

## **Relationship between Religiosity and Individual Economic Achievement: Evidence from South Kalimantan, Indonesia**

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**Abstract.** This study investigates the effect of religiosity on economic development or achievement of individuals in South Kalimantan, Indonesia. This province is of interest as its people are viewed as highly religious but lagging in economic development. The study attempts to address the measurement issues found in earlier studies at the micro level of analysis by constructing a multi-dimensional measure of religiosity. This study considers five dimensions of religion, namely: ritualistic, experiential, ideological, consequential and intellectual. Apart from the construction of a multi-dimensional measure of religiosity, an indicator of economic wellbeing is formulated other than income. The results show that Muslims in South Kalimantan have a high level of religiosity and that those with higher level of religiosity are economically better-off. Education was also found to be a significant determinant of individual economic achievement. Hence, religion and education must be emphasized for economic progress especially for South Kalimantan which has a low level of education.

**Keywords:** Religiosity, South Kalimantan, Economic achievement.

**JEL Classification:** A12, A13, 012, Z12

**KAUJIE Classification:** B5, F4, H47, H87

## 1. Introduction

Religion is an important aspect of human life. The term 'religion' derives from the Latin word '*religio*' or '*religare*' which means 'to bind'. It signifies belief in or obedience to some sacred and/or supernatural powers (Quinn, 2005, p. 180; Wilson & Slavens, 1982, pp. 3-4). The term 'religiosity' which means 'the quality of being religious' has also been used frequently in literature. It encompasses having commitment to religion that includes not only the belief system but also the rituals, values and actual embodiment and practice of these values. Religion links the physical and spiritual nature of man and has been considered to have a far-reaching impact on all aspects of an individual's life, including his achievement in the economic sphere. The positive values that religion or religiosity imbues in individual behavior such as honesty, accountability and other humane traits are considered to be pre-requisites for an individual's economic success. However, the accuracy of this notion needs to be examined.

Does religion or religiosity have an impact on individual economic achievement or progress? In the western context, Weber (1905/1930) views that religiosity can influence economic outcomes through fostering good traits such as work ethics, honesty, trust, thrift, charity, etc. Also, according to McCleary and Barro (2006, p. 51), the beliefs of different religions provide different economic incentives which result in different economic consequences. Galbraith and Galbraith (2007, p. 190) state that in the Christian tradition, there is a clear moral component of work and entrepreneurial effort which results in positive economic outcomes. Another view is that religiosity as related to church attendance may increase social capital. The networking and interaction effects may lead to economic opportunities resulting in higher income (McCleary & Barro, 2006, p. 51). Although it may be argued that the other way around might also be true, i.e., high income enables people to have more free time, hence allowing them to frequent the church. However, such an argument is not very strong. Firstly, high income may or may not lead to more free time as individuals may find that they will need to work longer hours to continuously improve their economic condition. Secondly, even if they do have more free time they may not necessarily choose automatically to attend church more frequently.

However, an opposing view is that religiosity has a negative relationship with economic indicators as religion may reduce the utility derived from income (Bettendorf & Dijkgraaf, 2005, p. 2).

The interest in the role of religion in economic development has generated a significant amount of empirical research. The studies that examine the relationship between religion or religiosity and economic variables have obtained mixed results. Some of these consider religion or religiosity as an explanatory variable and examine its impact on economic outcomes. For instance, the study by McCleary and Barro (2006, p. 66) finds that when "belief in hell" is used as a measure of religiosity, it is found to have a positive impact on GDP per capita. However, religiosity has a negative impact on GDP per capita if religiosity is measured by "monthly religious attendance". Some other studies highlight the positive contribution of religion and religiosity to economic achievement. Galbraith and Galbraith (2007, pp. 193-198) examine the relationship between religiosity, entrepreneurial activity, and economic growth. Religiosity is measured by three indicators – how important God is in one's life, whether one considers himself to be a religious person and the frequency of attending religious services. The findings suggest that religiosity is positively related to economic growth through the former's impact on entrepreneurial activity.

Similarly, the findings of Elçi, Sener, and Alpan (2011, pp. 1367-1370) on employees working in manufacturing, service, and trade organizations in Turkey show that religiosity has a positive impact on work behavior. Their measure of religiosity includes (i) the strength of individuals' belief in God; (ii) the importance of religion and (iii) the individuals' perception of their level of religiosity.

Using World Values Survey data, Guiso, Sapienza, and Zingales (2003, p. 228 & 280) find that, on average, religion is good for the development of attitudes such as cooperation, government, legal rules and market economy that are conducive to economic growth. However, they also highlight Islam as being negatively associated with attitudes that are conducive to growth and, among adherents to the world's major religions, Muslims as being the most anti-market.

Other studies consider a two-way relationship between religiosity and economic outcomes. For instance, Bettendorf and Dijkgraaf (2005, p. 18) construct a simultaneous equation model using micro dataset for the Netherlands and find no significant relationship between religiosity, as measured by church attendance, and income. In another of their studies (Bettendorf & Dijkgraaf, 2008, p. 23) based on data from 25 Western countries, the findings show that church membership has a positive effect on income for high-income countries, but negative effect for low-income countries.

On the other hand, the results derived from the study by Herzer and Strulik (2013, p. iii) indicate a more homogeneous relationship between religiosity and income. They find that a two-way negative relationship exists between the level of income, as measured by the log of GDP per capita, and the level of religiosity, as measured by church attendance. Higher income brings about declining religiosity, and declining religiosity leads to higher income.

Noland (2005, pp. 1215-1217) also considers the simultaneity between religiosity and two economic indicators, i.e., growth in total factor productivity (TFP) and real per capita income in his analysis. The findings based on both single-country and cross-country analyses indicate that religious affiliation has a significant impact on economic growth. In addition, the variable 'Muslim population share' has a significant positive impact on TFP growth. He highlighted that this shows that belief in Islam is not inimical to growth.

Most of the empirical studies on the impact of religion on economic variables are conducted at a macro level and as cross-country analyses particularly for Western countries. Although many studies rely on survey data such as the World Values Survey to measure religiosity, the data for individuals is aggregated to represent country data. The latter is combined with other macroeconomic indicators such as per capita income to determine their relationship.

Studies that examine the influence of religiosity at a micro level are less common. Also, these studies suffer from a common limitation in that religiosity is measured by a very limited number of indicators. Religiosity is not just restricted to ritual practices. Rather, it encompasses an individuals' intensity of

commitment to a religious belief system (McGuire, 1992, p. 108). The measurement of religiosity should be multi-dimensional and comprehensive to incorporate its various aspects. By doing this, the analysis would be more accurate and more reflective of the connection between religiosity and economic outcomes.

From the Islamic viewpoint, religiosity and economic development are closely related in a positive, direct and causal manner. This means that the level of economic achievement is highly dependent upon the practice of religion in the society concerned. This kind of positive relationship is declared by Allah Almighty in the Holy Qur'an. Allah says<sup>(1)</sup>:

If the people of the towns had but believed and feared Allah, We should indeed have opened out to them (all kinds of) blessing from heaven and earth; but they rejected (the truth), and We brought them to book for their misdeeds. (Qur'an, 7:96)

This verse reveals one of the important divine laws (*sunnat Allah*) pronouncing that the true religious practice would bring about economic development in the society and vice versa. As long as this religious factor exists, development would flourish. But conversely, if the former disappears, the latter would certainly collapse (al-Mudarrisy, 1985; Hamka, 1984; Shihab, 2004). Moreover, the Qur'an (3:110) has even mentioned that the Muslim *ummah* is "the best *ummah* (society) evolved for mankind" which constitutes a model for the rest of the human society (Bakar, 2012, p. 445) for its commitment to enjoining the common good (*al-ma'ruf*), forbidding the bad things (*al-munkar*), and faith in Allah (*al-īmān*).

Therefore, it is very important to study how and to what extent the practice of Islamic religion (religiosity) is related to the development of Muslim countries or societies especially at a micro level. This paper examines whether religiosity is positively associated with high economic achievement for individuals, particularly in the case of South Kalimantan province, Indonesia. We attempt to address the measurement issues found in earlier studies by constructing a multi-dimensional measure of religiosity. This study considers five dimensions of religion,

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(1) The analogous meaning can also be found in the following verses of the Holy Qur'an: (Qur'an, 2:268; 5:65-66; 16:30; 16:97; 20:132; 65:2-4; 71:10-12; 72:16)

namely: ritualistic, experiential, ideological, consequential and intellectual as suggested by Renzetti and Curran (1998, p. 466)<sup>(2)</sup>. Ritualistic religiosity looks at the religious rites observed by a person such as attendance at the mosque, church or temple. Experiential religiosity measures how strongly a person feels attached to his or her religion. Ideological religiosity relates to the degree of commitment to religious doctrine or teachings. The extent to which religion affects the way a person conducts his or her daily life is best described as consequential religiosity. Intellectual religiosity measures a person's knowledge of the history and teaching of his or her religion. As the focus of this study is on Muslims, the measurement of each of these dimensions is viewed from the Islamic perspective. Islam does not oppose efforts to improve a person's economic position. In fact, it encourages seeking wealth; but it must be done according to the principles of Islam.

Abu Said related that the Prophet (may the peace and blessings of Allah be upon him) said: The truthful and trustworthy businessman will be in the company of the Prophets, saints and martyrs (on the Day of Judgment). (al-Darimi, 2000, 3:1653, *ḥadīth* no. 2581; al-Tirmidhi, 1975, 3:507, *ḥadīth* no. 1209).

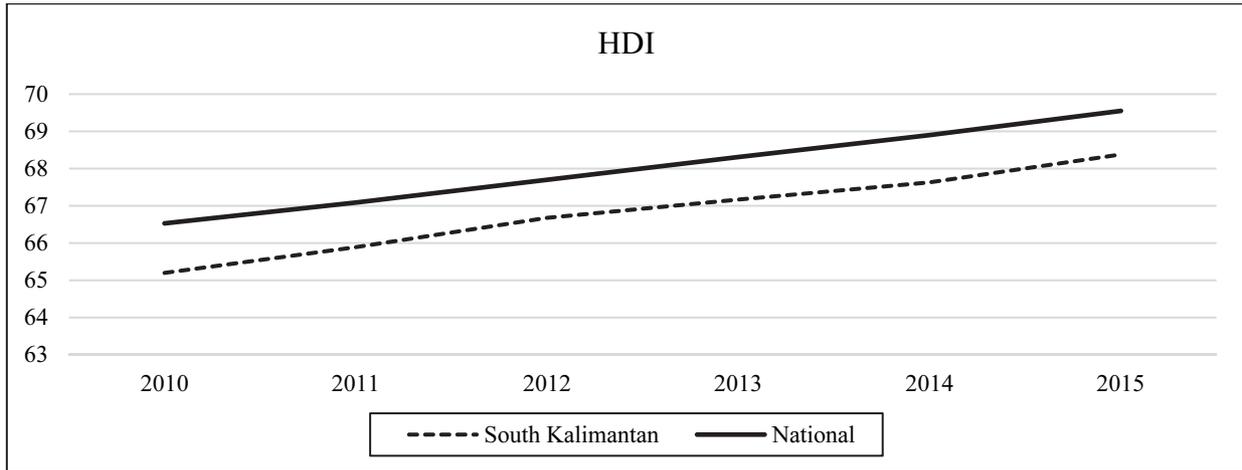
The analysis focuses on the effect of religiosity on economic achievement as positive values emphasized

in religion are important in determining an individual's economic success. The study also examines the influence of religiosity on economic achievement of Muslims who live in the province of South Kalimantan, Indonesia. This province is of particular interest as its society is viewed as highly religious, but their economic performance is minimal relative to other provinces in the country. Islam has a long history in this province and has a major influence on many socio-cultural aspects of its society. Islam is adhered to by the majority of the people in this province (96.67%) and its society has been observed to be highly religious and devoted to the Islamic teachings (Buseri, 2011; Daud, 1997). However, it is lagging with regards to development. The Human Development Index (HDI) for South Kalimantan has constantly been below the national average for the period of 2010 to 2015 (see Figure 1), ranking 22 out of 34 of the provinces in Indonesia in 2015. Similar is the case of GDP per capita as shown in Figure 2. For instance, this province recorded GDP per capita of 36.081 million Rupiah for 2016 which is far below the estimated national value of 47.957 million Rupiah. It would be interesting to determine if the observation of this community being highly religious is based more on the ritualistic aspects, or holistic. This can be examined from this study's multidimensional measure of religiosity. Also, it can be determined whether the level of religiosity is significantly associated with economic outcome or wellbeing.

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(2) Renzetti and Curran's (1998) suggestion seems to have been taken from Charles Y. Glock's original idea as indicated in McGuire (1992, pp. 102-104).

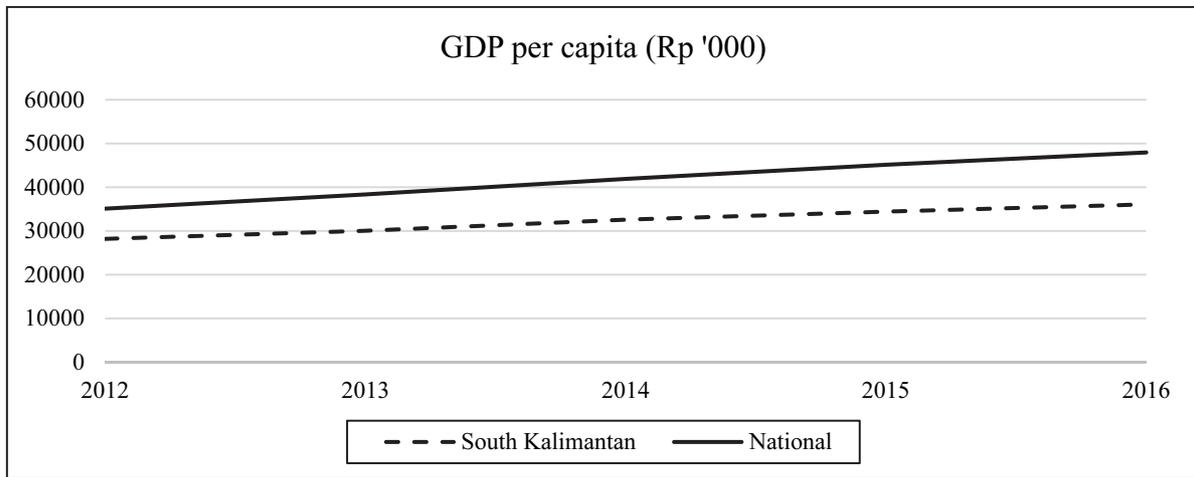
**Figure (1) Human Development Index for South Kalimantan**



	2010	2011	2012	2013	2014	2015
South Kalimantan	65.2	65.89	66.68	67.17	67.63	68.38
National	66.53	67.09	67.7	68.31	68.9	69.55

Source: Badan Pusat Statistik (BPS), 2017a

**Figure (2) GDP per capita for South Kalimantan**



	2012	2013	2014	2015
South Kalimantan	28197.08	30058.02	32599.83	34436
National	35102.2	38366	41915.9*	45140.7*

Note: \*estimated value

Sources: Statistical Yearbook of Indonesia 2017; BPS-Statistics Indonesia;  
<https://www.bps.go.id/linkTableDinamis/view/id/957>

The paper proceeds as follows. In the next section, the construction of a multi-dimensional measure of religiosity is presented. This is followed by a description of the economic development indicators that are used in the analysis and the sample selection process and data that is used in this study. Section 3 comprises of the description of the sample and discussion of the findings. The summary and conclusion of the study is provided in Section 4.

## 2. Methodology

### 2.1 Measure of religiosity: A multi-dimensional indicator

Religiosity encompasses the belief system, acts of worship, moral and ethical values and conduct. Following Renzetti and Curran (1998, p. 466), it is represented by five dimensions which are ritualistic, experiential, ideological, consequential and intellectual. As the data is collected through the use of a written questionnaire, all elements or items that represent each of the dimensions are constructed in the form of statements to be included in the questionnaire, and the responses are on a rating scale of 1 to 5, either “totally disagree” to “totally agree”; or “never” to “always”<sup>(3)</sup>. Each dimension is measured as the mean of the scores of the elements corresponding to that dimension. The religiosity measure is computed as the average score of the five dimensions. The value of the measure ranges from 1 (lowest religiosity) to 5 (highest religiosity).

The ritualistic dimension involves the particular set of religious practices, such as worship, obligatory prayer, fasting and the like, which are expected to be performed by the adherents. In Islam, there are obligatory and supererogatory rituals. In the measurement of preservation of religion, this study focuses on only the obligatory ones. The obligatory rituals include obligatory *ṣalāh* five times a day, *ṣiyām* (fasting) in the month of Ramaḍān, the Friday prayer (*ṣalāh*) for an adult man, and wearing of *ḥijāb* (veil) for adult women. Performing *ḥajj* is one of the

main pillars in Islam. However, it is obligatory only for those who can afford to do so. Hence, this is excluded from the analysis. As for *zakāh*, since it requires the fulfilment of *niṣāb* (minimum amount in possession) for a complete lunar year (*ḥawl*) to qualify for its payment, it is also excluded since there is difficulty in determining whether the respondents fulfill the requirements for paying *zakāh*.

Experiential dimension relates to feelings, perceptions, and sensations of having communication with Allah and involvement in religious activities/organizations. Religious practices that provide opportunities to be closer to Allah such as seeking Allah’s forgiveness and purification of the soul and heart from sins, performing *ṣalāh* with full devotion, and involvement in preaching activities and other religious activities are considered in the measurement of this dimension. The ideological dimension covers the faith that is expected to be believed by the adherents. The elements involved in the measurement of this dimension are the importance of religion in one’s life, giving precedence to religion over other matters, and to believe in the Divine will and decree.

The effects of religious belief, practice, experience, and knowledge on the adherent’s everyday life define the consequential dimension. It is reflected in the daily life of Muslims in terms of how they view morality in the changing world, whether religious beliefs should be compromised to attain self-interest, and whether attaining earnings can be from non-permissible means. These three indicators are used to measure this dimension. The intellectual dimension refers to basic information and knowledge about the religion that is expected to be known by the adherents. This study considers three items to represent this dimension, namely, sparing some time to learn about religion, understanding the meaning of the Qur’ānic verses, and having interest in discussions about religion. Table 1 provides a summary of the dimensions and elements of religiosity.

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(3) Some of the statements are written in negative form and the responses are accordingly reversely scored.

**Table (1) Dimensions and Elements/Items of Religiosity**

<i>Dimension</i>	<i>Element/Item</i>
Ritualistic	Performing obligatory prayers
	Performing Friday prayers (men)/wearing hijab (women)
	Fasting in Ramaḍān
	Reciting the Qur'ān
Experiential	Seeking God's forgiveness for wrongdoings
	Performing prayers with full devotion
	Involvement in preaching activities and other religious movements
Ideological	Importance of God
	Religion as a guidance
	Whether other things in life are more important than religion
	Believe in the Divine will and decree.
Consequential	View of morality in the changing world
	Religious beliefs can be compromised to attain self-interest
	Attaining earnings from non-permissible means
Intellectual	Making time to learn about the religion
	Understanding the meaning of the Qur'ānic verses
	Having interest in discussions about religion

## 2.2 Measures of individual economic achievement: Income and economic wellbeing

In this study, two measures of economic achievement are considered. The first is monthly income of the individuals. The construction of the second measure is based on the definition of economic wellbeing from an Islamic perspective. It is extracted from the work by Amin, Yusof, Haneef, Muhammad, and Oziev (2015, pp. 165-166) which uses the *maqāsid al-Sharī'ah* framework and applies content analysis to derive the operational definition of preservation and development of wealth. It is defined as the protection of ownership and property from damage, harm, theft, exploitation or injustice. Also, it encompasses the acquisition and development of wealth by making it available through circulation and equitable distribution, as well as preserving the wealth through investment and good governance. There are five dimensions that correspond to it: (i) protection of ownership and property; (ii) protection of wealth and property from damage or harm; (iii) preservation of wealth through protection of its value; (iv) preservation of wealth through its circulation; and (v) acquisition and development of property and wealth.

Although there are five dimensions for this definition, this study focuses only on the last dimension, which relates to the maintenance or upkeep of daily or routine economic wellbeing. Specifically, the

second measure of economic wellbeing is constructed based on individuals' responses on a rating scale of 1 ("totally disagree") to 5 ("totally agree") to three statements: (i) having a stable income; (ii) having sufficient income; and (iii) having financial investment(s). The mean score from these three items, which ranges from 1 to 5, represents the level of economic wellbeing. Higher values indicate higher wellbeing and therefore higher economic achievement, and lower values correspondingly reflect lower economic achievement.

## 2.3 Sample selection and data

Data is obtained from a random sample of individuals in South Kalimantan, Indonesia. This province is situated in the southern Kalimantan Island and covers an area of around 37,530.52 km<sup>2</sup> or about 6.98% of the total size of the island. Administratively, this province consists of 13 districts (11 regencies and 2 municipalities), 152 subdistricts, and 2,008 villages. Banjarmasin is the capital city of the province. The population of South Kalimantan in 2016 was 4,055,479, of which 96.67 percent were Muslims (Badan Pusat Statistik [BPS], 2017b).

The selection of sample is based on a multistage sampling technique. Firstly, the 13 districts are placed in one of three groups, high, medium or low, according to their Human Development Index (HDI)

score. The districts of Banjarmasin (high), Banjar (medium), Balangan (low) and Hulu Sungai Tengah (low) are chosen to represent the three groups. The second stage is choosing one urban and one rural sub-district from each district. The third stage involves a random selection of two to five villages from each sub-district, and from each village, a neighborhood is randomly chosen. The selection of individuals is based on the households they live in. Thus, the final stage is the random selection of households in the selected neighborhood.

The head, or in cases of him/her being absent, the spouse or another adult person in the household, was required to complete a written questionnaire. Out of 500 adult individuals representing households that were included in the sample, the study obtained

responses from 461. However, this study includes only those who earn a positive monthly income<sup>(4)</sup>, resulting in 373 usable responses.

### 3. Results and Discussion

#### 3.1 Sample description

The sample individuals, as presented in Table 2, are made up of 32.4 percent females and 67.6 percent males, and over 86 percent are married. Almost all of the male respondents are head of households compared to less than a quarter (24.8%) for female respondents. The majority of the sample have secondary education and earn income less than Rp 2,500,000. In this sample, women are more in the younger age groups compared to men. The location where the individuals live is about equally distributed between urban and rural areas.

**Table (2) Description of Sample**

		Female		Male		Total	
		n	%	n	%	n	%
Position in household	Head	30	24.8	248	98.4	278	74.5
	Other	91	75.2	4	1.6	95	25.5
Education	No schooling	5	4.1	7	2.8	12	3.2
	Primary	28	23.1	52	20.6	80	21.4
	Secondary	50	41.4	119	47.2	169	45.3
	Diploma/University	38	31.5	74	29.4	112	30.0
Marital status	Married	89	73.6	235	93.3	324	86.9
	Widowed/Separated/Divorced	23	19.0	10	3.9	33	8.8
	Single	9	7.4	7	2.8	16	4.3
Income	< Rp500,000	14	11.6	13	5.2	27	7.2
	Rp500,000 – < Rp1,500,000	36	29.8	56	22.2	92	24.7
	Rp1,500,000 – < Rp2,500,000	22	18.2	57	22.6	79	21.2
	Rp2,500,000 – < Rp5,000,000	37	30.6	85	33.7	122	32.7
	Rp5,000,000 – < Rp10,000,000	11	9.1	33	13.1	44	11.8
	Rp10,000,000+	1	0.8	8	3.2	9	2.4
Age	< 25 years	14	11.6	8	3.2	22	5.9
	25 – 34 years	31	25.6	54	21.4	85	22.8
	35 – 44 years	29	24.0	82	32.5	111	29.8
	45 – 54 years	36	29.8	56	22.2	92	24.7
	55 – 64 years	10	8.3	39	15.5	49	13.1
	65+ years	1	0.8	13	5.2	14	3.8
Location	Urban	59	48.8	129	51.2	188	50.4
	Rural	62	51.2	123	48.8	185	49.6
Total		121	32.4	252	67.6	373	100

(4) This study includes only those with positive monthly income as the dependent variable is log of income. For consistency and comparison purposes, the same sample is used for the analysis using the second measure of economic achievement indicator as the dependent variable.

### 3.2 Level of religiosity and individual economic achievement

Table 3 presents the levels of religiosity, monthly income, and economic wellbeing. The constructed religiosity measure ranges from 1 (lowest religiosity) to 5 (highest religiosity). Based on the findings, the religiosity scores are negatively skewed, with a mean value of 4.004, indicating a relatively high religiosity level, on average. This result is consistent with the

observation that the people of South Kalimantan are religious. Nevertheless, the range of the scores is from 1.722 to 4.944, indicating different levels of religiosity, where there are individuals especially among men who have relatively low religiosity levels. However, t-test on differences of means indicates no significant difference in religiosity between men and women, on average (t-value of -0.001 with p-value of 0.999).

**Table (3) Religiosity and Economic Development Levels**

	Religiosity	Monthly income (Rp) million)	Economic wellbeing
<i>All</i>			
Mean	4.004	2.740	3.388
Median	4.056	2.100	3.333
Minimum	1.722	0.030	1.000
Maximum	4.944	21.000	5.000
Std Deviation	0.532	2.485	0.857
n	373	373	373
<i>Female</i>			
Mean	4.004	2.227	3.438
Median	4.056	1.900	3.333
Minimum	2.556	0.030	1.000
Maximum	4.944	10.000	5.000
Std Deviation	0.422	1.886	0.863
n	373	373	373
<i>Male</i>			
Mean	4.004	2.986	3.364
Median	4.111	2.490	3.333
Minimum	1.722	0.200	1.333
Maximum	4.944	21.000	5.000
Std Deviation	0.578	2.695	0.854
n	252	252	252

The mean monthly income ranges from Rp 0.03 million to Rp 21 million with a mean of Rp 2.74 million, and the distribution is positively skewed, as expected. T-test reveals that women earn significantly lower than men. Based on this measure, women have a lower level of economic achievement compared to men. However, from the economic wellbeing aspect, both men and women are in good position, recording scores of 3.438 and 3.364, respectively, which are significantly higher than the satisfactory score of 3 (the t-values for testing mean scores larger

than 3 are 5.584 and 6.759 for women and men, respectively). In addition, the economic wellbeing of women is not significantly different from that of men.

### 3.3 Relationship between religiosity and individual economic achievement

Regression analyses are conducted to determine the impact of religiosity on economic achievement of individuals. The study also included several personal characteristics in the regression equation as control variables. Age, which to some extent reflects working

experience, and educational level are human capital indicators which are expected to have a positive impact on the economic condition of individuals. The variable *education* assumes a value from 1 (no schooling) to 7 (post-graduate degree). The third control variable is a dummy variable to differentiate between those living in urban and non-urban areas. There may be differences in the economic achievement between those living in urban areas as compared to others as economic opportunities are expected to be more in urban areas. The study also considers two other variables: marital status and whether the individual is a head of household or not, as these factors may impact the motivation for, and hence the level of, economic achievement. The reference category for marital status is divorced, separated or widowed. Gender is included to determine if there are differences between men and women as suggested from the preliminary analysis, once other factors are controlled for.

For the regression analyses, two economic development measures, total monthly income (in logarithm) and the level of economic wellbeing are the dependent variables. Ordinary Least Squares (OLS) regressions are estimated for the combined sample of men and women, and separately for men and women. Diagnostic tests on specification, multicollinearity, heteroscedasticity and normality are performed on the regression equations. The results are shown in Table 4.

There are no indications of specification error based on Ramsay RESET test. In addition, although

the variable *Head* appears to be somewhat correlated with other explanatory variables, the test indicates that there is no problem of serious multicollinearity between the explanatory variables (the variance inflating factors (VIF) are all less than 5). Estimations omitting the variable *Head* produce qualitatively similar results (as the results are qualitatively similar, they are not reported in this paper). All the models have homoscedastic errors with the exception of one. The regression for log of income for the joint sample of men and women indicates the presence of heteroscedasticity (based on White test). White heteroscedasticity consistent standard errors and covariance are used to address this issue. This regression, and the regression for the women sample are found to have residuals that are not normally distributed (based on Jarque-Bera tests). As the sample is large, the occurrence of non-normality is tolerated in this analysis.

The results, as shown in Table 4 indicate that religiosity has a significant positive impact on economic wellbeing. Those with higher religiosity experience higher levels of wellbeing in terms of having sufficient and stable income, and having financial investments. Religiosity is also significantly positively related to income for men, but there is no significant relationship between religiosity and income for women. Thus, religiosity is not an impediment to economic progress as found by some studies especially those related to Muslims. Rather, it contributes positively to the economic achievement of individuals and hence to the society.

**Table (4) Determinants of economic development: income and economic wellbeing**

	<i>All (n=373)</i>		<i>Men (n=252)</i>		<i>Women (n=121)</i>	
	<i>Log(income)</i>	<i>Econ Wellbeing</i>	<i>Log(income)</i>	<i>Econ Wellbeing</i>	<i>Log(income)</i>	<i>Econ Wellbeing</i>
Age	0.012***	-0.005	0.005*	-0.008**	0.033***	0.006
Male	0.182	0.168				
Urban	0.397***	0.096	0.345***	0.162**	0.544***	-0.016
Education	0.259***	0.074***	0.272***	0.076***	0.272***	0.069*
Head	0.093	-0.325**	-0.704*	-0.840*	0.271	-0.191
Married	0.257*	-0.050	0.218	-0.047	0.690**	0.182
Single	0.018	-0.416*	-0.749**	-0.776*	0.757*	-0.092
Religiosity	0.124*	0.714***	0.149**	0.673***	0.015	0.890***
Constant	11.849***	0.581*	13.018***	1.538**	10.908	-0.691
R-squared	0.362	0.296	0.417	0.305	0.283	0.314
<i>Diagnostics</i>						
Specification	✓	✓	✓	✓	✓	✓
No multicollinearity	✓	✓	✓	✓	✓	✓
Normality	✗	✓	✓	✓	✓	✗
Homoscedasticity	✗	✓	✓	✓	✓	✓

\*, \*\*, \*\*\*: significant at 10%, 5% and 1%, respectively.

An interesting finding is that among men, although the older ones attain higher income, their economic wellbeing is lower. Older men may have more responsibilities and dependents and thus their higher income may be insufficient to fulfill those needs. Those living in urban areas make more money, and for the men, they enjoy a higher level of economic wellbeing. Men who are heads of households also earn lower income and experience a lower level of wellbeing. Women who are widowed, divorced or separated earn lower income than other women. However, they do not differ from others in terms of stability and adequacy of income, and ownership of financial investment.

An encouraging result is that education plays a significant positive role in contributing towards economic development. Individuals with higher education levels do better in terms of income and economic wellbeing. The analysis also shows that after controlling for other factors, women and men are equal in their economic achievement.

#### 4. Summary and Conclusion

This study provides a novel way to measure Islamic religiosity among individuals. In addition, this paper constructed an indicator other than income to reflect economic achievement. The economic wellbeing indicator reflects individuals' level of adequacy and stability of income, and investment to meet current and future financial needs. Those with higher scores

on this indicator exhibit higher economic wellbeing, that is, they are more financially and economically developed.

These two measures of economic achievement are used to determine the effect of religiosity on the people of South Kalimantan. Consistent with the Islamic ideology that Islam strongly promotes development (Sulaiman, 2008), the analysis shows that religiosity contributes positively to economic achievement. Muslims in South Kalimantan have a relatively high level of religiosity, and those with higher religiosity are economically better-off.

The suggestion of the negative association between religion and economic development especially for the people of South Kalimantan is shown to be otherwise in general. In fact, even if only income is considered to reflect economic achievement, it is positively related to religiosity for the sample of men in this study. Nonetheless, there are determinants other than religiosity that impact individual economic development. Education, for instance, is found to be a significant determinant of economic development. The low level of education among the South Kalimantan community is one of the important factors that leads to low economic achievement. In fact, based on the latest population census, more than 30 percent of the South Kalimantan people did not complete primary school (BPS, 2010). Therefore, it can never be over-emphasized that education must be one of the main focus of policy to achieve economic progress.

The findings of this study support the importance of religiosity as it can bring about economic prosperity and wellbeing. Religiosity is not just about performing the rituals, but the embodiment and understanding of religion which encompasses the

belief system, acts of worship and moral and ethical values and conduct. If individuals abide by these principles, then it will translate into economic and non-economic success in their lives.

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## العلاقة بين التدين والإنجاز الاقتصادي للأفراد: أدلة من جنوب كاليمانتان، إندونيسيا

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المستخلص. تتناول هذه الدراسة تأثير التدين على النمو أو الإنجاز الاقتصادي للأفراد في مقاطعة جنوب كاليمانتان، في إندونيسيا؛ إذ تتميز هذه المقاطعة بارتفاع نسبة تدين الأفراد فيها، وضعف مستوى النمو الاقتصادي في آن واحد. تهدف الدراسة إلى استكمال بعض أوجه القصور في الدراسات السابقة التي تناولت هذا الموضوع على المستوى الجزئي، من خلال مقياس خماسي الأبعاد لقياس مستوى التدين يتضمن: الشعائر التعبدية، والجوانب العملية، والجوانب العقديّة، والجوانب الاجتماعية، والجوانب الفكرية، علاوة على تلك الجوانب تم استخدام مؤشر للرفاه الاقتصادي غير قائم على مستوى الدخل كما هو شائع في الأدبيات الاقتصادية. أظهرت النتائج أن مستوى التدين عند المسلمين في مقاطعة جنوب كاليمانتان عالٍ، وأن الأشخاص الأكثر تديناً أفضل حالاً من الناحية الاقتصادية. كما خلص البحث إلى أن التعليم يعد مؤشراً مهماً في تحقيق الرفاه الاقتصادي للأفراد، مما يستوجب التركيز عليه وعلى التدين اللذين يعدان من أهم المؤشرات في تحقيق التقدم الاقتصادي خاصة في مقاطعة جنوب كاليمانتان ذات الطبيعة السكانية الأقل تعليماً.

الكلمات الدالة: التدين، كاليمانتان الجنوبية، الإنجاز الاقتصادي.