

ISSN Print: 0975-4389

ISSN Online: 0975-4374

<http://www.laeme.com/ijci-et/index.asp>

**International Journal
of
Civil Engineering & Technology
(IJCIET)**



LAEME Publications

Plot : B1, Phase - 5 T,

Postoffice Sankrish Prarthi Apartment

Plot No. 18/ Vellore Salai 6th Street

Jai Shankar Nagar, Palayakkon, Chennai-600 041

Tamil Nadu, India

International Journal of Civil Engineering and Technology

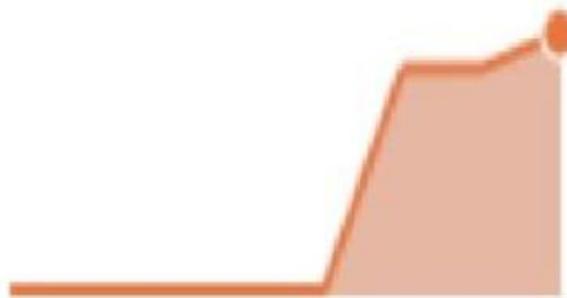
Q2

Metals and Alloys

best quartile

SJR 2019

0.29



powered by scimagojr.com

ISSN Print: 0976 - 6308

ISSN Online: 0976 - 6316

Journal ID : 203

11 Volumes 90 Issues 6295 Articles available from 2010 to 2020.

Journal Impact Factor (JIF) : 9.7820

EDITORIAL BOARD

Chief Editor

Dr. Kadhim Naief Kadhim

College of Engineering,
Babylon University, IRAQ

Managing Editor

Dr. H.T.Basavarajappa

Department of Studies in
Earth Science, University
of Mysore, India

Associate Editors

Dr. V.Antony Joe Raja

Sri Muthukumaran
Institute of Technology,
India

Prof. B. Arthi Gandhimathi

IAEME Publication, India

Dr. N. Tamil Selvan

IAEME Publication, India

Er. D. S. Chengalvarayam

IAEME Publication, India

Copy Editors

Mr. K.Prasanth

IAEME Publication, India

Mr. T.Nagarajan

IAEME Publication, India

Editorial Board

Dr. Mariappan.P

TWAD BOARD, India.

**Dr. Saleh Abd El-Aleem
Mohammed El-Awney**

Fayoum University, Fayoum, Egypt.

Dr. Yongwei shan

Oklahoma state university, USA.

Dr. Pei tang

JCMS, Inc- Mercerville, USA.

Dr. Najm alghazali

Babylon University, IRAQ.

Dr. Moises diaz-cabrera

University of Las Palmas de Gran Canaria,
Spain.

Dr. Cristina T. Coquilla

PIMSAT Colleges Dagupan City,
Philippines.

Dr. Ammar Al-Ojaili

Higher College of Technology / Muscat,
Sultanate of Oman.

Dr. Mohsen Sherif

College of Engineering, UAE University,
UAE.

Dr. Alireza bahrami

Islamic Azad University-Ahvaz Branch, Iran.

Dr. Fred Boadu

Duke University Durham, USA.

Dr. Mirko Mazza	Università della Calabria, Italia
Dr. Taha Ibrahim	Benha University, Egypt
Prof. Ragab Megahed Abd EI-Naby	Benha University, Egypt
Prof. Fabio Mazza	University of Calabria, Italy
Dr. Ali Akbar Firoozi	Universiti Kebangsaan Malaysia, Malaysia
Dr. Wilson Udo Udofia	University of Uyo, Nigeria
Er. Behnaz H. Zaribaf	Georgia Institute of Technology, Atlanta, GA, USA
Dr. Srijit Biswas	Manav Rachna International University, Faridabad, India
Dr. PL Meyyappan	Kalasalingam University, India
Prof. Anne Mary J	Vel Tech Dr. RR & Dr. SR University, Chennai,
Dr. Vikas Srivastava	Sam Higginbottom University of Agriculture Tech & Sciences, UP-India
Dr. A.Siva Sankar	KL University, India
Dr. P. Perumal	Vignan University, India
Prof. Gloria Terenzi	University of Florence, Italy
Dr. A. Vijayakumar	GMR Institute of Technology, Rajam, Andhara Pradesh, India
Dr. Satish kumar Moparathi	Kallam Haranadha Reddy Institute of Technology, Andhra pradesh, India
Dr. N.Sivakumar	SSN College of Engineering, Tamilnadu, India
Dr. Dr. Babu Rao Gudipudi	Narasaraopeta Engineering College, Andhra Pradesh, India
Dr. Mattia Rapa	Sapienza University of Rome, Italy
Dr. Valentine Yato KATTE	Higher Technical Teacher Training College (HTTTC) Bambili, Cameroon
Dr. Komal P.Mehta	ITM, Universe, Vadodara, Gujarat, India
Prof. Aamer Najim Abbas	Mustansiriyah University/College of Engineering/Water Resources Engineering Department, Iraq
Dr. T. Phani Madhavi	Professor, Department of Civil Engineering, Bapatla Engineering College(Autonomous), Andhra Pradesh, India
Er. Manish Venugopal	Project Manager, Randolph & Son Builders Inc., Pineville, NC, United States
Dr. Ruoyang Wu	Researcher, University of Utah, United States

Dr. Aboubakeur Boukhelkhal	University of Laghouat, Algeria
Dr. Francesco Abbondati	Parthenope University of Napoli, Italy
Dr. Naga Pasupuleti	Swetha Associate Professor, Head – International Research & Collaborations Cell, Galgotias University, Greater Noida, India.
Prof. Ruqayah K Mohammed	Faculty Member in Civil Engineering Department, Babylon University, Iraq.
Dr. Guendouz Mohamed	Lecturer, Yahia Farès University of Medea, Algeri
Dr. Nayana N. Patil	Assistant Professor, Department of Civil Engineering, Faculty of Engineering and Technology, MS Ramaiah University of Applied Sciences, Bangalore, India
Dr. Mahdi Hosseini	Research Scientist, Department of Civil Engineering, Jawaharlal Nehru Technological University Hyderabad, India.

Reviewer Board

Dr. Ajit Kumar	Indira Gandhi National Open University (IGNOU), New Delhi, India
Dr. S. Robert Ravi	PSR Engineering College, Tamil Nadu, India
Dr. Syed Anisuddin	Caledonian College of Engineering, Sultanate of Oman
Dr. K. Ramu	JNTU College of Engineering, Kakinada, India
Dr. Anant Parghi	S.V. National Institute Of Technology, Gujarat, India.
Er. Sadam Hade Hussein	Universiti Tenaga Nasional, Malaysia
Dr. P. Muthupriya	Sri Krishna College of Technology, Coimbatore
Prof. Anuj Chandiwala	Chhotubhai Gopalbhai Institute of Technology Gujarat, India
Er. Ali Amer Karakhan	University of Baghdad, Iraq
Dr. S. Bhagavathi Perumal	R.M.K. College of Engineering and Technology, Tamilnadu, India
Dr. Sujatha Unnikrishnan	Christ Deemed to be University, Bangalore, India

STATEMENT ON PUBLICATION ETHICS AND PUBLICATION MALPRACTICE

IAEME Journals are double blind peer-reviewed journal. This statement spells out ethical behaviour of all parties involved in the act of publishing an article for this journal, i.e.: the author, the editors, the peer-reviewers and the publisher. This statement is based on COPE's Best Practice Guidelines for Journal Editors.

Ethical standards for publication exist to ensure high-quality scientific publications, public trust in scientific findings, and that people receive credit for their ideas.

DUTIES OF EDITORS

Decision on the Publication of Article

The Chief Editor and the Associate Editor responsible for deciding which of the articles accepted for publication after undergoing double blind peer review should be published. The Chief Editor and the Associate Editor may be guided by the policies of the journal's Editorial Board and subjected to such legal requirements regarding libel, copyright infringement and plagiarism. However, neither the Chief Editor nor the Associate Editor have the authority to influence the reviewers who are conducting the blind review of the articles submitted for peer review.

- **Fair Play**

Manuscripts shall be evaluated solely on their intellectual merit without regard to authors' race, gender, sexual orientation, religious beliefs, ethnic origin, citizenship, or political philosophy.

- **Confidentiality**

The Chief Editor, the Associate Editor and any editorial staff

must not disclose any information about a submitted manuscript to anyone other than the corresponding author, reviewers, potential reviewers, other editorial advisers, and the publisher

- **Disclosure and Conflicts of Interest**

Unpublished materials disclosed in a submitted manuscript must not be used by anyone who has a view of the manuscript (while handling it) in his or her own research without the express written consent of the author

DUTIES OF REVIEWERS

Contribution of Double Blind Peer Review

Double Blind Peer review assists the reviewers in making editorial decisions, while editorial communications with the author may also assist the author in improving the paper. The reviewers don't know the author's identity, as any identifying information will be stripped from the document before review. Reviewers' comments to the editors are confidential and before passing on to the author will be made anonymous. The names of the reviewers remain strictly confidential; with their identities known only the Chief Editor and the Associate Editor.

- **Promptness**

Any selected referee who feels unqualified to review the assigned manuscript or unable to provide a prompt review should notify the Chief Editor and the Associate Editor and excuse himself/herself from the review process.

- **Confidentiality**

Manuscripts received for review must be treated as confidential documents. They must not be shown to, or discussed with, others except as authorized by the Chief Editor and the Associate Editor. Privileged information or ideas obtained through double blind

peer review must be kept confidential and not used for personal advantage.

- **Standards of Objectivity**

Reviews should be conducted objectively. There shall be no personal criticism of the author. Reviewers should express their views clearly with supporting arguments.

- **Acknowledgment of Sources**

Reviewers should identify relevant published work that has not been cited by the authors. Any statement that had been previously reported elsewhere should be accompanied by the relevant citation. A reviewer should also call to the Chief Editor/Associate Editor's attention any substantial similarity or overlap between the manuscript under consideration and any other published paper of which they have personal knowledge.

- **Conflict of Interest**

Reviewers should not review manuscripts in which they have conflicts of interest resulting from competitive, collaborative, or other relationships or connections with any of the authors, companies, or institutions connected to the papers

DUTIES OF AUTHORS

- **Reporting Standards**

Authors of reports of original research should present an accurate account of the work performed as well as an objective discussion of its significance. Underlying data should be represented accurately in the paper. A paper should contain sufficient detail and references to permit others to replicate the work. Fraudulent or knowingly inaccurate statements constitute unethical behaviour and are unacceptable.

- **Data Access and Retention**

Authors may be asked to provide the raw data in connection with a paper for editorial review, and should be prepared to provide public access to such, if practicable, and should in any event, be prepared to retain such data for a reasonable time after publication.

- **Originality and Plagiarism**

Authors should ensure that they have written entirely original works, and if the authors have used the work and/or words of others, this must be appropriately cited or quoted. All journals published by IAEME are committed to publishing only original material, i.e., material that has neither been published elsewhere, nor is under review elsewhere. Manuscripts that are found to have been plagiarized from a manuscript by other authors, whether published or unpublished, will incur plagiarism sanctions.

- **Multiple Publications**

An author should not in general publish manuscripts describing essentially the same research in more than one journal or primary publication. Submitting the same manuscript to more than one journal concurrently constitutes unethical publishing behaviour and is unacceptable.

- **Duplicate Submission**

Manuscripts that are found to have been published elsewhere, or to be under review elsewhere, will incur duplicate submission/publication sanctions. If authors have used their own previously published work, or work that is currently under review, as the basis for a submitted manuscript, they are required to cite the previous work and indicate how their submitted manuscript offers novel contributions beyond those of the previous work.

- **Acknowledgment of Sources**

Proper acknowledgment of the work of others must always be given. Authors should cite publications that have been influential in determining the nature of the reported work.

- **Citation Manipulation**

Submitted manuscripts that are found to include citations whose primary purpose is to increase the number of citations to a given author's work, or to articles published in a particular journal, will incur citation manipulation sanctions.

- **Data Fabrication and Falsification**

Submitted manuscripts that are found to have either fabricated or falsified experimental results, including the manipulation of images, will incur data fabrication and falsification sanctions.

- **Authorship of the Paper**

Authorship should be limited to those who have made a significant contribution to the conception, design, execution, or interpretation of the reported study. All those who have made significant contributions should be listed as co-authors. Where there are others who have participated in certain substantive aspects of the research project, they should be acknowledged or listed as contributors.

- **Improper Author Contribution or Attribution**

All listed authors must have made a significant scientific contribution to the research in the manuscript and approved all its claims. It is important to list everyone who made a significant scientific contribution, including students and laboratory technicians.

- **The Corresponding Author**

The Corresponding Author is the author responsible for communicating with the journal for publication. The

corresponding author should ensure that all appropriate co-authors and no inappropriate co-authors are included on the paper, and that all co-authors have seen and approved the final version of the paper and have agreed to its submission for publication.

- **Acknowledgment of Funding Sources**

Sources of funding for the research reported in the article should be duly acknowledged at the end of the article.

- **Disclosure and Conflicts of Interest**

All authors should disclose in their manuscript any financial or other substantive conflict of interest that might be construed to influence the results or interpretation of their manuscript. All sources of financial support for the project should be disclosed.

- **Fundamental Errors in Published Works**

When an author discovers a significant error or inaccuracy in his/her own published work, it is the author's obligation to promptly notify the Chief Editor/Associate Editor and cooperate with the editors to retract or correct the paper.

- **Redundant Publications**

Redundant publications involve the inappropriate division of study outcomes into several articles

SANCTIONS

In the event that there are documented violations of any of the above mentioned policies in any journal, regardless of whether or not the violations occurred in a journal published by IAEME, the following sanctions will be applied:

- Immediate rejection of the infringing manuscript.

- Immediate rejection of every other manuscript submitted to any journal published by IAEME by any of the authors of the infringing manuscript.
- Prohibition against all of the authors for any new submissions to any journal published by IAEME, either individually or in combination with other authors of the infringing manuscript, as well as in combination with any other authors. This prohibition will be imposed for a minimum of 36 months.
- Prohibition against all of the authors from serving on the Editorial Board of any journal published by IAEME

In cases where the violations of the above policies are found to be particularly egregious, the publisher reserves the right to impose additional sanctions beyond those described above.

S.No	Article ID	Title of the Paper	Authors	Pages	Downloads	How to cite this article
201	IJCIET_10_02_201	<u>DOMINANT FISH GROWTH IN DIGOEL RIVER, EDERA DISTRICT, MAPPI REGENCY</u> Download PDF Abstract Reference	ROSA DELIMA PANGARIBUAN, MARIUS AGUSTINUS WELLIKEN K., NORCE MOTE, SENDY LELY MERLY AND NOVA SURYAWATI MONIKA	201 9 - 202 3	13	<u>View</u>
202	IJCIET_10_02_202	<u>THE RELATIONSHIP BETWEEN ARCHITECTURAL FORM AND MEANING IN SANTA THERESIA CATHOLIC CHURCH, JAKARTA, INDONESIA</u> Download PDF Abstract Reference	PURNAMA SALURA, BACHTIAR FAUZY, RUDY TRISNO	202 4 - 203 1	15	<u>View</u>
203	IJCIET_10_02_203	<u>VARIATIONS IN THE ADDITION OF POLYPROPYLENE FIBER, FLY ASH AND IMMERSION IN ASPHALT MIXTURES ON STABILITY AND FLOW</u> Download PDF Abstract Reference	IBNU SHOLICHIN AND DEVI A. SUTAMA	203 2 - 203 9	9	<u>View</u>
204	IJCIET_10_02_204	<u>PERFORMANCE OF BASE CONNECTIONS FOR CONCRETE SEGMENTAL COMMUNICATION TOWER</u> Download PDF Abstract Reference	D. T. HASHIM, F. HEJAZI, M. S. JAAFAR, V. Y. LAI and R. S. M. RASHID	204 0 - 205 6	6	<u>View</u>
205	IJCIET_10_02_205	<u>INTERREGIONAL COOPERATION IN RUSSIA ON THE EXAMPLE OF THE NORTH-WEST FEDERAL DISTRICT</u> Download	OLGA BAKUMENKO, SVETLANA DEMIDOVA, OLEG DEREVIANKO, IRINA AKHMETOVA,	205 7 - 206 6	11	<u>View</u>

23 1	IJCIET_10_02 _231	<u>THE EMERGENCE OF INNOVATION AS A RESULT OF THE INTEGRATION OF IMPLICIT AND EXPLICIT KNOWLEDGE</u> Download PDF Abstract Reference	NATALIA L. BORSICHEVA, JULIA V. FEDOROVA, MARINA I. GLUKHOVA, EGOR A. FEDOROV	231 6 - 232 8	13	View
23 2	IJCIET_10_02 _232	<u>CREDIT TO THE PRIVATE SECTOR AND ECONOMIC GROWTH IN THE PRESENT TECHNOLOGICAL WORLD: EMPIRICAL EVIDENCE FROM NIGERIA</u> Download PDF Abstract Reference	IDOWU AKIN, OCHEI AILEMEN IKPEFAN AND ISIBOR AREGHAN	232 9 - 234 7	5	View
23 3	IJCIET_10_02 _233	<u>THE QUESTION OF EFFECTIVE CORPORATE SOCIAL RESPONSIBILITY IN PHARMACEUTICAL MARKETING: EVIDENCE FROM ENGINEERING WORKERS</u> Download PDF Abstract Reference	OGUNNAIKE, OLALEKE OLUSEYE, FAKUNLE, OLUWASEYI ADEOLA, BORIS HADE, TAIYE TAIRAT, ADETOWUBO-KING, S.A AND OSOKO, ABISOLA OLUTOLA	234 8 - 235 3	5	View
23 4	IJCIET_10_02 _234	<u>SEISMIC ANALYSIS OF RC ELEVATED WATER TANK IN DIFFERENT SEISMIC ZONES</u> Download PDF Abstract Reference	L.RAGHAVA NAIDU, H.SUDARSANA RAO AND VAISHALI G GHORPADE	235 4 - 236 4	9	View
23 5	IJCIET_10_02 _235	<u>ANIMAL AGRICULTURE: A VIABLE TOOL FOR RURAL WOMEN EMPOWERMENT AND REDEMPTION FROM POVERTY</u> Download PDF Abstract Reference	ALABI, O. O., AJALA, A.O., SHOYOMBO, A.J AND OGUNJIMI, S.I	236 5 - 237 3	10	View
23 6	IJCIET_10_02 _236	<u>CAUSES OF DELAY IN CONSTRUCTION</u>	SARAVANAN KARUNAKARAN	237	14	View

		<u>OF HIGHWAY PROJECTS: A REVIEW</u> Download PDF Abstract Reference	, M. A. MALEK AND M. Z. RAMLI	4 - 238 6		
23 7	IJCIET_10_02 _237	<u>THE COST ANALYSIS AND ECONOMIC FEASIBILITY OF AGRO WASTES TO ADSORB CHROMIUM (VI) FROM WASTEWATER</u> Download PDF Abstract Reference	PUSHPENDRA KUMAR SHARMA and SOHAIL AYUB	238 7 - 240 2	13	View
23 8	IJCIET_10_02 _238	<u>EFFECT OF REINFORCEMENT ON PUNCHING SHEAR BEHAVIOR OF FLAT SLABS</u> Download PDF Abstract Reference	SULAIMAN NAYEF, WAEL ZAKI and MOHAMED RABIE	240 3 - 241 8	16	View
23 9	IJCIET_10_02 _239	<u>A STUDY ON EFFECTS OF SERVICE QUALITY MODELS ON DIGITAL BANKING IN PRIVATE INDIAN RETAIL BANKS</u> Download PDF Abstract Reference	SHEERALI ARYA, T V RAMAN AND RON SCOTT	241 9 - 242 7	9	View
24 0	IJCIET_10_02 _240	<u>EXPENDITURE ON EDUCATION, HEALTH AND PDRB PER CAPITA ON THE GINI RATIO CITY IN THE EAST JAVA PROVINCE OF INDONESIA</u> Download PDF Abstract Reference	DIDIN FATIHUDIN AND NURUL LAILI MAULIDDAH	242 8 - 243 4	11	View
24 1	IJCIET_10_02 _241	<u>CREATING SUSTAINABLE DISASTER MANAGEMENT COLLABORATION IN INDONESIA</u> Download PDF Abstract Reference	ASEP SUMARYANA, SAWITRI BUDI UTAMI, RAMADHAN PANCASILAWA N	243 5 - 244 0	11	View

24 2	IJCIET_10_02 _242	<u>CRITICAL SUCCESS FACTORS FOR PUBLIC-PRIVATE PARTNERSHIPS (PPPs) IN AIRPORT INFRASTRUCTURE IN LAGOS, NIGERIA</u> Download PDF Abstract Reference	E. A. AYO-VAUGHAN, J. POON, E. O. IBEM	244 1 - 245 3	9	View
24 3	IJCIET_10_02 _243	<u>CASHEW NUT'S MARKET STRUCTURE IN SOUTH EAST SULAWESI</u> Download PDF Abstract Reference	WA ODE ALZARLIANI, BAHARI, SITTI AIDA ADHA TARIDALA, IDRUS SALAM	245 4 - 246 3	10	View
24 4	IJCIET_10_02 _244	<u>ANALYSIS OF E-BUSINESS TRAVEL AGENCY RISK IN INDONESIA</u> Download PDF Abstract Reference	JIMMY PRATAMA, SFENRIANTO SFENRIANTO and NANDA VERDENY AGUNG	246 4 - 247 4	13	View
24 5	IJCIET_10_02 _245	<u>IMAGE PROCESSING AND PARTICLE SIZE ANALYSIS OF COCONUT SHELL NANOPARTICLES</u> Download PDF Abstract Reference	OMOLAYO M. IKUMAPAYI and ESTHER T. AKINLABI	247 5 - 248 2	29	View
24 6	IJCIET_10_02 _246	<u>SUPPORT VECTOR MACHINE PREDICTION OF EXTERNAL STABILITY FOR SEGMENTAL RETAINING WALL</u> Download PDF Abstract Reference	TARIG MOHAMED, ANUAR KASA, NORINAH ABDUL RAHMAN, MARYAM GABER	248 3 - 249 0	2	View
24 7	IJCIET_10_02 _247	<u>PREDICTION OF EXTERNAL STABILITY FOR SEGMENTAL RETAINING WALL USING NEURAL NETWORK AND SUPPORT VECTOR MACHINE</u> Download PDF Abstract Reference	TARIG MOHAMED, ANUAR KASA, NORINAH ABDUL RAHMAN, MARYAM GABER	249 1 - 249 8	0	View

24 8	IJCIET_10_02 _248	<u>EFFECTIVE PLANS TO AVOID WATER SCARCITY IN IRAQ AND IMPROVE THE ENVIRONMENTAL Do wnload</u> PDF Abstract Reference	A M ABDUL RAZZAK	249 9 - 251 7	3	<u>View</u>
---------	----------------------	--	---------------------	------------------------	---	-----------------------------



EXPENDITURE ON EDUCATION, HEALTH AND PDRB PER CAPITA ON THE GINI RATIO CITY IN THE EAST JAVA PROVINCE OF INDONESIA

Didin Fatihudin

Departement Management, Faculty of Economics and Business,
Muhammadiyah University of Surabaya

Nurul Laili Mauliddah

Departement Management, Faculty of Economics and Business,
Muhammadiyah University of Surabaya

ABSTRACT

This study is to determine the effect of government expenditure in the education, health sector and GDP per capita towards the Gini Ratio of 38 Cities in East Java from 2010 to 2016. Quantitative analysis, explanatory method with panel data. The process of selecting panel data with data normality test through estimating common effect, model parameters, fixed effects or random effects. the selection of the right model using a panel data regressiThe index value of gini districts/cities in East Java is quite volatile,on model that is processed using software e-views 10. The results of the study show;The level of income inequality each district/city has a moderate stage gap. The index value of gini cities in East Java is quite volatile,the highest scores of Madiun City, Malang City, Blitar City, and Pasuruan City.Education spending, health spending, and GDP per capita partially each has a significant positive effect on the Gini ratio City in East Java. Education spending, health spending, and GDP per capita together have a significant positive effect on the Gini ratio of districts/cities in East JavaThe Gini Ratio is one model of approach to economic growth and fair economic. one of them is through the tax and subsidy sector in the population of a region. Education sector spending, health sector spending, goods/services expenditure such as roads, bridges, airports, terminals, ports.Education and health sector expenditure that's the most important thing for increasing economic growth and fair economic equality.

Keywords: Education Expenditure, Health Expenditures, GDP per capita, Gini Ratio.

Cite this Article: Didin Fatihudin and Nurul Laili Mauliddah, Expenditure on Education, Health and Pdrb Per Capita on the Gini Ratio City in the East Java Province of Indonesia, *International Journal of Civil Engineering and Technology*, 10(02), 2019, pp. 2428–2434

<http://www.iaeme.com/IJCIET/issues.asp?JType=IJCIET&VType=10&IType=02>

1. INTRODUCTION

Indeed economic growth is one indicator of the prestige of economic activities in a region. Economic growth is characterized by an increase in goods and services. Economic growth has been measured so far through changes in national income or Gross Regional Domestic Product (GRDP) in each region. The increase in GRDP cannot explain the level of income balance in an area (Marantika, P, Viphindrartin, & Viphindrartin, 2018). But on the other hand there are still many concepts that need to be considered in making economic growth a measure of the welfare level of an area. Some aspects that need to be considered are the level of education, health and welfare of the population must also be an important concern for the government and society. The human development index suggests not only goods and services, but the quality of the population must also be improved in a better direction. Equitable results of economic growth must also be enjoyed by all population, not only enjoyed by a group of people, where the problem of inequality is one of the important concerns in reducing poverty, especially in poor and developing countries (Putro, Mintarti, & Wijaya, 2018).

The Gini Ratio is one model to measure the extent to which the inequality of lovers of economic growth can be felt by the entire population. Certain instruments must be implemented into economic activities. The higher value of the gini ratio shows the higher level of inequality from a region and shows an uneven income distribution between high-income and low-income people (Berman, Ben-Jacob, & Shapira, 2016). The impact of increasing purchasing power and the income disparity of the community. East Java Province which consists of 28 districts and 9 cities has different characteristics, population and economic potential. There is a dominance of the agricultural sector, the dominance of the mining and industrial sectors. Some call themselves fertile areas, there are dry areas. That is the name for cities that have the number and quality of the population and unequal economic potential. This difference has the consequence of differences in tax revenues, regional levies, regional original income and different expenditure budget plans. These budget policies included in the fiscal policy of goods will certainly have an impact on the even income of the community (Aziz, Laila & Prihantono, 2016). Capital expenditure is one part of the regional expenditure revenue budget. These include education spending, health spending, community welfare and other infrastructure expenditures (Behera & Dash, 2018). Therefore, regional income and expenditure budgets are a reference in the study of the composition of expenditure on the total gross domestic product of the respective cities.

Referring to data from the Central Statistics Agency (BPS), that East Java Province has contributed 30 percent to Indonesia's total GRDP. Secondary sector and tertiary sectors from manufacturing, industry and services/trade. The dominance of the trade, finance, banking and services sectors in the total GRDP of cities in East Java is concentrated in cities such as the City of Surabaya, Sidoarjo Regency, South Sumatra Regency, Pasuruan Regency, Malang District, Mojokerto Regency and Kediri City. Circulation and accumulation of goods, capital, and services are in the district-city area (BPS, 2017). Therefore, cities in East Java are interesting to study further. Based on the background above, there is a need to study; (a) At the level of inequality like what has a gap in income for each city in East Java; (b) Education expenditure, health expenditure, and Perkapita GRDP partially have an influence on the Gini

ratio of the City in East Java; (c) Education expenditure, health expenditure, and GDP per capita together have an influence on the Gini ratio of cities in East Java.

2. THEORITICAL REVIEW

It seems the same meaning of economic growth with economic development and economic shifts. It's different. Economic growth is the increase in goods and services in a given year in a certain period in a particular area. Economic growth will increase thanks to three things; economic potential, capital accumulation, technology (Samuelson, 2104). There are three approaches to calculating economic growth; production, income and expenditure. Whereas economic development is interpreted besides the increase in goods and services also followed by an increase in the presence of human development in the fields of education, health, and the welfare of its population. Economic development is not solely measured based on an increase in GNP as a whole, but must pay attention to the distribution of income spread to all levels of society, and who has enjoyed the results (Todaro, 2004).

The economic shift is interpreted as a shift between sectors to other sectors; shifting better from the primary agricultural sector to the secondary sector of manufacturing production then shifted to the tertiary sector of trade, services, finance and banking. One of the characteristics of a developed region is the existence of population economic activities which are dominated by tertiary sectors namely trade, services, finance and banking. Business transactions are very easy to do. Liquidity of goods and services is easily exchanged. The mobility of goods and services is very high. Infrastructure is well available. Capital traffic is very easy to do.

Gini Ratio is a tool to measure the level of disparity in the distribution of relative income between residents of a country or region. But keep in mind that the economic growth of a region that is high is not necessarily felt by all its citizens equally. The gini ratio with the Lorenz curve illustrates that economic growth can be done using an equalization approach through the Gini Ratio model (Jhingan, 2007).

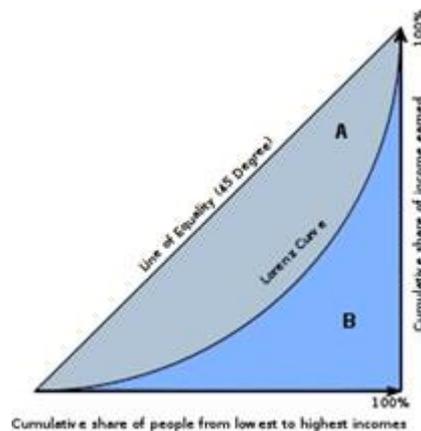
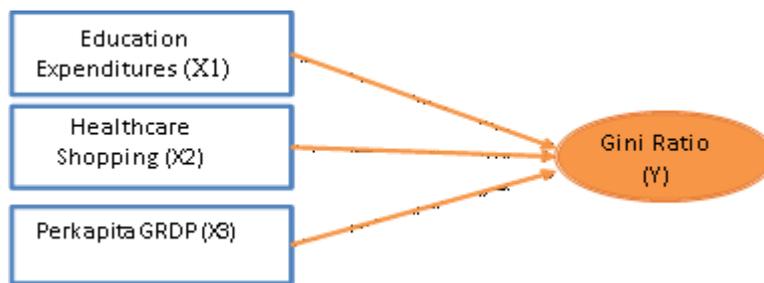


Figure.1 Lorenz curve

Because it could be that economic growth is only enjoyed by a group of individuals (call it a conglomerate). Because they are the ones who master the resources of the production factors that have been given freedom by the government to explore and produce a product. To exploit and explore the economic potential of a region's production resources. Schumpeter (Samuelson, 2014) believes that economic growth will rapidly increase when entrepreneurs are given the freedom to manage production factors. Because the entrepreneurs who have innovation and technology to process these factors of production.

Per capita GRDP is the calculation of the total increase in goods and services in a given year in a given period and a certain area is leveled to the entire population in the region. Gini This ratio is famous for the Lorenz curve which explains how important economic growth is distributed to the entire population evenly. Most do not approach equity. Evenly absolute is not possible, but the unevenness should not be left out. Kuznets (1995) the relationship between the level of income distribution and the level of economic development takes the form of an inverted U curve. Beginning of economic development, income distribution will cause higher income gaps, but as the economy matures, the income gap will decline slowly after passing the peak.

Do not let economic growth only be enjoyed by a group of people, call it a conglomerate or bourgeoisie. Governments according to the Keynesian recommendations must participate in economic activities through regulatory, allocation, distribution and stability of economic resources owned. Government spending is one of the expenditure ratios of the total GRDP of cities in East Java. This expenditure consists of education sector expenditure, health sector expenditure, as well as physical infrastructure expenditure. Although these are all free factors that can affect the income distribution of the population. It is possible that economic growth and the welfare of the population are associated with equal distribution of economic growth results with the Gini ratio as a factor that is influenced. Conceptually the analytical framework can be described;



3. RESEARCH METHODS

Objects studied were 38 cities from 2010 to 2016. Secondary data sources were obtained from the Central Java Provincial Statistics Agency. Data collected and processed data on government expenditure in education sector, health sector and per capita income as exogenous variables and the value of the gini index ratio as endogenous variables. Using quantitative analysis, explanatory methods with panel data. The process of selecting panel data by conducting a normality test through estimating common effect model parameters, fixed effects or random effects and selecting the right model using the Regression Model which is processed using software e-views 10. Test the assumptions and interpret the selected models exogenous variables affect endogenous variables.

4. RESEARCH RESULTS AND DISCUSSION

Descriptively the gini ratio in each city in East Java shows that the level of income inequality in the province of East Java between each city has a gap at the middle stage which is indicated by the average value between 0.2 - 0.5. The highest occurred in 2016 at 0.35. The index value of the city gini in East Java is quite fluctuating with the highest value in 2016, in fact it occurs in cities, namely City of Madiun 0.42, City of Malang and City of Blitar at 0.41, and City of Pasuruan at 0.40.

City Panel Data Regression Analysis of East Java Province through the likelihood ratio test obtained a probability value of 0,000, the fixed effect model is more appropriate to use than

the common effect. Followed by a hausmant test and obtained a probability of 0,000 or less than a significance value of 0.05, the random effect model is more appropriate to use than the fixed effect, so that through an exogenous random effect variable approach to endogens obtained results:

Variabel dependen : Rasio Gini			
Independen	coefisien	t-statistik	Prob
Belanja Pendidikan	-0,0001	-2,572	0,0100
Belanja Kesehatan	0,000	4,912	0,0002
PDRB Perkapita	0,033	4,798	0,0000
R-square	0,192		
Adjust R-square	0,183		
F-Statistik	20,470		
Prob. F-Statistik	0,000		

Source: results of data processing (2018)

Through the table above the panel data regression equation is obtained; $Gini\ Ratio = 0.138 - 0.01\ Education\ Expenditures + 0.0002,\ health\ expenditure + 0,000,\ Perkapita\ GRDP + e$. Partial test (t test) at a significance level of 0.05, if the significance level is below 0.05 then it has a significant effect on dependent variable (Widarjono: 2009). Based on the table above the probability of education spending amounting to 0.01 less than 0.05 can be interpreted that education spending has a significant influence on the gini ratio. The findings of this study support previous research, namely research from (Herry, Adhi, & Firmansyah, 2018) which concluded that public facilities that are the result of government expenditure have a significant influence on the even distribution of income measured by the gini ratio. The probability of health expenditure amounting to 0.0002 less than 0.05 can be interpreted that health expenditure has a significant effect on the gini ratio. These results support the research conducted by (Wahyuni, Sukarsa & Yuliarmi, 2014) which concluded that government expenditure has a significant influence on the gap in income distribution in the City of Bali Province. The next variable is GDP per capita has a probability of 0,000 less than 0.05. It means that per capita GRDP has a significant influence on the gini ratio. These results indicate support for research from (Meydiasari and Soejoto, 2017) which concluded that the income per capita of the community is one of the factors that have a significant influence on the gini ratio.

Simultaneous tests (F test) of the analysis obtained a probability value F-statistic of 0,000 or less than 0.05 indicating education spending, health expenditure, and GDP per capita jointly had an influence on the gini ratio. From the R-square test it is known that the R-square value of 0.192 explains that Education expenditure, Health expenditure and Perkapita GRDP affect the gini ratio of 19.2 percent and the rest is 80.8 percent influenced by other variables not examined in this study.

Education spending, health spending and GRDP have a significant positive effect on the ratio of cities in East Java, both partially and simultaneously. Even though the effect is small, accumulated. This shows that city governments in East Java need to increase the amount in allocating government budgets to the education sector and the health sector and the goods/services sector. This supports the theory of economic growth and economic development that has been suggested by previous experts that human development is as important as the construction of physical infrastructure. In fact it seems that human development needs to be a priority in development. In accordance with the state budget allocation for education by 30 percent. Improving education and health can increase innovation and accelerate the transfer of production technology. The existence of technology, production becomes more efficient,

increases the volume and production capacity. In Malthus's theory states although indeed population growth is growing in a series of measures while production capacity will encourage economic growth in a series of counts (Samuelson, 2014). More important is how to balance between the two. More appropriate economic growth is implemented into economic development programs that are more meaningful in terms of equity, proportional justice. The increase in goods and services continues to be increased, but also followed by an increase in the human development index through increased education, health and welfare of the population through income disparities. Reducing inequality between one another. The Gini ratio is the model. Adequate residents can subsidize residents who have not been fortunate. The main objective of economic growth is to increase the welfare of the population in various sectors equally.

The contribution of this study is only 19 percent, preferably there is 81 percent further research using more variables, aside from spending on education, health and GRDP in this study.

5. CONCLUSION

Based on the results of the research and discussion it can be concluded;

1. The level of income inequality of each city has a moderate gap. The index value of the city gini in East Java is quite fluctuating with the highest values of Madiun City, Malang City, Blitar City, and Pasuruan City.
2. Education spending, health expenditure and Perkapita GRDP partially have a significant positive influence on the Gini ratio of cities in East Java.
3. Education expenditure, health expenditure and Perkapita GRDP together have a significant positive effect on the Gini ratio of cities in East Java.
4. Education sector spending, health sector expenditure, goods/services expenditure are no less important than infrastructure spending such as roads, bridges, airports, terminals, ports. Education and health sector spending is precisely the most important for increasing economic growth and equitable development.

RECOMMENDATION

From this research, it is expected to provide recommendations for municipal governments in East Java that the education and health budget and patent GRDP need to be increased continuously. Because the effect is significant on the gini ratio of cities in East Java.

REFERENCES

- [1] Badan Pusat Statistik. (2010-2017). Jawa Timur Dalam Angka. Surabaya.
- [2] Fatihudin.D.(2015).Metode Penelitian untuk Ilmu Ekonomi, Manajemen dan Akuntansi, Dari Teori ke Praktek. Penerbit Zifatama.Sidoarjo.
- [3] <https://www.bing.com>, Lorenz Curve.
- [4] Jhingan, M.L.,(2007), Ekonomi Pembangunan dan Perencanaan, Edisi keenam Belas: Jakarta, PT.Raja Grafindo Persada.
- [5] Kuznets.(1995). Economic Growth and Income Inequality. American Economic Review 45,1-28.
- [6] Samuelson.Paul,A.(2104).Economics, Ninth edition, Mc.Graw Hill, Kogakusha. Ltd.Tokyo.

- [7] Saputri.K, W.Andi, (2018).Analisis Faktor-Faktor Yang Mempengaruhi Gini Ratio Di Provinsi Papua Dengan Model Spasial Data Panel, *Jurnal Statistika Industri dan Komputasi*. 3 (2): 1-11
- [8] Todaro, MP.dan Smith, SC.(2004). *Pembangunan Ekonomi di Dunia Ketiga*. Edisi Kedelapan, Jakarta : Penerbit Erlangga.
- [9] Widarjono, A.(2009). *Ekonometrika Pengantar dan Aplikasinya*. Ekonisia. Jogyakarta
- [10] Behera, D. K., & Dash, U. (2018). The impact of macroeconomic policies on the growth of public health expenditure: An empirical assessment from the Indian states. *Cogent Economics and Finance*, 6(1). <https://doi.org/10.1080/23322039.2018.1435443>
- [11] Berman, Y., Ben-Jacob, E., & Shapira, Y. (2016). The dynamics of wealth inequality and the effect of income distribution. *PLoS ONE*, 11(4). <https://doi.org/10.1371/journal.pone.0154196>
- [12] Herry, A., Adhi, P., & Firmansyah. (2018). The Effect of Inequality of Educational Facilities, Health, and Road Conditions toward Income Distribution in Central Java Province, Indonesia. *E3S Web of Conferences*, 73, 10014. <https://doi.org/10.1051/e3sconf/20187310014>
- [13] Marantika, D., P, T. H., Viphindartin, S., & Viphindartin, S. (2018). Disparitas Regional Antar Provinsi Di Indonesia 2011 – 2015 (Model Regresi Spasial). *Media Trend*, 13(1), 31–46. <https://doi.org/10.21107/mediatrend.v13i1.3171>
- [14] Putro, P. B. W., Mintarti, S., & Wijaya, A. (2018). Analisis determinasi pertumbuhan ekonomi dan kemiskinan. *INOVASI*, 13(2), 135. <https://doi.org/10.29264/jinv.v13i2.2459>
- [15] Meydiasari, Dewi Azizah & Soejoto, Adi. (2017). Analisis Pengaruh Distribusi Pendapatan, Tingkat Pengangguran, Dan Pengeluaran Pemerintah Sektor Pendidikan Terhadap IPM Di Indonesia. *Jurnal Pendidikan Ekonomi Manajemen Dan Keuangan*. Vol. 01 No. 02 November 2017 Hal. 116 – 126
- [16] Wahyuni, Putri, Sukarsa, Made & Yuliarmi, Nyoman. (2014). Pengaruh Pengeluaran Pemerintah Dan Investasi Terhadap Pertumbuhan Ekonomi Dan Kesenjangan Pendapatan Kabupaten/Kota Di Provinsi Bali. *E-Jurnal Ekonomi dan Bisnis Universitas Udayana* 3.8 (2014) :458-477