



## MAPPING OF SECTORAL ADVANTAGES AS A DRIVER OF THE REGIONAL ECONOMY

Suparmono

Management Department  
Sekolah Tinggi Ilmu Manajemen YKPN Yogyakarta  
Indonesia  
[suparmono.pasca@gmail.com](mailto:suparmono.pasca@gmail.com), [suparmono@stimykpn.ac.id](mailto:suparmono@stimykpn.ac.id)

\*Corresponding Author email: [suparmono.pasca@gmail.com](mailto:suparmono.pasca@gmail.com), [suparmono@stimykpn.ac.id](mailto:suparmono@stimykpn.ac.id)

Submission: 20 November 2020

Revised: 24 December 2020

Accepted: 19 January 2021

*Peer-review under responsibility of 6th Asia International Conference 2020 (Online) Scientific Committee*

<http://connectingasia.org/scientific-committee/>

© 2021 Published by Readers Insight Publisher,

Office # 6, First Floor, A & K Plaza, Near D Watson, F-10 Markaz, Islamabad, Pakistan,

[editor@readersinsight.net](mailto:editor@readersinsight.net)

*This is an open access article under the CC BY license (<http://creativecommons.org/licenses/4.0/>).*



## ABSTRACT

The purpose of this research is to analyze the sectoral difference between provinces in Indonesia. The analytical tool used in this study is the position quotient (LQ) analysis. The results indicate that the LQ value in agriculture, forestry and fisheries has an advantage in almost all provinces, as shown by the LQ value  $> 1$ . West Sulawesi is the province which has the highest LQ value for the agricultural sector, namely 3.08. The agriculture, forestry and fishery sectors of West Sulawesi have production that is far from being accomplished. The national capital has the lowest competitiveness in the farming and mining industries. Nevertheless, DKI Jakarta has competition in the financial and insurance services market, the real estate sector, the corporate services industry and other service sectors. The delivery of sectors that have advantages in and in the region has also been distinguished.

**Keywords:** *Inequality, Location Quotient, Development*

## RESEARCH HIGHLIGHTS

The most prevalent method for reducing deprivation, raising living conditions and rising income inequalities in developing countries is economic growth (Aneja et al., 2020). To clarify foreign exchange, there are several scientific definitions available (Benalywa et al., 2019). Both cross-country research and national qualitative assessments give compelling evidence that progress against the Millennium Development Goals must be achieved further, quickly and reliably. Existing research suggests that substantial regional variations in adiposity are growing across regions, especially in developed countries (Davillas and Jones, 2020) (Irsahd and Xin, 2017). Transition economies are described as a community of countries transitioning from planned economies to market economies (Le et al., 2019). The occupations of citizens are closely connected to different aspects of discrimination, such as income disparities, wellbeing, control, or the possibility of temporary employment. There is controversy about the theories and processes that connect occupations to these disparities (Haupt and Ebner, 2020).

---

## Research Objectives

This study aims to analyze sectoral inequality between provinces in Indonesia. The analytical tool used in this research is the Location quotient (LQ) analysis.

## Methodology

The Location Quotient (LQ) is a way to measure the concentration of a business in a location relative to a wider geographical area. Based on job data, LQ may be used to analyze economic dependencies, where higher industry LQ suggests greater dependency on that sector compared to other areas in the wider geographic region (Smith et al., 2019). Provided a series of methods to create a complex position quotient (LQ) models-based regional competitiveness index (Banerjee et al., 2020). LQ value greater than 1 indicates that a sector can meet local needs and has the potential to be exported outside the region. Besides that,

the LQ value of more than 1 is also an indication that the sector has a more significant proportion compared to the average of another region.

$$LQ_{ik} = \frac{X_{ik} / X_k}{X_{in} / X_n}$$

X = sectoral added value i = sector or business field i, k = regional k, n = national.

## Results

1. There are still disparities between provinces in Indonesia. In addition, DKI Jakarta as the nation's capital is still the center of economic activity and has a centrality of excellence by having 11 superior sectors. Some provinces that do not have the advantage
2. LQ value in agriculture, forestry, and fisheries in almost all provinces has an LQ value > 1. This sector shows that Indonesia is a country that is still dependent on the agricultural sector. West Sulawesi is a province with the largest LQ value for this sector which is 3.0799. This means that West Sulawesi's agriculture, forestry and fisheries sectors have much higher production than all Indonesia's other provinces' average output.
3. The sector that experiences high inequality in Indonesia is for the Electricity and Gas Procurement sector. This is because in Indonesia only Banten Province and Lampung Province have competitiveness compared to other provinces.
4. DKI Jakarta is a province that has the highest competitiveness for four sectors, namely the Financial Services and Insurance sector (2.7767), Real Estate (2.2920), Company Services (4,5077), and Other services (2.2042 ).

## Findings

The number of provinces that have competitive advantages from table 1 is only 19 out of 34 provinces in Indonesia. This shows that there are still disparities between provinces in Indonesia. In addition, DKI Jakarta as the nation's capital is still the center of economic activity and has a centrality of excellence by having 11 superior sectors. Some provinces that do not have the advantage of a single sector are North Sumatra, West Sumatra, South Sumatra, Bengkulu, Lampung, Bangka Belitung and Jambi on the island of Sumatra.

## Acknowledgement

The author would like to thank Sinergi Visi Utama Consulting for Data and theoretical review for this manuscript. Badan Perencanaan Pembangunan Nasional Republik Indonesia (National Development Planning Agency of the Republic of Indonesia) for data and financial support. Sekolah Tinggi Ilmu Manajemen YKPN Yogyakarta which has provided funding to conduct research.

## References

- Aneja, R., Barkha, Bandy, U.J., 2020. Regional Economic Growth and Inequality in India: A Sector-wise Decomposition Analysis. *Arthaniti J. Econ. Theory Pract.* 097674792091082. <https://doi.org/10.1177/0976747920910825>
- Banerjee, S., Chakrabarti, B.K., Mitra, M., Mutuswami, S., 2020. On the Kolkata index as a measure of income inequality. *Phys. A Stat. Mech. its Appl.* 545, 123178. <https://doi.org/10.1016/j.physa.2019.123178>
- Benalywa, Z.A., Ismail, M.M., Shamsudin, M.N., Yusop, Z., 2019. Revealed comparative advantage and competitiveness of broiler meat products in Malaysia and selected exporting countries. *Int. J. Bus. Soc.* 20, 383–396.
- Davillas, A., Jones, A.M., 2020. Regional inequalities in adiposity in England: distributional analysis of the contribution of individual-level characteristics and the small area obesogenic environment. *Econ. Hum. Biol.* 38, 100887. <https://doi.org/10.1016/j.ehb.2020.100887>
- Haupt, A., Ebner, C., 2020. Occupations and Inequality: Theoretical Perspectives and Mechanisms. *Kolner Z. Soz. Sozpsychol.* <https://doi.org/10.1007/s11577-020-00685-0>
- Irsahd, M.S., Xin, Q., 2017. Determinants of Exports Competitiveness: An Empirical Analysis through Revealed Comparative Advantage of External Sector of Pakistan. *Asian Econ. Financ. Rev.* 7, 623–633. <https://doi.org/10.18488/journal.aefr.2017.76.623.633>
- Le, Q.H., Ho, H.L., Mai, N.C., 2019. The impact of financial inclusion on income inequality in transition economies. *Manag. Sci. Lett.* 9, 661–672. <https://doi.org/10.5267/j.msl.2019.2.005>
- Smith, L.M., Harwell, L.C., Summers, J.K., Bousquin, J., Buck, K.D., Harvey, J.E., McLaughlin, M., 2019. Using re-scaled resilience screening index results and location quotients for socio-ecological characterizations in U.S. coastal regions. *Front. Environ. Sci.* 7, 1–17. <https://doi.org/10.3389/fenvs.2019.00096>

## Author's Biography



*Graduated with bachelor's and master's degree in economics from the economics faculty of Gadjah Mada University, Yogyakarta. Doctoral Program in Economics, University of Sebelas Maret Surakarta.*

*Major in the fields of regional economics, international trade, and monetary.*



## MAPPING OF SECTORAL ADVANTAGES AS A DRIVER OF THE REGIONAL ECONOMY

**Suparmono**

Management Department  
Sekolah Tinggi Ilmu Manajemen YKPN Yogyakarta  
Indonesia  
suparmono.pasca@gmail.com, suparmono@stimykn.ac.id

*\*Corresponding author's Email:* [suparmono.pasca@gmail.com](mailto:suparmono.pasca@gmail.com), [suparmono@stimykn.ac.id](mailto:suparmono@stimykn.ac.id)  
<https://readersinsight.net/APSS/authorDashboard/submission/1753>

*Peer-review under responsibility of 4th Asia International Multidisciplinary Conference 2020 Scientific Committee*

<http://connectingasia.org/scientific-committee/>

© 2020 Published by Readers Insight Publisher,

Office # 6, First Floor, A & K Plaza, Near D Watson, F-10 Markaz, Islamabad. Pakistan,

[editor@readersinsight.net](mailto:editor@readersinsight.net)

*This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).*



Copyright © 2020 Authors. This is an open access article distributed under the [Creative Commons Attribution License](http://creativecommons.org/licenses/by-nc-nd/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.



## Abstract

The purpose of this research is to analyze the sectoral difference between provinces in Indonesia. The analytical tool used in this study is the position quotient (LQ) analysis. The results indicate that the LQ value in agriculture, forestry and fisheries has an advantage in almost all provinces, as shown by the LQ value  $> 1$ . West Sulawesi is the province which has the highest LQ value for the agricultural sector, namely 3.08. The agriculture, forestry and fishery sectors of West Sulawesi have production that is far from being accomplished. The national capital has the lowest competitiveness in the farming and mining industries. Nevertheless, DKI Jakarta has competition in the financial and insurance services market, the real estate sector, the corporate services industry and other service sectors. The delivery of sectors that have advantages in and in the region has also been distinguished.

**Keywords:** *Inequality, Location Quotient, Development*

## Research Highlights

The most prevalent method for reducing deprivation, raising living conditions and rising income inequalities in developing countries is economic growth (Aneja et al., 2020). To clarify foreign exchange, there are several scientific definitions available (Benalywa et al., 2019). Both cross-country research and national qualitative assessments give compelling evidence that progress against the Millennium Development Goals must be achieved further, quickly and reliably. Existing research suggests that substantial regional variations in adiposity are growing across regions, especially in developed countries (Davillas and Jones, 2020) (Irsahd and Xin, 2017). Transition economies are described as a community of countries transitioning from planned economies to market economies (Le et al., 2019). The occupations of citizens are closely connected to different aspects of discrimination, such as income disparities, wellbeing, control, or the possibility of temporary employment. There is controversy about the theories and processes that connect occupations to these disparities (Haupt and Ebner, 2020).

---

## Research Objectives

This study aims to analyze sectoral inequality between provinces in Indonesia. The analytical tool used in this research is the Location quotient (LQ) analysis.

## Methodology





The Location Quotient (LQ) is a way to measure the concentration of a business in a location relative to a wider geographical area. Based on job data, LQ may be used to analyze economic dependencies, where higher industry LQ suggests greater dependency on that sector compared to other areas in the wider geographic region (Smith et al., 2019). Provided a series of methods to create a complex position quotient (LQ) models-based regional competitiveness index (Banerjee et al., 2020). LQ value greater than 1 indicates that a sector can meet local needs and has the potential to be exported outside the region. Besides that, the LQ value of more than 1 is also an indication that the sector has a more significant proportion compared to the average of another region.

$$LQ_{ik} = \frac{X_{ik} / X_k}{X_{in} / X_n}$$

X = sectoral added value i = sector or business field i, k = regional k, n = national.

## Results

1. There are still disparities between provinces in Indonesia. In addition, DKI Jakarta as the nation's capital is still the center of economic activity and has a centrality of excellence by having 11 superior sectors. Some provinces that do not have the advantage
2. LQ value in agriculture, forestry, and fisheries in almost all provinces has an LQ value > 1. This sector shows that Indonesia is a country that is still dependent on the agricultural sector. West Sulawesi is a province with the largest LQ value for this sector which is 3.0799. This means that West Sulawesi's agriculture, forestry and fisheries sectors have much higher production than all Indonesia's other provinces' average output.
3. The sector that experiences high inequality in Indonesia is for the Electricity and Gas Procurement sector. This is because in Indonesia only Banten Province and Lampung Province have competitiveness compared to other provinces.
4. DKI Jakarta is a province that has the highest competitiveness for four sectors, namely the Financial Services and Insurance sector (2.7767), Real Estate (2.2920), Company Services (4,5077), and Other services (2.2042).

## Findings

The number of provinces that have competitive advantages from table 1 is only 19 out of 34 provinces in Indonesia. This shows that there are still disparities between provinces in Indonesia. In addition, DKI Jakarta as the nation's capital is still the center of economic activity and has a centrality of excellence by having 11 superior sectors. Some provinces that





do not have the advantage of a single sector are North Sumatra, West Sumatra, South Sumatra, Bengkulu, Lampung, Bangka Belitung and Jambi on the island of Sumatra.

## Acknowledgement

The author would like to thank Sinergi Visi Utama Consulting for Data and theoretical review for this manuscript. Badan Perencanaan Pembangunan Nasional Republik Indonesia (National Development Planning Agency of the Republic of Indonesia) for data and financial support. Sekolah Tinggi Ilmu Manajemen YKPN Yogyakarta which has provided funding to conduct research.

## References

- Aneja, R., Barkha, Banday, U.J., 2020. Regional Economic Growth and Inequality in India: A Sector-wise Decomposition Analysis. *Arthaniti J. Econ. Theory Pract.* 097674792091082. <https://doi.org/10.1177/0976747920910825>
- Banerjee, S., Chakrabarti, B.K., Mitra, M., Mutuswami, S., 2020. On the Kolkata index as a measure of income inequality. *Phys. A Stat. Mech. its Appl.* 545, 123178. <https://doi.org/10.1016/j.physa.2019.123178>
- Benalywa, Z.A., Ismail, M.M., Shamsudin, M.N., Yusop, Z., 2019. Revealed comparative advantage and competitiveness of broiler meat products in Malaysia and selected exporting countries. *Int. J. Bus. Soc.* 20, 383–396.
- Davillas, A., Jones, A.M., 2020. Regional inequalities in adiposity in England: distributional analysis of the contribution of individual-level characteristics and the small area obesogenic environment. *Econ. Hum. Biol.* 38, 100887. <https://doi.org/10.1016/j.ehb.2020.100887>
- Haupt, A., Ebner, C., 2020. Occupations and Inequality: Theoretical Perspectives and Mechanisms. *Kolner Z. Soz. Sozpsychol.* <https://doi.org/10.1007/s11577-020-00685-0>
- Irsahd, M.S., Xin, Q., 2017. Determinants of Exports Competitiveness: An Empirical Analysis through Revealed Comparative Advantage of External Sector of Pakistan. *Asian Econ. Financ. Rev.* 7, 623–633. <https://doi.org/10.18488/journal.aefr.2017.76.623.633>
- Le, Q.H., Ho, H.L., Mai, N.C., 2019. The impact of financial inclusion on income inequality in transition economies. *Manag. Sci. Lett.* 9, 661–672. <https://doi.org/10.5267/j.msl.2019.2.005>
- Smith, L.M., Harwell, L.C., Summers, J.K., Bousquin, J., Buck, K.D., Harvey, J.E., McLaughlin, M., 2019. Using re-scaled resilience screening index results and location quotients for socio-ecological characterizations in U.S. coastal regions. *Front. Environ. Sci.* 7, 1–17. <https://doi.org/10.3389/fenvs.2019.00096>

## Author's Biography







*Graduated with bachelor's and master's degree in economics from the economics faculty of Gadjah Mada University, Yogyakarta. Doctoral Program in Economics, University of Sebelas Maret Surakarta.*

*Major in the fields of regional economics, international trade, and monetary.*

<https://readersinsight.net/APSS/authorDashboard/submission/1753>



**ASIA**  
ACADEMIA SOCIETY & INDUSTRY ALLIANCE



## 6th ASIA International Conference (AIC2020)

### Acceptance of Abstract

---

Ref:AIC-2020-EIEF-296

Dear SUPARMONO SUPARMONO,

I am pleased to inform you that your abstract entitled **MAPPING OF SECTORAL ADVANTAGES AS A DRIVER OF THE REGIONAL ECONOMY** has been accepted for online presentation in **6th ASIA International Conference (AIC2020)** after peer review by the editorial board (AIC2020). Please note that the conference will be held on 18-20 December 2020 at Online Video Conferencing. You are hereby requested to upload full paper along with payment proof at <https://portal.connectingasia.org/> within 14 days. Participants who can't ensure their presences at conference venue are allowed to present virtually through **video conferencing using Skype**. This paper will be published in an SCOPUS / ISI Indexed journal as mentioned in the conference website (see link for detail).

For future correspondence, use this **AIC-2020-EIEF-296** as reference. If you have any queries, feel free to contact any of the undersigned accordingly.

**Dr. Muhammad Imran Qureshi**

Conference Chair

6th ASIA International Conference (AIC 2020)

**Email:** [info@connectingasia.org](mailto:info@connectingasia.org)

**Website:** <http://www.connectingasia.org>

(<http://www.connectingasia.org/>)

---

Office 303, Industry Centre Building, UTM Technovation Park, Skudai, 81300, Johor Bahru, Johor, Malaysia.



# 6th ASIA International Conference

Invoice # AIC-2020-EIEF-296

Date: 2020-12-09 22:22:10

From

**Title account: Scholars Asia  
Network Sdn Bhd**

**Bank Name:** MAYBANK

**Account Number:** 551623216466

**Swift Code:** MBBEMYKL

**Address:** Setia Tropica Johor Bahru, Malaysia

To

**SUPARMONO SUPARMONO**

Management

SEKOLAH TINGGI ILMU MANAJEMEN YKPN YOGYAKARTA

**Email:** suparmono@stimykpn.ac.id

## Paypal Payment Option

CLICK HERE TO PAY USING PAYPAL

([https://www.paypal.com/paypalme/scholarsasia?locale.x=en\\_US](https://www.paypal.com/paypalme/scholarsasia?locale.x=en_US))

Note: Please add USD 10 for Paypal payment

No	Item	QTY	Price (USD)
1	Conference Fee for Article MAPPING OF SECTORAL ADVANTAGES AS A DRIVER OF THE REGIONAL ECONOMY in 6th ASIA International Conference 2020, Online Video Conferencing	1	200.00

This is computer generated invoice and needs no signature.

Due Date 2020-12-24

<b>Subtotal:</b>	USD 200.00
<b>GST</b>	USD 0.00
<b>Total:</b>	USD 200.00
<b>Amount Paid:</b>	USD 0.00

Fees is not refundable.

# Terms and Conditions

## Terms and Conditions

1. The conference fee is non-refundable in any case.
2. Full paper submission and publication is optional. Conference fee includes the e-certificates, access to all parallel sessions, selected workshops for participants (some workshops have payment), extended abstract published in proceedings, the publication of the full paper in free journals (Non-Indexed).
3. The conference fee doesn't include publication fees for SCOPUS / ISI / HEC indexed journals. Separate Invoice will be sent to the authors for article processing charges of journals.
4. The publication fee and time are dependent on the selected journals. There may be several rounds of corrections before publication. Please note this process can take a longer time for publication. However, the Connecting Asia team will assist you at each step of the publication process.
5. Author's Must need to ensure that the work submitted for publication is their original contribution. Connecting Asia has strict plagiarism. Any paper having plagiarism more than 15% would be rejected. Make sure your paper has a similarity index of less than 15% and less than 5% from a single source. Please note self-plagiarism is also not allowed. No refund application will be entertained if the paper is rejected due to plagiarism. We may also request the respective institutes to take action against the author who is involved in these Malpractices.
6. Connecting Asia is not responsible for any change in the journal indexing. Connecting Asia is conference organizers, not an indexing agency. We do not control the indexing process. The information about the journal is obtained from the journal website and verified from the Scopus database. In any case journal indexing has been changed during the publication process conference organizers have no control over it and they are not responsible for any change in journal indexing.
7. Connecting Asia always extended its efforts to publish conference papers in Scopus Indexed journals. However, we cannot control the indexing process. In any case, any author's article is not indexed in the Scopus database the authors have to contact Scopus through email [scopusupport@elsevier.com](mailto:scopusupport@elsevier.com) (<mailto:scopusupport@elsevier.com>) or Scopus help centre. We have not any control over the Scopus Indexing process.
8. Authors must need to confirm the indexing of the journal provided by the connecting Asia for publication from the SCOPUS / ISI / HEC or the official website of SCOPUS <https://www.scopus.com/> (<https://www.scopus.com/>) or through email [scopusupport@elsevier.com](mailto:scopusupport@elsevier.com) (<mailto:scopusupport@elsevier.com>) . Upon submission of the agreement from connecting Asia will process the publication.
9. Connecting Asia will try their level best to complete the publication process quickly. However, the publication process may take 6-8 months. We need your cooperation during this process.
10. Connecting ASIA is not responsible to fulfil any institutional criteria for publication acceptance. authors should confirm from their respective departments before submission of their publication fee.

I have read the agreement and I agree with these terms and conditions.