paper text:

STOCKS AS STRUCTURAL COMPONENTS OF ENTERPRISES CALCULATING CAPITAL IN UKRAINE

Abstract This article explains the purpose of inventory from a scientific point of view. A structural analysis of working capital of enterprises in Ukraine has been carried out and the role and place of inventories has been defined. Reversibility of inventory has been calculated. A discount rate of working capital of Ukrainian entities has been defined. Key words: working capital, current assets, stocks, accounting standards, reversibility.
I.INTRODUCTION Paying attention to the need for the enterprise economy effective management in market conditions, the amount of the circulating capital should be sufficient for the production of the products range at the expense of its rational proportions structure, i.e. equity and debt capital that will allow domestic production to operate successfully in the current environment, and correspondingly it depends on the stocks availability. To characterize stocks as current assets in inventory reserves that are in the process of production with the aim of subsequent sale which is resulted by product manufacturing as well as for the use in the goods production, labour and service, also it should be taken into consideration that they may be created with different goals in the enterprises (Blanc, 2000). In particular these include: ensuring current production activities (raw materials current stocks); providing current marketing activities (current stocks output); seasonal stocks accumulating that provide the production process in the coming period (seasonal raw materials and output). Stocks are assets held for sale (distribution, transferring) in the ordinary course of economic activity and remained in the process of production for product manufacturing sale, are held for the use in the goods manufacturing, labour and service, and business management / institution (Order…, 1999). Stocks are recognized as an asset if there is probability that the enterprise / institution will receive future economic benefits associated with their use, and their value can be reliably measured. The main components of stocks are as follows: - Inventory, that is raw, basic and auxiliary materials, components and other tangible assets intended for the goods production, labour, services, distribution, transferring, service production and administrative needs; - Current biological assets, if they are evaluated by Accounting Provision (standard) (AP(S), agricultural products and forestry products after its initial recognition; - Production in progress in the form of pending process and assembling parts, components, products, and unfinished processes. Progress at enterprises, institutions that perform work and provide services that consists of the cost to implement unfinished works (services) for which the enterprise is not yet recognized as an income; - Finished production that is made in the enterprise, institution intended for its selling and meets the technical and quality characteristics provided by the contract or other legal act; - Goods as items purchased (received) and held for the purpose of sale. II.RESULTS In the assets of entities in Ukraine current assets put more than 50% and during 2005-2012 tend to increase. Thus, their value has increased from UAH 700.72 billion in 2005 to UAH 2921.14 billion in 2012 (Table 1). Despite some fluctuations, the proportion of current assets to total

assets tends to decrease, which cause the reduction in value of the production key factors the main means and in accordance to reduce the equity entities cost. Table 1 Circulating capital entities structure in Ukraine * Indicator 2005 2006 2007 2008 2009 2010 2011 2012 GDP UAH, billion. 441,45 544,15 720,73 948,06 913,35 1082,57 1302,08 1411,24 Current assets, % of GDP 158,7 165,4 170,2 175,7 207,4 206,0 198,5 207,0 UAH, billion Current assets, including: 700,72 899,82 1226,96 1665,32 1893,93 2229,89 2584,16 2921,14 Current assets in cost of available inventories 164,32 204,93 275,79 351,44 377,16 497,20 628,28 688,60 Accounts receivable 421,82 534,04 726,51 1023,04 1217,90 1374,81 1499,97 1701,40 Current financial investments 34,10 50,41 78,95 110,20 139,25 168,69 211,41 259,39 Cash 53,65 68,28 101,22 126,35 103,22 126,04 158,27 188,67 Other current assets 26,82 42,18 44,47 54,30 56,40 63,16 86,23 83,08 % Current assets, including: 100,0 100,0 100,0 100,0 100,0 100,0 100,0 100,0 Current assets in cost of available inventories 23,4 22,8 22,5 21,1 19,9 22,3 24,3 23,6 Accounts receivable 60,2 59,3 59,2 61,4 64,3 61,7 58,0 58,2 Current financial investments 4,9 5,6 6,4 6,6 7,4 7,6 8,2 8,9 Cash 7,66 7,59 8,2 7,6 5,4 5,7 6,1 6,5 Other current assets 3,8 4,7 3,6 3,3 3,0 2,8 3,3 2,8 Note: * - without banks and budget institutions. Source: Statistical bulletins (2009; 2013). The current assets proportion in stocks of inventory remains unchanged in the total value of current assets (See Table 1) and it forms about 24% (Fig. 1). Fig. 1. The current assets structure of the Ukrainian entity in 2012, % The Source: calculated by the author. An important component in the stock structure is inventory, which amounted about 40% (UAH 273.72 billion) in stocks of inventory values of entities in Ukraine in 2012 (Table 2) and 9.3% that is the structure of current assets as a whole. Table 2 Entities inventory current assets in stocks of Ukraine * Indicator 2005 2006 2007 2008 2009 2010 2011 2012 GDP, UAH, billion 441,45 544,15 720,73 948,1 913,4 1082,6 1302,1 1411,2 Current assets in stocks, % to GDP 37,2 37,6 38,3 37,1 41,3 45,9 48,3 48,8 UAH, billion Current assets in stock of available inventories, including: 164,32 204,93 275,79 351,44 377,16 497,20 628,28 688,60 Inventories 65,2 77,82 102,71 121,35 123,36 231,44 262,21 273,72 Current biological assets 3,68 4,04 4,87 6,34 7,56 9,67 11,95 15,05 Unfinished production 20,81 26,36 34,66 46,18 46,27 50,47 58,74 67,31 Output 31,02 41 55,33 78,29 81,75 90,53 129,54 139,17 Goods 43,61 55,71 78,22 99,28 118,22 115,09 165,84 193,34 Current assets in stock of available inventories, including: 100,0 100,0 100,0 100,0 100,0 100,0 100,0 100,0 Inventories 39,68 37,97 37,24 34,53 32,71 46,55 41,73 39,75 % Current biological assets 2,24 1,97 1,77 1,80 2,00 1,94 1,90 2,19 Production in progress 12,66 12,86 12,57 13,14 12,27 10,15 9,35 9,78 Output 18,88 20,01 20,06 22,28 21,68 18,21 20,62 20,21 Goods 26,54 27,18 28,36 28,25 31,34 23,15 26,40 28,08 Note: * - without banks and budget institutions. Source: Statistical bulletins (2009; 2013). In order to determine the level of resource management parameters efficiency, we will calculate the inventories turnover profit as the primary source of circulating capital and general reserves, and production costs realization, in particular using formulas (Table 3). Table 3 The inventory turnover (UAH, billion) Indicator 2008 2009 2010 2011 2012 Income from sales (IS) 9,0 -45,0 58,3 126,7 75,7 The inventory average annual cost (IAAC) 308,8 358,1 431,2 560,4 654,7 Profit inventory rotation (PIR), PIR= IS / IAAC 0,029 -0,126 0,135 0,226 0,116 Production costs realisation (PCR) 2917,5 2680,3 3279,5 3834,9 4247,4 Inventory rotation at cost price (IRCP), times IRCP = PCR / IAAC 9,4 7,5 7,6 6,8 6,5 The Source: Calculated based on Statistical bulletins (2009; 2013). Traditionally, the stocks reversibility is calculated by the revenue (income) from the commercial output sale (Table 4) Table 4 The inventory turnover (UAH, billion) Indicator 2008 2009 2010 2011 2012 Revenue (income) from the commercial output sale 3014,7 2745,8 3366,2 3991,2 4459,8 The inventories average annual cost 308,8 358,1 431,2 560,4 654,7 Stocks turnover, times 9,8 7,7 7,8 7,1 6,8 The above-mentioned inventory turnover calculation comparison shows that the proposed approach to its definition of profit gives more accurate results than traditional for receipts (income) from the commercial output sale. However, the above studied efficiency of circulating capital usage criteria and indices is the most common for all entities. Therefore, in addition, in order to extend the analysis we will apply such new indices as the proportion of circulating capital share in stocks and flow, the human capital share by current

expenditures and the level of debt (delinquency), which improvement is directly connected with the main criterion for efficient use of circulating capital that is its turnover increasing. Circulating capital shares in stocks and production line is calculated by formulas (1.9-1.12) (see the section 1.2) (Table 5). The calculation results show insignificant increase in the share of circulating capital flow as a whole over the studied period and in particular from 72.7 % in 2008 to 73.6 % in 2012. Its level increase is distinguished in 2009, which was 77.1 %. The share of circulating capital in stock in 2009 had the lowest value and amounted 13.3 % in comparison to 16.7 % in 2008 and 16.4% in 2012 , the share of human capital in current expenditure remained at the level 6 -6.5 % for the whole period. Table 5 Entities circulating capital shares in stock and production line in Ukraine (UAH, billion)

Indicator	2005	2006	2007	2008	2009	2010	2011	2012
Accounts receivable, short-term investments, cash (C)	509,6	652,7	906,7	1259,6	1460,4	1669,5	1869,7	2149,5
Inventories, production in progress, finished goods stock (S)	117,0	145,2	192,7	245,8	251,4	372,4	450,5	480,2
Circula ting capital (CC)	700,7	899,8	1227,0	1665,3	1893,9	2229,9	2584,2	2921,1
The circulating capital share in flow (Sccf), Sccf =C/CC*100%	72,7	72,5	73,9	75,6	77,1	74,9	72,4	73,6
The sh are of circulating capital in stock (Sccs), Sccs =S/CC*100%	16,7	16,1	15,7	14,8	13,3	16,7	17,4	16,4
The size of the debt (loans and receivables) (Sd)	823,7	997,2	1308,5	2204,2	2645,7	2970,9	3339,5	3766,5
Output volume (Q)	1514,5	1898,3	2414,7	3014,7	2745,8	3366,2	3991,2	4459,8
The level of debt (delinquency) (P), P=Рзаб/Q*100%	54,4	52,5	54,2	73,1	96,4	88,3	83,7	84,5
Current human capital (labor costs, the additional training costs, etc.) (HC)	85,5	107,2	137,5	175,9	170,6	193,8	232,3	274,9
Output at cost price (C)	1450,6	1837,5	2312,8	2917,5	2680,3	3279,5	3834,9	4247,4
The share of human capital in operating costs (Shc), Shc = HC/C *100	5,9	5,8	5,9	6,0	6,4	5,9	6,1	6,5

The source: calculated according to Statistical bulletins (2009; 2013). Thus, we can make a conclusion that improvements towards more efficient use of working capital has not happened, and reversibility was backed up by continuous increase in debt (delinquency) that from 54.4 % in 2008 increased to 84.5 % in 2012. The comparison of the working capital cost over time we can achieve through the use of discounting method that allows you to bring the present value of the future and vice versa. For accurate valuations discounting it is used the formula by which the asset future value is the present value of its product by one item plus the discount rate (FV = PV (1 + i)) (Kasyanova N.V. et al., 2012; p. 103-104). The discount rate calculation depends on what type of cash flow is used as the basis for evaluation for equity applicable discount rate equal to the return on capital rate required by the owner, and for a total invested capital is applied discount rate (WACC), which is the sum of the return on equity rates and borrowed funds (the rate of return on borrowed funds is the interest rate of bank loans), where both scales are the proportion of debt and equity funds in the capital structure. We will calculate the circulating capital discount rate (Table 6). Table 6 The entities circulating capital discount rate in Ukraine

Indicator	2008	2009	2010	2011	2012
Number of circulating capital circulation (Nccc), times	9,4	7,5	7,6	6,8	6,5
Inflation rate (i), %	125,2	115,9	109,4	108,0	100,6
Credit interest on short-term commercial loans (% CI), %	21,6	19,6	15	17,2	17,6
circulating capital discount rate (d), d=i/ Nccc + % CI, %	34,9	35,1	29,4	33,1	33,1

The source: calculated on the basis: National Bank Survey (2010) and Statistical Yearbook (2013). III.CONCLUSIONS Summarizing the foregoing, we can make a conclusion that for the ways of prioritization to use the circulating capital it is necessary to consider all the components that affect its level, among which stocks is one of the most important.

IV. REFERENCES 1. Blanc I.A. (2000) Asset Management, Nika-Center, Kyiv, 720 p. 2. Kasyanova N.V., Solokha D.V., Moreva V.V. and others. (2012) Company Potential: formation and usage, Digital Printing, Donetsk, 257 p. 3. National Bank of Ukraine Monetary Survey for 2008-2009. 4. Order of the Ministry of Finance of Ukraine "On Approval (Standard) Accounting 9 "reserves" of 20.10.1999, № 246 (editing from 25.01.2013) [electronic resource], Access: http://zakon4.rada.gov.ua/laws/show/z0751-99. 5. Statistical bulletin "Business enterprises activity" during 2004-2008, State Statistics Service of Ukraine, Kyiv. 6. Statistical bulletin "Business Entities activity" during 2009-2012, State Statistics Service of Ukraine, Kyiv. 7. Statistical Yearbook of Ukraine for 2012 (2013), State Statistics Service of Ukraine, Kyiv, 552 p.