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# Impact of Regional Government Expenditure and Investment on Internal Migration and Economy in Sulawesi Selatan, Indonesia

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# Abstract

Government spending and investment are capital in economic development so that the number and composition are important to set properly. This study aims to analyze the impact of regional government expenditure and investments in internal migration and economy in Sulawesi Selatan, Indonesia. The analysis used regional series data from 1995 to 2015. The simultaneous equations model consisting 43 structural equations and 30 identity equations were estimated by the two-stage least squares method. The results of this study indicate that the economic development in the region Makassar is higher compared to other regions in Sulawesi Selatan, as well as internal migration flows to the region Makassar have increased. Through the policy of increasing the value of investments in the agricultural sector by 25 percent can improve the overall economy in the outside of Makassar region, and can reduce the flow of migration into Makassar at 0.050 percent.

Keywords: regional government expenditure; investmen; internal migration; regional economy.	

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#### 1. Introduction

Government spending and investment is a capital to achieve the goals of economic development, so that the number and composition should be well established [5]. Regional government expenditure during the era of decentralization continues to increase, but the agricultural sector only gets a small part of total regional expenditure [9]. This could lead to increasing backwardness of economic development in areas that are agricultural sector still dominant. Difference among the regional economic development progress of non-agricultural and agricultural areas lead to migration flows. According to Todaro [10] that economic development is closely related to migration, where migration plays relocate labor from the agricultural areas to non-agricultural area which has greater economic opportunities.

In the regional context, the economy of Sulawesi Selatan shows concentrated in Makassar region. Contributions of Makassar region reached 45.4 percent of the total economy of Sulawesi Selatan with 41.4 percent is the share of non-agricultural sectors, while agriculture still plays a major role in other regions [4]. Difference the structure and economic development among the Makassar region with other regions, make Makassar region as a major destination of internal migration in Sulawesi Selatan. Migration flows into the region of Makassar overload can cause a surplus of labor, increasing unemployment, and negative implications for economic growth and development efforts. According to Mellor [8] empirically countries have adopted development policies with a focus on the agricultural sector tends to be more successful in promoting economic growth compared to development that emphasizes non-agricultural sectors. Todaro [11] states the program of rural development and economic diversification in rural agricultural areas can be a solution to reduces the flow of excessive migration to urban areas. This indicates the importance of increasing capital development priorities in the region are still dominant agricultural sector. This study aimed to examine the impact of the increase in local government spending and investments on internal migration and the economy in areas that are still dominant agricultural sector.

### 2. Material and Methods

This study used a series of data from 1995 to 2015 from several sources such as the BPS-Statistics Indonesia, the Ministry of Finance, the Ministry of Labor and the Investment Coordinating Board (BKPM). In this study, Sulawesi Selatan region covering 24 districts/cities grouped into five regions, each region includes several districts/cities nearby. The five region are the region of Makassar in Southwest, Parepare in the West, Palopo in the North, Bone in the East and Bulukumba in the southeastern. Internal migration used in the study is limited to recent migration in the province of Sulawesi Selatan. A person is classified as migrants where the region district/city of residence when the survey was different from the region district/city of residence 5 years ago before the survey [3]. To estimate the impact of government expenditure and investments in internal migration and economy in Sulawesi Selatan, in this study built econometric models in the form of a system of simultaneous equations, consisting of 43 structural equations and 30 identity equations. Structural models are arranged in three blocks namely; (1) migration, (2) labor market, and (3) output. From the formulation of the model is known that there were 58 variables predetermined variables in the model so that the total amount to as much as 131 (K = 131). The maximum number of variables in the equation is 7 (M = 7), so that the

identification of the above model is (131-7) > (73-1). Based on the criteria order condition then identify existing structural equation model is over-identified, hence the model estimation can be done using a two-stage least squares method (2SLS). Statistical criteria for validating the estimated value of the econometric model used: Root Mean Squares Percent Error (RMSPE) and Theil's Inequality Coefficient (U). Policy simulations performed with historical simulation (ex-post) in the period from 2011 to 2015, and is intended to evaluate the policy at that time so it can be used as input for future policy implications. Impact analysis and policy alternatives to the economic model of migration consists of (1) changes in local government spending and (2) changes in the investment, each distinguished by agriculture and non-agriculture.

#### 3. Results

# 3.1. Result for model validation

Model validation procedures performed to assess whether the model is valid enough to make a policy simulation. The criteria for a good estimation model is a model that generates value RMSPE and U-Theil getting smaller. U-Theil coefficient (U) ranges between 0 and 1. If the value of U is 0, it means that the estimation of the model is perfect, whereas if U is 1, the model is rated naive [6]. RMSPE indicators show that 90.4 per cent of the variable has a value below 30 percent and the remainder have percentages below 10 percent. This shows that during the observation period 2011-2015 the value of endogenous variable estimation result is quite close to the actual values. Based on the validation indicator U-Theil, almost all variables have a U-Theil values below 0.3, there are only 2 of the 73 variables worth over 0.3. The number of variables that have the U-theil value below 0.1 by 65 variables. Table 1 presents the results of validation for the 35 variables selected from 73 models of endogenous variable. Based on the above indicators met criteria for a good model, and the model can be used to simulate the impact of policies on a number of variables that are the core of this research..

# 3.2. Internal migration and economic development in Sulawesi Selatan

Economic development of a region can be described through the development of the gross domestic product (GDRP) and employment opportunities. Figure 1 shows the development of the GDRP and employment in the agricultural and non-agricultural sector in Sulawesi Selatan in 2000-2015. The GDRP agricultural sector in Sulawesi Selatan showed a rising trend each year, but the number of its agricultural sector employment tends to decrease in recent years. On the other hand, the GDRP and employment in the non-agricultural sector is likely to increase and the increase is higher than the agricultural sector. This is an indication, the economic development of the agricultural sector is not accompanied by the creation of new employment opportunities in the agricultural sector. Development of the agricultural sector seems more directed at activities that capital intensive than labor intensive [1]. Table 2 shows the GDRP, employment and internal migration in Sulawesi Selatan 2005-2015. The economic structure of Sulawesi Selatan is concentrated in the region Makassar. Nearly half the economy of Sulawesi Selatan (45.4 percent) came from Makassar region, and 41.4 percent were non-agricultural sector contribution. Likewise with labor, Makassar region is a region with the largest accommodating workers in Sulawesi Selatan. Although the non-agricultural sector has dominated the agricultural sector is still holds a lot of manpower and sensitive has been linked to non-agricultural sector [2]. Reduced employment agricultural sector

resulting in increased labor surplus agricultural sector. Alternative anticipation of surplus agricultural laborers are migrating to non-agricultural sector. A review of spatial migration is important because the distribution of the population and uneven economic development. Table 2 also shows there is a gap in the development of migration flows between regions in Sulawesi Selatan. Migration flows heading to Makassar region dominates, this is due to the high intensity of economic development in the area of Makassar, especially the non-agricultural sector [12.7]. Makassar is the center of economic activity of business, industry, government, the condition of infrastructure and social amenities, education, better health becomes stronger the attraction for the inhabitants of other areas in Sulawesi Selatan to migrate toward the region.

Table 1: Validation result of the model for selected variables

No	Variable	Unit	Actual	Predicted	RMS % Error	U
1	GDRP Agriculture Makassar	Billion Rupiah	2664.4	2577.8	4.5152	0.0252
2	GDRP Agriculture Parepare	Billion Rupiah	3442.7	3217.1	6.7949	0.037
	GDRP Agriculture Palopo	Billion				
3	CDRD A cui cultura Bono	Rupiah Billion	3872.9	3969.6	5.2466	0.024
4	GDRP Agriculture Bone	Rupiah Billion	3682.5	3580.6	3.9065	0.0222
5	GDRP Agriculture Bulukumba	Rupiah	2710.8	2652.1	3.5243	0.0196
6	GDRP Non Agriculture Makassar	Billion Rupiah	26790.8	25090.8	8.937	0.0508
7	GDRP Non Agriculture Parepare	Billion Rupiah	4614.7	3821.3	16.874	0.0997
8	GDRP Non Agriculture Palopo	Billion Rupiah	8358.9	7643.8	11.5702	0.0655
9	GDRP Non Agriculture Bone	Billion Rupiah	5011.3	3314.5	37.7225	0.2302
10	GDRP Non Agriculture Bulukumba	Billion Rupiah	3454.9	3376.3	2.5354	0.0132
11	Employment Agriculture Makassar	Persons	249187	253923	5.6229	0.0132
12	Employment Agriculture Parepare	Persons	177363	178857	4.7521	0.0202
13	Employment Agriculture Palopo	Persons	356189	377134	7.8777	0.0366
14	Employment Agriculture Bone	Persons	326640	346996	6.9192	0.033
15	Employment Agriculture Bulukumba	Persons	323915	331592	4.9238	0.024
	Employment Non Agriculture	Persons				
16	Makassar		940131	910291	4.3982	0.0225
	Employment Non Agriculture	Persons				
17	Parepare		204164	185167	8.0866	0.0438
18	Employment Non Agriculture Palopo	Persons	261854	238358	9.5788	0.0526
19	Employment Non Agriculture Bone Employment Non Agriculture	Persons Persons	251725	192451	22.0325	0.1218
20	Bulukumba		252324	248000	4.6365	0.0228
21	Unemployment Makassar	Persons	95751	140533	39.9783	0.1699
22	Unemployment Parepare	Persons	19697	39640	99.5883	0.3129
23	Unemployment Palopo	Persons	38027	36982	30.7418	0.1622
24	Unemployment Bone	Persons	28369	65755	160.5	0.4641
25	Unemployment Bulukumba	Persons	21264	26015	41.6628	0.172
26	In-migration Makassar	Persons	60003	65991	8.5452	0.0421
27	In-migration Parepare	Persons	12491	11848	2.147	0.0108
28	In-migration Palopo	Persons	15599	16310	0.9554	0.0047
29	In-migration Bone	Persons	8655	8795	1.9323	0.0096

30	In-migration Bulukumba	Persons	9178	8610	7.919	0.0398
31	Out-migration Makassar	Persons	25870	25509	2.211	0.0111
32	Out-migration Parepare	Persons	18320	19056	3.5021	0.0173
33	Out-migration Palopo	Persons	22796	22292	5.6086	0.0313
34	Out-migration Bone	Persons	20607	26755	29.9944	0.1356
35	Out-migration Bulukumba	Persons	18334	17942	3.1793	0.0157

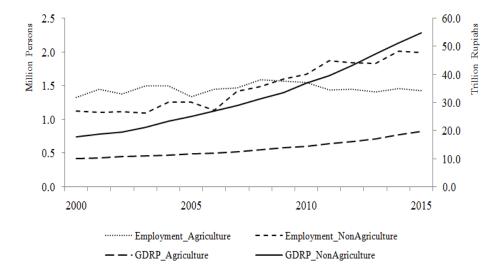


Figure 1: GDRP and Employment in Sulawesi Selatan 2000-2015

Net migration to the region of Makassar increased positive, while for other regions is negative. Negative net migration flows in the region of Parepare, Palopo and Bone increased indicating a relatively slow progress of development in the region. While Bulukumba district, the net migration is still negative but tended to decline, indicating the progress of development in the region were able to slow the rate of out-migration. Rising trend of migration flows into Makassar region is not good for economic development and population distribution. The changing pattern of population mobility in the future an important effort in order to achieve balanced population distribution, and its success depends on the development of other regions outside the Makassar region.

Table 2: GDRP, Employment and Internal Migration in Sulawesi Selatan 2005-2015

GDRP			Employment .		Internal migration					
	ODIG				In migration		Out migration		Net migration	
Region	(%)		(%)		,		,		,	`
					(persons)	)	(persons)		(persons)	
	2005	2015	2005	2015	2005	2015	2005	2015	2005	2015
Makassar	43.3	45.4	34.0	34.8	56648	62565	24466	26570	32182	35995
Parepare	12.4	12.4	12.1	11.3	10435	12816	14740	19129	-4305	-6313
Palopo	20.5	17.6	17.9	19.3	16220	14537	17045	25594	-825	-11057
Bone	13.7	14.1	19.1	17.2	9484	8824	18924	20979	-9440	-12155
Bulukumba	10.1	10.5	16.9	17.4	9740	10908	27352	17378	-17612	-6470
Total	100.0	100.0	100.0	100.0	102527	109650	102527	109650	-	-

# 3.3. The impact of increased government spending on internal migration and the economy

The simulation in this study include policy changes in local government spending and investment. Consider the background of the issue of conditions of economic structure is different between the region and other regions of Makassar in Sulawesi Selatan and the tendency of high flows of internal migration to the area of Makassar, it is necessary to partiality towards regions outside the region Makassar. The goal is to achieve a distribution of the population and more equitable development. Policy simulation is done by giving the weight increase in local government spending and investment to areas beyond the Makassar region of 25 percent, while exercised in accordance Makassar region is without weighting. Simulation increase in government spending and investment area is distinguished by agriculture and non-agricultural sectors. Table 3 shows the impact of increasing local government spending on internal migration and the economy. The first policy simulation (S1) is a policy to increase local government spending for agriculture in areas beyond Makassar by 25 percent, while for Makassar area increase of 0 percent. Based on simulation results, the policy of increasing local government spending for the agricultural sector have resulted in increased GRDP agricultural 0.238 percent. The increase in the GDRP agriculture led to the formation of the agricultural sector employment amounted to 0.019 percent and lowered the unemployment rate to 0.065 percent. The response among the areas outside the region Makassar to the increase in local government spending for the agricultural sector shows the same direction, which is positively related. But its magnitude varied responses. The increase in the GDP of agriculture, agricultural labor, and a decline in unemployment in the area of Parepare is the highest compared to the other three regions. The increase in the GDRP of agriculture, agricultural labor, and a decline in unemployment in the area of Parepare also lead to an increase the GDRP of non-agricultural, non-agricultural employment in the area of Parepare. Increased in the employment agricultural sector outside region of Makassar led to a reduction in out-migration from the region. also lead to an increase the GDRP of non-agricultural, non-agricultural employment in the area of Parepare. Increased in the employment agricultural sector outside region of Makassar led to a reduction in outmigration from the region.

The decline in migration out of the region outside region of Makassar caused a decline in migration into the region of Makassar. On the other hand most people Makassar region responding to the increasing in the employment agricultural sector outside Makassar region by migrating out of the area of Makassar, which led to increased migration into the region outside the region of Makassar.

The second policy simulation (S2) is a policy to increase local government spending on non-agricultural sector in the region outside of Makassar by 25 percent, while for Makassar region increase of 0 percent. The simulation results showed that the increase in local government spending on non-agricultural sector resulted in an increase GRDP of non-agricultural of 2.829 percent. The increase in the GDRP of the non-agricultural causes the formation of non-agricultural sector employment by 1.793 percent and reduce unemployment by 10.214 percent. The increase in non-agricultural sector employment outside the Makassar region led to a reduction of migration out of the region of Palopo and Bone respectively -1.649 percent and -12.653 percent. However, different effects occur in out-migration in the region of Parepare and Bulukumba which showed an increase in

out-migration by 0.008 percent and 0.057 percent. The decline in out-migration of the region outside the region of Makassar caused a decline in-migration into Makassar region amounted to -5.539 percent.

On the other hand partial responses of Makassar residents to increased employment in non-agricultural sectors outside the Makassar region is to migrate out of Makassar region by 1,276 percent, which led to increased in-migration into the Palopo region by 2,083 percent and Bone amounted to 0.009 percent.

The third simulation (S3) is a combination of local government policy to increase spending in areas outside of Makassar by 25 percent for non-agricultural sectors (S1) and the non-agricultural sector (S2), while for the Makassar region 0 percent increase. The simulations showed that as with the results of S1 and S2, the combination of an increase in local government spending for agricultural and non-agricultural sectors had a positive impact on the agricultural sector GDP increased by 0.238 percent and non farm sector GDP amounted to 2.830 percent. The increase in the GDP increase employment opportunities for 0.019 percent of the agricultural sector and the non-agricultural sector by 1.794 percent, and reduce unemployment by 10.279 percent. Increased employment opportunities outside the region Makassar cause a reduction in out-migration from the region, which resulted in a decreased migration into the area amounted to -5.609 percent Makassar. In other parts of the region population Makassar partial responses to increased employment opportunities outside the region Makassar is increased out-migration of the Makassar region by 1.376 per cent, which led to increased in-migration to other region outside of Makassar.

The difference between the effects of S1 and S2 be an indication that the response of the non-agricultural sector is more sensitive than the agricultural sector to employment. This condition occurs because of workers who work in the agricultural sector is already excess of the absorption capacity of the agricultural sector [1], so it needs to be done is to increase the government's new employment opportunities in the non-agricultural sector in the region outside the region Makassar. However, the development of the agricultural sector in the outside region Makassar is still an important priority because not only will drive changes in the structure but will also impact on the regional economy. Development of non-agricultural sectors outside the region Makassar forward should be directed to the activity based utilize the results of the agricultural sector, resulting in linkages between agriculture and non-agricultural sectors in the region.

If the government focused its efforts on reducing the flow of migrants heading to region of Makassar and increasing out-migration from Makassar region as well as improving the economy outside of Makassar region, a policy of affirmative form of an increase in local government spending outside of Makassar region for the agricultural sector and non-agricultural sectors is an alternative to the best policy.

# 3.4. The impact of increased investment on internal migration and the economy

In an effort to boost the economy in the outside Makassar region, the government can also make affirmative efforts to increase investment in agriculture and non-agricultural sector in the region outside of Makassar region. Policy simulation fourth (S4) is the policy of increasing investment in agriculture in region outside of Makassar by 25 percent.

Table 3: The impact of increased government spending on internal migration and the economy

Variable	Region	Unit	Base	Simulation result (%)		
v ariable			Value	S1	S2	S3
GDRP Agriculture	Makassar	Billion Rupiah	2578	0.000	0.000	0.000
	Parepare	Billion Rupiah	3217	0.901	0.000	0.901
	Palopo	Billion Rupiah	3972	0.003	0.000	0.003
	Bone	Billion Rupiah	3581	0.014	0.000	0.014
	Bulukumba	Billion Rupiah	2652	0.321	0.000	0.321
	Total	Billion Rupiah	16000	0.238	0.000	0.238
GDRP Non Agriculture	Makassar	Billion Rupiah	25338	0.000	0.000	0.000
	Parepare	Billion Rupiah	3985	0.008	-0.048	-0.038
	Palopo	Billion Rupiah	7644	0.000	5.848	5.848
	Bone	Billion Rupiah	3465	0.000	22.977	22.977
	Bulukumba	Billion Rupiah	3377	0.000	-0.056	-0.056
	Total	Billion Rupiah	43809	0.001	2.829	2.830
Employment Agriculture	Makassar	Persons	253467	0.000	0.000	0.000
	Parepare	Persons	178857	0.092	0.000	0.092
	Palopo	Persons	377467	0.001	0.000	0.001
	Bone	Persons	346996	0.002	0.000	0.002
	Bulukumba	Persons	331592	0.032	0.000	0.032
	Total	Persons	1488379	0.019	0.000	0.019
Employment Non Agriculture	Makassar	Persons	915591	0.000	0.000	0.000
	Parepare	Persons	189968	0.005	-0.026	-0.020
	Palopo	Persons	238356	0.000	2.990	2.990
	Bone	Persons	200874	0.000	12.527	12.527
	Bulukumba	Persons	248259	0.002	-0.035	-0.033
	Total	Persons	1793048	0.001	1.793	1.794
Unemployment	Makassar	Persons	130857	0.000	0.000	0.000
Chemproyment	Parepare	Persons	34077	-0.377	0.134	-0.243
	Palopo	Persons	31077	0.577	0.151	0.213
		1 CI SOIIS	36409	-0.003	18.914	18.917
		Persons	30407	-0.003	10.714	10.717
	Bone	1 CISOIIS	56496	-0.013	39.280	39.294
	Bulukumba	Persons	25849	-0.183	0.220	0.038
	Dulukuliloa	Persons	23047	-0.165	0.220	0.036
	Total	reisons	283688	-0.065	10.214	10.279
In-migration	Makassar	Persons	63693	-0.003	-5.539	-5.609
III-IIIIgration	Parepare	Persons	12538	0.115	-0.013	0.102
	Palopo	Persons	16365	0.113	2.083	2.084
	Bone	Persons	8806	0.001	0.009	0.009
Out migration	Bulukumba Makassar	Persons	8598 26254	0.140	-0.060	0.079
Out-migration		Persons	26254	0.100	1.276	1.376
	Parepare	Persons	18909	-0.111	0.008	-0.102
	Palopo	Persons	21991	0.000	-1.649	-1.650
	Bone	Persons	25109	-0.006	12.653	12.658
	Dululaumha	Darsons				-0.069
	Bulukumba	Persons	17737	-0.126	0.057	-0.009

The impact of the policy of increasing investment in the agricultural sector by 25 percent, increase the GDRP agricultural by 0.354 percent and GRDP non-agricultural of 0.001 percent. The increase in the GDRP of

agriculture is due to the increase in the GDRP of agriculture in the region Parepare 1.753 percent and Palopo 0.005 percent. The increase in the GDRP of agriculture in Parepare 1.753 percent has also resulted increase in the GDRP non-agriculture in Parepare 0.013 percent.

An increase of 0.354 percent of the GDRP of agriculture and GRDP of non-agriculture 0.001 percent resulted in increase employment in the agricultural sector of 0.021 percent and 0.001 percent in non-agricultural sectors, as well as lower unemployment -0.086 percent. The increase in the GDRP of agriculture in the region of Parepare and Palopo led to increased employment opportunities in the region's agricultural sector by 0.173 percent and 0.001 percent, and increase employment in the non-agricultural sector amounted to 0.008 percent of Parepare region. Increased in the employment agricultural sector opportunities outside of Makassar region decrease the out-migration from Parepare of -0.190 percent and caused a decline in-migration into Makassar region -0.057 percent. On the other hand most people Makassar region responding to the increasing in the employment agricultural sector opportunities outside Makassar region by migrating out of Makassar region 0.1 percent, which led to increased in-migration into Parepare 0.209 percent and Palopo 0.001 percent.

Policy simulation fifth (S5) is the policy of increasing investment in non-agricultural sectors in the region outside of Makassar by 25 percent. The impact of the policy of increasing investment in non-agricultural sector responded to differ between regions. Increased investment in non-agricultural responded positively to the Parepare, Bone and Bulukumba, which is characterized by increasing GRDP non-agricultural respectively by 0.085 percent, 0.072 percent and 0.079 percent. For Palopo region, the increase in non-agricultural investments resulted in a decrease of GRDP non-agricultural at -0201 percent. In general, non-agriculture increased investment resulted in a decrease of non-agricultural GRDP at -0021 percent. The decline in GRDP non-agricultural in general due to a decrease in GRDP non-agricultural -0201 percent in Palopo, caused a decline in employment in the non-agricultural sector in general at -0.008 percent, and increase unemployment 0.049 percent. The increase in the GDRP of non-agricultural occurred in the region Parepare, Bone and Bulukumba which led to an increase in employment non-agricultural sector in the region amounted to 0.044 percent, 0.039 percent and 0.005 percent.

The increase in non-agricultural sector employment in the region of Parepare, Bone and Bulukumba decrease the out-migration of the region. In Palopo region, the opposite is happening is the increasing out-migration Palopo region 0.075 percent due to declining non-agricultural employment in the region Palopo. Increased out-migration of Palopo led to increased in-migration into Makassar region at 0.007 percent. Makassar region residents responding decrease non-agricultural sector employment outside Makassar region by lowering out-migration from Makassar -0.052 percent.

Simulation sixth (S6) is a combination of policies increased investment in areas outside of Makassar for the agricultural sector (S4) and the non-agricultural sector (S5) each by 25 percent, while for Makassar area increase of 0 percent. The simulation results show that, like the S4 and S5, a combination of increased investment in agriculture and non-agricultural sector had a positive impact on the GDRP agricultural sector increased and negative on the GDRP non-agricultural sector.

Table 4: The impact of increased investments on internal migration and the economy

Variable	Davion	TImit	Base	Simulation res		sult (%)	
Variable	Region	Unit	Value	S4	S5	S6	
GRDP Agriculture	Makassar	Billion Rupiah	2578	0.000	0.000	0.000	
	Parepare	Billion Rupiah	3217	1.753	0.000	1.753	
	Palopo	Billion Rupiah	3972	0.005	0.000	0.005	
	Bone	Billion Rupiah	3581	0.000	0.000	0.000	
	Bulukumba	Billion Rupiah	2652	0.000	0.000	0.000	
	Total	Billion Rupiah	16000	0.354	0.000	0.354	
GRDP Non Agriculture	Makassar	Billion Rupiah	25338	0.000	0.000	0.000	
	Parepare	Billion Rupiah	3985	0.013	0.085	0.098	
	Palopo	Billion Rupiah	7644	0.000	-0.201	-0.201	
	Bone	Billion Rupiah	3465	0.000	0.072	0.072	
	Bulukumba	Billion Rupiah	3377	0.000	0.009	0.009	
	Total	Billion Rupiah	43809	0.001	-0.021	-0.020	
Employment Agriculture	Makassar	Persons	253467	0.000	0.000	0.000	
	Parepare	Persons	178857	0.173	0.000	0.173	
	Palopo	Persons	377467	0.001	0.000	0.001	
	Bone	Persons	346996	0.000	0.000	0.000	
	Bulukumba	Persons	331592	0.000	0.000	0.000	
	Total	Persons	1488379	0.021	0.000	0.021	
Employment Non Agriculture	Makassar	Persons	915591	0.000	0.000	0.000	
	Parepare	Persons	189968	0.008	0.044	0.053	
	Palopo	Persons	238356	0.000	-0.131	-0.131	
	Bone	Persons	200874	0.000	0.039	0.039	
	Bulukumba	Persons	248259	0.000	0.005	0.005	
	Total	Persons	1793048	0.001	-0.008	-0.007	
Unemployment	Makassar	Persons	130857	0.000	0.000	0.000	
	Parepare	Persons	34077	-0.711	-0.232	-0.943	
	Palopo	Persons	36409	-0.005	0.823	0.817	
	Bone	Persons	56496	0.000	-0.129	-0.129	
	Bulukumba	Persons	25849	0.000	-0.029	-0.029	
	Total	Persons	283688	-0.086	0.049	-0.037	
In-migration	Makassar	Persons	63693	-0.057	0.007	-0.050	
	Parepare	Persons	12538	0.209	0.023	0.233	
	Palopo	Persons	16365	0.001	-0.104	-0.103	
	Bone	Persons	8806	0.000	0.000	0.000	
	Bulukumba	Persons	8598	0.000	0.007	0.007	
Out-migration	Makassar	Persons	26254	0.100	-0.052	0.048	
	Parepare	Persons	18909	-0.190	-0.016	-0.206	
	Palopo	Persons	21991	0.000	0.075	0.074	
	Bone	Persons	25109	0.000	-0.030	-0.030	
	Bulukumba	Persons	17737	0.000	-0.010	-0.010	

The increase in the GDRP of the agriculture increase employment opportunities in agriculture and decline in the GDRP non-agricultural decrease employment in non-agricultural sector, but in the general decline the unemployment rate to -0.037 percent. This may imply that the increase in the employment agricultural sector in Palopo and Parepare region and increase employment opportunities in the non-agricultural sector Parepare,

Bone and Bulukumba can anticipate a decrease in employment non-agricultural sector in Palopo.

Increased employment opportunities in general lead to decreased out-migration from Parepare, Bone and Bulukumba, but increasing out-migration from Palopo. In other parts of the region population Makassar partial responses to increased employment opportunities in the three regions is increased out-migration out from Makassar by 0048 percent, which led to increased in-migration into Parepare and Bulukumba by 0.233 percent and 0.007 percent. Differences in impact between S4 and S5 be an indication that development outside of Makassar region can be improved and needs a lot of investment. In Palopo region, the increase in non-agricultural investment had a negative impact on the GDRP and employment of non-agricultural sector.

If the government focused its efforts on reducing the flow of migrants to Makassar region and increasing outmigration from Makassar as well as improving the economy region outside of Makassar, a policy of affirmative form of increased investment outside area of Makassar for the agricultural sector can be performed on all region, and while in the non-agricultural sector improvement non-agricultural sector investment should be done in region other than region Palopo.

# 4. Conclusion

The results of the research and simulation results indicate that the economic development in Sulawesi Selatan period 1995-2015 was concentrated in the non-agricultural sector and lead to increased internal migration flows toward Makassar region.

Through increased budget allocations and increase the value of investments in the agricultural sector could be the best alternative solution. Increased investment in agriculture and non-agricultural sector by 25 percent, can increase job opportunities by 0.021 percent and reduce employment in non-agricultural sector amounted to 0.007 percent.

By increasing the value of investments in the agricultural sector can reduce migration to Makassar at 0.050 percent and can lead to migration out of Makassar reached 0.048 percent.

#### References

- [1] Adriani D dan Wildayana E. (2015). Integrasi Pertumbuhan Ekonomi dan Penciptaan Kesempatan Kerja Sektor Pertanian di Indonesia, Sosiohumaniora, 17(3), 204-212.
- [2] Arman, S. Hadi, N.A.Achsani, & A.Fauzi. (2016). Analisis Sektor Strategis Pulau Sulawesi, Jawa Timur dan Kalimantan Timur, Sosiohumaniora, 18(2), 91-99.
- [3] Badan Pusat Statistik. (2011). Migrasi Internal Penduduk Indonesia Hsil Sensus Penduduk 2010. Badan Pusat Statistik. Jakarta.
- [4] Badan Pusat Statsitik. (2016). Indikator Makro Sosial Ekonomi Sulawesi Selatan 2010-2015. Badan Pusat Statistik Provinsi Sulawesi Selatan. Makassar.

- [5] Jhingan, M.L. (2008). Ekonomi Pembangunan dan Perencanaan. Raja Grafindo Persada. Jakarta.
- [6] Koutsoyanis A. (1977). Theory of Econometrics: An Introductory Exposition of Econometric Methods. Second Edition. The Macmillan Press Ltd, London.
- [7] Lewis, Blane D. (2014). Urbanization and Economic Growth in Indonesia: Good News, Bad News and (Possible) Local Government Mitigation, Regional Studies, 48(1), 192-207
- [8] MellorJW.(1995). Agriculture on the Road to Industrialization. The John Hopkins University Press. Baltimore and London.
- [9] Sumedi, P Simatupang, BM Sinaga, M Firdaus. (2013). Dampak Dana Dekonsentrasi Kementerian Pertanian dan Pengeluaran Daerah pada Sektor Pertanian terhadap Kinerja Pertanian Daerah. Jurnal Agro Ekonomi. 32(2), 97-113
- [10] Todaro, MP. (1969). A Model of Labor Migration and Urban Unemployment in Less Developed Countries. The American Economic Review. 59(1):138-148
- [11] Todaro, MP. (1997). Urbanization, unemployment and migration in Africa: Theory and policy, Policy Research Division Working Paper No. 104. New York: Population Council.
- [12] Todaro MP dan SC Smith. (2006). Pembangunan Ekonomi edisi kesembilan. Jakarta: Penerbit Erlangga.