# Comparing accelerated depreciation and straight line method accounting essay

Depreciation is the term used in accounting, economics and finance to spread the cost of an asset over the span of several years. Depreciation is the reduction in the value of an asset due to the usage, passage of time, wear and tear, technological outdating or obsolescence, depletion, inadequacy, rot, rust, decay or other such factors. Depreciation is used to effects the financial statements and in some countries the taxes of companies and individuals.

## Straight-line depreciation:

It is the simplest and the most-often-used technique, in which the company estimates the salvage value of the asset at the end of the period during which it will be used to generate revenues and will expense a portion of original cost in equal increments over that period. The salvage value is an estimate of the value of the asset at the time it will be sold or disposed of it may be zero or even negative. Salvage value is also known as scrap value or residual value.

## Calculations using Straight-Line Method:

## Annual depreciation expenses = Cost of fixed asset – Residual value

## Useful life of asset (years)

Where, Cost = Purchase price,

Useful life = Estimated amount of time that the asset will be used by the company, this is also called service life.

Salvage value = Estimated amount the asset can be sold for at its end of its useful life, this is also called residual value.

For example, a vehicle that depreciates over 5 years is purchased at a cost of US$17, 000, and will have a salvage value of US$2000, that will depreciate at US$3, 000/year. So ($17, 000 – $2, 000)/ 5 years = $3, 000 the annual straight-line depreciation expense. In other words, it is the depreciable cost of the asset divided by the number of years of its useful life.

## Accelerated Depreciation method:

This is a method recognizing higher amounts of depreciation in the earlier years and lower amounts in the later years of a fixed asset's life. Some machines, for example, are more efficient early on and generate greater service potential, matching dictates higher depreciation expense in those years. Over time, depreciation expense moves in a downward direction and maintenance costs tend to become higher; thus the effect of accelerated depreciation is fairly even charges to income. Greatest tax benefits from depreciation are enjoyed in the earlier years. There are many ways to calculate accelerated depreciation but one common method is to develop a table of declining depreciation values. The total depreciation remains the same but the yearly depreciation expense is gradually lessened.

## Comparing Accelerated Depreciation and straight line method:

The straight-line depreciation method spreads the cost evenly over the life of an asset. On the other hand, a method of accelerated depreciation like the double declining balance (DDB) allows you to deduct far more in the first years after purchase. Accelerated depreciation method in which a constant percentage factor of twice the straight-line rate is multiplied each year by the declining balance of the asset's book value. One method of accelerated

depreciation is the double declining balance method (DDB). If straight-line deductions equal 5% of depreciable basis, double declining balance (DDB) allows a deduction of 10% (200% of 5%), but applied to the undepreciated basis. Thus the deductions decline each year.

http://content. answers. com/main/content/img/barrons/realestate/acceleratteddepreciation. gif

The number of allowed methods of calculating depreciation that permit greater amounts of deductions in earlier years are permitted under the straight-line methods, which assumes equal depreciation during each year of the assets life. Accelerated depreciation methods that allow earlier recognition of depreciation increase a projects net present value. The reason for using accelerated depreciation is for income tax purposes to lessen net income. This makes sense because the higher the expenses in a given period the lower the net income. Hence I would prefer to use accelerated depreciation rather straight line method for tax purposes.

## P 3-4:

## Just One, Inc.:

By selecting Project P than Q because of the Net Present Value NPVP is higher than NPVQ.

The internal rate of return (IRR) on an investment or potential investment is the annualized effective compounded return rate that can be earned on the invested capital. The term internal refers to the fact that its calculation does not incorporate environmental factors (e. g., the interest rate or inflation)

The internal rate of return (IRR) is a rate of return used in capital budgeting to measure and compare the profitability of investments. It is also called the discounted cash flow rate of return (DCFROR) or simply the rate of return (ROR). In the context of savings and loans the internal rate of return (IRR) is also called the effective interest rate.

In more familiar terms, the IRR of an investment is the interest rate at which the costs of the investment lead to the benefits of the investment. This means that all gains from the investment are inherent to the time value of money and that the investment has a zero net present value at this interest rate.

Hence, by the above definition even though the IRR is lower in Project P, the NPV is significantly higher.