Depreciation Methods Analysis

Using Straight Line Method and Diminishing Balance Method

Introduction

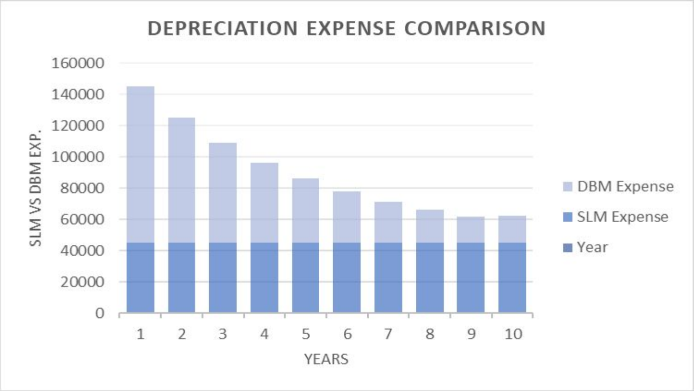
This report analyzes two depreciation methods—Straight Line Method (SLM) and Diminishing Balance Method (DBM)—for a $500,000 asset with a $50,000 scrap value over a 10-year lifespan. The objective is to inform stakeholders on how each method impacts financial reporting, asset management, and decision-making, supporting transparent and strategic financial planning

Key Findings

- **Total Depreciation:** Both methods depreciate $450,000 over 10 years, reducing the asset's book value to $50,000.
- **SLM:** Depreciation is fixed at $45,000 per year (9% of original cost).
- **DBM:** Depreciation starts high ($100,000 in year 1 at 20%), then decreases annually, matching asset value loss patterns for rapidly depreciating assets.
- **Expense Timing:** SLM spreads cost evenly; DBM accelerates expense recognition, front-loading depreciation.

Depreciation Expense Comparison

Year	SLM Expense	DBM Expense
1	$45,000	$100,000
2	$45,000	$80,000
3	$45,000	$64,000
10	$45,000	$17,109



Actionable Recommendations

- **Asset Policy:** Use SLM for assets with steady use (e.g., buildings), DBM for assets with rapid early value loss (e.g., technology, vehicles).
- **Financial Planning:** Choose DBM to maximize early-year tax deductions or match expense to asset utility.
- **Reporting:** Clearly disclose chosen method in financial statements for transparency and audit readiness.
- **System Updates:** Ensure accounting systems reflect the selected depreciation schedules.

Methodologies

A) Straight Line Method (SLM)

- Depreciation expense is constant each year.
- Formula: **Annual Depreciation = Asset Price – Scrap / Value Life Span**
- Results in a linear decline in book value.

B) Diminishing Balance Method (DBM)

Formula: **Annual Depreciation = Book Value at Start of Year * Depreciation Rate**

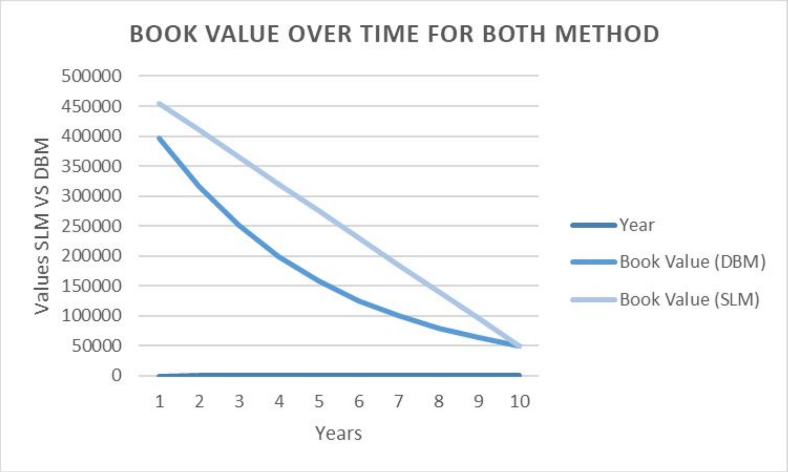
- Rate is typically double the SLM rate; depreciation decreases each year.
- **Data Sources:** Asset register, company accounting policy, and applicable accounting standards (IFRS/GAAP).

Approaches

- **Comparative Analysis:** Year-by-year comparison of depreciation expense and book value under both methods.
- **Visual Representation:** Use bar and line charts to illustrate expense patterns and book value decline.
- **Scenario Modeling:** Evaluate impact on profit/loss, tax, and cash flow under each method.

Insights

- **SLM:** Provides predictability and smooths profit/loss over time.
- **DBM:** Better matches expense to actual asset usage for fast-depreciating assets, improving accuracy of financial statements.
- **Strategic Impact:** Method choice can influence reported profits, tax liability, and investment decisions.
- **Both Methods:** Reach the same end book value, but the timing of expense recognition differs, affecting financial ratios and stakeholder perceptions



Conclusions

Both SLM and DBM are valid, compliant depreciation methods. The choice should align with asset type, usage pattern, and strategic financial goals. SLM is best for assets with uniform value loss; DBM is optimal for assets with rapid early depreciation. Transparent reporting and appropriate method selection will enhance financial clarity and support informed stakeholder decisions