

## Comparative Analysis of Depreciation Methods: Straight-Line vs. Diminishing Balance

Points to remember before starting this project:-

Purpose of the project is to give you the fundamental ideas about how Depreciation methods and terminologies works in Excel so imp thing is to go thorough this documentation very carefully and understand the tems.

1. In Project Worksheets you dataset is already prepared so you have to find the values and answers for given functions for solution please go through this sheet

2. Kindly read all the documentation attached to this project file very carefully because all the important points for making this projects is given there in this documentation

3. After doing the anlalysis Create a Summary report that what insights and analysis you have find while doing this proects

	<u>Coachx.live</u>
	Depreciation Calculator

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## Straight Line Method

Straight Line Method	
Asset Cost	\$4,50,000.00
Additonal Asset Cost	\$50,000.00
Asset Price	\$5,00,000.00
Scrap Value	\$50,000.00
Estimated Life Span (Years)	10
Depreciation / Year as per Straight Line Method	45000
Depreciation Percentage	9.00%
Total Depreciation For Its Life Span	\$4,50,000.00
Depreciated Book Value After Its Life Span	\$50,000.00
Balance Amount	\$0.00

## Diminishing Balance Method

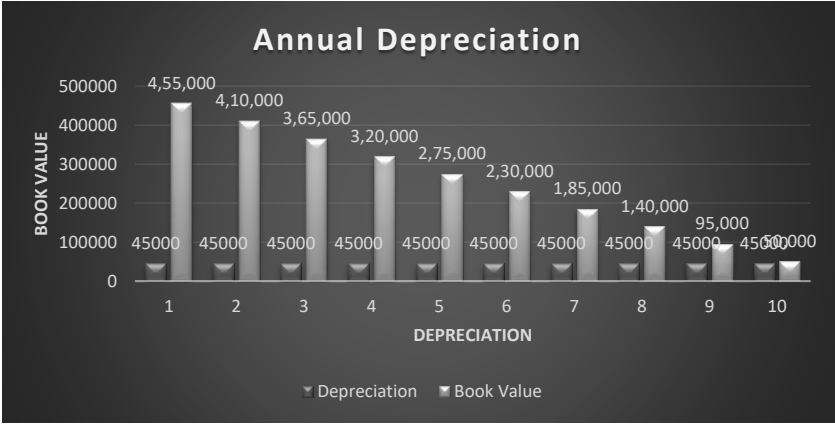
Diminishing Balance Method	
Asset Cost	\$4,50,000.00
Additonal Asset Cost	\$50,000.00
Asset Price	\$5,00,000.00
Scrap Value	\$50,000.00
Estimated Life Span (Years)	10
Rate of Depreciation as per Diminishing Balance Method	20.57%

## Depreciation Schedule

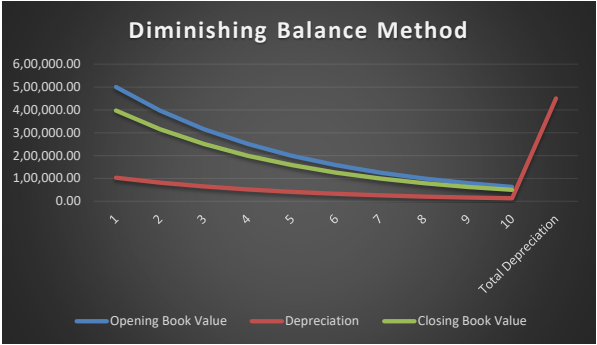
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Field	Value
Asset Cost	4,50,000
Additional Cost	50,000
Total Asset Price	5,00,000
Scrap Value	50,000
Life Span(years)	10
Depreciation Rate(Straight Line Method)	9%
Depreciation Rate(Diminishing Balance Method)	20.57%

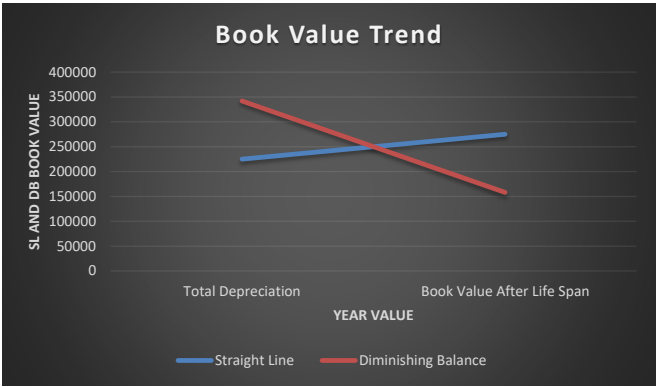
Year	Depreciation	Book Value
1	45000	4,55,000
2	45000	4,10,000
3	45000	3,65,000
4	45000	3,20,000
5	45000	2,75,000
6	45000	2,30,000
7	45000	1,85,000
8	45000	1,40,000
9	45000	95,000
10	45000	50,000
Total Depreciation	450000	



Year	Opening Book Value	Depreciation	Closing Book Value
1	5,00,000.00	1,02,850.00	3,97,150.00
2	3,97,150.00	81,693.76	3,15,456.25
3	3,15,456.25	64,889.35	2,50,566.90
4	2,50,566.90	51,541.61	1,99,025.29
5	1,99,025.29	40,939.50	1,58,085.79
6	1,58,085.79	32,518.25	125567.543
7	1,25,567.54	25,829.24	99,738.30
8	99,738.30	20,516.17	79,222.13
9	79,222.13	16,295.99	62,926.14
10	62,926.14	12,943.91	49,982.23
Total Depreciation		4,50,017.78	



Method	Total Depreciation	Book Value After Life Span
Straight Line	225000	275000
Diminishing Balance	341914.22	158085.79



### **Straight line method:**

1. Calculate the Asset Price

Asset price:- 5,00,000

2. What is the depreciation as per straight line method

Depreciation:- \$45000

3. What is the depreciation percentage for the straight-line method?

Depreciation percentage:- 9%

4. What is the total depreciation for its life span

Total Depreciation:- \$225000

5. Find the depreciated book value after its life span

Depreciated value after life span:- \$50000

6. What is the Balance amount

Balance 4,55,000

### **Diminishing Balance Method**

1. Calculate the Asset Price

Asset price:- 5,00,000

2. Find the rate of depreciation as per diminishing balance method

Rate of Depreciation=20.57%

1. Find the Book Value for Year 1 and the after that Calculate the Year on Year Depreciation amount

Year	Opening Book Value	Depreciation	Closing Book Value
1	500000	102850	397150
2	397150	81693.76	315456.25
3	315456.25	64889.35	250566.90
4	250566.9	51541.61	199025.29
5	199025.29	40939.50	158085.79
6	158085.79	32518.25	125567.54
7	125567.54	25829.24	99738.30
8	99738.3	20516.17	79222.13
9	79222.13	16295.99	62926.14
10	62926.14	12943.91	49982.23



1) Calculate the annual depreciation amount using the straight line method for the given asset.

Annual Depreciation 45000

2) Calculate the total depreciation for the asset's entire life span using the straight-line method.

Total Depreciation 225000

3) What is the depreciated book value of the asset after its life span using the straight-line method?

Depreciated book value after life span= Asset value-total depreciation after life span=  
500000-450000=50000

4) Calculate the rate of depreciation per year as per the diminishing balance method.

Formula= $1-(\text{Scrap value}/\text{asset price})^{(1/\text{estimated life span})}$   
Solution: 0.205672

5) What is the depreciation amount for the asset in the second year according to the diminishing balance method?

The depreciation amount in the second year is \$81693.76

6) What is the book value of the asset in the fourth year using the diminishing balance method?

Depreciation amount = \$51541.61

7) Calculate the total depreciation for the asset's entire life span using the diminishing balance method

Total depreciation = \$4,50,017.78

8) What is the book value of the asset after its life span using the diminishing balance method?

Value after depreciation after its life span = \$49,982.23

9) Compare the total depreciation amounts obtained from the straight-line method and the diminishing balance method. Which method results in higher total depreciation?

The total depreciation for straight line method is \$4,50,000 and for diminishing balance method it is \$4,50,017.78. This indicates that diminishing balance method results in higher total depreciation i.e. \$4,50,017.78