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J. Martinavičius, Dr, Dean of the Faculty of Economics  
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*The economy's power and capacities could be measured using different methodologies and numerous macroindicators. The national wealth definition provides an opportunity to reveal not only accumulated resources, but also exposes a real potential of the country and the path for sustainable development. Wealth measurements for transition countries could show the long term development rationality, comparing national wealth structure and its components for different countries. The two methodologies – National Accounts System and World Bank Measuring of wealth, and the obtained comparison results are discussed in the paper.*

**Keywords:** national wealth, assets, assessment, World Bank, system of National Accounts methodology, transition countries.

It can be stated that the category of wealth is the cornerstone of economic theory, which has been proved by the development of economic science. It should be mentioned that as early as 400BC the Greek philosopher Aristotle, having identified the aspects of practical philosophy and considering the state as a form of coexistence, discussed the categories of value, price, money and defined economics as the science of wealth.

It is generally accepted that the fundamentals of the economic science were formed in the works by Francois Quesnay and Adam Smith. The former, being a representative of Physiocratic school and considered as the pioneer of macroeconomic modelling provided the following brief description of wealth in the epigraph of his work "Economic Table": "Poor farmers – poor country, poor country – poor King". The attitude to the economic science and wealth of the latter, who is considered to be the founder of the classical school of economists in England, was expressed in his capital investigation using expression "An Inquiry into the Nature and Causes of the Wealth of Nations".

It should be remembered that one of the first researchers who started to investigate the origin of wealth and its significance to the human society was the philosopher Thomas Hobbes (16th century) who proved that the strict rule of the King ensures social order and economic progress. Adam Smith (18th century), moral and political philosopher, later granted the title of the pioneer of economics for putting forward the idea of the market forces creating national wealth and controlled by the "invisible hand". Another researcher to be mentioned was Karl Marx (19th c.), as Marxist theory emphasises the total critique of the Capitalist society for making use of its wealth. While studying issues of sociology, philosophy, politics and economics, he pointed out the idea of emergence of the surplus value and its just use, when the society itself has to take over and manage the public assets created. The list of classics could be completed by Max Weber (19–20 th c.) who associated nation's wealth with the rational organisation of the bureaucratic / administrative system.

While structuring the category of wealth, it should be admitted that, according to the above mentioned classics, the national wealth was identified not only with its economic aspects, especially distinctive is the understanding of wealth as a public/social good. In the modern concept while defining national wealth the following aspects are distinguished:

a) Economic – wealth, national assets are understood as pure value of the assets held by individuals, households and nation.

b) Sociological – wealth is a means of maintaining inequality passed on from generation to generation. Wealth distribution and redistribution mechanisms, interests of individual classes, their alignment, assessment of inequality and social justice issues are all important here.

c) The concept of natural capital – economic wealth / capital, its extension and addition of elements of the natural environment, natural ecosystems and their maintenance being regarded as a value.

d) The value of wealth as a part of good functioning in a more complex system. Here the assets held are associated with the development of ecological system (ecological economics – [10]), regional development (bioregionalism – [17], or even ethical aspects of planning and managing natural resources (ecological stewardship).

The economic importance of national wealth was realized quite long ago, when in the era of frequent military conflicts a need arose to assess the countries' resources and economic potential. In the history of national wealth assessment the first results recorded were known in 1664 in Britain, 1789 in France and 1805 in the USA. Since 1853 the issues of methodology for measuring and classifying national wealth have been analyzed and discussed at international congresses and conferences of statistics, and in 1947 International Association for Research in Income and Wealth was founded, the main purpose of which is to formulate an adequate definition of the national wealth, submit and develop proposals concerning national wealth measurement issues. Afterwards the definition of national wealth, its distribution and evaluation issues were focused on in numerous studies and evaluations, until 50 years later EU countries agreed on the methodology of national wealth measurement and classification. In 2001 world standards for measuring national wealth were established [5], they have been taken into account in the legal acts of EU countries.

However, despite the notable achievements at methodological level, there is still a lot to be done in the field of national wealth accounting and measurement. The review of the works by Lithuanian and international authors suggests that it is still not clear how objective and unambiguous measurement of national wealth of EU countries should be carried out. In the EUROSTAT database information about national wealth of each individual country is not available, moreover, no concise methodology is provided how this wealth should be measured. Different Sources of EU National Statistics are also not generous in offering estimates of the national wealth of their countries.

National Wealth, as every other macroeconomic term, is a complex systematic category, combining economic, social, legal, geographical and other factors of wealth formation, disposition and use. Terminology itself suggests a broad variety, e.g. the concept of National wealth used by Lithuanian statistic services not always clearly expresses what is defined as "Assets", "Worth" in the system of national accounts [16]; the country asset valuation is even more different when using "Wealth of nation" [19] terminology by the World Bank or the term "National Wealth" [14] used by the Organisation for Economic Co-operation and Development.

The system of National Accounts applied in the world, including Europe, presents methodology of national wealth measurement and classification with the following definition of national Wealth [16]: this is the sum of financial and non-financial assets of all institutional units consisting of the unit residents, which means that National Wealth is the country's economic net worth.

National wealth is divided into three parts: non-financial produced assets (AN. 1), non-financial non-produced assets (AN. 2) and financial assets (AF). It does not include human capital, natural resources which have no economic value (air, river water) and contingent assets (obligations between two institutional units on the financial terms of the transaction, based on the contract), which are not financial assets (with some exceptions when the contract itself has a market value and can be traded or converted into another asset).

The National Wealth classification scheme includes 78 separate elements of the country's national wealth key interrelations expressed as follows:

$$T = AN + AF \quad (1)$$

$$AN = AN.1 + AN.2 \quad (2)$$

$$AF = AF.1 + AF.2 + AF.3 + AF.4 + AF.5 + AF.6 + AF.7 \quad (3)$$

Financial assets are economic assets, comprising means of payment (monetary gold, special drawing rights (AF. 1), currency and deposits (AF. 2), securities other than shares (AF. 3), loans (AF. 4), shares and other equity (AF. 5), insurance technical reserves (AF. 6) and other receivable or payable accounts (AF. 7). Using the World Bank methodology the total wealth of the country is evaluated on the basis of the following assumptions:

1. The total volume of assets is measured as present value of future consumption. Formally, the following expression is used:

$$T_t = \int_t^{\infty} V(s) e^{-r(s-t)} ds \dots (4),$$

where  $T_t$  – total assets in year  $t$ ;  $r$  – rate of return on investment;  $s$  – initial years of investment / funds' use.

2. To make estimates of buildings, machinery and equipment *perpetual inventory method* is used [13], with the help of which assessment of depreciation is carried out.

The following structural elements of the assets are distinguished; natural capital (*Natural capital = subsoil assets + timber resources + nontimber forest resources + protected areas + cropland + pastureland*), produced capital, urban land, intangible capital (See Table 1 for more details).

Detailed analysis of both methodologies shows the essential difference in the national wealth estimates:

According to NSS [16] (System of National Accounts), intangible capital is valued only as much as it is directly involved in the product development and participates in the market relations, whereas (4) expresses macro-economic development approach, which suggests that intangible capital is *net present value* generating factor and summing up the *natural capital* and *produced capital*, the volume of the country's *National Wealth* is expressed. The difference of the result using different approaches (NSA and WB methodology) evident for Lithuania's case, where amount of 2008 wealth differ by 1.42 time. Numerical evaluation of the results where intangible capital for some transition countries plays an essential role in the wealth stock presented in Table 1.

The country's development, economic efficiency, living standards as well as its weight in the international community is predetermined by its available resources and the nature of their use. The currently used concept of sustainable development rather fully reflects the holistic

approach to the performance of development factors: the country's progress is determined by the entire complex of closely related and interwoven factors. The period of transition from a centrally planned economy to an open competitive system was marked, firstly, by political changes followed by economic and social transformations causing reappraisal of not only moral but also economic values.

For example, during nationalized or state property privatization process the real market price of the country's assets was revealed, which in some cases was several times different from the rem (determined by balancing) value. At the same time production assets within a short period of time could have been lost and become null and void, having transferred their use to incompetent entities, or due to the lack of necessary investment. In other words, the country's assets could be lost or decreased due to various mistakes made during the privatization process as well as due to political reasons, improperly carried out or delayed agricultural reform, exceptional conditions granted to local or foreign investors, the legal regulation of labor, corruption and other factors.

It can be argued that the assessment of the country's wealth as "assets" within the framework of the system of national accounts alone allows one to see how the country's assets changed in each individual phase of the transition process.

The report more will offer a more detailed analysis of the Lithuanian national wealth changes and explain which of them may be regarded as the transition results or consequences.

It can be stated that efficient use of the country's assets is the essential prerogative for sustainable development, and it can be rather accurately measured while using *present value of future consumption* concept, which reflects the importance of the most significant element of the development of any economic system, i.e. the human factor, expressing it as a component of the intangible capital. Equally important is the realization of the (4) expression, the country's assets are valued in the ongoing dynamics of the development process, using the *genuine saving* assessments. Thus the result of success or failure of the development process is obtained taking into account physical or moral depreciation of the "fixed capital", conservation or indiscriminate waste of the resources, environmental pollution, efforts to develop and improve the quality of human capital.

As it was already mentioned, during the transition process many cases were observed when "fixed assets" available were obsolete unused, the same can be said about abandoned land, increased air and water pollution, excessive exploitation of natural resources, today's increased consumption at the expense of the future – this behaviour reducing the country's wealth. Likewise, the country's assets are reduced not sufficiently investing in education, science, new technology. Table 1 presents the numbers which are only a part of the picture, reflecting the general situation of the national wealth valuation in transition economies.

Table 1. Wealth and GDP per capita in some transition countries, US\$ \*

	Natural capital	Produced Capital + urbanland	Intangible capital	Total wealth		GDP		
				2000	2005	2000	2005	2010
				2005				
Bulgaria	5,56	10,08	50,0	46,89	63,99	1,58	3,73	6,33
Latvia	7,35	23,26	94,66	75,57	121,27	3,30	6,97	10,72
Lithuania	6,01	21,26	108,76	93,44	132,92	3,27	7,6	11,04
Poland	8,89	20,53	109,94	113,35	135,94	4,45	7,96	12,29
Romania	9,06	14,29	58,96	61,64	80,91	1,65	4,57	7,54
Ukraine	6,90	7,25	15,48	19,69	29,32	0,64	1,83	3,01

\* Sources: [2], [19].

As it can be seen, in all transition countries the part of intangible capital comprises the biggest part of the country's wealth, while this part is smaller for the countries with worse results. It can also be noticed that those countries that chose a radical path of transition earlier have achieved better results- their wealth per capita and the change in GDP is bigger. Other countries in the period of 2000–2005 considerably increased their national wealth as well, however, the changes in their assets and GDP were quite varied. A more detailed and thorough analysis of the countries' "in transition" property transfer process shows different national wealth utilization results and different possibilities to use own resources in the most efficient way.

The country's wealth estimation using category "national wealth" could be a very fruitful measure in assessing the effects of the transition course. The comparison of System of National Accounts methodology with the World Bank's national wealth measurement system displays possibilities to show long term results in utilization of nation's or country's available resources. Analysis of wealth magnitudes and dynamics for different transition countries shows the results of different means and approaches to overcome the pitfalls of centrally planned economies on the road to the market economy.

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### ОЦІНКА НАЦІОНАЛЬНОГО БАГАТСТВА ТА ЇЇ ВИКОРИСТАННЯ В КРАЇНАХ З ПЕРЕХІДНОЮ ЕКОНОМІКОЮ

*Потужність економіки та її можливості можуть бути виміряні за допомогою різних методик і численних макропоказників. Визначення національного багатства дає можливість виявити не тільки накопичені ресурси, але також виражає реальні можливості країни та шлях до сталого розвитку. Вимірювання багатства для країн із перехідною економікою здатне показати в довгостроковій перспективі раціональність розвитку, порівняння структури національних багатств та її компонентів для різних країн. Дві методології (Система національних рахунків і Вимірювання багатства Світовим банком) та порівняння отриманих результатів обговорюються у статті.*

*Ключові слова: національне багатство, майно, оцінка, Світовий банк, система національних рахунків, країни з перехідною економікою.*

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### ОЦЕНКА НАЦИОНАЛЬНОГО БОГАТСТВА И ЕЕ ИСПОЛЬЗОВАНИЕ В СТРАНАХ С ПЕРЕХОДНОЙ ЭКОНОМИКОЙ

*Мощность экономики и ее возможности могут быть измерены с помощью различных методик и многочисленных макропоказателей. Определение национального богатства дает возможность выявить не только накопленные ресурсы, но также предоставляет реальную возможность страны и путь к измерению устойчивого развития. Измерение богатства для стран с переходной экономики могло бы показать в долгосрочной перспективе рациональность развития, сопоставление структуры национальных богатств и ее компонентов для разных стран. Две методологии (Система национальных счетов и измерение богатства Всемирным банком) и сравнение полученных результатов обсуждаются в статье.*

*Ключевые слова: национальное богатство, имущество, оценка, Всемирный банк, система национальных счетов, страны с переходной экономикой.*

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### ALTERNATIVE STRATEGIES TO REDUCE PUBLIC DEFICITS: THE CASE OF SPAIN

*High government deficits are a matter of concern in many European countries. We examine the effects of several alternative measures intended to reduce public deficits, distinguishing between those acting through either taxes or spending. Our analysis is applied to the Spanish economy, using a computable general equilibrium model.*

*Keywords: Government deficit, taxes, spending, computable general equilibrium.*

Major fiscal imbalances are a matter of concern in many developed countries, which is particularly true for most European countries, especially those belonging to

the euro area. Accordingly, fiscal consolidation strategies are being pursued in those countries in order to reduce such "excessive" government deficits, and so recovering