SIZING VALUE ADDED IN CORRELATION WITH TAXES, EXERCISE TAXES AND ASSIMILATED PAYMENTS

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Abstract. In the present the author shows the relationships among different major taxes and the value added.

Key words: exercise production, trade margin, value added.

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1. Introduction

The size of the value added depends on the elements that set the size of the workload of the enterprise’s activity: production capacity, available resources, continuing change of the market demand. These elements can be both stimulating factors of the growth of the value added, and restrictions on its optimism. Regulating mechanisms of the adjustment proportion between value added and taxes of the economic units, aim at ensuring optimal correspondence between income and expenditure in order to ensure a maximum benefit.

Sizing value added in relation to tax and interest in the analysis presents interest not only in the conditions of maximizing the turnover, but also in the conditions it has values that allow for microeconomic balances: the minimum value added necessary to recover costs "critical value added" corresponding to "threshold profitability"; value added which can provide an estimated benefit, margin of safety, increase efficiency, respectively financial stability. These determinations should take into consideration the relations between: the value added, total income and total expenditure respectively taxes and excise taxes so that the activity is profitable.

\[ VA = PEX - CI + MC + MOP + MOL \] => value added by the synthetic method (subtractive)

\[ VA = CHP + (I+TX) + CHFIN + AMI + AVC + AVP + ACHE + CHEX + RN - AVEX - VEX - VSE - VFIN \] => value added by the method of allocation (additive), where

\( VA \) = Value added

\( PEX \) = Exercise’s production

\( CI \) = Intermediate consumption

\( MC \) = Trade margin

\( MOP \) = Venture operations margin

\( MOL \) = Leasing operations margin

\( CHP \) = Personnel expenditure

\( (I+TX) \) = Taxes and charges expenses including profit tax

\( CHFIN \) = Financial expenses

\( AMI \) = Value adjustments on intangible and tangible assets

\( AVC \) = Value adjustments on assets

\( AVP \) = Adjustments on provisions

\( ACHE \) = Other operating expenses

\( CHEX \) = Extraordinary charges

\( RN \) = Net result

\( AVEX \) = Other operating income

\( VEX \) = Extraordinary income

\( VSE \) = Income from operating grants

\( VFIN \) = Financial Income
\((I+TX) = PV + PS + PI - CI + VMF + VDI - CHDI + VTOP - CHTOP - CHP - CHFIN - AMI - AVC - AVP - ACHE - CHEX - RN + AVEX + VEX + VSE + VFIN\)

where

- **PV** = Sold production
- **PS** = Stored production
- **PI** = Production for company’s use and capitalized
- **VMF** = Revenue from sale of goods
- **CHMF** = Expenditure on goods
- **VDI** = Interest income recorded for the leasing activity
- **CHDI** = Expenditure on interest recorded for the leasing activity
- **VTOP** = Income from venture operations
- **CHTOP** = Expenses from venture operations
- **CHTOP** = Expenses from venture operations

\[(I+TX) = (PV + PS + PI + VMF + VDI + VTOP + AVEX + VEX + VSE + VFIN) - (CI + CHMF + CHDI + CHTOP + CHP + CHFIN + AMI + AVC + AVP + ACHE + CHEX) - RN,\]

where

- **PV + PS + PI + VMF + VDI + VTOP + AVEX + VEX + VSE + VFIN = Total income (VT)\]
- **CI + CHMF + CHDI + CHTOP + CHP + CHFIN + AMI + AVC + AVP + ACHE + CHEX = Total intermediate expenditure (CHTI)\]

\[CHTI = CHTB - (I + TX)\]

\[CHTB = \text{Total gross expenditure, where:}\]

\[I + TX = VT - CHTI - RN\]

\[CHTI = \text{Total intermediate expenditure}\]

Total income: represents the amounts or cashed values or values that are about to be cashed in the company’s name from any undertaken activities, and also the earnings of the entity from any other source, as part of its object of activity and their related activities.

Total expenditure: of the entity represents paid or payable values for: stock consumption, work performed and services provided that the entity benefits, expenditure on staff, enforcement of legal and contractual obligations.

Gross outcome (RB): represents the residual balance between total income and total expenditure and is determined by difference.

\[RB = \text{Total revenue} - \text{Total expenses}\]

The net result of the exercise (RN): is the final balance after applying the tax rate percentage (I) of the gross taxable outcome

\[RN = RB - \text{Tax on profit}\]

Total intermediate expenditure (CHTI) is determined by the difference between Total gross expenditure (CHTB) and Total expenditure of taxes and excise taxes, including tax on profit, and it is an analysis element, respectively factor of influence in terms of taxes and excise taxes, except V.A.T.

Total gross expenditure (or total expenditure) is the total sum of all expenditures registered by the entity in a concluded financial exercise that represents consumption and obligations.

\[CHTB = CHT + CHIP,\]

Where:

- **CHTB** = Total gross expenditure
- **CHT** = Total expenditure
- **CHIP** = Tax profit expenditure.
2. Case study
The equation formula resulting from: the value added calculated by the subtractive method and value added calculated using the additive method \((I+TX) = VT - CHTI - RN\) is useful for determining their influence on the financial stability of the entity and, consequently on the net result of the activity.

Taxes and excise taxes are primarily expenses for economic entities and secondly are legal obligations (debt) according to their nature and specification.

Analysis of taxes and excise taxes through the correlation \((I+TX) = VT - CHTI - RN\), on the basis of the data from the profit and loss account will be made according to the following calculation elements:

**Previous Exercise**

a) \((I+TX) = \text{Other taxes and excise taxes} + \text{Tax profit} = 2.875.680 + 850.476 = 3.726.156 \text{ lei}\)
b) \(VT = \text{Total revenue} = 52.944.180 \text{ lei}\)
c) \(CHTI = \text{Total gross expenditure} - \text{Other taxes and excise taxes} - \text{Tax profit} = 47.662.512 + 850.476 - 2.875.680 = 44.786.832 \text{ lei}\)
d) \(RN = \text{Gross outcome} - \text{Tax profit} = 5.281.668 - 850.476 = 4.431.192 \text{ lei}\)

**Current Exercise**

a) \((I+TX) = \text{Other taxes and excise taxes} + \text{Tax profit} = 3.350.480 + 1.561.812 = 4.912.292 \text{ lei}\)
b) \(VT = \text{Total revenue} = 65.856.487 \text{ lei}\)
c) \(CHTI = \text{Total gross expenditure} - \text{Other taxes and excise taxes} - \text{Tax profit} = 56.070.747 + 1.561.812 - 3.350.480 - 1.561.812 = 52.720.267 \text{ lei}\)
d) \(RN = \text{Gross outcome} - \text{Tax profit} = 9.785.740 - 1.561.812 = 8.223.928 \text{ lei}\)

**Change of taxes and excise taxes** is the difference
\[
\Delta = (I_{1+TX} - I_{0+TX}) = 4.912.292 - 3.726.156 = 1.186.136 \text{ lei}
\]
\[
\Delta r = \frac{I_{1+TX} - I_{0+TX}}{I_{0+TX}} \times 100 = \frac{4.912.292 - 3.726.156}{3.726.156} \times 100 = 31.83 \text{ %}
\]

**Influence factors** are determined in two stages:

**Stage I.**

\[
\Delta = \Delta VT - \Delta CHTI - \Delta RN, \text{ in care}
\]
\[
\Delta VT = VT_1 - VT_0 = 65.856.487 - 52.944.180 = +12.912.307 \text{ lei}
\]
\[
\Delta r VT = \frac{12.912.307}{3.726.156} \times 100 = +346.53 \text{ %}
\]
\[
\Delta CHTI = CHTI_0 - CHTI_1 = 44.786.832 - 52.720.267 = -7.933.435 \text{ lei}
\]
\[
\Delta r CHTI = \frac{-7.933.435}{3.726.156} \times 100 = -212.91 \text{ %}
\]
\[
\Delta RN = RN_0 - RN_1 = 4.431.192 - 8.223.928 = -3.792.736 \text{ lei}
\]
\[
\Delta r RN = \frac{-3.792.736}{3.726.156} \times 100 = -101.79 \text{ %}
\]

By summation the equality is checked:
\[
\Delta VT + \Delta CHTI + \Delta RN = 12.912.307 - 7.933.435 - 3.792.736 = 1.186.136 \text{ lei} = \Delta
\]
\[
\Delta r VT + \Delta r CHTI + \Delta r RN = 346.53 - 212.91 - 101.79 = +31.83 \text{ %} = \Delta r
\]

**Stage II.**

The influence of taxes and excise taxes
\[
\Delta(I+TX) = 1.186.136 \text{ lei} = \Delta AITX + \Delta IP
\]
\[
\Delta AITX = \text{Other taxes and excise taxes} - \text{Tax profit}
\]
\[
\Delta IP = \text{Tax profit}
\]
\[
\Delta AITX = AITX_1 - AITX_0 = 3.350.480 - 2.875.680 = +474.800 \text{ lei}
\]
\[
\Delta r_{AITX} = \frac{474.800}{3.726.156} \times 100 = +12,74\%
\]
\[
\Delta P = IP_1 - IP_0 = 8.223.928 - 4.431.192 = +3.792.736 \text{ lei}
\]
\[
\Delta r_{IP} = \frac{3.792.736}{3.726.156} \times 100 = +101,79\%
\]

**Influence of total revenue: \( VT = VEXPL + VFIN + VEXTR \)**

**Previous Exercise**

a) \( VT = \) Total revenue = 52.944.180 lei
b) \( VEXPL = \) Total operating income = 51.445.380 lei
c) \( VFIN = \) Total financial income = 1.379.870 lei
d) \( VEXTR = \) Total extraordinary income = 118.930 lei

**Current Exercise**

a) \( VT = \) Total revenue = 65.856.487 lei
b) \( VEXPL = \) Total operating income = 63.824.367 lei
c) \( VFIN = \) Total financial income = 1.908.670 lei
d) \( VEXTR = \) Total extraordinary income = 123.450 lei

\[
\Delta VT = 12.912.307 \text{ lei} = \Delta VEXPL + \Delta VFIN + \Delta VEXTR, \text{ in which:}
\]
\[
\Delta VEXPL = VEXPL_1 - VEXPL_0 = 63.824.367 - 51.445.380 = +12.378.987 \text{ lei}
\]
\[
\Delta r_{VEXPL} = \frac{12.378.978}{3.726.156} \times 100 = +332.22\%
\]
\[
\Delta VFIN = VFIN_1 - VFIN_0 = 1908670 - 1379870 = +528.800 \text{ lei}
\]
\[
\Delta r_{VFIN} = \frac{522.800}{3.726.156} \times 100 = +14,19\%
\]
\[
\Delta VEXTR = VEXTR_1 - VEXTR_0 = 123450 - 118930 = +4520 \text{ lei}
\]
\[
\Delta r_{VEXTR} = \frac{4.520}{3.726.156} \times 100 = +0,12\%
\]

**Influence of total intermediate expenditure: \( CHTI = CHTB - (I + TX) \)**

**Previous Exercise**

a) \( CHTI = \) Total intermediate expenditure = 44.786.832 lei
b) \( CHTB = \) Total gross expenditure = 48.512.988 lei
c) \( (I + TX) = \) Total expenditure with taxes and excise taxes = 3.726.156 lei

**Current Exercise**

a) \( CHTI = \) Total intermediate expenditure = 52.720.267 lei
b) \( CHTB = \) Total gross expenditure = 57.632.559 lei
c) \( (I + TX) = \) Total expenditure with taxes and excise taxes = 4.912.292 lei

\[
\Delta CHTI = \Delta CHTB - \Delta (I + TX), \text{ where:}
\]
\[
\Delta CHTI = CHTI_0 - CHTI_1 = 44.786.832 - 52.720.267 = -7.933.435 \text{ lei}
\]
\[
\Delta CHTB = CHTB_0 - CHTB_1 = 48.512.988 - 57.632.559 = -9.119.571 \text{ lei}
\]
\[
\Delta r_{CHTB} = \frac{9.119.571}{3.726.156} \times 100 = -244,74\%
\]
\[
\Delta (I + TX) = (I + TX)_1 - (I + TX)_0 = 4.912.292 - 3.726.156 = +1.186.136 \text{ lei}
\]
\[
\Delta r(I + TX) = \frac{1.186.136}{3.726.156} \times 100 = +31.83\%
\]

**Influence of the net outcome: \( RN = RB - IP \)**

**Previous Exercise**

a) \( RN = \) Net outcome = 4.431.192 lei
b) \( RB = \) Gross Outcome = 5.281.668 lei
c) \( IP = \) Tax profit = 850.476 lei

**Current Exercise**
a) RN = Net outcome = 8,223,928 lei
b) RB = Gross Outcome = 9,785,740 lei
c) IP = Tax profit = 1,561,812 lei
\[ \Delta RN = ARB - \Delta IP, \text{ where:} \]
\[ \Delta RN = RN_0 - RN_1 = -3,792,736 \text{ lei} \]
\[ \Delta RB = RB_0 - RB_1 = 5,281,668 - 9,785,740 = -4,504,072 \text{ lei} \]
\[ \Delta rRB = \frac{-4,504,072}{3,726,156} \times 100 = -120,88\% \]
\[ \Delta IP = IP_1 - IP_0 = 1,561,812 - 850,476 = +711,336 \text{ lei} \]
\[ \Delta rIP = \frac{-711,336}{3,726,156} \times 100 = +19,09\% \]

3. Conclusions
In conclusion we can say that taxes and excise taxes have an influence on the financial position and financial performance of the entities.
The value size of the taxes and excise taxes is determined according to the value size of total revenue, the value size of expenditure and also of the value size of the net outcome.
Increase or decrease of taxes and excise taxes influence positively or negatively the major objectives of the enterprise:
- Maximizing enterprise value or maximizing the wealth of owners.
- Maximizing the utility function.
- Function with a minimum threshold to be achieved: the production, storage, sales, market share gained, profit.
- Minimizing the cost of transmission, recovery and verification of signals, respectively harmonizing interests of shareholders - managers.
Taxes and excise taxes recorded as trade-off expense with debts affect the patrimonial value.

\[ VP = AE - DAT \]
\[ VP \] = Patrimonial value
\[ AE \] = Economic asset
\[ DAT \] = Total debt

Increasing debt on account of taxes and excise taxes diminishes patrimonial value.
Decreasing debt on account of taxes and excise taxes increases the patrimonial value. Taxes and excise taxes affect the size of wealth and profit, respectively actual size of the monetary (cash-flow-in). The deductible character of expenses from taxable profit influences the size of profit tax, entity’s taxation and its value.

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