Financial independence of regencies and cities in Central Java

by Fafurida Fafurida

Financial independence of regencies and cities in Central Java

Fafurida*, Erliz Nindi Pratiwi

Department of Economics, Semarang State University, Semarang, Indonesia.
*Corresponding author. Email: fafurida@mail.unnes.ac.id

Article Info

Abstract

This research aims to identify and to map the financial independence of the local government. This research uses ratio analysis to identify the financial independent analysis and typology to map the local government financial level. The research indicates that the financial independence tends to increase in all regions. Based on the financial independent analysis, Semarang and Tegal have lower financial dependence with the consultative relationship pattern rather than 33 other regions that have higher financial dependence level with the instructive relationship pattern. The mapping results of financial independence are in the following: ten cities or regencies have self-financial dependency below the average toward the central government, seven regencies have self-sufficient above the average toward the central government, and eighteen regencies have self-sufficient below the average toward the central government.

Abstrak

Penelitian ini bertujuan untuk mengidentifikasi dan memetakan kemandirian keuangan pemerintah daerah. Penelitian ini menggunakan analisis rasio untuk mengidentifikasi analisis independensi dan tipologi keuangan untuk memetakan tingkat keuangan pemerintah daerah. Hasiln penelitian menunjukkan bahwa kemandirian finansial cenderung meningkat di semua daerah. Berdasarkan analisis independensi keuangan, Semarang dan Tegal memiliki ketergantungan finansial yang lebih rendah dengan pola hubungan konsultatif dibandingkan dengan 33 daerah lain yang memiliki tingkat ketergantungan finansial lebih tinggi dengan pola hubungan instruktif. Hasil pemetaan independensi keuangan adalah sebagai berikut, 10 kota atau kabupaten memiliki ketergantungan mandiri di bawah rata-rata terhadap pemerintah pusat, 7 kabupaten memiliki swasembada di atas rata-rata terhadap pemerintah pusat dan 18 kabupaten telah berada di bawah swadaya rata-rata terhadap pemerintah pusat.

Introduction

Economic development is an effort to create employment opportunities, to have livelihood and to provide a solid foundation for sustainable development (Muti'ah, 2017). Economic development has become an important part in the Indonesian administration since the decentralization era. This is because economic development has a broad and thorough scope in all aspects in accordance with the main characteristic that is multidimensional. Therefore, economic development serves as one measure of the success of a country. Further, Simanjuntak & Mukhlis (2015) stated that the difference in the condition of each country would require special handling.

The process of economic development of a country is influenced by the shape of the government pattern. In Indonesia, there has been a change in the government pattern from centralized to decentralized governance. The actual impact of fiscal decentralization for a country depends on the style of the existing institutions in the governance of a country (Junadi, Maski & Khusaini, 2013). This style is centralized by the government pattern, which is the implementation of a centralized approach that produces a state of the stronger dependence of a region on the central government. In its progress, the centralized system becomes a barrier to the implementation of the regional government because the problem-solving or the regional development should be with the approval of the central government. Lestari & Kholis (2016) stated that the formulation of policies, programs, and development activities in a region also need to consider the objectives of the national development. The central government still has to be involved in providing

resources in terms of funding, training, and capacity building programs and continues to monitor the local government programs or the policy implementation (Mamogale, 2014).

Therefore, in 1999 the governmental pattern in Indonesia was changed to decentralization. The implementation of decentralized pattern is expected to accommodate the paradigm change of government, to prioritize the principles of democracy, social participation, equity and justice, to pay attention to the potential differences and diversity, and to be able to prevent the disintegration of a nation. Known as a regional autonomy program, decentralization also aims to accelerate the economic growth and to reduce the regional development disparities among the regions and to improve the quality of public services (Nuf, Supratikta, & Muchtar, 2017). Paul, Renyaan, Ubud, & Idrus (2012) stated that the regional autonomy in Indonesia is viewed as a strategy to respond the local communities' demands on three main issues those are sharing of power, distribution of income, and independence of management system. According to Ratang (2016), fiscal decentralization provides broadly autonomy for the government to conduct the local financial management oriented to public interest.

Gousario & Dharmastuti (2015) stated that regional autonomy is not only to eliminate the disintegration of a nation, but also to improve the efficiency and effectivenessof the financial resource management in order to improve the welfare and service to the community. In other words, Cigu (2014) stated that the financial decentralization is realized by disposing of sufficient resources to ensure their own expenses and at the same time to achieve the decentralized powers with the help of the local public finance. Fiscal decentralization as a follow-up of decentralization encourages the region to manage the regional finance by optimizing the resources and potential of the region. The form of fiscal decentralization is the Regional Budget, which consists of postal receipts, expenditure, and regional financing.

The essence of autonomy or decentralization is democratization and empowerment. Regional autonomy as the embodiment of democracy means the equality relationship between the center and the regions, where regions have the authority to regulate and manage the interests, needs and aspirations of their people (Viphindrartin & Cahyo, 2016). The implementation result of regional autonomy shows the success or collapse through increased welfare of society. The unchanged or even lower welfare of a society shows the collapse of regional autonomy. On the other hand, the success of regional autonomy should be seen from the growing prosperity of society (Badrudin & Siregar, 2015).

Postal receipt becomes an important part in the implementation of fiscal decentralizationbecause the local revenue represents the ability of the local governments to provide the funds as a source of regional management in certain periods. Based on the data from the (Directorate General of Fiscal Balance, 2014), the postal revenues in the Regional Government Budget in 2010 to 2014 are shown in Table 1.

Table 1. Summary of postal revenues in regional government budget in 2010-2014 in national range (in million rupiah)

Items	2010	2011	2012	2013	2014
Revenues	314,486,000	459,893,000	551,947,000	652,862,000	759,476,113
Local Revenues	71,852,000	90,393,000	112,745,000	140,302,000	180,347,447
Balance Funds	292,281,000	327,368,000	380,984,000	432,697,000	482,221,112
Other Legitimate Local Revenues	22,205,000	42,132,000	58,218,000	79,866,000	96,907,544

Source: Directorate General of Fiscal Balance 2010 – 2014.

All sources of local revenues from 2010 to 2014 tend to increase. However, the balance funds still dominate the national source of local revenue (Table 1). This means that the local governments still depend on the revenues derived from the external parties such as the central government, whereas various efforts have been made to reduce the financial dependence as stated in the Legislation No. 29 of 2009 on local taxes and levies with the aim of strengthening the taxation.

Based on the data from the (Directorate General of Fiscal Balance, 2014), the Java-Bali region becomes the regional group with a proportion of balance funds to the smallest total fund compared to other regions in Indonesia. In the region, viewed from the aggregate local revenue growth of regencies/cities in provinces, the revenue growth of Central Java Province is still below the average.

In the implementation of regional autonomy, the tax may represent people's participation in the local development measured by the tax ratio. The higher the tax ratio is, the greater the tax revenues will

and so the more freely the government will finance its revenues. Based on the data from the (Directorate General of Fiscal Balance, 2014) Directorate General of Fiscal Balance (2014), of 33 provinces in Indonesia, nine provinces have the tax rate above the average. In Java-Bali region Central Java Province has the lowest tax ratio value of 0.3, which means that the average of taxes levied by the local government of regencies/cities in Central Java Province is 0.3% of the GDP of non-oil and gas.

Moreover, the success of regional autonomy can also be seen from the fiscal space, which is the flexibility level of the local government in utilizing the budgets for local priorities. In Java and Bali, Central Java Province gets the second lowest rank of all provinces in Indonesia. The interesting thing is that Central Java province as the autonomous region in Java-Bali region has the greatest receipt capability of Region Own Source Revenue among other regions but has very little fiscal space. Based on these conditions, it is very interesting to know more deeply about the finances in Central Java Province. Based on the data from the Directorate General of Fiscal Balance, the Composition of Regional Government Budget Revenue in Central Java Province can be seen in Table 2.

Table 2. Composition of aggregate regional government budget revenue in regencies and cities in Central Java province in 2010 – 2014 (in million rupiahs)

Year	2010	2011	2012	2013	2014
Local Revenues	2,958.17	3,726.29	4,885.40	6,091.50	8,849.41
Balance Funds	22,481.24	24,682.10	29,472.91	31,710.86	34,113.12
Other Legitimate Revenues	1,149.40	1,643.95	1,487.13	1,319.25	2,111.64

Source: Directorate General of Fiscal Balance 2010-2014.

Table 2 shows that all sources of local revenues have increased every year. The balance fund becomes the greatest income source compared to other income source. Therefore, the role of central/provincial government in the implementation of regional autonomy in the regencies/cities in Central Java Province is still great.

Based on the above explanation, it can be concluded that during the process of decentralization in progress, the results of implementation of regional autonomy of each region is different and the role of central government in the local governance is still great. The characteristics of a region that is capable of implementing the regional autonomy are as follows: (1) the local financial capability, which means that the region should have the authority and the capability to explore the financial sources, to manage and use its own finance that is sufficient to finance the governmental implementation, and (2) the dependence on central assistance should be as minimum as possible to make the region own source revenue part of the largest financial resources so that the role of local government becomes even greater. It is important to analyze the financial condition of local government, the local financial independence, and the mapping of local financial independence. This is conducted in an effort to achieve the success of regional autonomy.

Research Method

This research uses descriptive quantitative method, which is a research that uses numerical and graphical methods to identify the patterns of a number of data, to summarize the information contained in the data, and to present such information in the desired form. The object of research consists of 35 regencies/cities in Central Java Province. The data used in this research is secondary data in the form of data pooling. The data collection is conducted by using the documentation based on the Supreme Audit Agency of Republic of Indonesia, Representative of Central Java Province, the Directorate General of Fiscal Balance, the Central Bureau of Statistics of Central Java Province, and other literatures.

The data analysis in this research uses the ratio analysis and typology. Ratio analysis is used to identify the financial condition of the region, which consists of:
(1) Short-term solvency, which is used to know the capability of local government in ensuring the short-term liabilities. The formula is:
   a.   Ratio A = (cash/cash equivalents + short-term investments)/short-term liabilities
   b.   Ratio B = (cash/cash equivalents + short-term investments + credit)/short-term liabilities
   c.   Ratio C = (current assets/short-term liabilities).
(2) Long-term solvency, which is used to know the capability of local government in ensuring the long-term liabilities. The formula is:

a. Ratio A = total assets/long-term liabilities
b. Ratio B = total assets/total liabilities
c. Ratio C = equity of investment funds/total liabilities
(3) Service level solvency, which is used to know the capacity of local government to provide public ser-
vice needed and desired by the people. The formula is:
a. Ratio A = total capital/total population
b. Ratio B = total assets/total population
c. Ratio C = total expenditure/total population
(4) Budget solvency, which is used to know the capacity of local government to produce income to cover
the operation during the finance budget period. The formula is:
a. Ratio A = (total revenue – Special Allocation Funds)/(total expenditure – capital expenditure)
b. Ratio B = (total revenue – Special Allocation Funds)/operational expenditure
c. Ratio C = (total revenue – Special Allocation Funds)/personnel expenditure
d. Ratio D = total revenue/total expenditure.
(5) Finance flexibility, which is used to know the capability of local government to cover the debt load.
The formula is :
a. Ratio A = (total revenue – Special Allocation Funds – personnel expenditure)/(principal payment
+ interest expenditure)
b. Ratio B = (total revenue – Special Allocation Funds – personnel expenditure)/total liabilities
c. Ratio C = (total revenue – Special Allocation Funds – personnel expenditure)/total long-term lia-
bilities
d. Ratio D = (total revenue – Special Allocation Funds)/total liabilities.

Local financial independence aims to describe the regional dependence on the external funding
sources and the levels of people's participation in the local development. In this research, the local finan-
cial independence can be seen by using the ratio analysis tools as follows:

Financial dependence ratio

The ratio of local financial dependence can be calculated by comparing the amount of transfer revenues
received by the region to the total local revenues. The higher the ratio is, the greater the value of depen-
dence level of the local government on the central government will be. Besides, the dependence level of
the region indicates the capability of the local government to finance its local expenditure. Classification of
dependency can be seen in Table 3 below:

Table 3. Classification of local dependence rate

Ratio (%)	Summary
<= 25	Fiscal dependence is very little,which means that budget financial performance is excellent
26 – 50	Fiscal dependence is good enough, which means that budget financial performance is good enough
51 – 75	Fiscal dependence is great enough, which means that budget financial performance is not so good
76 – 100	Fiscal dependence is very great, which means that budget financial performance is very bad

Financial independence ratio

Financial independence ratio is used to determine the capability of local government to finance its own
activities of governance, development, and services to the people who have paid taxes and levies as the
required source of income. The formula is Local Revenues/Central or Provincial Government Assis-
tance/and Loan. From the independence ratio calculation results, there is a pattern of relationship between
the central government and local governments. Classification of this kind of relationship can be seen in
Table 4.

Typology is conducted to map the regions based on the financial independence. The mapping re-
sults are in the form of groups, in which each group's characteristic will be identified with the income ap-
proach. The typology of financial independence based on the ratio of financial independence and depen-
dence can be seen in Table 5.

Table 4. Relationship of local capability level

Independence Ratio (%)	Local Finance Capability	Independence Level	Pattern of Relationship
<= 25	Very Low	Incapable	Instructive
25 – 50	Low	Not independent Enough	Consultative
51 – 75	Medium	Independent Enough	Participative
76 – 100	High	Independent	Delegative

Table 5. Typology of local financial independence based on ratio of local financial independence and dependence

	TKtD> TKtD	TKtD< TKtD
TKD> TKD	Group I Independent region which dependencelevel is below the average	Group II Independent region which dependence level is above the average
TKD< TKD	Group III Dependent region which dependence level is below the average	Group IV Dependent region which dependence level is above the average

Explanations:
TKDi = Rate of independence ratio of region i
TKD = Average rate of local finance independence ratio
TKtDi = Rate of local finance dependence ratio of region i
TKtD = Average rate of local finance dependence ratio

Based on Table 5, the results of the typology of local financial independence consist of four groups. The classification of each group is:

1. Group I is the regions that have greater rate of independence ratio than the average of independence ratio and have smaller rate of local financial dependence ratio than the average of local financial dependence ratio. Regions in group 1 are categorized as independent which level of financial dependence on the central government/province is below the average.
2. Group II is the regions that have greater rate of independence ratio than the average of independence ratio and have greater rate of local financial dependence ratio than the average of local financial dependence. Regions in Group II are categorized as independent which level of financial dependence on the central government/province is above the average.
3. Group III is the regions that have smaller rate of independence ratio than the average of independence ratio and have smaller rate of local financial dependence ratio than the average of local financial dependence ratio. Regions in Group III are categorized as dependent which level of financial dependence on the central government/province is below the average.
4. Group IV is the regions that have smaller rate of independence ratio than the average of independence ratio and have greater rate of local financial dependence ratio than the average of local financial dependence ratio. Regions in Group IV are categorized as dependent which level of financial dependence on the central government/province is above the average.

Results and Discussion

The government financial condition indicates the capability of the local government to meet its liabilities (short-term liabilities long-term liabilities, operational liabilities, and the liabilities to provide services to the public), to anticipate the unexpected events, and to run the finance efficiently and effectively. The data processing results show the aggregate financial condition of the regencies/cities in Central Java Province in 2010 - 2014 as seen in Table 6.

It can be concluded that the government financial condition of the regencies/cities in Central Java Province in 2010-2014 is in the improving state. Although the value of short-term solvency is fluctuating, it is still very liquid to ensure the payment of short-term liabilities. Even the very high value for this ratio indicates that the local government has the excessive current assets that are better used to provide services to the public.

Table 6. Aggregate financial condition of regencies/cities in
Central Java Province in 2010 – 2014

	2010	2011	2012	2013	2014
Short-term Solvency	25.78	18.15	33.58	26.80	34.70
Long-term Solvency	1,159	1,498	2,199	3,653	11,943
Budget Solvency	1.25	1.22	1.26	1.28	1.30
Financial Flexibility	145.87	643.41	340.98	1,297.69	3,624.46
Service Level Solvency (Rp)	1,283,237	1,547,990	1,742,752	1,939,282	2,155,990

The rate of long-term solvency indicates an upward trend. This indicates that the capability of local government in Central Java Province from 2010 to 2014 is getting stronger. Therefore, the local government has a great opportunity to obtain funding from external parties when facing financial difficulties. The use of the loan must be adapted to the legislation in force, for example, the use of the loan is only for the capital expenditure.

The trend that the rate of the service level solvency increases, which means that the local government has improved in providing services to the people. For budget solvency, the rate tends to fluctuate but the government has been stated to be able to fund the local operation activities without funding transfers from the central government in the form of special allocation funds. However, the higher rate of the budget solvency ratio is getting better because there are more of the local government revenues that can be used to finance the local operational expenditure.

Last, the rate of financial flexibility shows an upward trend. This means that the local governments are more flexible to use the budget at any time when there are the unexpected expenses such as debt maturities, disasters, and many others. Financial independence in the research is measured by using the financial dependence ratio and the financial independence ratio. The results and discussion of these ratios are:

1. Financial dependence ratio

Local financial dependence ratio is used to determine the capability of the local government to finance its expenditure without depending on the fund aid from external parties. The result of the calculation of financial dependence ratios can be seen in Table 7.

Table 7. Ratio average of financial dependence of regencies/cities in
Central Java Province in 2010-2014

Local Government	Average (%)	Rank	Local Government	Average (%)	Rank
Demak Regency	90.89	1	Semarang Regency	84.48	19
Purworejo Regency	89.45	2	Pati Regency	84.31	20
Wonogiri Regency	89.38	3	Cilacap Regency	84.21	21
Pemalang Regency	89.18	4	Purbalingga Regency	83.47	22
Klaten Regency	89.09	5	Kudus Regency	83.30	23
Jepara Regency	88.65	6	Magelang City	83.25	24
Blora Regency	88.29	7	Banyumas Regency	83.21	25
Brebes Regency	88.19	8	Boyolali Regency	82.86	26
Temanggung Regency	88.10	9	Kendal Regency	82.67	27
Grobogan Regency	88.00	10	Wonosobo Regency	82.58	28
Magelang Regency	87.91	11	Salatiga City	82.14	29
Sragen Regency	87.65	12	Rembang Regency	81.35	30
Batang Regency	87.59	13	Pekalongan City	81.02	31
Karanganyar Regency	86.62	14	Sukoharjo Regency	78.89	32
Kebumen Regency	86.62	15	Surakarta City	78.48	33
Pekalongan Regency	86.56	16	Tegal City	73.05	34
Tegal Regency	86.38	17	Semarang City	66.18	35
Banjarnegara Regency	84.75	18	Average	84.54	

It can be seen that the average dependence ratio in Central Java province is 84.54%. Demak becomes a region with the highest dependence level in Central Java Province with a rate of 90.89%, which means that the budget performance is still very bad. This is because the fiscal capacity of the local government is so low that the central government pours the public allocation fund that is relatively large.

Different things happen in Purworejo Regency, which has the second highest level of financial dependence in Central Java Province. If the trend of the financial dependence ratio of Purworejo tends to fluctuate in 2010 – 2014, this indicates that the local government has not been able to maintain or increase its local capability.

The autonomous region with the lowest level of financial dependence is Semarang City. Semarang has an average ratio of 66.18% of financial dependence because the economic potential is greater than other regions, seen from the rate of GDP of Semarang City that is the largest one compared with other regions. Besides, the local government is also always able to achieve the effectiveness of its local revenue.

Of 35 autonomous regions in Central Java province, 33 regencies/cities are stated to have so large financial dependence level that the budget performance is still considered very bad. As for the other two autonomous regions, Semarang City and Tegal City are stated to have so large financial dependence level that the budget performance is considered unfavorable.

Therefore, the government should encourage the achievement of optimization of the local resources that encourage increasing the local revenue. The increase in local revenue is expected to reduce the proportion of transfer revenue to the local government. Besides, the role of transfer revenue in the form of profit sharing also cannot be excluded because the local role affects the magnitude of the profit sharing.

2.   Regional autonomy ratio

The ratio of local independence is used to show the capability of the local government to finance the local activities and the relationship between the local government and the central government. The results of the ratio calculation of the financial independence can be seen in Table 8.

Table 8. Average of financial dependence ratio of regencies/cities in Central Java Province in 2010 – 2014

Local Government	Average (%)	Pattern of Relationship	Rank	Local Government	Average (%)	Pattern of Relationship	Rank
Semarang City	44.42	consultative	1	Magelang Regency	12.01	constructive	19
Tegal City	33.42	consultative	2	Sragen Regency	11.92	instructive	20
Surakarta City	23.89	instructive	3	Jepara Regency	11.85	instructive	21
Magelang City	20.06	constructive	4	Batang Regency	11.81	instructive	22
Salatiga City	19.49	constructive	5	Purworejo Regency	11.15	instructive	23
Pekalongan City	18.22	constructive	6	Tegal Regency	11.15	instructive	24
Banyumas Regency	17.61	constructive	7	Wonosobo Regency	11.04	instructive	25
Semarang Regency	16.24	constructive	8	Grobogan Regency	10.72	instructive	26
Sukoharjo Regency	15.81	constructive	9	Temanggung Regency	10.68	instructive	27
Cilacap Regency	14.87	constructive	10	Demak Regency	10.05	instructive	28
Kudus Regency	13.88	constructive	11	Pemalang Regency	9.97	instructive	29
Pati Regency	13.7	constructive	12	Banjarnegara Regency	9.66	instructive	30
Pekalongan Regency	13.6	constructive	13	Brebes Regency	9.1	instructive	31
Purbalingga Regency	13.6	constructive	14	Kebumen Regency	9.03	instructive	32
Boyolali Regency	13.25	constructive	15	Wonogiri Regency	8.72	instructive	33
Rembang Regency	12.75	constructive	16	Blora Regency	8.34	instructive	34
Karanganyar Regency	12.46	constructive	17	Klaten Regency	7.2	instructive	35
Kendal Regency	12.4	constructive	18	Average	14.4		

It is known that the average of financial independence ratio in Central Java Province in 2010-2014 is 14.4%. Of 35 autonomous regions, there are 33 regencies/cities that are stated to have the very low financial capability with the instructive relationship pattern with the central government, while the two autonomous regions, Semarang City and Tegal City, are stated to have the unfavorable financial independence level, the low financial capability, with the consultative pattern of relationship with the central government.

Semarang and Tegal have the consultative pattern of relationship with the central government, which means that the governments of Semarang and Tegal are little more able to implement the regional autonomy and the intervention of the central government has begun to diminish. Meanwhile, the 33 regencies/cities have the instructive pattern of relationships, which means that the central government's role is still so large and even dominant that the regions are considered not able to fully implement the regional autonomy.

Semarang City government becomes the most independent region in Central Java Province because the government officials are able to carry out the development and assessment to increase the local revenue. This can be seen in the massive use of technology in various kinds of government activities and the active socialization to increase the local revenue. Semarang financial independence is also supported by the growth of GDP that is increasing every year. The main sectors contributing the GDP of Semarang are kinds of field processing industry, construction, and wholesale and retail trade, repair and maintenance of cars and motorcycles. GDP of Semarang supports the local financial independence because the average elasticity of local revenue to the GDP of Semarang in 2010 - 2014 is 4.13. It means that any increase in the GDP by 1% will increase the local revenue of 4.13%.

Klaten Regency becomes a region with the lowest level of financial independence because the transfer fund in the form of general allocation funds become the major source of local revenue. In 2014, the general allocation fund amounts Rp 1,142,586,588,000.00 while the total local revenue is Rp 1,866,506,500,772.00. This means that the local government finances the local activities using the funds from the central/provincial government and few activities are funded from the local revenues. With the general allocation fund of Klaten which amount is nearly half of the total revenues, it seems that the revenues are more allocated for the operational expenditure, especially personnel expenses. Capital expenditure is relatively small in proportion to the local expenditure.

Based on the result of independence and the regional autonomy, Central Java has not fully economically independent yet. This result is based on the previous research of Viphindrartin & Cahyo (2016) that East Java, which also implements the regional autonomy, has not fully independent. But the result of this research states that Central Java has constructive pattern between central government and local government, which could mean that the central government's role is less dominant than the local government independence itself. Meanwhile East Java has instructive pattern between central government and local government, which could mean that the central government's role is more dominant than the local government independence itself.

3.   Regional mapping through typology of local financial independence

Regional mapping using the typology of financial independence is to classify the region based on the average ratio value of the local financial dependency and the average of local financial independence ratio. The results of the typology of financial independence can be seen in Figure 1.
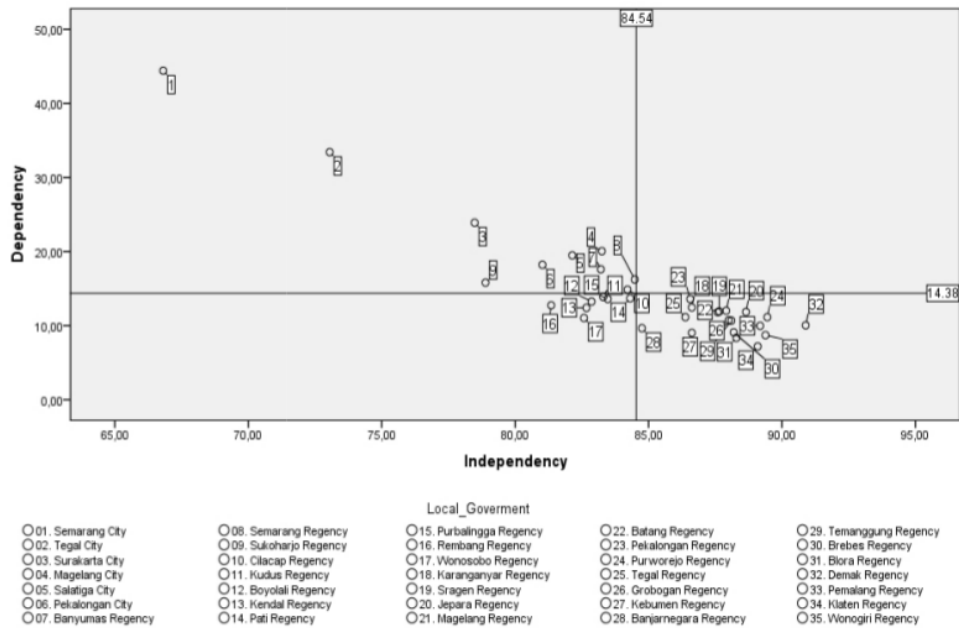
Figure 1 shows the classification of autonomous regions based on the local financial independence. The vertical center line is the average rate of financial independence ratio of regencies/cities in Central Java Province in 2010-2014, while the horizontal center line is the average rate of financial dependence ratio of regencies/cities in Central Java Province in 2010-2014.

When the financial independence ratio is getting away from point 0, the region is getting more independent, and vice-versa. This is different from the dependence level, in which the farther the ratio of financial dependence from the point 0 is, the more the local government will tend to depend on the transfer fund from the central government or the provinces.

Group I consists of the Banyumas Regency, Cilacap Regency, Semarang Regency, Sukoharjo Regency, Magelang City, Pekalongan City, Salatiga City, Semarang City, Surakarta City, and Tegal City. This region has the rate of independence ratio of more than 14.38% and the rate of dependence ratio of less than 84.54%.

There is no cities and regencies in Group II. However, based on the typology of financial independence, no governments of regencies/cities in Central Java Province fall into this category. This is because no regions have the rate of independence ratio of more than 14.38% and the financial dependence ratio of more than 85.54%.

Group III consist of seven regencies. This group is the dependent regions which local financial dependence level is below the average. Group III consists of Boyolali Regency, Kendal Regency, Kudus Regency, Pati Regency, Purbalingga Regency, Rembang Regency, and Wonosobo Regency. These regions have the independence rate of less than 14.38% while the rate of financial dependence ratio is less than 84.54%.

Figure 1. Typology of financial independence in Central Java Province

Local_Goverment

01. Semarang City	08. Semarang Regency	15. Purbalingga Regency	22. Batang Regency	29. Temanggung Regency
02. Tegal City	09. Sukoharjo Regency	16. Rembang Regency	23. Pekalongan Regency	30. Brebes Regency
03. Surakarta City	10. Cilacap Regency	17. Wonosobo Regency	24. Purworejo Regency	31. Blora Regency
04. Magelang City	11. Kudus Regency	18. Karanganyar Regency	25. Tegal Regency	32. Demak Regency
05. Salatiga City	12. Boyolali Regency	19. Sragen Regency	26. Grobogan Regency	33. Pemalang Regency
06. Pekalongan City	13. Kendal Regency	20. Jepara Regency	27. Kebumen Regency	34. Klaten Regency
07. Banyumas Regency	14. Pati Regency	21. Magelang Regency	28. Banjarnegara Regency	35. Wonogiri Regency

Group IV consist of 18 regencies. This group is the dependent regions but the financial dependence level on the central government or provinces is above the average. This group consists of Banjarnegara Regency, Batang Regency, Blora Regency, Brebes Regency, Demak Regency, Grobogan Regency, Jepara Regency, Karanganyar Regency, Kebumen Regency, Klaten Regency, Magelang Regency, Pekalongan Regency, Pemalang Regency, Purworejo Regency, Sragen Regency, Tegal Regency, Temanggung Regency, and Wonogiri Regency. These regions have the rate of financial independence ratio of less than 14.38% while the rate of financial dependence ratio is more than 84.54%.

Based on the results of typology of local financial independence shown in Figure 1, some characteristics of each group can be arranged. These characteristics are conducted by looking at the financial capability of the local governments. Group I, the growth of its local revenue tends to be stable between +/- 30% annually; the local taxes become a major source of income followed by other legitimate local revenues, the local levies, and the wealth management results that are separated. The result of management is still very low when compared to other sources of local revenues. The sources of local revenues have been obtained effectively even the realization of local taxes are very effective. Recently, the elasticity trend of the local revenues to the GDP tends to be stable.

Group III is shown by the orange color, which consists of seven local governments. The characteristics of group III are: the local revenue (PAD) growth tends to fluctuate between 20% - 56.65%, but is still lower than group I and II; other legitimate PAD becomes the main source of revenues, while taxes and levies give small contribution; the PAD reception is relatively effective, the trend of levies is less stable; PAD elasticity to the GDP is higher than group II.

Group IV is shown by the red color, which consists of 18 local governments. The characteristics of group IV are: the PAD growth trend is increasing in 2010 - 2014; other legitimate PAD becomes the main source of revenues, but other sources of revenues are also increasing; the government has been very effective in collecting the local revenue; PAD is also elastic to the GDP.

From these characteristics, some strategies can be drawn up to improve the local financial independence. Group I is maintaining the PAD growth to be always positive through the policy of intensification and extension; the levies need to be improved in quantity and level of effectiveness; giving more attention to public enterprises (BUMD); encouraging the local economic growth; and improving the local assets.

Group III is creating the conducive economic conditions to encourage the local economic growth and PAD; implementing the policy of intensification and extension of PAD; optimization and improvement of BUMD; supervision in the process of collecting levies; improving the performance of the government apparatus and the use of technology in the process of local financial management.

Group IV is creating the conducive economic conditions in order to increase the PAD and the economic growth; the policy of intensification and extension of taxes and levies; supervising the collection of local levies because of fluctuating and less effective; improving the performance of BUMD to be more effective and efficient; and improving the quality of human resources and technology.

We could say that the financial independence ratio that is far from point 0 indicates that a region becomes more independent, and vice versa. On the contrary, the dependence level with the regional financial dependence ratio that is far from point 0 indicates that the local government tends to depend on funding transfer from the central or local government.

Based on the calculation of indicators of the local government financial condition, it is known that in 35 districts/cities in Central Java Province the rate of each indicator tends to increase from 2010 to 2014. It means that in this period, the local governments are able to improve their regional ability to manage the finance and to improve the services to the people in the regions.

This research is in line with previous research conducted by Ritonga, Clark, & Wickremasinghe (2012), which examined the analysis of local government financial condition in Indonesia, which indicated that the local government financial condition is in good condition in terms of the rate of short-term solvency dimension, long-term solvency, and financial flexibility. Budget solvency demonstrates the ability of the local governments to cover all expenditures. It cannot be concluded for the service level solvency because there is no differentiation between good or bad conditions, but an increased ratio shows the service improvement to the community.

Conclusion

The aggregate financial condition of the government of regencies/cities in Central Java Province in 2010-2014 is in the improving state. The values of each indicator such as short-term solvency, long-term solvency, service level solvency, budget solvency and financial flexibility show the upward trend every year.

The financial independence of local government based on the financial dependence and independence ratio is that Semarang and Tegal Cities are stated to have high enough rate of financial dependency on the central or provincial government and the unfavourable financial independence level with consultative relationship pattern. The remaining of 33 regencies/cities in Central Java Province are stated to have the very high dependence level on the central government and have not been able to implement the local autonomy with the instructive relationship pattern with the central government.

Regional mapping through typology of financial independence of the autonomous regions are divided into four groups. Group I consists of ten local governments. In group II there is no autonomous regions included in the classification. Group III consists of seven local governments. Group IV consists of eighteen local governments.

The government needs to improve and maintain the local financial condition in good condition by increasing the current assets, especially the short-term investment, in order to avoid idle assets, particularly the transfer of cash; improving the long-term investment to gain more profits to increase the local revenues; adding the local fixed asset that can improve the level of service to the public; maintaining and improving coordination in the preparation of the local government's budget; and trying to achieve the accretion of local assets that are greater than the accretion of local government liabilities, which can be conducted by taking out a loan just for infrastructure development activities, not for the local operational activities. Therefore, the role of decision makers in budgeting and managing the local budget is very large in determining the financial condition of local government.

Semarang can be chosen as a pilot project for the improvement of local financial independence in Central Java Province. Other local governments may imitate, innovate, and study the policies made by the Government of Semarang that possibly match the potential of the region.

There are some strategies to increase the financial independence: making the policy of intensification and extension of PAD, creating the conditions and situation that are conducive to encourage the local economic growth, achieving the effectiveness and efficiency of enterprises, improving the quality of human resources and technology, and minimizing the elements of debt in the local finance.

References

Badrudin, R., & Siregar, B. (2015). The evaluation of the implementation of regional autonomy in Indonesia. *Economic Journal of Emerging Markets*, *7*(1), 1–11. https://doi.org/10.20885/ejem.vol7.iss1.art1

Cigu, E. (2014). An aproach of local financial autonomy and implication over sustainable development in the knowledge society. *Journal of Public Administration, Finance and Law*, *6*, 44–53.

Directorate General of Fiscal Balance. (2014). Regional Government Budget in 2010 to 2014. Retrieved July 23, 2017, from www.djpk.kemenkeu.go.id

Gousario, F., & Dharmastuti, C. F. (2015). Regional financial performance and human development index based on study in 20 counties/cities of level I region. *Journal The WINNERS*, *16*(2), 152–165.

Junadi, Maski, G., & Khusaini, M. (2013). The impact of fiscal decentralization on local economic development in East Java. *IOSR Journal Of Humanities And Social Science*, *13*(1), 1–7.

Lestari, E. P., & Kholis, M. (2016). The practices of regional autonomy in Central Java and its implication on economic competitiveness. *Journal of Economics, Business and Management*, *4*(5), 358–362. https://doi.org/10.18178/joebm.2016.4.5.417

Mamogale, M. (2014). Financial performance of local government in Limpopo Province, 2010-2012. *African Studies Quarterly*, *15*(1), 71–92. Retrieved from http://sites.clas.ufl.edu/africa-asq/files/Volume-15-Issue-1-Mamogale.pdf

Muti'ah. (2017). The effect of regional revenue, revenue sharing fund, general allocation fund and special allocation fund on regional economic growth (Empirical study in the 33 provinces in Indonesia year 2011-2014). *Research Journal of Finance and Accounting*, *8*(8), 102–112.

Nufus, K., Supratikta, H., & Muchtar, A. (2017). Analysis of financial performance of local government through South Tangerang calculation of realization regional budget. *European Journal of Business and Management*, *9*(3), 136–146.

Paul, J., Renyaan, A., Ubud, S., & Idrus, M. S. (2012). Effect of fiscal autonomy and economic growth on local financial performance (A study on local government of Papua Province). *Journal of Asian Scientific Research*, *1*(1), 16–21. https://doi.org/10.18488/journal.2/2015.5.7/2.7.340.348

Ratang, S. (2016). Analysis of financial performance of local government Keerom fiscal year 2009 – 2013. *Journal of Social and Development Sciences*, *7*(1), 31–39.

Ritonga, I. T., Clark, C., & Wickremasinghe, G. (2012). Assessing financial condition of local government in Indonesia   : An exploration*Public and Municipal Finance*, *1*(2).

Simanjuntak, T. H., & Mukhlis, I. (2015). Empirical study about the interaction between equalization funds, regional financial and human development Index in Regional Economic. *International Journal of Economics and Finance*, *7*(1), 192–203. https://doi.org/10.5539/ijef.v7n1p192

Viphindrartin, S., & Cahyo, H. (2016). Analysis of economic performance as the independence indicators of government in East Java Province. *Review of Integrative Business and Economics Research*, *5*(32), 272–286.

Financial independence of regencies and cities in Central Java

PRIMARY SOURCES

1	journal.uii.ac.id Internet Source	2%
2	Submitted to Universiti Malaysia Perlis Student Paper	1%
3	Submitted to Universitas Jenderal Soedirman Student Paper	1%
4	Rosmeli Rosmeli, Nurhayani Nurhayani. "Financial capacity of provinces in Sumatra during regional autonomy era", Jurnal Perspektif Pembiayaan dan Pembangunan Daerah, 2019 Publication	1%
5	Submitted to Shanghai American School Student Paper	1%
6	Submitted to International University of Japan Student Paper	1%
7	Submitted to Universitas Diponegoro Student Paper	1%
8	A Karim, D S Sarra, R Wasono, T W Utami, Toheri. "Spatial modelling for rice production	1%

analysis in Central Java province Indonesia",
Journal of Physics: Conference Series, 2019
Publication

9	Submitted to Fakultas Ekonomi Universitas Indonesia Student Paper	1%
10	Joko Tri Haryanto. "Regional financial performance evaluation in the Indonesian fiscal decentralization era", Jurnal Perspektif Pembiayaan dan Pembangunan Daerah, 2018 Publication	<1%
11	Submitted to Universitas Brawijaya Student Paper	<1%
12	Submitted to UIN Ar-Raniry Student Paper	<1%
13	www.jopafl.com Internet Source	<1%
14	ijbmi.org Internet Source	<1%
15	clok.uclan.ac.uk Internet Source	<1%
16	www.kosmix.com Internet Source	<1%
17	www.ccsenet.org Internet Source	<1%

18	garuda.ristekdikti.go.id Internet Source	<1%
19	Syamsul Huda, Wiwin Priana, Zumrotul Fitriyah. "Regional Financial Model Mapping Independence to Fiscal in East Java", International Journal of Financial Research, 2019 Publication	<1%
20	I. Made Sudana, Okta Purnawirawan, Ulfa Mediaty Arief. "Prediction system of hydroponic plant growth and development using algorithm Fuzzy Mamdani method", AIP Publishing, 2017 Publication	<1%
21	Submitted to Sriwijaya University Student Paper	<1%
22	www.aircanada.com Internet Source	<1%
23	Submitted to Politeknik Negeri Sriwijaya Student Paper	<1%
24	Nur Dewi Natrini, Irwan Taufiq Ritonga. "Design and Analysis of Financial Condition Local Government Java and Bali (2013-2014)", SHS Web of Conferences, 2017 Publication	<1%
25	www.questia.com Internet Source	<1%

26 Submitted to iGroup
Student Paper
<1%

27 www.un.or.id
Internet Source
<1%

28 Submitted to Atlantic International University
Student Paper
<1%

29 Submitted to University of Baltimore
Student Paper
<1%

30 www.unisdr.org
Internet Source
<1%

31 Submitted to Universitas Pendidikan Indonesia
Student Paper
<1%

32 Submitted to Flinders University
Student Paper
<1%

33 Simanjuntak, Timbul Hamonangan, and Imam Mukhlis. "Empirical Study about The Interaction Between Equalization Funds, Regional Financial and Human Development Index in Regional Economic", International Journal of Economics and Finance, 2014.
Publication
<1%

34 Mohammad Rofiuddin. "Competitiveness and structural change in Salatiga economy", Indonesian Journal of Islamic Economics Research, 2019
<1%

Publication

35 Submitted to Udayana University
Student Paper
<1%

36 Submitted to Kenyatta University
Student Paper
<1%

37 Submitted to Hitotsubashi University
Student Paper
<1%

38 Submitted to University of Leicester
Student Paper
<1%

39 Mehran Hajilou, Mohammad Mirehei, Sohrab Amirian, Mehdi Pilehvar. "Financial Sustainability of Municipalities and Local Governments in Small-Sized Cities; a Case of Shabestar Municipality", Lex localis - Journal of Local Self-Government, 2018
Publication
<1%

40 Submitted to International Institute of Social Studies - Erasmus University Rotterdam
Student Paper
<1%

41 jpas.ub.ac.id
Internet Source
<1%

42 onlinesciencepublishing.com
Internet Source
<1%

43 Isabel-María García-Sánchez, Noemí Mordán, Beatriz Cuadrado-Ballesteros. "Do electoral
<1%

cycles affect local financial health?", Policy Studies, 2014

44	Submitted to University of Malaya Student Paper	<1%
45	Submitted to University of South Africa Student Paper	<1%
46	www.wbiworldconpro.com Internet Source	<1%
47	worldwidescience.org Internet Source	<1%
48	scholar.ufs.ac.za:8080 Internet Source	<1%
49	Submitted to Massey University Student Paper	<1%

Exclude quotes   On   Exclude matches   Off
Exclude bibliography   On