RESUMPTION AND DEVELOPMENT ON THE METHODS OF REGRESSIVE OR DEGRESSIVE DEPRECIATION

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For a systematic allocation of the depreciation of an asset during its useful life can be used several methods of depreciation such as: the linear method, the method of reduction of the balance - regressive, progressive and accelerated and the method of production units.
The methods of regressive or degressive depreciation have such as result the inclusion in the operating expenses of some redemption in the decreasing amount and relatively high in the first part of the process of depreciation and some amounts of equal value and lower in the final part of the process of depreciation. These methods, based on time, start on the assumption that most tangible assets are more efficient when they are new, thus offering more and better quality in the early years of the duration of their useful life.
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Jel classification: *B21; C81; F15; L14; M41*

Recovery of value of tangible assets is made on account depreciation and amortization is recognized the ageing of the fixed assets from the use or the mere possession ("aging" the tangible assets as a result of the passage of time and the technical progress). Currently, the two terms "dispute" the attribute or the initiator of the necessity of recovering the initial value of fixed assets: **ageing** and **depreciation**.
By appeal to International Financial Reporting Standards[463] - IFRS, and within the International Accounting Standards - IAS 16 *Property, Plant and Equipment*, the harmonization is *a systemic allocation of the depreciation value of an asset for the entire duration of its useful life*.
According to the same standard, thus the Anglo-Saxon view, the concept of depreciation of capital maintenance through the initial investment recovery and preserving this kind of financial and technical enterprise. The depreciation, according to the same standard, is the difference between the net book value (input value less depreciation) and recoverable amount (the amount that is expected to recover from future use of assets, including its residual value at the time of amortize).
According to the American Institute of Accountants Public Authorities - *AICPA, the accounting of depreciation, is an accounting system which aims to distribute its cost or other values of the tangible capital assets, less their residual value (if any) over the estimated life of the article in systemic and rational way. This is a method of allocation, not evaluation*[464].
The costs of the production facilities (an asset) take part of the costs of services it offers during its economic operation. The general accepted accounting principles require that this cost should be shared throughout the estimated life of the facility so as to allow its allocation more balanced on the intervals in which to enjoy the services offered by the use of the facility.

463 The International Financial Reporting Standards from 1 January 2005, CECCAR Publishing, Bucharest, 2005.
464 B. E. Needles, Jr., H. R. Anderson şi I. C. Caldwell, Principiile de bază ale contabilităţii, the fifth edition, Arc Publishing, 2001. p. 476

Can be used many methods of depreciation for the systematic allocation of the amount of depreciation on an asset during its use. It must be known that the depreciation method used will reflect the way that the future economic benefits of an asset will be consumed by the entity. These methods include the **linear** method, the method of **reduction of the balance** and method of **production units**.

Method of **reduction of the balance** shown in several variants such as the method of **rates/ the decreasing rates**- *softy* or *adding the numbers of years useful life* (regression), or if it is changed the order of considering of the rates of depreciation to arrive at depreciation method *progressively* or *increasing softy* and the method of **rates / the steady rates** – the *double declining balance* method with variant *balance of reduction* and in Romania are applied the variants of the method of the *degressive depreciation* AD_1 without the influence of the wear moral, AD_2 with the moral wear influence and the *accelerated* method.

Schematic, the method of **reduction of the balance** is as follows:

Method of reduction of the balance:

The method of rates / the decreasing rates:

The softy method or sum of the numbers for years period of useful life (regressive or degressive)

The softy method or sum of the numbers for years period of useful life (progressive)

The method of rates / the steady rates:

The method (balance) double declining–BDD with the variant of the balance reduction–BR

The degressive method – AD_1 and AD_2 (Romania)

The accelerate method (Romania)

The linear depreciation has as a result a constant expense over the useful life if the residual value of the asset does not change. The method of reduction of the balance has as a result a decreasing or increasing expense (progressive) along the useful life. The method of production units has as a result in a variable expense based on or planned use of the product.

The entity selects the method that most reliably reflects the expected pattern of consumption of future economic benefits embedded in the asset. That method is applied consistently from one period to another only if there is any change in the expected consumption of those future economic benefits.

Under accounting rules and tax in Romania[465], the depreciation is calculated according to the following procedures (methods) of depreciation: **the linear depreciation, the degressive depreciation (AD1 and AD2) and accelerated depreciation**. Depreciation related to a period is normally recognized as expense. But then when the economic benefits brought by an asset are consumed in the business of acquiring other assets, the amortization expense is included in the book value of that asset.

In continuation of our scientific we present the methods of depreciation regressive or degressive enforcement both in the accounting system in Romania and in other accounting systems.

Methods of regressive or degressive depreciation have as a result the inclusion in the operating costs of the redemption amount and decreasing the relatively high early in the process of depreciation and of amounts of equal value and lower in the final part of the process of liquidation. These methods, based on the passing time, based on the assumption that most fixed assets are more efficient when they are new, thus offering more and better quality in the early years of their working life.

465 Law No. 15/1994 on depreciation on fixed capital in tangible and intangible assets, Law no. 571/2003 on Fiscal Code.

Also, the regressive methods consider the fact that the change of the technology leads to a rapid loss of the use value of certain equipment and services offered through the new equipment more efficient. It is therefore more realistic allocation of greater depreciation in the first years of exploitation of assets than in the last years. New inventions and products have as a result the moral depreciation of equipment purchased in the past, requiring them to replace faster than if the technology would have progressed more slowly.

Another argument in favour of regressive methods is that, over time, the expenditure on repairs increases and is larger in the recent years. Thus, the expenditure on repairs and depreciation (cumulative) remain relatively constant over the time. It results that the services (benefits) are provided by assets are approximately equal from one year to another.

There are two methods for calculating the depreciation in the decreasing amounts, for the first part of the period of operation:

- applying some rates of decreasing to a constant value;
- applying a constant rate at a decreasing value.

In Romania is approved and practice the second method.

1. The method of quotes/decreasing rates

The method of quotes/decreasing rates is a regression or degressive depreciation which for calculating the rate of depreciation is cumulated years of useful life or the normal operation of the asset. Their sum becomes the denominator of a series of fractions that are multiplied by the depreciation of assets to determine the annual depreciation value assigned to duration of operation. In fractions numerator is the numbers of each year of the estimated duration of operation, but in reverse order.

In another respect this method of depreciation known as the **softy** (sum of the year's digits) specify to the Anglo-Saxon financial system, and consists in determining the annual rate, or **decreasing (regression or degressive)** or **increasing (progressive),** which applies to a constant value of cushion, giving annual depreciation. There is not a method approved by the Romanian tax system.

The **decreasing variant (regressive or degressive)** of the rates result from reporting the serial number "N" of the year, from the viewpoint of life remaining, the amount of years digits.

For example, for a tangible lasting useful life of 5 years, the sum of the years' digits is 1 + 2 + 3 + 4 + 5 = 15. A relationship for calculating[466] the amount of years may be operating:

$S = \frac{N(N+1)}{2}$ where: **S** – represent the sum of years of operation (use); **N** – represent number of years of useful or normal functioning life.

Example: when for a truck to transport goods the useful life is 5 years and the depreciation is 10,000 um. Amount of years' digits of operation is 1 + 2 + 3 + 4 + 5 = 15 or, S = 5(5+1)/2 = 15

Annuities depreciation is then calculated by multiplying the amount of depreciation (10,000 um), with each annual rate (r) decreasing (fractions) following:

$r_1 = 5/15$; $r_2 = 4/15$; $r_3 = 3/15$; $r_4 = 2/15$; $r_5 = 1/15$.

The depreciation softy plan - the decreasing variant

Year	The input value	The annuities depreciation	Cumulative depreciation	The remaining value for depreciation
N – 1	10,000	–	–	10,000
N	10,000	10,000 × 5/15 = 3,333	3,333	6,667
N + 1	10,000	10,000 × 4/15 = 2,667	6,000	4,000
N + 2	10,000	10,000 × 3/15 = 2,000	8,000	2,000
N + 3	10,000	10,000 × 2/15 = 1,333	9,333	667

466 Belverd E. Needles, jr., Henry R. Anderson, James C. Caldwell, Principiile de bază ale contabilităţii, the fifth edition, translated in Romanian, Arc Publishing, 2001, p. 480.

N + 4	10,000	10,000 × 1/15 = 667	10,000	0

Based on this method is observed that annuities depreciation is greatest in the first year of operation and then decreases each year. The accumulated depreciation also increases each year by an amount less. The remaining value for depreciation is diminishing each year by the annual depreciation amount equal to the residual value in our case it is zero.

If you change the order of considering the rates of depreciation it gets at the **method of the progressive depreciation** or the **increasing variant softy**.

The **increasing (progressive) rate** used (rate or fractions) increasing, resulting in reporting serial number "N" of the year, in terms of life passed to the sum of years' digit. Annual rates (r) will be increasing: r1 = 1/15, r2 = 2/15, r3 = 3/15, r4 = 4/15; r5 = 5/15.

In these circumstances the Plan of softy depreciation from the previous example is as follows:

The depreciation softy plan - the increasing (progressive)

Year	The input value	The annuities depreciation	Cumulative depreciation	The remaining value for depreciation
N – 1	10,000	–	–	10,000
N	10,000	10,000 × 1/15 = 667	667	9,333
N + 1	10,000	10,000 × 2/15 = 1,333	2,000	8,000
N + 2	10,000	10,000 × 3/15 = 2,000	4,000	6,000
N + 3	10,000	10,000 × 4/15 = 2,667	6,667	3,333
N + 4	10,000	10,000 × 5/15 = 3,333	10,000	0

2. The method of quotes/ the steady rates

The method of quotes/the steady rate is a regressive depreciation by annual depreciation which is calculated by applying a fixed rate (single, constant) on the value of remaining for depreciation (decreasing) of a fixed asset.

This method is based on the same theory as the method of the decreasing rates. Both have resulted in higher expenditure on depreciation in the first part of the normal operation of the asset. Although it can be applied to any constant rate, the most commonly used is equal to the average annual rate of depreciation, multiplied by two, so the method is also called the **method of the constant double rates**[467]**.**

The method is specific to the economy of Anglo-Saxon, and resembles with the **degressive method** approved by the Romanian accounting system, but kept the same quotes (rate) by the end of depreciation. **The method of the constant double rates** is also known as the **method of (balance) double declining**[468] **– BDD (double-declining balance – DDB)** having a **variant** called **the method of the balance reduction– BR.** At the end of the depreciation period will be always a residual value (or remaining value of the register).

Relationship of calculating the depreciation is:

Aa = Vreg × 2 × Ral = Vreg × 2 × 100/DNU, where: **Aa** = annual depreciation method (balance) double declining; **Vreg** = register value (the value remaining at the beginning of the period / year or book value according to IAS 16 *Property, plant and equipment*);

Vreg = Vi - gained; **Vi** = input value of tangible; **Ral** = linear rate of depreciation.

In the variant called the method of balance reduction, the relation of the rate calculation is:

467 Belverd E. Needles, jr., Henry R. Anderson, James C. Caldwell, Principiile de bază ale contabilităţii, the fifth edition, translated in Romania, Arc Publishing, 2001, p. 481.

468 Ristea Mihai et. al., Politici şi tratamente contabile privind activele imobilizate, Publishing, Tribuna Economică, Bucharest, 2007, p. 59.

$r = 1 - \sqrt[n]{\frac{V_r}{V_i}}$, where: **r** = rate or annual rate of depreciation; $\mathbf{V_r}$ = residual value of tangible; **Vi** = the input value of tangible; **n** = number of years of useful life.

The rate of depreciation, a constant, is applied to the remaining value (or net book value under IAS 16 *Property, plant and equipment*) of the tangible assets. This circumstance creates similarity between depreciation based on the double declining balance and the degressive depreciation.

Example 1: the truck to transport goods had a useful lifetime of 5 years. Accordingly, the linear depreciation method has resulted in an average annual rate of depreciation of 20% (100% / 5 years). For the method constant double rates will cause a rate of 20% x 2 = 40%. This fixed rate of 40% applies to extinguish the remaining value determined at the end of each year. Last year the entire remaining value is passed to expense or the residual value is deducted, and what remains is included in the operating costs of depreciation.

The depreciation plan - the method of constant double rates

Year	The input value	The annuities depreciation	Cumulative depreciation	The remaining value for depreciation
N – 1	10,000		–	10,000
N	10,000	10,000 × 40% = 4,000	4,000	6,000
N + 1	10,000	6,000 × 40% = 2,400	6,400	3,600
N + 2	10,000	3,600 × 40% = 1,440	7,840	2,160
N + 3	10,000	2,160 × 40% = 864	8,704	1,296
N + 4	10,000	1,296	10,000	0

Note: in the fifth year of useful life (N + 4) the total amount remaining for depreciation (1,296 um) is entered on the operating costs of depreciation, contrary to the end of five years the value remaining to depreciation would be more than zero. If at the beginning of the useful life is estimated the residual value, suppose 1,000 um, when depreciation annuities in the last year of operation will be limited to the amount necessary to reduce the value remaining to depreciation until the residual value: 1,296 um – 1,000 u.m. = 296 u.m.

We must note that the constant percentage rate is always applied over the remaining value for depreciation of the end of last year. It is noted that annuities depreciation is higher in the first year of useful life and then decreases each year. Finally, the remainder of recouping the beginning of the last year of useful life is past, for that financial year, full-on operating costs or it is reduced with the estimated residual value.

Example 2: S.C. MIORITA S.A. restraint has a tangible asset having an input value (depreciation, without the influence of residual value) of 5,587 lei, specifying that the residual value is 279.35 lei (5% of input) and duration of 5 years of operation. The annual amortization is determined by the method (balance) double decline - and BDD variant called balance reduction method - BR to determine the rate of annual depreciation.

a) determining the rate or the annual rate of depreciation:

- the annual depreciation rate of the method (balance) double decline – BDD:

$$Rbdd = 2 \times Ral = 2 \times 100/5 = 40\%$$

- the annual rate of depreciation in the balance reduction method - BR:

$$r = 1 - \sqrt[5]{\frac{279.35}{5,587.00}} = 0.45072 = 45.072\%$$

b) determining the depreciation for the first year - N:

- the method of (balance) double decline:

Abdd = Vi × Rbdd = 5,587 lei × 40% = 2,234.80 lei

- the method of the balance reduction:

Abr = Vi × r = 5,587 lei × 45.072% = 2,518.17 lei
c) determining the depreciation for the second year – N+1:
- the method of (balance) double decline:
Abdd = Vreg × Rbdd = (5,587.00 lei – 2,234.80 lei) × 40% = 1,340.88 lei
- the method of the balance reduction:
Abr = Vreg × r = (5,587.00 lei – 2,518.17 lei) × 45.072% = 1,383.18 lei
Note: Vreg = Vi – Gained
d) determining the depreciation for the third year - N+2:
- the method of (balance) double decline:
Abdd = Vreg × Rbdd = (5,587.00 lei –3,575.68 lei) × 40% = 804.52 lei
- the method of the balance reduction:
Abr = Vreg × r = (5,587.00 lei – 3,901.35 lei) × 45.072% = 759.75 lei
e) determining the depreciation for the fourth year – N+3:
- the method of (balance) double decline:
Abdd = Vreg × Rbdd = (5,587.00 lei – 4,380.20 lei) × 40% = 482.71 lei
- the method of the balance reduction:
Abr = Vreg × r = (5,587.00 lei – 4,661.10 lei) × 45.072% = 417.31 lei
f) determining the depreciation for the fifth year – N+4:
- the method of (balance) double decline:
Abdd = Vreg × Rbdd = (5,587.00 lei – 4,862.92 lei) × 40% = 289.63 lei
- the method of the balance reduction:
Abr = Vreg × r = (5,587.00 lei – 5,078.42 lei) × 45.072% = 229.22 lei.
The plan (table) of depreciation in method of (balance) double decline is as follows:

Plan (table) of depreciation – the method of (balance) double decline - BDD

Year	The input value	The depreciation value	The depreciation BDD	The cumulative depreciation BDD	The remaining value BDD
N	5.587,00	5.587,00	2.234,80	2.234,80	3.352,20
N+1	5.587,00	3.352,20	1.340,88	3.575,68	2.011,32
N+2	5.587,00	2.011,32	804,52	4.380,20	1.206,79
N+3	5.587,00	1.206,79	482,71	4.862,92	724,07
N+4	5.587,00	724,07	289,63	5.152,55	434,45

As can be seen when using method (balance) double declining depreciation accumulated at the end of the normal use / function (or useful life) is not equal to the input value of the tangible assets. It will remain an outstanding part of it which will be included in the costs to the corresponding residual value of restraint, in case: 434.45 lei - 279.35 lei = 155.10 lei.
The plan (table) of depreciation in the balance reduction method, while from the outset to consider in determining the annual rate of depreciation, the residual value different from zero, is as follows:

The plan (table) of depreciation - balance reduction method - BR

Year	The input value	The depreciation value	The depreciation BR	The cumulative depreciation BR	The remaining value BR
N	5,587.00	5,587.00	2,518.17	2,518.17	3,068.82
N+1	5,587.00	3,068.82	1,383.18	3,901.35	1,685.64
N+2	5,587.00	1,685.64	759.75	4,661.10	925.89
N+3	5,587.00	925.89	417.31	5,078.42	508.57
N+4	5,587.00	508.57	229.22	5,307.65	279.35

It is noted that in both cases the annual depreciation and accumulated present the same trend, with the minor differences. The existence of residual values and the complexity of calculations decrease, however, the comparative advantages over other methods of depreciation. In the presence of calculus, and in the context of legislation pass, the two versions are interesting.

Starting from the regressive or degressive methods with constant rate in Romania, accounting rules require the use of the method degressive in two variants: without **the moral wear influence** **AD_1** and **AD_2** with **the moral influence wear**. The second rule is used to calculate depreciation of tangible assets with a normal operating period of more than 5 years.

The calculation of depreciation in a degressive variant AD_1

The degressive depreciation - AD_1 variant consists in multiplying the average annual linear rate with a **coefficient of fiscal** correction.

The determination of depreciation is made on the basis of such relations:

The degressive quotes (rate) = The average linear quotes (rate) x The tax coefficient

or in the other words:

$Ra_d = Ra_l \times C$, where: **Ra_d** = rate of the degressive depreciation; **Ra_l** = rate of the linear depreciation; **C** = coefficient for multiplication regulated by law (the tax coefficient).

The tax coefficient is determined according to the normal operation of the vehicle fixed. Thus in Romania, the accounting rules require the following factors:

1.5 for a DNF between [2 – 5 years];

2.0 for a DNF between (5 – 10 years];

2.5 for a DNF for more than 10 years.

$Va = \text{VNC at the beginning of period}$, where: **Va** = the depreciation value; **VNC** = net book value.

$Aa_d = Va \times Ra_d$, where: **Aa_d** = the annual degressive depreciation.

The calculation of the annuities degressive depreciation is done by applying the rate degressive input value (the value of depreciation) during the first year of normal life of operating - DNF, and in subsequent years to depreciate the remaining value also known as value accounting or reporting. The application is made until the operation resulting annual depreciation is equal to or less / than the annual depreciation determined by the ratio between the remaining value for depreciation and the number of remaining years of operation. From that year to pass linear depreciation calculation for the remaining value to be recovered, so the annual depreciation will be equal to the ratio calculated at the end of the previous year.

Example for calculation of depreciation in a degressive variant AD_1: a means of transportation for people with a normal operating period of 8 years and a value of 300,000 lei entry, begin to be depreciation at 01 January 2007.

Determining the average annual linear rate:

$$\text{The linear rate} = \frac{100\%}{8 \text{ years}} = 12.50\%.$$

Determining the degressive rate:

$$\text{The degressive rate} = 12.5\% \times 2.0 = 25\%.$$

The plan (table) for depreciation in the degressive method, AD_1 variant is as follows:

The plan (table) for depreciation in the degressive method, AD_1 variant

Year	The input value	The annuities depreciation	Cumulative depreciation	The remaining value for depreciation
2007	300,000	300,000 × 25% = 75,000.00	75,000.00	225,000.00
2008	300,000	225,000 × 25% = 56,250.00	131,250.00	168,750.00
2009	300,000	168,750 × 25% = 42,188.00	173,438.00	126,562.00

2010	300,000	126,562 × 25% = 31,640.00	205,078.00	94,922.00
2011	300,000	94,922 × 25% = 23,730.50	228,808.50	71,191.50
2012	300,000	94,922 × 25% = 23,730.50	252,539.00	47,461.00
2013	300,000	94,922 × 25% = 23,730.50	276,269.50	23,730.50
2014	300,000	94,922 × 25% = 23,730.50	300,000.00	0.00

Since 2011 (the fifth year of the normal operation) the annuities of depreciation calculated under the degressive annuities is equal to the calculated linear regime. Since that year it is passed to apply the method of linear depreciation for remaining the value and the period. Test: the remaining value for depreciation at the end of 2010 (the fourth year of DNF) is 94,922 lei.

Year 2011: the degressive depreciation:

94,922 lei × 25 % = 23,730.50 lei

The linear depreciation:

- DNF remaining 4 years:

$$\text{The linear rate} = \frac{100\ \%}{4\ \text{years}} = 25\%$$

- the linear annuities:

94,922 lei × 25 % = 23,730.50 lei

For the remaining four years (2011, 2012, 2013 and 2014), the depreciation is determined by linear method. In this way it is avoided the situation of not achieving full recovery of the depreciation in the normal operating time for recovery.

When the transition from the degressive depreciation method to the linear depreciation may be determined based on the following mathematical relationship[469]:

$t_i = (d+1) - \frac{100}{Cd}$, where: $\mathbf{t_i}$ – when the transition from the degressive epreciation method to the linear depreciation; d – the normal period of operation and useful life; Cd – the degressive rate of depreciation

- in our case we have:

$t_i = (8+1) - \frac{100}{25} = 5$ of DNF which correspond to the 2011calendar year.

The calculation of the degressive depreciation in a AD_2 variant:

In this version considering the wear and moral influence which act on fixed assets. The AD_2 allow recovery of the depreciation of fixed assets in a period less than the normal operating period set in the catalog for linear depreciation. The difference in the years that will not calculate depreciation is moral influence wear.

Applying this variation involves the following elements, in order:

a) duration of the use associated to the linear regime, recalculated according to the average annual rate of depreciation degressive:

$DUR_{ec} = \frac{100}{Ra_d}$, where: $\mathbf{DUR_{ec}}$ = the economic life of fixed, according to the wear morale in the linear duration of use within which the redemption of capital in fixed assets.

i. or using other notes, we have:

- the normal functioning – $\mathbf{D_n}$;
- duration of operation, associated to the linear regime, recalculated according to the rate of degressive depreciation - $\mathbf{C_d}$, which is obtained by reporting the percentage to 100% rate of degressive depreciation - $\mathbf{D_r}$:

469 Ristea Mihai (coordinator), Contabilitatea financiară a întreprinderii, Publishing, Universitară, Bucharest, 2005, p. 157.

$$Dr = \frac{100}{Cd}$$

b) duration of use in which is realised the integral depreciation:

$DUI = DNU - DUR_{ec,}$ where: **DNU** = the normal use period, irrespective of the moral influence of wear; **DUI** = length of time when the fixed cushion will be full depreciation of the wear moral influence

This term is split into two of its components as follows:

- the period of use as the degressive depreciation:

$DUD = DUI - DUR_{ec} = DNU - DUR_{ec} - DUR_{ec} = DNU - 2\times DUR_{ec}$

DUD = the period of use in the moral influence of wear, which will use the degressive depreciation;

- the period of amortization under the linear depreciation:

$DUL = DUI - DUD = DUI - DUI - DUR_{ec} = DUR_{ec}$

DUL = the period of use, in conditions of moral wear for which depreciation is calculated linearly.

ii. or using other notes we have:

- the period of use in which is realised the full depreciation - D_i, which is calculated as the difference between the normal operation - D_n according to the catalogue and the operating system offer linear recalculated:

$$D_i = D_n - D_r$$

- the period of use in which the procedure applies the depreciation degressive - D_d, which is calculated:

$$D_d = D_i - D_r$$

- the period of use in which the procedure applies linear depreciation - D1, which is calculated:

$$D_l = D_i - D_d$$

c) the period when not more is practiced the depreciation, as a result of considering the moral wears:

$$DUM = DNU - DUI = DUR_{ec}$$

DUM = the period when is not more calculated the depreciation, as a result of considering the moral wear.

iii. or using other notes, we have:

- the period of use related morale wear, for which no depreciation is calculated - D_m to determine:

$$D_m = D_n - D_i$$

Example of calculating the depreciation in degressive AD2 variant: a purchase and put into service a generator of electricity in the following conditions: the cost of purchasing and putting into service 25,000 lei, the normal operating under Catalog is set at 15 years, date of service December 2006.

For applying the AD2 variant a method of degressive depreciation establish the following elements:

D_n = 15 year

$$Cd = \frac{100\%}{15\text{years}} \times 2.5 = 16.66\% \approx 16.70\% \qquad Dr = \frac{100\%}{16.70\%} = 6 \text{ years}$$

D_i = 15 years – 6 years = 9 years

D_d = 9 years – 6 years = 3 years

D_l = 9 years – 3 years = 6 years

D_m= 15 years – 9 years = 6 years

Of calculations result that the fixed depreciation in concordance with the method degressive depreciation, AD2 variant, will be for a period of 9 years, of which 3 years -degressive and 6 years - linear. The difference of 6 years (15 years - 9 years) is not calculated the depreciation as

the amount invested in the redeemable asset has been recovered. The plan of the depreciation in the degressive method, AD_2 variant is as follows:

The plan of the depreciation in the degressive method, AD_2 variant

Year	The input value	The annuities depreciation	Cumulative depreciation	The remaining value for depreciation
2007	25,000	25,000 × 16.70% = 4,175	4,175	20,825
2008	25,000	20,825 × 16.70% = 3,478	7,653	17,347
2009	25,000	17,347 × 16.70% = 2,897	10,550	14,450
2010	25,000	14,450 × 16.70% = 2,410	12,960	12,040
2011	25,000	14,450 × 16.70% = 2,408	15,368	9,632
2012	25,000	14,450 × 16.70% = 2,408	17,776	7,224
2013	25,000	14,450 × 16.70% = 2,408	20,184	4,816
2014	25,000	14,450 × 16.70% = 2,408	22,592	2,408
2015	25,000	14,450 × 16.70% = 2,408	25,000	0
2016	25,000			
2017	25,000			
2018	25,000			
2019	25,000			
2020	25,000			
2021	25,000			

The full depreciation of the tangible assets is done in much less time than the normal operation; the decreasing trend of the annual depreciation is faster than the depreciation in AD_1 variant.

3. The method of accelerated depreciation

The method of accelerated depreciation is specific to the Romanian accounting, it is to calculate and include in the first year of operation in the operating costs of a depreciation of up to 50% of the entry of the redeemable assets. The annual depreciations for the operating years ahead are calculated at the remaining value for depreciation according to the method of linear depreciation.

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