Influence of fiscal decentralization on the economic growth of public welfare and poverty between regions of Province of Papua

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Abstract. This research aims to understand the impact of fiscal decentralization on improving the economy, public welfare, and poverty in the province of Papua. The population and sample of this research were 20 districts/cities in the Papua province. The data analysis used a multivariate model analysis based on the structural equation modeling WarpPLS variant. The results showed that fiscal decentralization positively influenced the economic growth and the improvement in public welfare, but negatively influenced poverty. Meanwhile, economic growth negatively influenced public welfare. On the other hand, the growth positively influenced poverty reduction, and public welfare influenced poverty. In addition, the results of the mediation test showed that economic growth was able to fully mediate between fiscal decentralization and poverty reduction, yet the economic growth became the partial mediation between fiscal decentralization and public welfare.

1. Introduction

The implementation of regional autonomy is inseparable from the economic crisis and the belief in the previous government implementation system which tends to be centralized. Public protest against development instability has an impact on the process of implementing development in the area, such as the increasing number of poor people; on the other hand, it provides wider opportunities (freedom) to improve the quality of society in the future. The economic importance and the waning public trust can stimulate changes in all development dimensions. Realizing public welfare, creating good governance, and equitable development, are the main programs of the reformation spirit. One important impact of the changes in the post-reform development paradigm is the wide authority abundance (autonomy) to the government at the local level, both provincial and district/city, throughout Indonesia.

Generally, the implementation of fiscal decentralization in Indonesia is encouraged to manage financial capacity optimally to accelerate the process of sustainable development, and all aspects of people's lives in the future. Specifically, the implementation of fiscal decentralization in Indonesia is encouraged to overcome the problems of macroeconomic instability, low economic growth, to improve the quality of the human development index, to eradicate poverty, and to accelerate regional infrastructure development. The legal basis for implementing fiscal decentralization is the amendment
of Law Number 33 of 2004 concerning financial balance between the central and regional governments. The essence of the law clarifies the source of revenue transferred to the regional government which is then used to finance the abundance of the fields to the regional government. The components of intergovernmental transfers with the government at the local level include the General Allocation Fund (DAU), the Special Allocation Fund (DAK), and the Revenue Sharing Fund. The fiscal transfers to the government at the local level through the sources mentioned above are expected to have a positive impact on regional development. Due to the abundance of financial management rights, the parties that are given the mandate have extensive discretion to take advantage of the transfer of funds, and explore the potential of Regional Real Revenue (PAD). The government at the local level has the full role of allocating independently to finance the physical and non-physical development priorities, set out in the regional mid-term development plans. Specifically for regencies/cities of Papua province, in addition to receiving equalization funds, they also receive Special Autonomy Funds.

The debate about fiscal decentralization, as an instrument of accelerating development in the regions, continues to take place in the public sphere. Various empirical studies conducted, as a form of evaluation of the policy instrument, provide various conclusions. Some research confirms that the abundance of financial management authority has a good impact on regional economic development, increases HDI, and helps reduce poverty. However, not a few empirical studies have concluded that the policy has a negative effect, it has not even played a role optimally (maximum) in accelerating development, and has created very high dependence on the external party (central government), as well as the high disparity between regions. This research aims to understand the spatial influence, as well as by mediating financial management authority on the economy, public welfare, poverty reduction, and understanding economic growth, quality of life of the community, poverty reduction, as well as understanding public welfare towards the poverty reduction in the districts/cities throughout the province of Papua.

In addition to increasing economic growth, the decentralization policy aims to increase regional fiscal capacity so that local governments are able to create social protection programs such as education, health, and to create jobs to reduce unemployment and poverty. The growth of fiscal decentralization, economic growth, public welfare, and poverty, are social constructs that have a causal relationship. The progress of one of these constructs can cause changes in other structures. The adequate fiscal capacity can stimulate economic development, then contribute to improving public welfare, and minimizing poverty; and vice versa. The high economic growth has an impact on increasing public welfare and minimizing poverty, and vice versa. Based on the analogy of causality between the constructs, the objectives of this research include: (1) Fiscal decentralization can improve the economy between regions in the province of Papua; (2) Fiscal decentralization can improve the life quality of people between regions in the Papua province; (3) Fiscal decentralization can reduce poverty between regions in the Papua province; (4) Economic growth influences the life quality of inter-regional society in the Papua province; (5) Increasing the economy influences the inter-regional poverty in Papua Province, and; (6) Public welfare influences the poverty among regions in the Papua province.

2. Methodology
The research model is the structural equation modeling analysis, namely WarpPLS 4.0. The evaluation of the WarpPLS model can be done with the One Step approach, which is to evaluate the structural model (Inner model). The data processing includes designing a model, constructing a path diagram, estimating, evaluating the inner model, and testing the hypotheses. The conceptual framework looks like figure 1.
Figure 1. Flowchart of the research model

Sources: Akai & Sakata. (2002), Badrudin, R. (2012), and Wibowo, P. (2008)[1][2][3]

Information:
AI_1: Indicator of Autonomy I  UHH: Life Expectancy
AI_2: Indicator of Autonomy II  ABS: Absolute Poverty
AI_3: Indicator of Autonomy III  AMH: Number of Literacy
AI_4: Indicator of Autonomy IV  PDRB: Gross Regional Domestic Product
RRLS: Rata-rata Lama Sekolah  PPK: Income per capita

Figure 2. Results of a hypothesis test of WarpPLS 4.0

3. Result and discussion
The results of the hypothesis test of SEM WarpPLS are shown in the figure below. The arrows in figure 1, as many as six paths, show the influences between the variables tested. Meanwhile, each value bearing the β (beta) value is a coefficient value, while the value of p represents the level of probability or significance.
The results of the research test in Figure 2 show that the fiscal decentralization positively and significantly influences the economy in Papua. The coefficient value on the DF-PE pathway is 0.20, and the probability value is 0.01 < 0.05. Thus, the first hypothesis (H1) cannot be declined. The results of this research support the results of the research by Helmi (2008), Sasana (2009), Zulyanto (2010), Mansim (2010), Mualim (2010), and Khusaini, et al. (2013) [4–9].

Positively influenced means: the higher the adequate fiscal capacity, the more it will stimulate the economy of the economic region in the Papua region. In addition to relying on revenue sourced from transfers, the Regional Government needs to work hard to exploit local potentials to increase local revenue. The results of this research support the grand design goal of the fiscal decentralization of the Ministry of Finance (2012) [10], that fiscal decentralization as an instrument intended for local governments to encourage regional economic growth. The impact of fiscal decentralization is supported by empirical data. Over the past six years, the economic performance of each district and city has grown positively and is above six percent. These effects have also strengthened the reasons for implementing fiscal decentralization, namely reducing macroeconomic instability and low economic growth. However, in terms of public expenditure, it is considered to be of poor quality because the ratio of capital expenditure for each district/city is lower than the national standard, or has not reached 50 percent.

Testing the model between fiscal decentralization and public welfare showed a positive and significant influence. The beta value in the DF – WF path was 0.26, and the probability value was 0.01 < 0.05. Thus, the H2 was accepted, and the relationship was positive and unidirectional. Thus, the value of the variance of these two constructs supported the theory that the ultimate goal of fiscal decentralization can improve public welfare.

The fiscal decentralization and the special autonomy carried out empirically in the province of Papua can support that there has been an improvement in the level of human quality in Papua. However, the objective condition still causes imbalances between regions. The development of IPM components over the past few years has changed but not significantly. To significantly improve the quality of human resources, the local and national governments need to thoroughly evaluate the social protection program that has been implemented in recent years. The indications of an increase in human quality (public welfare) are the effects of the 9-year compulsory education program, Education for All (PUSP), and JAMKESMAS (Public Health Insurance).

The DF – PM pathway in figure 2 above shows fiscal decentralization and poverty reduction which have a negative influence. The coefficient value on the DF – PM path was -0.12, and the probability level was 0.13 > 0.05. Thus, the (H3) was rejected. Thus, it can be concluded that fiscal decentralization had a negative influence, and it was not significant on the poverty reduction in the districts/cities in the Papua province. The existence of the negative influence means that the current fiscal capacity did not play a maximal role in reducing the absolute poverty in the districts/cities. Currently, the fiscal capacity has not touched and improved or reduced absolute poverty.

Testing the direct effects of fiscal decentralization on poverty reduction did not have a positive effect. This means that the implementation of fiscal decentralization, as manifested in transfers to the regions, had not yet maximally played a role in reducing absolute poverty. This finding contradicts the reason for the implementation of the concept of fiscal decentralization, namely reducing the widening of the poor population. The implementation of fiscal decentralization, that has entered its 13th year, has not been optimal in reducing the absolute poor population in Papua. This empirical result is strengthened by the real condition that there are still high numbers of poor people in the districts/cities throughout the Papua Province. To minimize poverty, local governments and other stakeholders need to study holistically and create social protection programs that are based on data and facts, not based on political interests alone.

The PE – WF pathway test results in Figure 2 above indicate a negative influence. The beta value of the PE – WF pathway was -0.13, with a probability level of 0.02 < 0.05, so H4 was rejected. This
means that economic development had not been able to improve the life quality of the people. The results of this study contradict the results of research by Sasana (2009) [5].

In recent years, the economy of each regency and city has positively contributed to the economy of Papua and has even grown above the provincial, even national average. This positive economy is not a quality economy, because it has not been able to guarantee the life quality of the people equally. The data on the economic development over the past six years shows that each district/city has grown positively above the provincial, even national average. While in the midst of high economic growth, the level of welfare, as measured by the IPM component, is still far from ideal conditions. The low quality of the IPM should be suspected that economic growth does not reflect the economic growth that prioritizes all groups. But the high economic growth is more likely to reflect an exclusive economic increase.

The quality of human development, if proxied by IPM, has also increased; but it is still under the national average, and remains in the category of medium IPM quality. The existence of high economic growth and the increase in IPM strengthens the previous hypothesis, that the better economic growth (income) in a region, it will increase the human development index (IPM). Even so, the high economic growth has not had a positive impact on the life quality of the people. One reason is that income disparities between districts are still high.

The predicted results of WarpPLS as presented in Figure 2, show that the PE – PM pathway is positive. The PE – PM path coefficient was 0.02, with a probability level of 0.33 > 0.05, so the H5 was rejected. This high economic growth does not reflect the pro-poor growth. Therefore, local governments need to consider programs that promote the growth that has a trickle-down effect, or the economic growth that can have a trickling effect on grassroots communities. In other words, local governments need to pay attention to the programs that not only to encourage the high growth but are also accompanied by equity, so as to minimize a development inequality and create sustainable development. The results of this research contradict the research by Sasana (2009), Santoso (2013), and Setiyawati and Hamzah (2007) [5,11,12].

The economic performance of the district and the level of poverty in Papua Province have improved. This indicates that the government's commitment to inclusive economic growth and accelerating poverty reduction has led to a bright spot, despite the fact that there are still many poor people recorded. The dynamics of a change in the government system, which was previously centralized to become decentralized, contribute to the economy in Papua. The high economic growth has not been able to have a good impact on poverty reduction. That is because, despite the high growth, there is still inequality in development. The gap in the infrastructure development between districts is still high, and the improvement of the development index component is still far from expectation.

Public welfare and poverty reduction have a causal relationship. Improved quality of society will reduce poverty; conversely, the higher the poor population, the lower the life quality of the population. The causal relationship between the two constructs has a direct negative relationship. The beta value in the WF – PM pathway was -0.44, with a probability level of 0.01 < 0.05. The existence of a negative influence shows that the relationship between public welfare with poverty has a direct negative relationship. This means that an increase in the component variance of each indicator of the human development index, as a form of public welfare, can reduce absolute poverty in the Papua Province. This research supports Sasana (2009) and Mirza (2012) [5,13].

Improving the IPM component as a proxy for public welfare has a positive effect on absolute poverty. This strengthens the assumption stating that public welfare and poverty are two things that influence each other so that it raises a hypothesis, that the higher the level of public welfare, it can reduce the number of poor people to a certain level; conversely, the increasing number of poor people, will reduce the life quality of the society. The results of this research strengthen this assumption. To reduce absolute poverty, local governments must strengthen the existing programs, as well as creating social protection programs based on education, health, and the creative economy.
In addition to assessing the direct effects of fiscal decentralization on the poverty reduction, on the one hand it can also be assessed with a mediating effect, namely to assess the hypothesized effects of the exogenous fiscal decentralization variables on the endogenous variables dependent on the poverty reduction through intervening variables of the economic growth and the public welfare. The effect output is indirectly shown in the following figure:

![Figure 3. Output of indirect effect](image_url)

From the output results above it can be determined that the indirect effect for the economic growth with a significance level of $0.030 < 0.050$, with a standard error value of 0.031, which means the economic growth can be a full mediator variable (full mediation) between the fiscal decentralization and the poverty reduction. Meanwhile, economic growth becomes partial mediation between physical decentralization and public welfare. The last mediating effect is the public welfare between fiscal decentralization and poverty reduction. Based on the mediation effect output, it is known that public welfare becomes the full mediation between economic growth and poverty reduction. The purpose of the fiscal decentralization to improve the public welfare has a trickling effect on various aspects such as encouraging, improving and/or recovering the income structure, as well as gradually opening the access to education and health facilities.

4. Conclusion and suggestion
The fiscal decentralization can improve the economy and improve the quality of people in the districts/cities in the Papua province. However, the policy has not had a significant effect on poverty. The economic improvement in this region is exclusive and capital-intensive, not the inclusive economic growth and labor-intensive. On the other hand, improving the life quality of the society can improve the condition of absolute poverty.

The local governments need to develop inclusive economic activities to improve the public welfare and eradicate poverty, by (1) encouraging UMKM (MSME) to concentrate on agriculture, animal husbandry, fisheries, and handicraft businesses; (2) providing UMKM training centers in the form of Job Training Centers (BLK), or other forms of entrepreneurship development activities based in sub-districts or by regions, and; (3) providing banking facilities that make it easier for the society to make loans or invest (save) in banks.

References
[1] Akai N and Sakata M 2002 Fiscal decentralization contributes to economic growth: evidence from state-level cross-section data for the United States J. Urban Econ. 52 93–108
[2] Badrudin R 2012 Pengaruh Desentralisasi Fiskal Terhadap Belanja Modal, Pertumbuhan Ekonomi, Dan Kesejahteraan Masyarakat Kabupaten/Kota Di Provinsi Jawa Tengah
[3] Wibowo P 2008 Mencermati dampak desentralisasi fiskal terhadap pertumbuhan ekonomi daerah J. Keuang. Publik 5 55–83
[4] Helmi A 2008 Peran Belanja Daerah dan penerimaan Daerah dalam Meningkatkan Perekonomian Daerah di Provinsi Riau
[5] Sasana H 2009 Peran desentralisasi fiskal terhadap kinerja ekonomi di kabupaten/kota provinsi Jawa Tengah
[6] Zulyanto A 2010 Pengaruh Desentralitasi Fiskal Terhadap Pertumbuhan Ekonomi Di Provinsi Bengkulu (Universitas Diponegoro)
[7] Mansim N 2010 Dampak Desentralisasi fiskal terhadap pertumbuhan ekonomi dan Ketimpangan Pendapatan Antar Kabupaten/Kota Provinsi Papua Barat (Gadjah Mada University)
[8] Mualim M 2010 Pengaruh Desentralisasi Fiskal terhadap Pertumbuhan Ekonomi dan Peran kelembagaan Dana Otonomi Khusus Papua di Provinsi Papua Barat (Universitas Brawijaya)
[9] Jumadi M P, Ghozali M and Khusaini M 2013 The Impact of Fiscal Decentralization on Local Economic Development in East Java IOSR J. Humanit. Soc. Sci. 13 1–7
[10] Keuangan K 2012 Grand Design Desentralisasi Fiskal di Indonesia Jakarta Kementeri. Keuang. Republik Indones.
[11] Santosa B 2013 Pengaruh Pendapatan Asli Daerah Dan Dana Perimbangan Daerah Terhadap Pertumbuhan, Pengangguran Dan Kemiskinan 33 Provinsi Di Indonesia J. Keuang. Bisnis Progr. Stud. Magister Manaj. Sekol. Tinggi Ilmu Ekon. Harapan 5 130–43
[12] Setiyawati A and Hamzah A 2007 Analisis Pengaruh PAD, DAU, DAK, dan Belanja Pembangunan terhadap Pertumbuhan Ekonomi, Kemiskinan, dan Pengangguran: Pendekatan Analisis Jalur J. Akunt. dan Keuang. Indones. 4 211–28
[13] Mirza D S 2012 Pengaruh kemiskinan, pertumbuhan ekonomi, dan belanja modal terhadap indeks pembangunan manusia di Jawa Tengah tahun 2006-2009 Econ. Dev. Anal. J. 1