

The Interaction between Income Inequality and Inclusive Growth in Iranian Provinces

(SURE Approach in Panel Data)

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Abstract:

The concept of inclusive growth is one of the important issues in the urban economics literature and has been considered in empirical studies recently. For this purpose, the main aim of this paper is to investigate the relationship between income inequality and GDP growth in Iranian provinces over the period of 2000-2012. To conduct this study, the econometric model has been estimated by applying seemingly unrelated regression in panel data for 30 Iranian provinces.

The empirical findings of this paper shows that the Gini coefficient as a proxy for income inequality and unemployment rate have negative and the initial level of Gini coefficient has positive and significant effect on the growth of GDP respectively.

The overall conclusion of this study suggests that inequality of Iranian provinces can be decreased by improving employment and growth of per capita income.

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1. Introduction

Inclusive growth is one of the crucial issues in the urban economics and recently has been discussed in development economics. According to Ali and Zhuang (2007), inclusive growth is growth that not only creates new economic opportunities, but also ensures equal access to the opportunities created for all segments of society, including the disadvantaged and the marginalized. This definition of inclusive growth is very similar to the concept of pro-poor growth presented by the OECD-Development Assistance Committee (DAC).

In addition, Ali and Son (2007) define that inclusive growth depends on the average opportunities available to the population and how opportunities are distributed between the population. On the other hand, Ali (2007) emphasizes that inclusive growth policy relies on three anchors, i.e., expanding opportunity, increasing access to opportunity, and social protection that acts as a safety net and a springboard. Asian Development Bank (2007) defines inclusive growth strategy by giving importance of creation opportunities and expansion of access to it. Rauniyar and Kanbur (2010) suggested that inclusive growth strategy should accompany with reduction of inequality.

On the empirical ground, several studies have examined the main determinants of inclusive growth such as poverty, access to primary and secondary education and other micro or macroeconomics variables. Agrawal (2007) finds that the higher growth rates are likely to accompany with more quick reduction in poverty. Son (2007) investigates the relationship between economic growth, income distribution, and poverty for Asian Development Bank Developing Member Countries. The results of this study indicates that greater effectiveness of pro-poor policies in the countries with higher incomes than in countries with lower incomes and they suggest that inequality-reducing pro-poor policies would be more impressive policy, in countries where high inequality persists. In measuring income inequality in the People's Republic of China at the national, regional, and provincial levels, Lin et al (2008) conclude that income inequality increased significantly

during the last two decades. The major sources of the increases in inequality were found to be within urban inequality and between urban and rural inequality. Suryanarayana (2008) has attempted to define the concept and aims at developing measures of inclusion. Using the broad-based growth process in terms of mean-based averages of income and absolute-norm based measures of deprivation, the tentative estimates indicate that the growth process between 1993-94 and 2004-05 bypassed the majority and was not inclusive. Thorat and Dubey (2012) examines the changes in poverty frequency and monthly per capita expenditure in India by using of National Sample Survey's unit record data for three period, 1993-94, 2004-05 and 2009-10. They found that some groups benefited more than the others from poverty reduction strategies. In addition, inequality has also begun to adversely affect poverty reduction, particularly in the urban sector.

The review of empirical studies on the inclusive growth literature shows that there is no study on the relationship between inclusive growth and income inequality in the Iranian provinces. Hence, for fill out this gap, the main contribution of this paper is to investigate the nexus between inclusive growth and income inequality for 30 Iranian provinces over the period of 2000-2009. To conduct this study, the econometric model has been estimated by applying seemingly unrelated regression (SURE) for Iran's provinces. To achieve this goal, the remainder of the paper is organized as follows:

Section 2, briefly reviews the current literature on the inclusive growth issue. Section 3 presents the model specification and data sources. In Section 4 econometric results of study has analyzed. The final section is concerned with conclusions and policy implications of paper.

2. Review of Literature

The concept of inclusive growth was suggested with people's deeper understanding of poverty. In the process of poverty alleviation and development, we have experienced three stages in understanding of poverty: income poverty, capability poverty and rights poverty.

Meanwhile, people have also a deeper understanding of the relationship between economic growth and poverty reduction. The idea of growth has gone through the evolution from pure emphasis on growth rate, to "pro-poor growth" and "inclusive growth". The core thought of inclusive growth is economic growth on the basis of equality of opportunity, and inclusive growth needs to ensure that everyone has equitable participation and benefit from the growth process. In next segment, the content of inclusive growth has been described.

2.1 Content of inclusive growth

As a new concept, inclusive growth has excited international attention and recognition, but there is no unique and accepted definition for it yet. From the literature review, we found that the definition of inclusive growth is mainly stated from the following three perspectives: First, from the perspective of domestic economic growth and welfare improvement, the inclusive growth is defined as growth in equality of opportunity (Ali, 2007). In this definition, equality of opportunity is the core of inclusive growth, and the inclusive growth emphasizes to create employment and other development opportunities through rapid and sustained economic growth, and to promote social justice and the equality of sharing of growth results by reducing and eliminating inequality of opportunity. Inclusive growth is the economic growth that all people are able to "participate in" and "share" (Tang, 2010). Inclusive growth aims to achieve the following four results: sustainable and equitable growth, social inclusion, empowerment and social security. At the same time, rapid and sustainable growth should be based on a wide range of sectors and regions, covering the majority of workforce, the poor and vulnerable groups (Ali and Son, 2007). Second, inclusive growth is defined based on the philosophy of compatible development of civil society from the perspective of populism and concept of governance.

"Inclusiveness" is the system demand for people's livelihood development and inclusive growth is the coordination of economic growth, population growth and system equity, with significant trend of development towards populism (Xianzhong, 2010). Jieren (2010),

however, define inclusive growth from three levels of understanding based on the core concept of China's ruling party: At the level of value, people's interests first is the core of inclusive growth; as for method, legal and policy regulation is the key to achieving inclusive growth; at the technical level, it takes care of more private enterprises and other grass-roots interest subjects.

Third, define inclusive growth from a global perspective. From the domestic perspective, inclusive growth is "broad-based growth". It continuously creates the material wealth for people to live a richer life steadily in order to achieve equitable distribution and increase the proportion of residents' income in national revenue and the proportion of labor payment in the initial distribution of income (Zhixiong, 2010). Inclusive growth is the harmonious growth and scientific growth; people can all benefit from the growth, especially low-income groups; this development should be helpful to the social development, public services and the development of spiritual civilization (Xiaohe, 2010). From the international perspective, inclusive growth is an "open growth". Countries should take care of each other in the economic cooperation and adhere to the principle of mutual benefit and joint development (Zhixiong, 2010; Xiaohe, 2010). Meanwhile, we should invest in trade liberalization and oppose trade protectionism.

It is clear from the above definitions that the concept of inclusive growth has been recognized in various fields, both from the perspective of domestic economic growth, social development or from the perspective of global cooperation. This study primarily evaluates and analyses Iran's provinces inclusive growth in recent years from the perspective of economic growth and social welfare, therefore, it is more inclined to define inclusive growth as the growth of equality of opportunity that covers not only the speed but also the model of economic growth. To achieve inclusive growth, on the one hand, we need to maintain high economic, effective and sustained growth, thereby creating a large number of employment and development opportunities; on the other hand, inclusive growth requires promoting social justice and inclusiveness

by decreasing and eliminating inequality of opportunity. These two aspects complement each other: there is no chance (employment, education, social security) without economic growth, and if there is no opportunity, equality of opportunity will become castles in the air. Meanwhile, in case of inequality of opportunity and lack of social inclusion, it is impossible to maintain rapid, effective and sustained economic growth.

After the definition of inclusive growth and explain the content of it, in next section, the relationship between economic growth as a proxy for inclusive growth and income distribution in the framework of Kuznets curve has been inspected.

2.2. The Relationship between economic growth and income inequality

A pro-poor growth strategy does not have to only focus on economic growth, but could also be combined with an active policy of income redistribution. However, there may be a trade-off: If more rapid reduction in poverty can be achieved through reductions in inequalities, then distributional policy takes on a greater priority; but on the other hand, if greater levels of inequality appear to ensure rapid growth leading to faster poverty reduction, then there may well be greater tolerance of distributional inequalities. Thus, the relationship between growth and inequality are important from a policy viewpoint, and has been highly debatable since the 1950s. In his well-known 1955 article, Kuznets investigated the relationship between per capita incomes and inequality in a cross-section of countries. He found that there was an inverted-U pattern, that is, inequality first increased, and then decreased, as per capita income increased. The driving force was assumed to be structural change in a dual-economy setting, in which labor was shifted from a poor and relatively undifferentiated traditional sector, to a more productive and more differentiated, modern sector. Many researchers have doubted the hypothesized relationship, and Kuznets' inverted-U has been exposed to a large number of tests over the years. Deininger and Squire (1998) provide the most comprehensive attempt so far to test the Kuznets hypothesis.

They systematically gathered a data-set of better quality than previous researchers had, and for individual countries they had fairly comparable data for several points in time. They were also able to carefully examine the income changes in the bottom quintiles, that is, among the poor. The result for their sample was that there was no evidence of an inverted-U pattern. In the majority of cases, in fact, it was impossible to find any significant change in income distribution during recent decades. They then went on to investigate whether there was a link from fast growth to increasing inequality, and again they did not find any systematic evidence in favor of such a relationship. Rapid growth was associated with growing inequality as often as it was associated with falling inequality or with no changes at all. Ravallion and Chen (1997) also did not find any systematic relationship between the rates of growth and in equality. The effect of economic growth on inequality can thus be summarized as follows (Goudie and Ladd, 1999): First, the effect can go either way, contingent on a number of factors, but there is little convincing evidence that growth alters distribution in a systematic way. Second, in the absence of a clear relationship, there is a case for pursuing a policy aimed at as rapid growth as possible. The impact of growth on the poor obviously depends on how the benefits are distributed across the population. By looking at the growth and income shares of different groups, Deininger and Squire (1998) examined how initial inequality, and contemporaneous changes in inequality influence the evolution of poverty. The poor (bottom 20%) were most clearly found to suffer from growth reducing effects of inequality, and also to benefit from measures that stimulate growth. Deininger and Squire argue that initial asset inequality hurts the poor via credit-rationing and inability to invest. Low initial inequality is thus doubly beneficial for the poor, since it not only increases overall growth, but it also specifically increases their own income-generating opportunities. Other policy variables, however, affect poverty mainly through their effect on investment, and investment in new assets seems more effective than redistribution of existing ones. Thus, there may be problems with the use of a land reform policy to fight poverty if it leads to reduced investments. Ravallion and Chen (1997) also found a very strong

relation from growth to reduced poverty. They distributed their observations into four quadrants, according to the direction of changes in mean consumption and in the poverty rate. Virtually all observations fell either in the quadrants with rising poverty and falling mean-income or in the quadrant with falling poverty and rising mean incomes. Empirically, there is thus a very strong relationship from per capita income growth to poverty reduction. However, while the incomes of the poorest are responsive to growth, this may hide important dynamics among the poor. A focus on the poor as a homogenous group can miss important within-group changes in well-being.

The review of literature in the context of relationship between economic growths as a one of indicators of inclusive growth and income inequality indicate that there is a simultaneous relationship among these variables and should be examined empirically. For this, in the section of model specification, the simultaneous nexus between these two variables for Iranian provinces has been investigated.

2.3. Empirical Studies

In the context of inclusive growth and its main determinants, several studies have examined the determinants of inclusive growth such as income inequality. In this section, the main of these studies have been reviewed.

Fritzen (2002) has analyzed the relationship between income inequality and urban growth in the case of Vietnam during the period of 1980-2000. The results of this study indicate that income inequality has led to decreases of urban growth. In other study, Ali and Son (2007) by applying panel data approach have investigated the determinants of inclusive growth in the 10 Asia countries over the 1985-2008. They found that the income inequality and unemployment rate have negative and significant impact on the inclusive growth. Agrawal (2007) by using of Johansen's co-integrating technique has explored the long-run relationship between income inequality and inclusive growth in Ghazakestan during the 1975-2005. The empirical results of this study indicate that income inequality

has negative and significant effect on the inclusive growth in the cities of this country. Son (2007) has analyzed the relationship between income inequality, poverty and inclusive growth in 43 developing countries over the period of 1980-2004. The econometric model in this study has been estimated by 2SLS approach in panel data. The main results of this paper suggest that in the countries with high per capita income, implementing of inclusive growth policies has led to the alleviation of income inequality and poverty. Lin et al (2008) by using of panel data technique have investigated the nexus between income inequality and inclusive growth in China provinces over the period of 1990-2004. They concluded that an increase of income inequality has led to decrease in growth in these provinces. Pieters (2010) by SAM method has explored the relationship between income inequality and inclusive growth in Indian provinces during the 2003. The results of this study suggest that the growth of industrial sector has led to increase of income inequality. Kundu and Samanta (2011) investigated the relationship between inclusive growth and income inequality in the case of Indian cities over the 1995-2009. The main results of this study show that there is a negative nexus between these variables. In the recent studies, Dubey (2012) and Sabyasachi (2013) showed that income inequality has negative and significant impact on the inclusive growth. Tsokhas (2013) has inspected the relationship between poverty, income inequality and inclusive growth in selected Asian countries over the 1995-2010. The results of this study reveal that there is unilateral causality relationship from income inequality to inclusive growth in these countries.

None of these studies has attempted to look at the nexus between income inequality and inclusive growth in Iranian provinces, so the prime objective of this study is to fill out this gap by investigating the relationship between growth of Gini coefficient and GDP growth rate by applying SURE method.

3. Model Specification and Data Collection

In order to evaluate the relationship between income inequality and inclusive growth in the Iranian provinces, according to the economic

literature as well as empirical studies by Son (2007) and Sabyasachi (2013), the following model has been specified:

$$\Delta Y_{it} = \alpha_i + \beta_1 I_0 + \beta_2 \Delta I_{it} + \beta_3 UR_{it} + \beta_4 Y_{0it} + v_{it} \quad (1)$$

$$\Delta I_{it} = \gamma_i + \alpha_1 I_0 + \alpha_2 \Delta Y_{it} + \alpha_3 \Delta Y_{it} \times I_{0it} + \varepsilon_{it} \quad (2)$$

In above equations, ΔY , ΔI , UR are the growth rate of GDP, growth rate of Gini coefficient and unemployment rate. Moreover, Y , I , and $\Delta Y \times I$, represents the initial value of GDP, Gini coefficient and cross effect of GDP growth and initial value of Gini coefficient respectively.

For estimation of these two equations, the data set for above variables has been collected from the statistical center of Iran during the period of 2000-2012.

As discussed in review of literature, the expected sign of coefficients are: $\beta_4 > 0, \beta_1, \beta_2, \beta_3 < 0$ and $\alpha_1 > 0, \alpha_2, \alpha_3 < 0$.

For investigation of relationship between growth rate of income inequality and GDP growth as a proxy for inclusive growth, the econometric model has been estimated by using of seemingly unrelated regression in panel data (SURE)¹. This method is suitable and credible for estimation of simultaneous equations and for contemporaneous correlation between error terms of equations. In this case, at first the contemporaneous correlation among the error terms of equations has been tested and with confirmation of contemporaneous correlation, the equations have estimated by SURE method.

For the test of contemporaneous correlation between error terms of equations, LM test has been used as follows:

$$LM = T \sum_{i=2}^M \sum_{j=1}^{i-1} r_{ij}^2 \quad (3)$$

¹. For more details in the context of SURE method, please see Baum (2006)

In above formula, T and r_{ij} represents the observations and correlation coefficient between error terms of equation i and j.

4. Empirical Results

In this section, the result of model specification has been presented. Before the estimation of model, we can examine the correlation between error terms of equations.

The results of LM test for investigation of contemporaneous correlation has been tabulated in table 1.

Table1: The Results of Contemporaneous Correlation between Error Terms

LM Statistics (χ^2)	df	PV
26.3	2	0.000

Source: Authors Computations

The results of Table 1 show that the contemporaneous correlation between error terms of equations has been accepted and these two equations should be estimated by SURE approach.

In next step, the results of model estimation for equation (1) and (2) have been presented in table 2.

Table2: The Results of SURE Method for Model Estimation

t-statistics	coefficient	Equation2 (ΔI)	t-statistics	coefficient	Equation1 (ΔY)
5.39	0.39	C	0.78	2.23	C
*8.4	0.05	I_0	*-48.26	-0.82	I_0
*-7.91	-0.16	ΔY	** -2.39	-0.04	ΔI
** -4.48	-0.019	$\Delta Y \times I_0$	** -7.01	-0.18	UR
		---	*** 1.94	0.34	Y_0
---	70.65	F Statistics	----	818.36	F Statistics
---	0.096	(RMSE)	----	0.077	(RMSE)

*, ** and *** represents significance level at 1, 5 and 10%

Source: Authors Computations

According to table2, we can argue that in equation (1), initial value of Gini coefficient has negative effect on the GDP growth rate in Iranian provinces and with 1 percent increase of Gini coefficient in initial year (2000), the growth of GDP has decreased in about of -0.82. The growth rate of Gini coefficient has also negative impact on the growth of GDP in equation1 and one percent increase of this variable has led to 0.04 decreases in GDP growth rate.

In equation1, the unemployment rate has negative impact on the growth of GDP and initial value of GDP has positive and significant effect on the growth rate of Iranian provinces.

In equation2, the initial value of Gini coefficient has positive effect on the growth of Gini coefficient and growth rate of GDP has negative and significant impact on the income inequality.

The RMSE for these two estimated equations shows that, the RMSE for these equations are 0.077and 0.096. Moreover, the value of F statistics for these two equations indicates that the coefficients of variables overall significant at level of 5%.

In other section of paper for investigation of model robustness, the variable of population density (PD) instead of unemployment rate considered in equation1 and these two equations has been estimated by SURE method. Before the estimation of model by SURE approach, contemporaneous correlation between error terms of equations has been examined by LM test statistics. The result of LM test has been showed in table3:

Table3: The Results of Contemporaneous Correlation between Errors terms (Robustness Case)

LM Statistics (χ^2)	df	PV
26.68	2	0.000

Source: Authors Computations

The results of Table 3 show that the contemporaneous correlation between error terms of equations has been accepted and these two equations should be estimated by SURE approach. The result of model estimation in this condition has been reported in table 4.

Table4: The Results of Model Robustness

t-statistics	coefficient	(ΔI) Equation ₂	t-statistics	coefficient	(ΔY) Equation ₁
19.39	0.42	C	0.78	0.89	C
*19.4	0.13	I_0	*-9.26	-0.54	I_0
*-7.91	-0.16	ΔY	** -5.23	-0.12	ΔI
** -8.22	-0.023	$\Delta Y \times I_0$	** -25.29	-0.32	PD
		---	***1.83	0.18	Y_0
---	58.39	F Statistics	----	98.56	F Statistics
---	0.071	(RMSE)	----	0.056	(RMSE)

Source: Authors Computations

The results of model estimation in this case show that the initial value of Gini coefficient has negative impact on the growth of GDP and one increase in this variable caused to decrease of GDP growth rate in Iranian provinces at about of 0.54. In addition, growth rate of Gini coefficient has also negative and significant effect on the GDP growth. Initial value of GDP has positive effect on the growth of GDP and one percent increase of this variable has led to 0.18 increase of GDP growth. In second equation, initial value of Gini coefficient has positive impact on the growth rate of Gini coefficient in current period. The variable of GDP growth has negative and significant effect on the Gini coefficient growth. The coefficient of this variable is estimated at about of 0.16 and one percent increase in growth rate of GDP has resulted to a 0.16 decline in income inequality and poverty.

The cross effect of GDP growth with initial value of Gini coefficient has negative and significant effect on the growth of Gini variable.

The value of RMSE for these two equations is 0.056 and 0.071 respectively. This criteria shows that the error term for these equations is less than of other estimated models.

According to the results of this study, we can conclude that the growth of GDP has negative impact on the Gini coefficient growth and growth of Gini coefficient has also negative and significant impact on the GDP growth. Moreover, initial values of Gini coefficient and GDP have negative and positive impact on the growth of GDP respectively.

The results of this paper in the context of relationship between income inequality and inclusive growth have been consistent with theoretical framework and empirical studies such as Son (2007), Lin (2008) and Sabyasachi (2013).

5. Concluding Remarks and Policy Implications

This paper analyzes empirically the relationship between growth of GDP as a proxy for inclusive growth and Gini coefficient growth rate in Iranian provinces over the period of 2000-2012.

For this purpose, by using of SURE method, the empirical model has been estimated for 30 Iran's provinces.

The main findings of this study reveal that the growths of Gini coefficient, unemployment rate and initial value of Gini coefficient have negative effect on the GDP growth. In addition, the growth of GDP has negative and significant effect on the Gini coefficient. The interaction effect of GDP growth with Gini coefficient has negative effect on the growth of Gini coefficient.

On the basis of empirical results in this paper, it can be argued that the increase of population density and unemployment can lead to the increase and intensify of income inequality. So, with an increase of population density and unemployment, it can be expected that, the capacity of production declined and as a result the growth of GDP decrease.

With respect to the results of this paper, the main policy implication is that the policy makers should rely on the inclusive growth policies such as social development policies and provide the equal opportunities to all groups of the society.

References

1. Agrawal, P. (2007), Economic growth and poverty reduction: evidence from Kazakhstan. *Asian Development Review* 24 (2), 90-115.
2. Ali, I. and Zhuang, J. (2007), Inclusive growth toward a prosperous Asia: policy implications ERD Working Paper No. 97: 1-32.
3. Ali, I. and Son, H.H. (2007), Measuring inclusive growth. *Asian Development Review* 24 (1), 11-31.
4. Barro, R. J. & Sala-i-Martin, X. (2003). *Economic Growth*, 2nd Edition, Chapter-I, Cambridge: MIT Press: 23-73
5. Baulch, B. & McCulloch, N. (2000). Simulating the Impact of Policy upon Chronic and Transitory Poverty in Rural Pakistan". *Econometrics*, (43). EconWPA.
6. Besley, T. and Cord, L. (2006). *Delivering on the Promise of Pro-poor Growth: Insights and Lessons from Country Experiences*". Basingstoke: Palgrave Macmillan
7. Baum, C.F. (2006), *An Introduction to Modern Econometrics, Using Stata*, Brighton Massachusetts Press.
8. Chen, Been-Lon (2003). An inverted-U relationship between inequality and long-run growth. *Economics Letters*, 78: 205-12.
9. Choi, In (2002). Instrumental variables estimation of a nearly non-stationary, heterogenous error component model. *Journal of Econometrics*, 109:1-32.
10. De La Croix, David and Doepke, Matthias (2003). Inequality and growth: Why differential fertility matters. *The American Economic Review*, 93: 1091-113.
11. Deininger, Klaus & Squire, Lyn (1996). A new data set measuring income inequality. *World Bank Economic Review*, 10: 565-91.
12. Deininger, K., and Squire, L. (1998), New ways of looking at old issues: asset inequality and growth, *Journal of Development Economics*, 57:259-287.
13. Filho, A.S. (2010), *Growth, Poverty and Inequality: From Washington Consensus to Inclusive Growth*, DESA Working Paper Series: 1-22.

14. Fritzen, S. (2002), Growth, inequality and the future of poverty reduction in Vietnam, *Journal of Asian Economics*, 13(5): 635-657.
15. Haan, A. (2011), Inclusive growth? Labor migration and poverty in India, Working Paper Series: 1-28.
16. Klasen, S. (2010), Measuring and monitoring inclusive growth: multiple definitions, open questions, and some constructive proposals. ADB Sustainable Development, Working Paper Series No. 12: 1-25.
17. Kundu, D. and Samanta, D. (2011), Redefining the inclusive urban agenda in India. *Economic & Political Weekly* 46 (5), 55-63.
18. Lin, T. Zhuang, J. Yarcia, D. and Lin, F., (2008). Income inequality in the People's Republic of China and its decomposition: 1990-2004. *Asian Development Review*. 25 (1), 119- 136.
19. Mahendra, D. (2008), Inclusive Growth in India: Agriculture, Poverty, and Human Development, Working Paper Series: 1-25.
20. Naik, G., Joshi, S. and Basavaraj, K.P. (2012), Fostering inclusive growth through e-Governance Embedded Rural Telecasters (EGERT) in India, *Government Information Quarterly*, 29(1): 582-589.
21. Pieters, J. (2010), Growth and Inequality in India: Analysis of an Extended Social Accounting Matrix, *Journal of World Development*, 38(3): 270-281.
22. Qin, D., Cagas, M. A. Ducanes, G, X. He, L. R. Shiguo, L (2009), "Effects of Income inequality on China's economic growth", *Journal of Policy Modeling*, 31, : 69 – 86.
23. Rauniyar, G., Kanbur, R. (2010). Inclusive development. Two Papers on conceptualization, Application, and the ADB Perspective. Independent Evaluation Department, ADB.
24. Son, H. (2007), Interrelationship between growth, inequality, and poverty: the Asian experience *Asian Development Review* 24 (2), 37-63.
25. Sabyasachi, T. (2013), Is Urban Economic Growth Inclusive in India?, Centre for Economic Studies and Policy Working Paper Series: 1-27.
26. Suryanarayana, M.H. (2008), what is exclusive about „inclusive growth? *Economic & Political Weekly* 47 (43), 93-101.