns zero turnover in such cases by design, which hides the condition if unflagged (learn.microsoft.com).
- **Incomplete history:** if an item has fewer months than the window, show the months present and do not impute.
- **Missing COGS:** report as a data defect to the cost-of-sales owner, not as zero cost.

Performance and Benchmarks

No public, audited benchmark for category-level GMROI on a NetSuite cost basis exists, and this report proposes none. What is published falls into three groups.

Vendor rules of thumb. Zoho's page says a GMROI of 2.5 to 3 is generally considered healthy (www.zoho.com); Getonecart says most healthy retailers aim for 3.0 or higher (www.getonecart.com); Hedges & Company gives a rule of thumb of 3.2 or greater for retail stores (hedgescompany.com); SPS Commerce says many businesses aim for 3.0 or higher (www.spscommerce.com). Qoblex states that the one line that holds everywhere is 1.0 (qoblex.com), Mindpera says 1.00 is the break-even point (www.mindpera.com) and Slimstock says a value below 1 indicates unprofitable inventory (www.slimstock.com). The Mindpera page was last updated on 5 October 2026 (www.mindpera.com). None of these pages cites a primary study or dataset for its figure, and the figures disagree with each other, so this report treats them as unverified vendor statements. In particular, a 1.0 threshold is not a universal operating break-even: GMROI is gross, excludes other operating costs and does not directly measure cash recovery.

Academic evidence on the turnover and margin tradeoff. A working paper by Gaur, Fisher and Raman, later published in Management Science, hypothesizes that inventory turnover is negatively correlated with gross margin (questrompublish.bu.edu), and reports that turnover varies widely across retailers and over time (ideas.repec.org). The paper also reports that, in the authors' surveys, retailing managers set business targets partly in terms of the product of gross margin and inventory turnover, a measure it calls gross margin return on inventory (GMROI) (questrompublish.bu.edu). Because both turnover and gross margin depend on cost of goods sold, part of any negative correlation can arise mechanically, which is a reason to examine the fictional Category A and B pattern rather than assume that fast and profitable go together. Rumyantsev and Netessine found that firms with higher gross margins hold higher inventory levels (faculty.wharton.upenn.edu).

Official macro ratios. The US Census Bureau publishes inventories-to-sales ratios as end-of-month inventory relative to monthly sales (www.census.gov), which is a months-of-stock view and not a turnover rate. They are useful context for cyclical inventory conditions, not category benchmarks.

Data Analysis and Evidence

Official inventory ratios as of August 2026

The Census Bureau's August 2026 release, issued on 15 October 2026, reported a seasonally adjusted total business inventories-to-sales ratio of 1.33 (www.census.gov). In the release's table, seasonally adjusted ratios were 1.36 for retailers, 1.18 for merchant wholesalers and 1.48 for manufacturers; not-adjusted ratios were 1.33, 1.17 and 1.45 respectively. Census describes its seasonal adjustment as an approximation based on current and past experience (www.census.gov) and runs it through the X-13ARIMA-SEATS program (www.census.gov). FRED, the Federal Reserve Bank of St. Louis data service, notes that the ratios can be looked at as indications of the number of months of inventory (fred.stlouisfed.org). Retail inventories in these statistics are valued at cost (www.census.gov) using any method other than LIFO (www.census.gov), which means a NetSuite book that uses a different method is not directly comparable. The ratios also include only businesses with paid employees, so they are context and not a target.

Company-reported turnover

Dollar General's annual report for the fiscal year ended January 30, 2026 defines inventory turnover over four quarters of cost of goods sold (www.sec.gov) and reports 4.5 against 4.1 a year earlier, computed on a five-quarter average (www.sec.gov). It is one company's number under its own definition, not a benchmark for a different assortment or a month-end convention.

Fictional arithmetic summary

The author-designed figures reduce to identities readers can verify with a calculator: Category A returns 1.00 (3.00 turns × 33.3% markup), Category B returns 2.00 (2.00 turns × 100.0% markup) and Category C returns 2.83 on the twelve-point basis (5.65 turns × 50.0% markup) or 4.00 on the two-point basis (8.00 × 50.0%). With matched definitions the bridge reproduces the direct calculation every time, and the two Category C readings differ only in the denominator convention. None of these figures is a market average or a recommended target.

The size of the turnover and margin tradeoff

In the Gaur working paper, the estimated gross margin elasticity is negative: a 1% increase in gross margin is associated with a 0.285% decrease in inventory turns (questrompublish.bu.edu). That estimate comes from the pre-publication version and a 311-retailer sample; the published abstract states that the model explains 66.7% of the within-firm variation and 97.2% of the total variation (ideas.repec.org). The estimate describes retailers on average and should not be applied to a specific category. For averaging, the working paper computes average inventory from quarterly closing values (questrompublish.bu.edu) and Rumyantsev and Netessine use quarterly rather than annual data to account for seasonal swings (faculty.wharton.upenn.edu), two examples of researchers choosing denominators for seasonality.

From Ratio to Review Agenda

A comparison of turnover and GMROI should end in a review agenda, not an automated rule. The quadrants below are discussion prompts, subject to the contract tests above.

- **Fast turns, high GMROI:** check service levels and supply constraints before adding stock. A strong average does not prove the next purchase earns the same return, and a stock-out risk review belongs with the safety-stock owner, outside this report's scope.
- **Fast turns, low GMROI (Category A pattern):** start with a price and cost-mix review. Look at discounting, supplier terms, rebates and the sales netting policy. If the category plays a traffic or service role, document that purpose before judging it on gross return.
- **Slow turns, high GMROI (Category B pattern):** examine inventory exposure and whether the return is concentrated in a few items. Confirm the denominator is not understated by costing artifacts, such as a past-date valuation where average cost is not recalculated (docs.oracle.com).
- **Slow turns, low GMROI:** open an assortment review, with contribution, labor, storage and space evidence. GMROI is not net profit, not a cash return and not proof of an avoidable saving, so any retirement or exit decision needs separate lifecycle analysis.

Assortment planning with GMROI works best as a ranking aid inside a category: rank items or sub-categories by gross profit per unit of average inventory, then examine why the lowest and highest differ. Academic work supports GMROI as one input to retail control and planning (pure.psu.edu), not as a trigger; this report advises against automating replenishment or retirement from one ratio.

Supplier terms deserve their own line of inquiry because they enter the ratio on both sides. If rebates probable of receipt are deducted from inventory cost, as Grant Thornton describes for IFRS (www.grantthornton.global), and PwC says rebates or refunds that are probable and estimable should be considered in valuing inventory under US practice (viewpoint.pwc.com), then a change in a rebate estimate moves the denominator and later cost of sales. A GMROI shift after a rebate true-up reflects changed accounting inputs, not necessarily commercial performance.

Governance: Ownership, Cadence and Evidence Retention

Before publishing a dashboard that shows both ratios, set the following controls:

- **Data ownership:** name an owner for item-to-category mapping, one for cost of sales, one for month-end inventory balances and one for reconciliation. The contract's final field makes this explicit.
- **Review cadence:** monthly for balance capture and variance review, quarterly for category reviews. Because month-end values are not recoverable on a past date without a captured snapshot (average cost is not recalculated for a past date), snapshot capture should happen at close.
- **Evidence retention:** retain, per period, the saved report parameters, run timestamps, mapping version, exclusions list and reconciliation sign-off.
- **Account-specific tests:** before publication, reproduce Oracle's Inventory Turnover result for a sample of items from the underlying month-end balances and confirm that the sum of category inventory ties to the general ledger inventory asset account. Also test returns, landed cost and multi-subsidiary cases against the questions in *Table 2*.
- **Permissions and field availability:** confirm that the roles producing the dashboard can see the fields it needs. The Inventory Balance search documents bin, location, lot or serial, on-hand, available and status information (docs.oracle.com), and Inventory Status can reduce available quantity while retaining items as quantity on hand, so on-hand and available balances should not be confused.

Implications and Future Directions

For NetSuite teams, the main implication is that dashboard disagreement is usually a definitions problem. Reports labelled turnover or GMROI can differ in numerator, cost basis, scope and averaging points, as *Table 3* shows, and Oracle's own documentation separates the report-specific monthly average from other inventory views. A data contract turns that ambiguity into an auditable artifact.

A second implication concerns tooling. Public calculators are useful for a single scenario but use their own averaging convention, so they cannot reproduce a NetSuite month-end result without matching inputs. Scheduled snapshot capture, versioned category mapping and a reconciliation view are likely higher-value investments than additional ratios. Implementation partners can help build those pipelines, but the account-specific tests above remain the control that matters.

Open questions remain. No public data show how often NetSuite users compare turnover with GMROI, and this report claims no trend. Further work could compare month-end, daily-average and quarterly conventions on real account data, with results described as account-specific.

Frequently Asked Questions (FAQs)

What is the difference between GMROI and inventory turnover? Turnover divides cost of sales by average inventory at cost (www.cfainstitute.org). GMROI divides gross profit by the same average. Turnover shows speed; GMROI shows gross return per unit of inventory investment.

Which is better, inventory turnover or GMROI? Neither alone. In the fictional example the faster category (3.0 turns) has the lower GMROI (1.0). Use both on a matched basis and treat the pair as a diagnostic.

What is the GMROI formula? GMROI = (net sales minus COGS) / average inventory at cost, shown as a ratio; the percentage form is the ratio times 100. Windward publishes an equivalent form.

How is GMROI calculated in NetSuite? The help pages reviewed show no native GMROI report. A defensible build is to fix the window, derive category cost of sales and sales on one cost basis, capture month-end cost-valued on-hand balances by category, sum, then compute the ratio, and finally reconcile to Oracle's Inventory Turnover report. Validate each step in the specific account.

Where is the NetSuite inventory turnover report? Oracle documents it as the Inventory Turnover report with cost of sales, average value, turnover rate and days on hand per item. Its date window is independent of the Report by Period preference.

What is a good GMROI benchmark for retail? Published figures such as 2.5 to 3 or 3.2 are vendor statements without a cited primary study. Use your own category history instead.

How does GMROI relate to margin and markup? GMROI equals turnover times gross markup (profit over cost), which equals turnover times margin / (1 minus margin). Markup is measured against cost, margin against sales (www.investopedia.com).

Can GMROI be used by category? Yes, if you sum numerators and denominators across the category and recompute, with a versioned item-to-category mapping.

Conclusion

Inventory turnover and GMROI answer different questions with the same inputs. The fictional categories show how a category that turns faster can return less gross profit per unit of inventory. A reliable comparison depends on a shared period, cost basis, scope and item population, which is why the data contract and reconciliation come before any ranking.

For NetSuite users, Oracle's Inventory Turnover report supplies a documented, report-specific month-end average that is separate from the Report by Period preference. GMROI has to be built and reconciled deliberately, with the averaging convention, the margin versus markup distinction and the sales netting policy stated alongside the result. Published rules of thumb are no substitute for category history, and a ratio is a

prompt for a stock-investment, pricing or assortment review, not an automatic order to retire a SKU or change replenishment. Teams that want help building the snapshots, mappings and reconciliation views can contact Houseblend.

Source links

Links cited in this article, in order of first appearance. Full addresses are provided for readers using extracted text.

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Implementation and architecture

Houseblend provides NetSuite implementation, architecture and data migration services. We help teams evaluate how business processes, reporting requirements and existing data should fit together in an ERP environment. Training supports the people responsible for adopting and operating the resulting system.

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Our services include NetSuite integrations and customization, as well as AI integrations and AI transformation work. These engagements connect ERP data and workflows with the broader application landscape. The right design depends on the organization's systems, controls and operating needs.

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Houseblend offers NetSuite health checks, optimization, managed support and project rescue services. We also provide expertise for analytics and specialist workflows, including NetSuite Analytics Warehouse, warehouse management and field service management. Published educational material helps teams investigate options and prepare informed questions for their implementation or support work.

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