

The other members of a syndicate play the role of passive co-investors [25]. Thus, syndicated investments can be located at a larger distance from venture capital funds than the non-syndicated; however, provided that at least one member of a syndicate will have been established relatively close to the investment target. This is exactly the reason why it can be expected that investors being far from investments will look for a partner of a syndicate, who is closer. Therefore, it is important for a region (or a country) to have a sufficient number of venture capital providers who could act as catalysts, when connecting regional economy with further global supply chains by way of syndication.

Thus, public venture capital fund established in a country, could, even not being of high volume, act as a catalyst and, by attracting foreign venture capital, invest in high technology companies. This could also happen in a syndicate manner. Moreover, while being public, it would provide foreign investors with the "guarantee of reliability" [26].

In general, importance of public venture capital to a country (or a region) could be shown by stochastic dependence, which could be a function of respective parameters discussed above. Design of such dependence is the object of our further research.

Conclusion. There is a positive medium-strength correlation between private equity (including venture capital) investments in a country and innovative capacity of this country; there is a strong correlation between country's innovation capacity and the proportion of people employed in high technology sector, thus, in order to create a high added value economy, country needs innovative companies that would create competitive business environment in the country and would contribute to the growth of employment and economy; innovative companies need adequate financing infrastructure which could be ensured by venture capital funds.

Public venture capital fund would be useful to those countries where traditionally no entrepreneurial spirit exists, where uncertainty is avoided and a strong sense of collectivism exists. Public venture capital fund, keeping in mind specific character of venture capital investments (there is a tendency to invest at limited geographical distance), could, even not being of high volume, act as a catalyst and, by attracting foreign venture capital, invest in high technology start-ups. And this could also happen in a syndicated manner.

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ASSET-BASED POLICY: A NEW DIRECTION FOR SOCIAL POLICY IN CEE COUNTRIES?

Стаття коротко представляє новий напрямок соціальної політики – політику, що базується на активах. Розглядаються та порівнюються різні варіанти впровадження цієї політики в інших країнах. Розглядаючи ідентифіковані виплати, піднімається питання про те, чи буде корисним впровадження політики, що базується на активах у країнах Центральної та Східної Європи.

Ключові слова: активи, політик, що базується на активах, нерівність, країни Центральної та Східної Європи.

Статья коротко представляет новое направление социальной политики – основанную на активах политику. Рассматриваются и сравниваются различные варианты внедрения этой политики в других странах. Рассматривая идентифицированные выплаты, поднимается вопрос о том, будет ли полезным внедрение основанной на активах политики в в странах Центральной и Восточной Европы.

Ключевые слова: активы, основанная на активах политика, неравенство, страны Центральной и Восточной Европы.

The article briefly presents a new direction for social policy – Asset-Based Policy. Various cases of the implementation of this policy in other countries are overviewed and compared. Considering the identified benefits, the question, whether the implementation of the Asset-Based Policy in CEE countries would be useful, is raised.

Keywords: assets, asset-based policy, inequality, CEE countries.

Income inequality, high poverty rate prevent development of society and state, have a significant impact on health and education of residents, conditions of housing

2. Socialinės ir ekonominės plėtros centras, VŠĮ. Europos Sąjungos ir kitų valstybių neformaliųjų individualių investuotojų ("Verslo angelų") investavimo kultūros patirties analizė. Taikomojo mokslinio tyrimo darbas [Analysis of the experience of the investment culture of the informal individual investors (business angels) of the European Union and other countries. Applied scientific research work] 2006. 3. Kompetencijos gildija, UAB. Incentives for Venture Capital Funds' Investments in Small and Medium Sized Enterprises Feasibility Study. Applied scientific research work, 2006. 4. Colombo L., Dawid H., Kabus K. When do thick venture capital markets foster innovation? An evolutionary analysis // Springer-Verlag, 2010. 5. Dutta S. The Global Innovation Index 2011. Accelerating Growth and Development, 2011. 6. European Commission. Innovation Union Scoreboard 2010. The Innovation Union's performance scoreboard for Research and Innovation, 2011. 7. Lerner J. Innovation, Entrepreneurship and Financial Market Cycles // OECD Science, Technology and Industry Working Papers, 2010. – 2010/3. 8. Cyert R. M., March J. G. A behavioral theory of the firm – Englewood Cliffs, NJ: Prentice-Hall, 1963. 9. Nelson R. R., Winter G. S. An evolutionary theory of economic change – Cambridge, MA: The Belknap Press of Harvard University Press, 1982. 10. Dimov D., Murray G. Determinants of the incidence and scale of seed capital investments by venture capital firms // Small Business Economics, 2007. – 30(2). – P. 127–152. 11. Gompers P. A., Kovner A., Lerner J., Scharfstein D. S. Skill vs. luck in entrepreneurship and venture capital: Evidence from serial entrepreneurs // NBER Working Paper, 2006. – No. W12592. 12. Li Y., Zahra S. A. Formal institutions, culture, and venture capital activity: A cross-country analysis // Journal of Business Venturing, 2012. – Vol. 27. – P. 95–111. 13. Fukuyama F. Trust: The Social Virtues and the Creation of Prosperity – New York, NY: Free Press, 1995. 14. Steensma H. K., Marino L., Weaver K.M. The influence of national culture on the formation of technology alliances by entrepreneurial firms // Academy of Management Journal, 2000. – Vol. 43 (5). – P. 951–973. 15. Zacharakis A. L., McMullen J. S., Shepherd D. A. Venture capitalists' decision policies across three countries: an institutional theory perspective // Journal of International Business Studies, 2007. – Vol. 38 (5). – P. 691–708. 16. European Commission. Entrepreneurship in the EU and beyond. Analytical report, 2010. 17. Green M. B. Preferences for U.S. venture capital investments 1970–1988. In Venture capital: International comparisons, ed. M. Green. London and New York: Routledge, 1991, p. 18–58. 18. Petersen M. A., Rajan R. G. Does distance still matter? The information revolution in small business lending. // Journal of Finance, 2002. – Vol. 57:2533–70. 19. Zook M. Grounded capital: Venture financing and the geography of the Internet industry, 1994–2000 // Journal of Economic Geography, 2002. – Vol. 2:151–77. 20. Florida R. L., Kenney M. Venture capital, high technology and regional development // Regional Studies, 1998. – Vol. 22. – P. 33–48. 21. Sapienza H. J., Manigart S., Vermeir W. Venture capitalist governance and value added in four countries // Journal of Business Venturing, 1996. – Vol. 11:439–69. 22. Fritsch M., Schilder D. The Regional Supply of Venture Capital: Can Syndication Overcome Bottlenecks? // Economic Geography, 2011. – Vol. 88(1). – P. 59–76. 23. Sorensen O., Stuart T. E. Syndication networks and the spatial distribution of venture capital investments // American Journal of Sociology, 2001. – Vol. 106:1546–88. 24. Fritsch M., Schilder D. Does venture capital investment really require spatial proximity? An empirical investigation // Environment and Planning, 2008. – Vol. A 40:2114–31. 25. Wright M., Lockett A. The structure and management of alliances: Syndication in the venture capital industry // Journal of Management Studies, 2003. – Vol. 40:2073–102. 26. Lerner J. The government as venture capitalist: The Long-Run Impact of the SBIR Program // Journal of Business, 1999. – Vol. 72(3). – P. 285–318.

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and delinquency rate. Income inequality and wealth disparity cause political discontent that may lead to severe social disorders.

It should be noted, that traditional methods dealing with poverty and social inequality focus on issues of income and consumption, with particular importance given to the idea of progressive taxation and increase of various benefits to the poor. These actions, called income security or income support policy, have to support individuals when they have insufficient income, face difficulties, whether temporary or constant ones, including unemployment, health problems, accidents or old age. Notably, income security was effective policy measure at the time, when national economy offered a number of stable and long-term jobs, providing regular income to majority of its population. Income security policy however is a passive one: it supports individuals in distress; however, it is not intended to develop their possibilities [1; 2]. Research works suggest that transfer of benefits to the poor does not reduce a pre-transfer poverty rate [3].

Modern, post-industrial economy needs active social policy, encouraging personal development and providing motivation for development of one's knowledge, skills and abilities. Latest proposals no longer limit themselves with idea of consumption as a measure of well-being going toward what A. Sen [4; 5] identifies as *capabilities*. According to A. Sen, a concept of capabilities is closely related to personal freedom of choice and ability to carry out one's potential to the fullest.

Therefore, despite the fact that income or consumption are still most widely used measure of poverty in social policy, lately efforts were made to develop a vision on combating poverty and social inequality, based on saving, investment and accumulation of asset. Concept, stressing long-term individual possibilities, based on certain asset level, is called *asset-based policy* [6]. Notably, asset-based policy does not envisage replacing current income security policy, which is a core idea of a welfare state. Both policies can mutually contribute, seeking their goals: benefits received maintain consumption, while the asset accumulated may encourage personal financial freedom and recovery from poverty. To put it briefly, asset-based policy is one that encourages individuals to save and accumulate asset, to improve, develop one's knowledge, skills and capabilities, thereby contributing to the growth of the national economy and progress of its society [7; 8; 9]. Therefore, only both policies, based on asset and income, when applied together, can help reaching mutually contradictory goals of fair social policy and high economic efficiency, thereby cutting the price of trade-off between economic growth and social development.

In the last decade, several countries have focused their social policy in this direction and have started implementing universal asset-based policy. Unfortunately, Central and Eastern Europe (hereinafter CEE) countries are not on that list.

The article seeks to provide a summary of the asset-based policy models implemented in foreign countries, present results of this policy and consider idea of its implementation in CEE countries. The methods of the research cover a comparative analysis of scientific literature and a statistical computation.

Asset-based policy: from theory to practice

Various authors have come up with several different methods to implement asset-based policy:

1. benefits to new-borns: one-time transfers by the government to *child development accounts* opened to all new-borns (hereinafter CDA) [10];
2. matched savings accounts for the poor and transfers by the government, that match at a certain ratio and to a certain limit the personal savings, transferred to these accounts [6];
3. one-time grant to all individuals reaching majority [11; 12];
4. regular monthly benefits for all citizens of a country, after reaching majority [12].

It should be noted, that these proposals envisage fairly different implementation of asset-based policy, however all of them focus on the same goal, i.e. to accumulate a certain amount of asset, escape from regular cycle of benefits, consumption and poverty, encourage development of personal capabilities and as a result, a better development of entire society and national economy.

Interest in asset-based welfare became increasingly popular throughout the world in the last decade of 20th century. Efforts have shifted from scientific research to practical implementation of ideas.

Western countries, which have more or less developed models of asset-based policy include Canada (CDA), the United Kingdom (CDA: universal, most developed, but terminated program). In the East, the policy is in place in Singapore (coherent program of life-long asset accumulation), South Korea (CDA and savings accounts to the poor), and Hong Kong (CDA). There are pilot programs in Taiwan (savings accounts to the poor) and USA (CDA in Oklahoma; individual development accounts for the poor; draft legislation for universal CDA policy at national level).

The table below briefly presents key features of these policies.

Table 1. Asset-based policies in selected countries

Country	Name of accounts / program	Status	Beneficiaries	Scope	Benefits
United Kingdom	CTF	terminated	children (0-18 years)	Universal	Benefit by the Government at birth and reaching 7 and 11 years
Canada	RESP (CESG and CLB)	in progress	children (CESG: 0-18 years; CLB: 0-21 years)	Universal	Benefit by the Government to the new-borns from poor families; matching funds for private savings
USA	KIDS	expected	children (0-18 years)	Universal	Benefit by the Government at birth; matching funds for private savings (for the poor only)
USA	SEED OK	in progress (pilot)	children (0-7 years)	1360 newborns in Oklahoma, USA	Benefit by the Government at birth; matching funds for private savings (for the poor only)
USA	IDA	in progress (pilot)	low-income individuals	selective; low-income families	Matching funds for private savings
Singapore	Baby Bonus, Edusave, PSEA	in progress	children (Baby Bonus: 0-6 years; Edusave: 6-16 years; PSEA: 7-20 years)	universal	Benefit by the Government at birth and until the age of 20; matching funds for private savings
South Korea	KCDA	in progress	children (0-18 years)	as at the end of 2010, ~41 000 institutionalised children	Matching funds for private savings

End table

Country	Name of accounts / program	Status	Beneficiaries	Scope	Benefits
South Korea	Hope Accounts	in progress	low-income individuals	~13 000 individuals from low-income families in Seoul	Matching funds for private savings
Taiwan	TFDA	in progress (pilot)	low-income individuals	selective (not specified)	Matching funds for private savings
Hong Kong	CDF	in progress	children (10-16 years)	Intended for ~13 600 children from low-income families	Matching funds for private savings

Source: [13; 14; 15; 16; 17; 18] and authorial computation

All these policies are characterised by the fact that there is accumulation of funds in an investment account for a certain period of time (in case an account is opened to a new-born, the funds are mostly accumulated until he/she reaches majority; if an account is opened to a low-income individual, funds are mostly accumulated for 2-4 years), using support of the Government (one-time benefits or matching funds); later on, these funds can be used for a predetermined purpose: mostly for education, housing or starting a small business. Only CTF program that operated in the United Kingdom included no restrictions to the use of accumulated funds.

The first results of saving / investment / asset accumulation programs suggest that the asset-based policy increases individual saving rate, financial literacy and may have positive attitudinal, behavioral, and social effects [19]. The most important conclusion is that low-income individuals and families can save, if they participate in saving programs and are provided with information, certain benefits and access to corresponding institutional structures [20]. How can they accomplish it? The studies have showed that families facing severe financial difficulties can modify their consumption habits and come up with various innovative methods in order to save funds in an investment account of their child [21].

Social policy and its efficiency in CEE countries

Overview of key cases of asset-based policy makes an impression that this policy is tested and implemented in Anglo-Saxon countries and South-East Asia, where the coun-

tries have historically inherited or try to imitate the same model of society and social protection (it should be noted, that certain products of asset-based welfare are offered in some other Asian and African countries, however they are provided mostly by commercial institutions, therefore they do not amount to a national policy). This impression is mostly correct: so far, no continental Western European country has carried out similar experiments of asset-based policy (they have a strong welfare state and a well-developed social protection in place); it also applies to the Central and Eastern Europe. CEE countries traditionally follow their Western neighbours, trying to implement the same welfare state models. But is it necessary? First, CEE countries are relatively poor, so they find it hard to create and maintain this costly welfare economy given current economic difficulties and ever more austere fiscal policy conditions. Second, Greece provides a good example, how the welfare economy over-financed for years discouraged efficiency and productivity and moved the country towards bankruptcy.

When considering, whether asset-based policy would be necessary in CEE countries, one must evaluate the efficiency of current social policy. Gini coefficient and poverty rate are the most appropriate indicators for this purpose. The table below shows that since 2005 (i.e. after joining EU), until 2010, the Gini coefficient fell in five countries, rose in four, and was stable in two. Poverty rate fell in seven countries, yet rose in four.

Table 2. Gini and At-risk-of-poverty rates in CEE countries

Country	Gini coefficient (for incomes), %			At-risk-of-poverty rate, %		
	2005	2010	Δ in p.p.	2005	2010	Δ in p.p.
EU	30,6	30,5	-0,1	16,4	16,4	0,0
New Member States (12)	33,2	30,3	-2,9	18,9	16,9	-2,0
Bulgaria	25,0	33,2	8,2	14,0	20,7	6,7
Czech Republic	26,0	24,9	-1,1	10,4	9,0	-1,4
Estonia	34,1	31,3	-2,8	18,3	15,8	-2,5
Latvia	36,1	36,1	0,0	19,2	21,3	2,1
Lithuania	36,3	36,9	0,6	20,5	20,2	-0,3
Hungary	27,6	24,1	-3,5	13,5	12,3	-1,2
Poland	35,6	31,1	-4,5	20,5	17,6	-2,9
Romania	31,0	33,3	2,3	24,8	21,1	-3,7
Slovenia	23,8	23,8	0,0	12,2	12,7	0,5
Slovakia	26,2	25,9	-0,3	13,3	12,0	-1,3
Croatia	30,0	31,5	1,5	18,0	20,5	2,5
Arithmetic mean of changes in CEE countries			0,0			-0,1

Source: Eurostat and authorial calculations

It should be noted, that a simple arithmetic mean of the changes of Gini coefficients and poverty rates in the CEE countries, in either case, is close to 0 (Gini coefficient and poverty rate of all 12 New Member States converged to-

wards EU average), which is to say, that the social policy in place didn't bring a break-through in a combat against poverty and inequality.

Conclusions

1. Income based policy is a passive one: it supports individuals in distress; however, it is not intended to develop their capabilities. Modern, post-industrial economy needs active social policy, encouraging personal development and providing motivation for development of one's knowledge, skills and abilities.

2. A concept, stressing long-term capabilities, based on certain asset level, is called *asset-based policy*. During the last decade, several countries started focusing the social policy towards a universal, asset-based policy.

3. The first results of asset accumulation programs suggest that this policy increases individual saving rate, financial literacy and may have positive attitudinal, behavioral, and social effects. Even low-income individuals and families are capable to save.

4. To-date, no continental Western European country has carried out asset-based policy experiments; neither did CEE countries.

5. Dynamics of the Gini coefficient and poverty rate in CEE countries in 2005-2010 suggests that the social policy in place didn't bring a break-through in a combat against poverty and inequality.

6. Inefficiency of current social policy, economic crisis and austere fiscal policy are the main assumption to start implementing asset based policy in CEE countries.

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DYNAMIC MODEL OF MULTISTRUCTURAL ECONOMY

На основі теорії біфуркації (катастроф) запропонована динамічна модель впливу підприємницького потенціалу на процес формування технологічного виробничого укладу. Проаналізовано ефекти, що виникають при заміщенні технологічних укладів.

Ключові слова: підприємницький потенціал, технологічний уклад, модель, моделювання, теорія біфуркації, ВНП.

На основе теории бифуркации (катастроф) предложена динамическая модель воздействия предпринимательского потенциала на процесс формирования технологического производственного уклада. Проанализированы эффекты, которые возникают при замене технологических укладов.

Ключевые слова: предпринимательский потенциал, технологический уклад, модель, моделирование, теория бифуркаций, ВНП.

The paper studies the dynamic model of influence of entrepreneur potential on the process of forming of technological production way, based on the theory of bifurcation (catastrophes). The effects, caused by substitution of the technological ways, are being analyzed.

Keywords: entrepreneur potential, technological way, model, modelling, theory of bifurcation, GNP.

Introduction. Investigation of the causes and consequences of cyclic long-term fluctuations in business activity in the economy led to the emergence and development of the concept of technological multistructure production. At present, generally accepted view about the existence of six technological ways, where the notion of technological way refers to a set of technologies and industries of the same level.

Investigations show that in a market economy development and changing technological way manifested in the form of long waves of economic conditions (Kuznets waves). At the same time rate of economic growth and business activity vary depending on the phase of the life cycle of technological way.

Analysis of recent research and publications. The scientific works of scientists J. Schumpeter, R. Foster, J. Martino, G. Dobrov, S. Glazhev, R. Nyzhehorodtsev are devoted to investigation of features of economy technological development. A significant contribution to the development of the same problems did Ukrainian scientists V. Geyets, L. Fedulova, Y. Bazhal and others.

In particular note the contribution of Joseph Schumpeter in the study of economic development. Schumpeter introduced the economic science distinction between economic growth and economic development. **Economic growth** – the increase of production and consumption of the same goods and services in length of time. **Economic development** – first of all the emergence of something