Accounting as a Pillar of the Knowledge Society

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Abstract **Accounting is at the centre of well functioning societies and its role extends well beyond its historical bookkeeping role. National accounting and corporate accounting systems, which are in essence informational systems, help to achieve equilibrium and balance between various participants and agents in the economy in a knowledge society. The main objective of the article is to discuss the relevant issues in the context of macro and micro aspects.** [1]

Keywords ***– accounting, social cohesion, balanced development, knowledge society*****.**

I. INTRODUCTION

Accounting system can also avail social and economic cohesion process and in fact feature income distribution foundation. Human capital model based on the accounting principles and axioms allows defining labor value of individuals. Setting a fair compensation, understood as a derivative of individual human capital value that determines ones labor value, leads to a fair and understood as natural income distribution. Therefore, accounting as an information system, can pattern labor relations determining income distribution and cohesion of modern knowledge society.

Accounting also plays a key role in the performance of companies by providing the essential information for all involved and affected parties such as: shareholders, banks, management, employees, government and society at large. The proper measurement and its informational value contributes to the fair and constructive evaluation, forward planning and more efficient use of the broadly defined financial and human capital in an environment with potential for the conflict of interests.

II. ACCOUNTING IN SOCIAL ECONOMY

Accounting as an information system can play important role in social and economical development. It helps to define precisely many economic and social problems enabling the process of development and control.

However, involving the accounting system to resolve the social and economic problems needs new insights beyond the traditional understanding of accounting expressed in terms of only basic "bookkeeping". Accounting has a decision making application in the economy similarly to the role of managerial accounting at firm's level. It enables true and fair measurement of the economic and social parameters which are fundamental conditions for a good and efficient state government.

Accounting is a process of measurement that takes place in firms and implementing it at the macroeconomic level needs definition of new terms and concepts that comply with the accounting principles.

The assurance of social cohesion[2] and balanced development requires establishment of a suitable information system. The main objective of this system is evaluation of the streams of value and capital in the economy. Adequate definition of value and capital, with reference to accounting principles, empowers more efficient resources utilisation with emphasis on the intellectual resources.

Taking into consideration increasing importance of the intellectual resources for the level of economic growth, proper method of their valuation and compensation is prevailing social focus. The second aspect – fair compensation for the knowledge engagement – is more than ever gaining in significance. The adequate remuneration can play a role of a foundation for proper labour industrial relations that enable effective capital allocation in the national economy.

III. THE PROPER KNOWLEDGE VALUATION AND ITS IMPACT FOR MACROEFFICIENCY

Presented in this paper a new look on accounting is founded on an understanding of capital as an economic energy, in other words capital is the ability to perform work. Value is defined as amount of work accumulated in the object of work. According to this definition, working can be described as a process of transforming human capital into objects (i.e. assets) which are value careers (i.e. they represent value). That approach also determines the nature of money, which according to numerous publications is not clear and unequivocal. Money is work receivable and unit of value. This definition also determines the problem of credit, interest rate and other questions connected with money circulation [4].

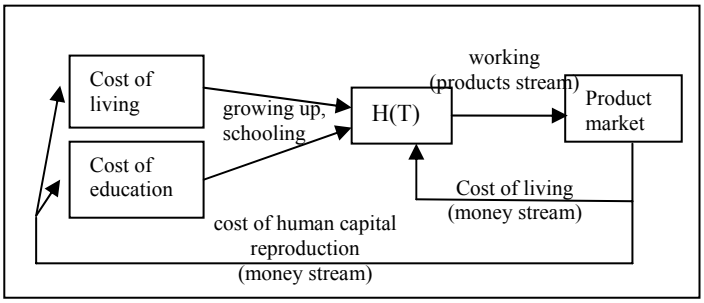

Fig. 1. Capital and value flow in economy

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[2] Cohesion from the point of view of the social-economic system, arises from the interrelations of the structural and nominal inputs and outputs of the system's elements.

Analysis of the above figure needs to specify the problem of human capital (H(T)) measurement and compensation. M. Dobija has developed a model of the individual human capital, which is consistent with accounting principles. Nature of capital can be described by the following equation [1]:

$$C_t = C_0 \, e^{(p-s)t} \qquad (1)$$

Where: C_t – value of capital in point of time (t), C_0 – initial value of capital, s – cost of risk losses, p – risk premium, t – time variable.

Mentioned above risk premium (p) is about 8% per year according to numerous research on the long term rate of return from assets quoted on the stock exchange, companies profits (ROA) and human capital accounting.

In the presented model, human capital consists of three components: discounted cost of living (K), discounted cost of professional education (E) and experience factor (Q(T)).

$$H(T) = (K + E) \cdot (1 + Q(T)) \qquad (2)$$

$$K = k \cdot 12 \frac{(1+p)^t - 1}{p} \qquad (3)$$

$$E = e \cdot 12 \frac{(1+p)^t - 1}{p} \qquad (4)$$

$$Q(T) = 1 - T^{\frac{\ln(1-w)}{\ln 2}} \qquad (5)$$

Where: k – monthly cost of living, e – monthly cost of education, w – learning coefficient, T – years of professional experience.

Value of the individual human capital determines value of his or her labour what is revealed with a fair salary. Fair wages are measures of human capital value with risk premium (p).

Simple application of the human capital model is an estimation of the fair minimum wage. Minimum wage will be earned by a citizen with only primary education and without any significant work experience. Thus, his human capital is as follows: $H(T)_{min} = K$ (E=0, Q(T) = 0). For example, suppose that in Ukraine monthly cost of living is 500 (or 400) UAH, time of the costs capitalisation is 17 years, sum of human capital $H(T)_{min}$ = 202.500 (or 162.000) UAH. Fair yearly compensation is 8% (risk premium) of human capital value 16.200 (or 12.960) UAH, 1350 (or 1080) UAH monthly. In Ukraine legal minimum wage is 625 UAH (at 1.04.2009) plus 32% social insurance, so minimum cost of labour is 825 UAH, that gives 4,9% (or 6%) rate of return from human capital instead 8%. In summary, Ukrainian minimum wage is too low and needs about 60% increase in case of 500 UAH monthly cost of living or 31% increase in case of 400 UAH.

On the other hand, in Great Britain monthly cost of living is 350 GBP, time of capitalisation is 18 years - designated minimum age of obligatory education, then $H(T)_{min}$ = 157.000 GBP. Fair yearly compensation is 12.560 GBP and 1045 GBP monthly. Legal binding minimum salary is 993 GBP, about 7,5% rate of return from human capital. Difference between the model and legal amount comes from adopted approximations.

IV. STIPULATED WAY OF APPLICATION

Broader analysis of wages in developed countries give results in line with the model, but less developed countries reveal a worrisome gap between the actual and model calculated salaries. This gap leads to a problem with reproduction of human capital, diminishing its value and causes social exclusion. On the other hand, developed countries face a problem of overpaying some groups of the workers. The imbalance usually causes inflation resulting from the lack of equilibrium between stream of money and products.

Therefore, the main issue is how to discipline employers to compensate for work fairly. Efficient solution is to initiate adequate labour market institutions. These institutions should assure the fair minimum wage and provide the right pattern of remuneration. At the core of the national labour system can be a coordinated collective bargaining system. Recent research points out that such coordination leads to a better macroeconomic and social performance, especially to lower inflation, income inequality and unemployment [4; 5].

V. CONCLUSION

Three findings arise from the presented concepts and models. 1) Human labour is a source of value and it is possible to quote value unequivocally and clearly. Double entry accounting principle protects against increasing value by internal operations, what is often violated especially in the financial operations of the globalised economy. 2) Value of labour is a derivative of human capital value. 3) Compensation should be derived from value of labour.

Sufficient condition for achieving social cohesion and balanced development is the equity between labour value and its compensation. Each deviation from this principle upsets balanced development of contemporary knowledge societies.

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