

IMPACT OF SOCIAL LAWS ON VIABLE ECONOMIC GROWTH¹

Social laws such as customs, taboos and religious beliefs have been mostly alien to traditional economics. If researchers consider social laws in their interpretation of economic events, their view may become holistic and more useful. In the literature, a causal relationship has been tried to establish between social laws and economic growth and which has been observed ambiguous. The present endeavour has observed that the social laws mediate the interaction of economic factors in realization of their actual capacity and thus affect the economic growth as mediator. Moreover, an attempt has been made to measure viability in terms of rate of rate of change. Three measures of viability – absolute viability, relative viability and conditional relative viability, have been proposed.

Key words: *social laws, institutions, medium, viability, relative conditional viability, economic growth*

INTRODUCTION

Axiomatic economics has not paid much attention to the influence of non-economic factors such as social norms, cultural values, beliefs, customs, taboos and rituals. The development of institutional economics has emphasised the influence of non-economic factors on economic development. A correlation has been found between cultural values and economic growth in empirical studies of cross-country differences in economic development (Weber, 1930; McClelland, 1961; Marx, 1867; Greif, 1994; Granato et al., 1996; Swank, 1996; Tabellini, 2010). A group of researchers has found that cultural values foster economic development (Weber, 1930), while others suggest that modernization and economic development change cultural values (Marx, 1867). A few studies show that economic development and change in cultural values co-vary (Inglehart, 1977,

¹The research paper has achieved 2nd place in the International Contest of Young Scholars and Students in Honor of the 110th Anniversary of Simon Kuznets in the category of “Young Scholars” organized by Alfred Nobel’s Planet Charity Fund & Alfred Nobel Dnipropetrovsk University of Economics And Law.

1990, 1997). Therefore, researchers do not agree on the exact causal relationship between cultural values and economic progress.

The literature on the relationship between cultural values and economic development pertains mainly to western countries (Weber, 1930; McClelland, 1961; Marx, 1867; Greif, 1994; Granato et al., 1996; Swank, 1996; Tabellini, 2010). The endeavour to understand the above propositions in an Asian setting, where individuals are more socio-centric², has been limited. Also, if such influence is substantiated at the micro level, it should find place in the theoretical underpinning and as an alternative to the axioms of the market and of absolute rationality, and should provide alternatives to search for universal laws that are ‘meta cultural narratives’ and the output of the deliberate effort of scientificism and objective realities.

Viability is an implicit assumption of neoclassical economics (Lin, 2002). The viability of an economic system cannot be measured only in economic terms. A socially unacceptable firm, which does not abide by social values, cannot survive long. Therefore, economic viability implicitly includes social viability. In economic literature, growth or growth rate is studied as a function of time. Sala-i-Martin has put forward the theory of conditional convergence by incorporating the role of other factors in explaining an economy’s growth path. Similarly, the capacity to grow—i.e., viability of a firm—is conditioned by the production structure, given the formal and informal laws of society.

² It is found that the Eastern self is more socio-centric whereas the Western self is egocentric.

The present study attempts to find out the influence of social laws³ on the performance of small and medium enterprises (SMEs) in India. It measures influence in terms of viable economic growth and also tries to define viability in terms of rate of the rate of change. The data are based on responses to a questionnaire prepared for SME owners of the eastern region of Uttar Pradesh (India) during 2008–2009. Findings suggest that social laws mediate the relationship between performance and factors of production like labour, capital, and technology.

SOCIAL LAWS AND ECONOMIC DEVELOPMENT

The role of values has been emphasized less in economics than in sociology, psychology, and anthropology. The development of institutional and behavioural economics has increased the emphasis on an enquiry into the role of social values on economic development. Institutions consist of formal (i.e. written) laws and informal (i.e. unwritten) laws that shape human interactions. A number of researchers have shown a strong association between values (i.e. formal and informal laws) and economic performance (North, 1990; Knack and Keefer, 1997; Hall and Jones, 1999; Acemoglu et al., 2001, 2002; Acemoglu and Johnson, 2005; Banerjee and Iyer, 2005; Putnam, 1993; Guiso et al. 2004; Akçomak and ter Weel, 2009; etc). The old institutional economics emphasizes that rational choices⁴ are substituted by habits that are produced by social norms, values, traditions, and taboos. The link between institutions and habit is very clear to Veblen (1919)⁵.

³In the present study, social laws are defined as informal or unwritten laws of the land that may include cultural values, beliefs, customs, taboos and rituals, etc.

⁴ In broad sense, every act (whether it is economic, social or political) of an individual is his choice.

⁵ “Institutions are a settled of thought common to the generality of men” Veblen (1919).

Many researchers have proposed an association between economic development and general cultural values (Bell, 1973; Inglehart, 1977, 1997; Marx, 1867; Weber, 1905). Marx (1867) suggested that economic development leads to changes in cultural values while Weber (1905) suggested that certain cultural values encourage economic development. Moreover, a few researchers have tried to find a link between cultural values and different stages of development (Inglehart, 1977 and 1997; and Bell, 1973). Inglehart and Baker (2000) have observed that individuals in more developed countries endorse cultural values that emphasize self-expression and respect for secular-rationalism while individuals in less developed countries support cultural values that give prominence to survival goals and deference to traditional norms.

Economists note both economic and non-economic determinants in empirical studies of cross-country differences in economic development and suggest that many variables such as the nature of governance, macroeconomic stability, openness to trade, human capital, rule of law, religion, geography may explain differences in standards of living, output, and economic growth (Barro, 1991; Eicher et al., 2007; Kremer, 1993; Sala-i-Martin, 1997; Tamura, 2006). However, besides geography, almost all these factors are man-made, and decisions are influenced by social values (Shirley, 2005; Stern et al. 2005; Algan and Cahuc 2007). Researchers who focus on Asian economies observe that collectivism—rather than individualism—is important for economic success (Harrison, 1992).

Weber (1930) has found relationship between Protestant ethics (i.e. Protestants' attitudes toward work, thrift, and accumulation) and the rise of capitalism in Europe. McClelland (1961, 1963) has also suggested that high concentrations of values emphasizing the need for achievement are the engines that

drive economic growth. Granato et al. (1996) found that cultural values matter for economic growth. They have measured cultural values in terms of emphasis on autonomy, hard work, thrift, and conformity to traditional social norms. They found that countries that emphasise autonomy, hard work, and thrift achieve more economic development rather than those that emphasize conformity to traditional social norms.

Social or cultural values represent the shared abstract ideas desirable in a society (Williams, 1970). These influence individuals' decisions in a society by permitting/prohibiting them to undertake certain activities under certain conditions. Therefore, these values also affect interactions between various economic agents and, finally, influence economic performance. Many researchers have proposed that values and informal institutions form the basic cause of difference in economic performance between countries (Franke et al., 1991; Granato et al., 1996; Harrison, 1992; Jackman and Miller, 1996; McCleary and Barro, 2006; Noland, 2005; North, 1990; Pryor, 2005; Swank, 1996; Williamson, 2000; Putnam, 1993; Guiso et al. 2004; Akçomak and ter Weel, 2009). The welfare of individuals may be a gain, loss, or be Pareto non-comparable with changes in social norms (Routledge and Amsberg, 2003). Guiso et al. (2004) have shown that higher social trust contributes to higher financial development. Akçomak and ter Weel (2009) present that venture capitalists are more willing to invest in innovation when social capital is higher.

It may be proposed on the basis of the above studies that social values are important in determining an economic unit's performance. However, social values have been taken as the causal variable for differences in development in most

studies on informal institutions. Similar to formal institutions⁶, social values (i.e. informal institutions) are also rule of game⁷. Thus social laws provide a framework for economic agents to interact with their multiple objectives and bargaining capacities. Some social beliefs and norms may foster economic growth while others may be incompatible with it (North, 1994, 2005; Greif, 1994; Knack and Keefer, 1997). Moreover, a particular social value may have a different regulating influence on different economic agents depending on their personality and experiences. Therefore, it may be proposed that social values act as a medium in which factors of production interact (Figure 1). Singh et al. (2008) have tried to capture the notion by introducing into economics the term 'permittivity'⁸, which means permission from the medium (law). It is what permits the realization of the actual capacity. It is also maintained that given the relationship, no factor can exist in isolation; rather, factors exist in groups.

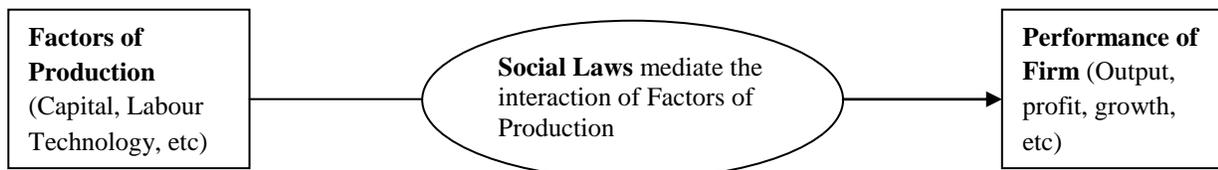


Fig.1. Flow chart showing relationship between factors of production, social laws and performance of firms

Economic agents do not perform in a vacuum but in the medium of institutions, both formal and informal, that provide permittivity when it comes to individuals' decision making (Singh et al., 2008). In the present study, the discussion is limited to informal institutions, i.e. social laws, only. Figure 1

⁶ The institutional environment is shaped by the rules of the game (North, 1981).

⁷ Rule of game may be defined as an invisible framework, accepted by society at large, which regulate the interaction of players.

⁸ Singh et al., (2008) have derived the concept of permittivity from the theories of magnetic field.

portrays the phenomenon of mediation of social laws in the realization of the capacity of factors of production in the production process in an industry.

THE MISSING GAP: THE VIABLE ECONOMIC GROWTH

Rationality is the basic assumption of neoclassical economics. In decision-making, rationality means that the decision maker will attempt to maximise his/her objective functions—thinking not merely of the favourable present but also of the future. Therefore, viability is an implicit assumption of neoclassical economics (Lin, 2002). However, the concept of viability is not new; it is applied in different academic disciplines. In ecology, the population of a species is called viable if its possibility to survive over a certain time horizon is higher than a predefined threshold value (Soulé, 1987; Beissinger and McCullough, 2002; Frank, 2005). In economics and finance, an entrepreneurial action is called viable if it continually generates a cash flow higher than a certain predefined level. A general mathematical theory of viability developed by Aubin (1991) has been applied to ecological, environmental, and resource economic problems for conditions of certainty (Béné and Doyen, 2000; Béné et al., 2001; Martinet and Doyen, 2007; Martinet et al., 2007) and also for conditions of uncertainty (Doyen and Béné, 2003; Tichit et al., 2004; Doyen et al., 2007; DeLara and Doyen, 2008).

A system may be said to be viable if it has the capacity to grow over a period of time (Frank, 2005). This definition has a sustainability dimension. The viability of an economic system cannot be measured only in economic terms. In economic literature, growth or growth rate is studied as a function of time. Only time is considered the explanatory variable for growth. A system is said to be viable if it grows positively, or its rate of growth is positive. Therefore, viability is measured in absolute sense and may be termed absolute viability.

Solow proposed a theory of convergance for growth, but it has not been justified empirically. Sala-i-Martin put forward a theory of conditional convergance by incorporating the role of other factors in explaining an economy's growth path. Similarly, the capacity to grow—i.e., the viability of a firm—is conditioned by the production structure given a society's formal and informal laws. Therefore, conditional viability—defined as the viability measure that incorporates the influence of factors such as factors of production—must be considered for analysis, rather than absolute viability.

Formal and informal laws provide a medium for economic agents to interact and perform. Therefore, these have a significant impact on the realization of the actual capacity of different economic agents. Existing laws may increase or reduce or may not have any influence on the realization of the actual capacity of economic agents. The influence of laws depends upon the permission it gives economic agents to perform. The impact of a medium may not be measured in absolute sense. Performance in one medium may be compared with performance in another medium, as in magnetism in physics. Similarly, a firm's performance under one set of laws may be compared with its performance under another set of laws. Therefore, if a study incorporates the influence of laws, the absolute viability measure may be termed relative viability and the conditional viability measure may be termed relative conditional viability.

The existing literature pertaining to social values and economic growth just shows the relationship between social values and economic growth. It has not found out the mediating role of cultural values on the interaction of factors of production or on cross-country differences in growth. Moreover, the study on the viability of economic growth has always been absent in such research. Therefore, it

is pertinent to study the viability of economic growth together with the mediating role of social laws on the interaction of factors of production and their performance.

THE THEORETICAL UNDERPINNING AND SPECIFICATION OF THE REGRESSION MODEL

In the literature, viability has been measured in terms of the rate of change, which reflects the direction and magnitude of change at the present moment only—not in the future. It is the rate of rate of change that maintains momentum in a system over time. It also reflects the system's power to sustain the change. Therefore, the rate of rate of change, the acceleration, is the true representative of a system's viability. Symbolically, it is expressed as $d\{dY/dt\}/dt$, where dY is the change under study and dt is change in time. Let output (Y) be the function of time (t) (i.e. $Y=f(t)$). The capacity to grow (i.e. acceleration in growth in output) can be found out calculating the coefficient "B" from the following expression:

$$dY = A + Bdt \quad \dots (1)$$

where, dY is change in output and dt is change in time. B , the coefficient of dt in equation (1) represents the absolute viability.

It is widely accepted among researchers that merely time does not sufficiently explain change in output. Now, suppose a linear relationship between change in output (dY), change in labour (dL), change in capital (dK), change in technology (dT) and time period (dt).

$$dY = A + Bdt + CdL + DdK + EdT \quad \dots (2)$$

Equation (2) includes the conditional factors like labour, capital and technology for explaining the relationship between time and output. Therefore, B, the coefficient of dt in equation (2) represents the conditional viability.

The above discussion establishes that social laws mediate the relationship between factors of production performance of a firm. Let the coefficients B, C, D and E linearly depend on social laws (SL). There exist different social laws for different factors of production. Incorporating this relation in equation (2), we have

$$dY = A + (\alpha_1 + \beta_1 SL_t) dt + (\alpha_2 + \beta_2 SLL) dL + (\alpha_3 + \beta_3 SLK) dK + (\alpha_4 + \beta_4 SLT) dT$$

$$dY = A + \alpha_1 dt + \alpha_2 dL + \alpha_3 dK + \alpha_4 dT + \beta_1 SL_t dt + \beta_2 SLL dL + \beta_3 SLK dK + \beta_4 SLT dT \dots (3)$$

Equation (3) includes social laws together with the conditional factors for explaining the relationship between time and output. Therefore, α_3 , the coefficient of dT in equation (3) may be termed a relative conditional viability measure.

DATA AND DEFINITION OF VARIABLES

The data have been observed for two points of time, i.e. initial and present. The snowball sampling technique has been used. Out of 1500 questionnaires distributed in 15 districts of the region on a ratio basis, 588 filled questionnaires have been received. Therefore, the response rate is 39.2 per cent. For the qualitative observation, care has been taken for objectivity and scale has been developed to evolve a 'measure' to represent qualities in the terms of quantities. Reliability and validity of the scale is verified. Standardization of scores is done by using formulae—(Maxm of score—Actual score)/ (Maxm of score—Minm of

score)—for the ascending ranks. There was a heteroscedasticity⁹ problem in the cross-section data, which was removed.

Table 1:

Description of Variables

Variable	Definition	Measurement
Output (Y)	Annual output	Value of commodities produced in the firm in the year of observation; values have been deflated by price index of the respective year to make them comparable
Labour (L)	Work force	No. of workers employed
Capital (K)	Assets like machines, buildings, fuel, etc	Aggregate of monetary value of fixed and variable assets; values have been deflated by price index of the respective year to make it comparable
Technology (T)		Capital-labour ratio
Social laws (SL)	Medium in which economic activities takes place	Scales have been prepared for written laws and unwritten laws to obtain the data by the questionnaire containing questions capturing the degree of hindrances caused by laws pertaining to economic activities. It contained question on labour in terms of wage law, minimum hour of work, etc.; questions on capital are property right, establishment of industry, etc. questions on technology are acquiring new machinery, intellectual property rights, etc. Likert scale: Not at all = 0, Some Times = 1, Usually = 2, Many Times = 3, Always = 4)

THE MEASUREMENT

Researchers have many measures for social values in terms of emphasis on work, thrift, and accumulation (Weber, 1930; McClelland, 1961; 1963; Granato et al., 1996); emphasis on autonomy (Granato et al., 1996); and emphasis on traditional social norms (Granato et al., 1996; Guiso et al., 2003). The present study has measured the influence on social values in terms of hindrances felt by

⁹ For finding cause of heteroscedasticity, $(Y - Y^{\wedge}) = X + X^2 + X^3$ has been regressed for all X separately, where X is dependent variables of model (4). With SLdL, it has shown the best fit. Therefore, it has been identified as cause of heteroscedasticity and it is controlled by dividing the equation (4) by SLdL².

entrepreneurs while taking decisions regarding various factors of production. A firm's performance has been measured in terms of annual output. The factors of production, i.e. capital, labour and technology, have been measured in terms of value of fixed and variable assets, number of workers and capital-labour ratio respectively (Table 1).

RESULTS AND DISCUSSION

The regression of equation (1) for relationship between dY and dt show a very weak fit for data (Adj. $R^2=0.01$; See Table 2). It infers that change in time is not sufficient to explain the variation in change in output of SMEs of the region. The positive coefficient of dt is (8611.489) shows output of SMEs is increasing very fast over time. It indicates positive absolute viability of the SMEs.

Table 2: Regression Results

Model		Constant	Dt	dL	dK	dT	SLtdt	SLLdL	SLKdK	SLTdT	Adj. R2	SEE
1	Unstd. Coefficients	0.165	8611.489								0.010	0.582
	Std. Coefficients	6.105	0.110									
	t value	.000	2.680									
	Significance		0.008									
2	Unstd. Coefficients	0.021	-177727.0	90.285	2.308	-112650.5					0.340	0.475
	Std. Coefficients	0.851	-2.271	0.381	1.609	-1.494						
	t value	.395	-15.772	5.986	15.519	-16.715						
	Significance		.000	.000	.000	.000						
3	Unstd. Coefficients	-.216	-438935.9	-93.903	10.38	-139497.1	272014.83	1847.66	-20.97	-167926.1	0.829	0.242
	Std. Coefficients	-9.156	-5.608	-0.392	7.238	-1.850	0.954	1.095	-3.968	-0.614		
	t value	.000	-10.373	-6.074	20.82	-7.930	2.136	11.405	-16.46	-2.926		
	Significance		.000	.000	.000	.000	0.033	.000	.000	.004		

The regression result of equation (2) shows a weak fit (Adj. $R^2 = 0.34$), but has increased many times that of equation (1). It justifies incorporating the factors of production in equation (1). It also supports the concept of conditional convergence. The coefficient of dt is negative (-177727.0) in the presence of the factors of production. It shows negative conditional viability. The change in

productivity¹⁰ of labour and capital has been found to be positive (90.285 and 2.308 respectively) while the change in productivity of technology is negative (-112650.5).

The regression of equation (3) shows a very good fit for data (Adj. R2 = 0.829). It indicates that social laws significantly influence the relationship between factors of production and performance by mediation. This finding is consistent with findings of earlier researchers (Meyer, 2004; North, 1990; Weber, 1930; McClelland, 1961; Marx, 1867; Greif, 1994; Granato et al., 1996; Swank, 1996; Tabellini, 2010, Singh et al., 2008). The coefficient of change in times is negative (-438935.9). It shows that the change in SMEs' output decreases over time and also that the SMEs' relative conditional viability is negative. Though the absolute viability is positive, the relative conditional viability represents actual realized capacity to grow by incorporating the influence of social laws and of factors of production. Therefore, it may be said that SMEs of the region are not viable. This finding is consistent with the prevalence of sick industries in the region.

The coefficient of dL is negative (-93.903) in model (3) while it is positive (90.285) in model (2). It indicates that the region's social laws negatively affect labour productivity. The coefficient of dK is not only positive for both models but its magnitude has increased for model (2). It may be inferred that the region's social laws foster capital productivity. The coefficient of dT is negative for model (1) and this negativity has increased for model (2). It implies that the region's social laws are decreasing the productivity of technology.

The coefficient of SLtdt is positive (272014.83). Similarly, other covariance terms with social laws are 1847.66, -20.97 and -167926.1 for SLLdL, SLKdK and

¹⁰ The coefficients of dL, dK, and dT represent change in productivity of labour, capital, and technology.

SLTdT respectively. Social laws are seen as hindrances with time, but add to increasing labour productivity as the negative productivity change (Model 2) is made positive due to the effect of social laws in realization of labour capacities (Model 3). On the contrary, these laws subdue the introduction of new capital and technology but they add to the relationship.

CONCLUSION

Social laws are representative of social institutions. They provide a medium for the interplay of various economic factors. The findings of the above study support the earlier findings that a relationship exists between cultural values and economic development. The earlier studies have tried to find a causal relationship between social laws and performance, while the present study suggests that social laws act as a medium for the interaction of various factors of production. The findings also support the hypothesis that social laws—and, in a broader sense, institutions—govern the actual realization of capacity of factors. There is an element of permissivity of the institutions. This suggests that economics should begin with observing behaviour instead of unrealistic axioms.

The region's SMEs have not been found viable. Therefore, policy makers and entrepreneurs must urgently readjust their policies and strategies in consistence with social laws.

The measurement of viability as 'the rate of rate of change' is more comprehensive and justified than 'the rate of change'. If researchers pay attention to the other terms pertaining to viability—i.e. absolute viability, conditional viability, and relative conditional viability, which are probably new to the literature on economics—they may understand the realities of our complex world better.

REFERENCES

1. Acemoglu, D. and Johnson, S. (2005). Unbundling institutions, *Journal of Political Economy*, 113, 949–995.
2. Acemoglu, D., Johnson, S. and Robinson, J. (2001). The colonial origins of comparative development: an empirical investigation, *American Economic Review*, 91, 1369–1401.
3. Acemoglu, D., Johnson, S. and Robinson, J. (2002). Reversal of fortune: geography and institutions in the making of the modern world income distribution, *Quarterly Journal of Economics*, 117, 1231–1294.
4. Akçomak, I. and ter Weel, B. (2009). Social capital, innovation and growth: evidence from Europe, *European Economic Review*, 53 (5), 544–567.
5. Algan, Y. & Cahuc, P., (2007). Social Attitudes and Economic Development: An Epidemiological Approach, CEPR Discussion Paper No. 6403.
6. Aubin, J. (1991). *Viability Theory (Systems & Control: Foundations & Applications)*, Boston: Birkhäuser.
7. Banerjee, A. and Iyer, L. (2005). History, Institutions, and Economic Performance: The Legacy of Colonial Land Tenure Systems in India, *American Economic Review*, 95, 1190–1213.
8. Barro, R. J. (1991). Economic Growth in a Cross Section of Countries, *Quarterly Journal of Economics*, 106(2), 407–443.

9. Beissinger, S. and McCullough, D. (Eds.), (2002). *Population Viability Analysis*, Chicago: University of Chicago Press.
10. Bell, D. (1973). *The coming post industrial society*, New York: Basic Books.
11. Béné, C. and Doyen, L. (2000). Storage and Viability of a Fishery with Resource and Market Dephased Seasonalities, *Environmental and Resource Economics*, 15, 1–26.
12. DeLara, M. and Doyen, L. (2008). *Sustainable Management of Natural Resources: Models and Methods*, Berlin: Springer.
13. Doyen, L. and Béné, C. (2003). Sustainability of Fisheries through Marine Reserves: A Robust Modelling Analysis, *Journal of Environmental Management*, 69, 1–13.
14. Doyen, L., DeLara, M., Ferraris, J. and Pelletier, D. (2007). Sustainability of Exploited Marine Ecosystems through Protected Areas: A Viability Model and A Coral Reef Case Study, *Ecological Modelling*, 208 (2–4), 353–366.
15. Eicher, T. S., Papageorgiou, C., and Roehn, O. (2007). Unraveling The Fortune Of The Fortunate: An Iterative Bayesian Model Averaging (IBMA) Approach,” *Journal of Macroeconomics*, 29(3), 494–514.
16. Frank, K. (2005). Metapopulation persistence in heterogeneous landscapes: lessons about the effect of stochasticity, *The American Naturalist*, 165, 374–388.

17. Franke, R.H., Hofstede, G. and Bond, M.H. (1991). Cultural Roots Of Economic Performance—A Research Note, *Strategic Management Journal*, 12,165–173.
18. Granato, J., Inglehart, R. and Leblang, D. (1996). The Effect of Cultural Values on Economic Development: Theory, Hypotheses, and Some Empirical Tests, *American Journal of Political Science*, 40, 607–631.
19. Greif, A. (1994). Cultural Beliefs and the Organization of Society: A Historical and Theoretical Reflection on Collectivists and Individualists Societies, *Journal of Political Economy*, 102 (5), 912–950.
20. Guiso, L., Sapienza, P. and Zingales, L., (2003). People’s Opium? Religion and Economic Attitudes, *Journal of Monetary Economics*, 50 (1), 225–282.
21. Guiso, L., Sapienza, P., and Zingales, L., (2006). Does Culture Affect Economic Outcomes? NBER Working Paper No. 11999.
22. Guiso, L., Sapienza, P. and Zingales, L. (2004). The role of social capital in financial development, *American Economic Review*, 94 (3), 526–556.
23. Hall, R.E. and Jones, C.I. (1999). Why do some countries produce so much more output per worker than others? *The Quarterly Journal of Economics*, 114, 83–116.
24. Harrison, L.E. (1992). *Who Prospers? How Cultural Values Shape Economic and Political Success*, New York: Basic Books.
25. Inglehart, R. (1977). *The Silent Revolution: Changing Values and Political Styles*, Princeton (NJ): Princeton University Press.

26. Inglehart, R. and Baker, W. E. (2000). Modernization, cultural change, and the persistence of traditional values, *American Sociological Review*, 65(1), 19–51.
27. Inglehart, R., (1990). *Culture Shift in Advanced Industrial Society*, Princeton (NJ): Princeton University Press.
28. Inglehart, R., (1997). *Modernization and Post Modernization: Cultural, Economic and Political Change in 43 Societies*, Princeton (NJ): Princeton University Press.
29. Jackman, R.W. and Miller, R.A., (1996). A renaissance of political culture? *American Journal of Political Science*, 40, 632–659.
30. Knack, S. and Keefer, P., (1997). Does Social Capital Have an Economic Payoff? A Cross- Country Investigation, *Quarterly Journal of Economics*, 112 (4), 1251–1288.
31. Kremer, M. (1993). The O-Ring Theory of Economic Development, *Quarterly Journal of Economics*, 108(3), 551–575.
32. Martinet, V. and Doyen, L. (2007). Sustainability of an economy with an exhaustible resource: a viable control approach, *Resource and Energy Economics*, 29, 17–39.
33. Marx, K. (1867). *Capital*, 1, Harmondsworth: Penguin.
34. McCleary, R.M. and Barro, R.J. (2006). Religion and economy, *Journal of Economic Perspectives*, 20, 49–72.

35. McClelland, D.C. (1961). *The Achieving Society*, Princeton: D. Van Nostrand Co.
36. McClelland, D.C. (1963). National Character and Economic Growth in Turkey and Iran, In: Pye, L.W. (Ed.), *Communications and Political Development*, Princeton: University Press.
37. Noland, M. (2005). Religion and economic performance, *World Development*, 33, 1215–1232.
38. North, D. C. (1990). *Institutions, Institutional Change and Economic Performance*, New York: Cambridge University Press.
39. North, D.C. (1994). The Historical Evolution of Politics, *International Review of Law and Economics*, 14 (4), 381–391.
40. North, D.C. (2005). *Understanding the Process of Economic Change*, Princeton: Princeton University Press.
41. Pryor, F.L. (2005). National values and economic growth, *American Journal of Economics and Sociology*, 64, 451–483.
42. Putnam, R.D. (1993). *Making Democracy Work: Civic Traditions in Modern Italy*, Princeton: University Press.
43. Routledge, B.R. and J. von Amsberg, (2003). Social capital and growth, *Journal of Monetary Economics*, 50 (1), 167–193.
44. Sala-i-Martin, X. X. (1997). I Just Ran Two Million Regressions, *American Economic Review, AEA Papers and Proceedings*, 87(2), 178–183.

45. Shirley, M.M. (2005). Institutions and Development, In: Menard, C., Shirley, M.M. (Eds.), *The Handbook of New Institutional Economics*, Springer, 611–638.
46. Singh, S., Singh, B.V. and Sharma, A.K. (2008). Efficacy of Law in Realizing Capability of Factors of Production: A Study of Extended Production Function from a Panel of Small and Tiny Industries, “*The Indian Economic Journal*, 56(3), Oct-Dec.
47. Soulé, M. (Ed.) (1987). *Viable Populations for Conservation*, Cambridge: Cambridge University Press.
48. Stern, N., Dethier, J. & Rogers, F.H. (2005). *Growth and Empowerment*, Cambridge: MIT Press.
49. Swank, D. (1996). Culture, Institutions and Economic Growth: Theory, Recent Evidence, and the Role of Communitarian Polities, *American Journal of Political Science*, 40 (3), 660–679.
50. Tabellini, G. (2010). Culture and Institutions: Economic Development in the Regions of Europe, *Journal of the European Economic Association*, 8(4), 677–716.
51. Tamura, R. (2006). Human Capital and Economic Development, *Journal of Development Economics*, 79(1), 26–72.
52. Tichit, M., Hubert, B., Doyen, L. and Genin, D., (2004). A viability model to assess the sustainability of mixed herds under climatic uncertainty, *Animal Research*, 53, 405–417.

53. Veblen, T. (1919). *The Place of Science in Modern Civilization*, Reprinted ed. New York 1961, 239.

54. Weber, M. (1905). *The protestant ethic and the spirit of capitalism*, London: Allen and Unwin.

55. Williams Jr., R.M. (1970). *American Society: A Sociological Interpretation*, 3rd ed., New York: Knopf.

Социальные законы, такие как обычаи, табу и религиозных верования были в основном чужды традиционной экономике. Если исследователи считают социальные законы в их интерпретации экономических событий, их вид может стать целостным и более полезным. В литературе, причинно-следственную связь, которая неоднозначно наблюдается, пытались установить между социальными законами и экономическим ростом. Настоящие усилия прилагались в том чтобы социальные законы опосредовали взаимодействие экономических факторов в реализации их фактической емкости и таким образом влиять на экономический рост посредника. Кроме того, была предпринята попытка измерить жизнеспособность с точки зрения коэффициента изменения. Были предложены три меры жизнеспособности - абсолютная жизнеспособность, относительная жизнеспособность и условно-относительная жизнеспособность.

Ключевые слова: социальные законы, учреждения, средние, условно-относительная жизнеспособность, экономический рост

Соціальні закони, так як звичаї, табу і релігійні вірування були в основному чужі традиційної економіки. Якщо дослідники вважають соціальні закони в їх інтерпретації економічних подій, їх вигляд може стати цілісним і більш корисним. У літературі, як спостерігається неоднозначно, причинно-наслідковий зв'язок намагалися встановити між соціальними законами і економічним зростанням. Справжні зусилля докладалися в тому щоб соціальні закони опосередкувала взаємодія економічних чинників у реалізації їх фактичної ємності і таким чином впливати на економічне зростання посередника. Крім того, була зроблена спроба виміряти життєздатність з точки зору швидкості коефіцієнта зміни. Були запропоновані три заходи життєздатності - абсолютна життєздатність, відносна життєздатність і умовно-відносна життєздатність.

Ключові слова: соціальні закони, установи, середні, умовно-відносна життєздатність, економічне зростання