Predictors for compliance with anti-terrorist financing standards

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Abstract

Purpose – The purpose of this paper is to identify and test predictors for countries to comply with the Financial Action Task Force's (FATF) anti-money laundering and terrorist financing recommendations.

Design/methodology/approach – The authors conduct a quantitative study to explore which factors predict compliance of countries. They include the compliance scores of 196 countries.

Findings – The results of a forward stepwise regression analysis show that a country's wealth, measured as gross domestic product (GDP) per capita, is the most important predictor for compliance. This result supports earlier academic work about predictors for compliance (Simmons, 1998; Giraldo and Trinkunas, 2007; Whitaker, 2010). The other factors identified suffering from terrorist attacks, relative financial market dominance, tourism sector and the degree of democracy do not explain additional variance in compliance.

Practical implications – This research sheds light on compliance as a concept. For policymakers, accountants, companies and governments, it is important to understand why compliance occurs and why not.

Originality/value – The empirical results indicate that, in contrast to common belief, countries that suffer more from terrorism are not more compliant. Moreover, the rate of democracy, a relative dominant financial market and a strong tourism sector do not stimulate compliance with anti-terrorist financing standards.

Keywords Compliance, Countering terrorist finance, Degree of compliance, Economic consequences theory, FATF, International regime theory

Paper type Research paper

1. Introduction

Since September 2001, the Financial Action Task Force (FATF) coordinates an international campaign against criminal money laundering and terrorist financing (FATF, 2012). Transnational terrorism is an international problem and countering terrorism is a responsibility of all countries in the world (Giraldo and Trinkunas, 2007). Cutting of resources has proved to be an effective method in fighting terrorism (Clunan, 2006). The FATF made recommendations and standards for countries to make it harder for terrorists to finance themselves. The effectiveness of countering terrorist financing depends on the compliance of countries with these standards (Clunan, 2006; Jensen and Png, 2011; Mugarura, 2013). Although the fierceness and collectiveness of the terrorist threat is obvious, it remains a challenge to realize full cooperation of all states in countering terrorist financing. The degree of compliance is studied by scholars like Johnson (2008), Bogers and Beeres (2013) and institutions like the FATF. Their findings show that both the absolute as the relative degree of compliance with FATF standards differ between countries.

This study investigates what factors are associated with the compliance of governments. Its main goal is to enlighten the understanding of the considerations of countries regarding

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compliance with international anti-money laundering and terrorist financing standards. The research question of this study is:

RQ1. What are the predictors for countries to comply with anti-money laundering and terrorist financing recommendations?

Our research contributes to the literature about compliance with international agreements. This study complements earlier more qualitative work on this subject (Whitaker, 2010; Simmons, 1998). We use Tangs *economic consequences theory* to define and categorize predictors for compliance with the FATF standards (Tang, 1994). Tang (1994, p. 146) argues that governments will make a cost benefit analysis when deciding to implement international (financial) standards. Next to cost and benefits, cultural, social, political and economic factors play a role (Tang, 1994). Tang's paper shows parallels between the accounting oriented *economic consequences theory* and the more political oriented *international* regime *theory* (Krasner, 1983). If we understand which factors predict countries' compliance and, thus, get a better idea of why countries behave as they do, we can use that knowledge to improve compliance and consequently combat money laundering and terrorist funding.

This paper is structured as follows. Section 2 focuses on transnational terrorism and terrorist financing in general. Furthermore, we briefly explain the goals and recommendations concerning anti-terrorist financing of the FATF. Section 3, combining economic consequences and international regime theory, formulates three categories for predictors for compliance whereupon we assess our hypotheses. Section 4 develops five hypotheses. The research method of this study is described in Section 5. In Section 6, we put the hypotheses to the test and present the results. The final section offers the conclusion of this research.

2. Countering terrorist financing

In the past decades, multiple strategies have been used to fight terrorism. The most common and visible strategy is the physical war on terrorism. Defense forces of many countries fought in Afghanistan and Iraq in the first decade of the twenty-first century and do so now in Iraq and Syria. Complementary to the physical war, the international community realized that cutting of resources and denying terrorist access to funds contributed to the success of the war on terror (Clunan, 2006). Terrorist organizations receive their financial funds from different sources and actors, such as charities, fraud, legal businesses, money laundering, kidnaping for ransom and smuggling (Clarke, 2015).

In 1999, the United Nations (UN) Security Council announced the first comprehensive plan to counter terrorist financing by publishing resolutions 1267 and 1269. These resolutions specifically focus on the international cooperation in the fight against terrorism in general and the Taliban in specific (UN, 2017). Concurrently, in December that year, the UN International Convention for the Suppression of the Financing of Terrorism was held (Ridley and Alexander, 2012). Right after 9/11, the FATF was given the responsibility to make rules and recommendations in fighting terrorist financing. As a response to international demand, the FATF added nine Special Recommendations to fight terrorist financing to its standards (FATF, 2001). After 2012, the FATF 40 standards for money laundering and the nine standards for combating terrorist financing merged to 40 standards (FATF, 2012) These 40 standards contain nearly the same criteria as before 2012. The UN support the FATF and the FATF recommendations are seen as the most important anti-terrorist financing standards. With over 190 jurisdictions around the world that have committed to the recommendations, this makes FATF the policy-making body for countering terrorist financing.

3. Predictors for compliance with Financial Action Task Force standards

In this section, we develop three categories for predictors for compliance with anti-money laundering and terrorist financing standards. We present Tang's economic consequences theory as a way to analyze the behavior of states with regard to compliance. Moreover we show that parallels exist between the economic consequences theory, the studies about international relations and regimes (international regime theory), and the adherence to FATF standards. We demonstrate the aptness of the economic consequences theory for developing categories of predictors for compliance.

Tang (1994) studied the harmonization of accounting standards for Chinese ventures. His main question was how governments decide on the implementation of international financial rules. More in particular, his aim was to identify which factors predict compliance with international financial standards. Tang proposes a theoretical model to explain and predict the compliance with international accounting standards across countries and shows that there are five main influential factors for compliance: costs, negative and positive economic consequences, structural capacity, external influence and willingness of local parties (Tang, 1994, p. 146). Because costs and benefits of compliance with anti-terrorist financing standards are more than financial expenditures and economic consequences, we reformulate these factors to define a new category: balance of costs and benefits. Furthermore, we merge willingness of local parties and structural capacity into internal structures. We define external influence as external structures.

3.1 Balance of costs and benefits

In essence, the economic consequences theory states that governments will make a cost benefit analysis to decide on compliance with international accounting standards. Tang (1994) describes that direct costs and negative and positive economic consequences play an important role. According to the international regimes theory, the balance between costs and benefits determines the optimal strategy for countries in international regimes (Stein, 1983, p. 120). For international cooperation to take place, "the organizational costs to the entrepreneur must be lower than the net discounted value of the benefits that the entrepreneur expects to capture for itself" (Keohane, 1983, p. 155). Basically, the economic consequence theory has the same fundament. It also states the benefits of compliance have to exceed the costs; otherwise, compliance will not take place. The parallel between the economic consequence theory and the international regime theory here is clear. Both theories incorporate the cost benefit analysis. The literature on terrorist financing and the implementation of the FATF standards supports the statement that compliance is both costly and beneficial. According to Clunan (2006) and Geiger and Wuensch (2007) the adoption and implementation of the FATF recommendations is costly and resource consuming. They argue that compliance requires institutional and governmental capacity. Furthermore the compliance of countries with anti-terrorist financing standards depends on how governments and institutions perceive the costs and benefits associated with compliance (Giraldo and Trinkunas, 2007; Harvey, 2004).

In conclusion, the economic consequences theory states that the balance between costs and benefits plays an important role. The international regime theory theoretically validates this and the case specific characteristics of the implementation of the FATF standards show that it is possible that costs and benefits are predictive factors. Therefore, we will use costs and benefits as a category of predictors for compliance.

3.2 Internal structures

In his study, Tang (1994, p. 148) finds that internal conditions also influence the decision making process. Societies with conservative values are inclined to accept conservative accounting standards compared to progressive societies. Moreover, the influence of local customs and preferences cannot be ignored (Tang, 1994, p. 148). In the international regime literature, three structural forces take a central position: the distribution of power, the nature of knowledge and the nature of technology (Stein, 1983). A state's degree of power in the international system is one of the things that explains its preferences. Powerful organizations and companies for instance can exercise influences on compliance decisions. The nature of technology and knowledge can also be important for a state's decision to cooperate in international regimes. For example, the nature of technology can be important for states to decide whether to invest in weapons and knowledge about terrorist risks can transform states interest to cooperate (Stein, 1983). In the terrorist financing literature, the predominance of internal structures is justified too. Multiple scholars point out that institutional capacity is perhaps the most important factor for implementing anti-terrorist financing standards (Clunan, 2006, p. 576; Giraldo and Trinkunas, 2007; Napoleoni, 2006). A country has to possess sufficient resources, capacity and knowledge to comply (Giraldo and Trinkunas, 2007).

Furthermore, type of state is mentioned as predictor for compliance with international law (Simmons, 1998; Giraldo and Trinkunas, 2007). Whitaker (2010) tests this assumption in her study about compliance of weak states. She argues that in the context of the counter-terrorist regime, the strength of political institutions could pull in both directions and shows contradictory findings about the influence of democratic institutions on the degree of compliance (Whitaker, 2010, p. 649).

In summary, the economic consequences theory, the international regime theory and the terrorist finance literature predict that internal structures play an important role. This demonstrates the legitimacy of the use of the economic consequence theory when identifying predictors for compliance. We will use internal structures as the second category when identifying predictors for compliance.

3.3 External structures

Next to internal conditions, as described above, Tang (1994) considers that external conditions shape the way in which governments behave in the matter of compliance with international accounting standards. When deciding for compliance governments will take the interest of all stakeholders into account. The international regime theory suggests that multiple external elements can intervene in decision-making and influence the cost-benefit balance too (Stein, 1983, p. 120). Stein finds that external structural forces influence the behavior of countries in a regime (Stein, 1983, p. 134). "Great powers can often structure the choices and preferences of minor powers and thus shape regional outcomes" (Stein, 1983, p. 135). These structures amongst others create different incentives and prospects for countries in international regimes (Stein, 1983, p. 136). The results of studies about terrorist financing show the influence of external factors too (Simmons, 1998; Whitaker, 2010; Napoleoni, 2006). Whitaker (2010) focuses on the influence of external pressure on compliance of weak states with the UN anti-terrorist resolution. In her study, Whitaker shows that external parties like the UN make effort to influence the compliance of countries. By providing funds to weak states, the UN tries to stimulate compliance. Other parties and factors that influence compliance with FATF standards can also be found. Furthermore, in case of non-compliance, the FATF will exercise peer pressure and if that is not sufficient, it will suspend countries. The resulting reputation damage for a country is obvious.

Clunan (2006, p. 579) argues that cost of non-adoption to FATF recommendations rise through western pressure too. The reviewed terrorist financing literature tells us that external forces can play an important role in the matter of compliance.

In this section, we showed that although the context varies, parallels exist between the behavior of governments in the matter of compliance with anti-terrorist standards and the behavior in accounting settings. Therefore, the economic consequence theory seems suitable for defining predictors for compliance. Based on an analysis of the prior literature on compliance, international relations and anti-terrorist funding, we formulated three categories for predictors for compliance:

(1) balance of costs and benefits;

(2) internal structures; and

(3) external structures.

Although external structures certainly will play an important role, we will not pursue research into this category further, however. We were not able to quantitatively operationalize variables (e.g. degree of pressure from the international community) in relation to external structures in a meaningful way. In the next section, we will develop five testable hypotheses for the categories balance of costs and benefits and internal structures.

4. Hypotheses

4.1 Balance of costs and benefits

4.1.1 Country's wealth. Direct costs are important in anti-terrorist financing compliance decisions. To oblige financial institutions to include originator information on funds transfers and related messages is an example of such direct costs. Next to that, reviewing the adequacy of laws and regulations that relate to nonprofit organizations that can be abused for the financing of terrorism is resource-consuming and expensive. From a pure financial view, one would expect that wealthy countries have less trouble with the implementation of the standards than poor countries. Therefore, the assumption that in general richer countries are more compliant seems legitimate (Giraldo and Trinkunas, 2007). We, therefore, conjecture a significant positive relation between the wealth of a country and the degree of compliance. The wealth of a country will predict compliance with FATF standards:

H1. State wealth is a predictor for compliance with the FATF standards.

4.1.2 Suffering from terrorist attacks. Naturally, countries that suffer more from terrorists attacks have more incentives to counter terrorism (Whitaker, 2010; Clunan, 2006). The USA is exemplary for this statement. The terrorist attacks of 9/11 caused and fueled the war on terror. Logically, countries that have more incentives to fight terrorism are more willingly to comply with anti-terrorist financing standards. Therefore, we assume that there is a positive relation between the extent to which countries suffer from terrorist attacks and the degree of compliance:

H2. The degree to which countries suffer from terrorism is predictive for compliance with FATF standards.

4.1.3 Financial sector. In defining the possible benefits for a country to comply, it is important to focus on the possible incentives for a country to fight terrorism. Suffering from terrorist attacks is the most direct incentive but there are more incentives. Terrorist finance and money laundering poisons the economic financial system of a country (Ai, 2012; Clunan, 2006). Both undermine the confidence in the economic system (Czinkota *et al.*, 2010). This means that countries that heavily rely on their financial sector or simply have a dominant financial sector have more incentives to counter money laundering and terrorist finance. Therefore, it is legitimate to assume that countries that have a dominant financial sector are more willingly to comply with FATF standards. As a result, we formulate the following hypothesis:

H3. A country's financial market dominance is predictive for compliance with FATF standards.

4.1.4 Tourism. For governments, the possible economic consequences of compliance are extensive. Terrorist attacks have an enormous impact on society and will spread fear and insecurity under the population (Giraldo and Trinkunas, 2007). Especially the tourist sector is highly influenced by catastrophic events. In the aftermath of terrorist attacks like the ones in North Africa and Turkey, tourism revenues collapsed (UN World Tourism Organization, 2017). Countries that have a large tourism sector are more inclined to counter terrorism. Therefore, it is expected that countries with a relative dominant tourist sector have more incentives to comply with the recommendations (Enders *et al.*, 1992):

H4. The largeness of a country's tourism sector is predictive for compliance with FATF standards

4.2 Internal structures

4.2.1 State form. According to the economic consequences theory, the influence of local customs and preferences on compliance with international accounting standards cannot be ignored (Tang, 1994, p. 148). Tang exemplifies this by postulating that conservative countries will be relatively more willing to comply with conservative international standards. The attitude and opinions of a country towards internationalization can be decisive. The international regime theory supports this argument: *domestic structures and sectors play a* role *in determining the constellation of actor preferences* (Stein, 1983, p. 140). According to several scholars the way in which the state is formed is paramount for compliance too (Giraldo and Trinkunas, 2007; Whitaker, 2010). The general view how to improve economic situations, bring safety, create freedom and fight terrorism is by democratization (Hehir, 2007). Whitaker (2010, p. 644) describes that "democracies are more likely to comply with international agreements because of their emphasis on the rule of law and the influence of pro-compliance constituencies". When the people of a country have more influence on the decisions of a government, it can be assumed that their countries have more incentives to comply with FATF standards. However, Hehir (2007, p. 730) postulates that a democratic governance does not lead to a reduction of terrorism in general. He states that "the *ability of democratic governance to catalyze a reduction in terrorism is exaggerated if not wholly inaccurate*". Whitaker (2010, p. 661) also mentions the degree of democratization. In the studied cases, he found that democracies in transition are less likely to comply with anti-terrorist finance standards. Remarkably, Whitaker results point out that non-democracies are even more cooperative and compliant as democracies. In conclusion, scholars do not agree on the effect of state form on compliance to the FATF recommendations. We will explore whether state form is a predictive factor for the degree of compliance:

H5. The rate of democracy of a country predicts the degree of compliance.

5. Research methodology

In this section, we focus on the research method. We will explain how the hypotheses are operationalized and present proxies to measure the variables.

5.1 Variables and data sources

The compliance level with the FATF standards is the dependent variable in this research. We use three measures to assess compliance: FATFAT (i.e. the total average score of all FATF standards), FATFA40 (i.e. the average score on the anti-money laundering standards), FATFA9 (i.e. the average score on the standards that concern combating terrorist financing) (see Table I, row compliance). We used 371 mutual evaluation- and follow up reports to assess the compliance scores of 196 countries. The evaluations were held by a team of assessors composed of FATF experts using the AML/CFT assessment methodology (FATF, 2013). The evaluations were performed between 2004 and 2016. The outcomes of the mutual evaluations by the FATF comprise five compliance levels: compliant (C) largely compliant (LC), partially compliant (PC), non-compliant (NC) and not applicable (NA). To rate the compliance of countries we used a valuation method adopted by Arnone and Padoan (2008). Following that method, C scores three points, LC scores two points, PC scores one point and NC scores zero points. In the case of NA, the average score on all other recommendations is assigned. By using the method of Arnone and Padoan (2008), the compliance level as dependent variable becomes a scale variable. We used five independent variables to test our hypothesis. Table I presents a summary of all variables, proxies and the data sources we used to test the hypotheses.

Variable	Abbreviation	Description	Source
Compliance	FATFAT	Total average score on all FATF recommendations	FATF (2004/2016), 371 mutual evaluation and follow up reports
	FATF40	Total average score on the 40 anti-money laundering recommendations of the FATF	
	FATF9	Total average score on the 9 special FATF standards to combat terrorist financing	
Wealth	GDP	Gross domestic product per capita based on purchasing power parity (current international $)	World bank (2017a)
Terrorism	GTI	Global terrorism index	Institute for Economics and Peace (2017)
Financial market dominance	FIN	Market capitalization of listed domestic companies (Share price times the number of shares outstanding)	World bank (2017b)
Tourism	TOU	The number of tourists who travel to a country other than that in which they have their usual residence	UN World Tourism Organization (2017)
State form	DEM	The democracy index is based on five categories: electoral process and pluralism; civil liberties; the functioning of government, political participation and political culture	The Economist (2017)

Table I. Summary of measures

For this research we will use the total score (i.e. FATFAT) as the proxy for the dependent variable for two reasons. First, next to the nine special recommendations, the forty general recommendations, when implemented, are necessary to counter terrorist finance too. A sharp distinction between special and general recommendations cannot be made. Second, the scores on the three proxies of the dependent variable are highly correlated (a correlation coefficient of almost 0.9). This implies that the selection of a specific proxy makes no difference for analyzing the results. Furthermore, we assessed the distribution of the dependent variable. Using the Kolmogorov–Smirnov test, measuring the skewness and kurtosis and by analyzing the histogram of the variable compliance we assess the distribution of the dependent variable compliance. Based on these tests we conclude that the dependent variable is distributed normally.

6. Results

6.1 Descriptive statistics

In this research, we assessed the predictive value of different variables for compliance with the FATF standards. The descriptive statistics of all variables are presented in Table II.

In Table II the descriptive statistics of the dependent and independent variables are given. The compliance rate ranges from zero to three. The minimum score for compliance in the data set is 0.2, and the maximum score is 2.61. Table III presents the correlations of all variables. All variables, except GTI, show significant positive correlations with compliance. The same goes for gross domestic product (GDP). To draw conclusions about the predictive value of the variables, the correlation results are insufficient. Therefore, we conduct a regression analysis with compliance as dependent variable.

Table II. Descriptive statistics of variables used

Category	Variables	*N*	Mean	Median	SD	Maximum	Minimum
Dependent variable	Compliance (FATFAT)	371	1.39	1.45	0.57	2.61	0.2
Independent variables	GDP	305	19,558	12,348	20,147	135,422	581
	GTI	231	1.93	1.19	2.22	9.11	0
	FIN	129	70.27	40.90	113.52	1,078.3	1.6
	TOU	295	5,526,013	1,111,000	11,303,508	80,499,000	4,600
	DEM	177	5.84	6.32	2.23	9.93	1.49

Note: All the variable are defined in Table I

Table III. Correlation analysis

Variables	Compliance	GDP	GTI	FIN	TOU	DEM
Compliance	1	0.618 ***	0.101	0.353***	0.444***	0.487***
GDP	0.420***	1	0.069	0.452***	0.498***	−0.501***
GTI	0.054	−0.071	1	0.063	0.296***	−0.066
FIN	0.213**	0.290***	−0.088	1	0.343***	0.308***
TOU	0.335***	0.259***	0.281***	0.158*	1	0.396***
DEM	0.463***	0.255***	−0.136*	0.035	0.205**	1

Notes: $^{*}p \leq 0.10$; $^{**}p \leq 0.05$; $^{***}p \leq 0.01$

6.2 Regression analysis

The regression analysis provides results about how the set of variables predicts the dependent variable. To measure the individual contribution of each variable it is useful to compare the regression models (1) to (5). By doing so, the individual additional explanatory value of the independent variables becomes visible. The interrelation between the independent variables can be interesting too. Table IV provides an overview of the results of a forward stepwise regression analysis.

Table IV shows that the individual influence of wealth on compliance with anti-terrorist financing standards is positive and significant (model 1; $\beta = 0.420$; $p < 0.01$). Model 2 adds suffering from terrorism to the equation. Adding terrorism does not explain compliance and has no significant influence on the relation between wealth and compliance (model 2; $\beta = 0.082$; $p > 0.10$). In Model 3, the variable financial market is added. Financial market dominance does not add to explaining the level of compliance (model 3; $\beta = 0.113$; $p > 0.10$). In model 4 the tourism sector variable is added to the equation. It appears that the size of the tourism sector, unlike suffering from terrorism and financial market dominance, adds to explaining the level of complying with anti-terrorist financing standards (model 4; $\beta = 0.194$; $p < 0.05$). However, when we add the democracy variable, it appears the influence of the tourism sector disappears (model 5; $\beta = 0.203$; $p < 0.10$). Overall, Table IV shows that a country's wealth is the major predictor for compliance to FATF standards. The other independent variables do not have additional explanatory value for compliance. We now turn to our hypotheses.

6.3 Hypotheses

H1. A country's wealth is a predictor for compliance with the FATF standards.

The wealth of a country, measured in GDP per capita, is correlated with the compliance to FATF standards (Table III; correlation coefficient 0.420; $p < 0.01$). Based on this correlation we come to the conclusion that wealthier countries are relatively more compliant to FATF standards. Furthermore, as can be seen in the stepwise regression analysis of Table IV, wealth (GDP) is a significant predictor for compliance in all models. Moreover, we conclude that GDP is the most important predictor for compliance. The data, therefore, support *H1*.

H2. The degree to which countries suffer from terrorism is predictive for compliance with FATF standards.

Variables	(1)	(2)	(3)	(4)	(5)
GDP	0.420*** (8.058)	0.480*** (8.104)	0.521*** (5.948)	0.500*** (5.485)	0.435*** (3.724)
GTI	–	0.082 (1.378)	0.063 (0.769)	−0.005 (0.055)	0.082 (0.706)
FIN	–	–	0.113 (1.318)	0.057 (0.664)	0.018 (0.148)
TOU	–	–	–	0.194** (2.247)	0.112 (0.940)
DEM	–	–	–	–	0.203* (1.858)
Constant	1.089*** (24.439)	1.021*** (18.609)	1.126*** (13.197)	1.122*** (13.445)	0.884*** (4.478)
Adjusted R^2	0.174	0.225	0.298	0.358	0.281
Observations	305	223	112	107	68
F-value	64.928***	33.162***	16.679***	15.784***	6.236***

Notes: *$p \leq 0.10$; **$p \leq 0.05$; ***$p \leq 0.01$

Table IV. Ordinary least square regressions

Suffering from terrorism is not correlated with compliance (Table III; correlation coefficient 0.054; $p > 0.10$). The regression analysis of Table IV shows that suffering from terrorism, measured by the score on the global terrorism index, does not lead to additional compliance with anti-terrorist financing standards. We, therefore, reject *H2*.

> *H3.* A country's financial market dominance is predictive for compliance with FATF standards.

The relative dominance of the financial market is positively and significantly associated with the degree of compliance (Table III; correlation coefficient 0.213; $p < 0.05$). Based on this association we draw the conclusion that countries with a relative dominant financial market are more compliant with the FATF standards. However, a relative dominant financial market however is not a predictive factor for compliance. The regression analysis of Table IV shows that in model 3 financial market dominance does not significantly add to explaining additional variance in the dependent variable compliance. We reject *H3*.

> *H4.* The largeness of a country's tourism sector is predictive for compliance with FATF standards.

Countries with a relative large tourism sector are relatively more compliant to FATF standards (Table III; correlation coefficient 0.335; $p < 0.01$). The regression analysis of Table IV, however, shows that tourism sector is not a predictive factor for compliance. We, therefore, reject *H4*.

> *H5.* The rate of democracy of a country predicts the degree of compliance.

Democracy is correlated with compliance too (Table III; correlation coefficient 0.463; $p < 0.01$). Therefore, we draw the conclusion that democratic countries are relatively more compliant with FATF recommendations. Although democracy is correlated with compliance, it is not an important predictor. The regression analysis shows a weak significance for democracy (Table IV; Model 5). Therefore, we conclude that democracy does not explain additional variance in compliance and reject *H5*.

7. Conclusion

In the private sector, the arguments to choose for compliance with accounting standards are straightforward; a company will make a cost benefit analysis. If the benefits of compliance exceed the costs, compliance will take place. In the international governmental security sector however, arguments for compliance are not self-evident. In this paper, we study terrorist finance and the compliance of countries with FATF standards. The FATF is the inter-governmental body responsible to set standards to counter terrorist finance. We conducted a quantitative study to explore which factors predict compliance of countries. We formulated the following research question: what are the predictors for countries to comply with FATF anti-money laundering and terrorist financing recommendations? We used the economic consequences theory to define categories for compliance with the FATF recommendations. Before defining categories, we validated the economic consequences theory by comparing it with the international regime theory. This theoretical comparison demonstrated that the accounting orientated economic consequences theory can be applied in a governmental security setting. Using the economic consequences theory supplemented with literature research we formulated three categories for compliance, costs, benefits and internal structure.

The results of the forward stepwise regression analysis show that a country's wealth, measured as GDP per capita, is the most important predictor for compliance. This result supports earlier academic work about predictors for compliance (Simmons, 1998; Giraldo and Trinkunas, 2007; Whitaker, 2010). The other variables: suffering from terrorist attacks, relative financial market dominance, tourism sector and the degree of democracy do not add significantly to explaining additional variance in compliance. These results are unexpected. In contrast to common belief, the degree to which countries suffer from terrorism does not predict compliance. Moreover, the rate of democracy, a relative dominant financial market and a strong tourism sector do not stimulate compliance with anti-terrorist financing standards.

These results have practical implications. The efforts of the FATF and wealthy states should be focused on improving the compliance rates of poor states, since the effectiveness of the fight against terrorist finance will be determined by its weakest link. Terrorists will move their financial activities to states where effective controls to prevent terrorist financing are not implemented. Consequently, there is an incentive for wealthy states to assist poor states with the implementation of the standards, because failing to do so will make the total system to fight "the financial war on terror" worse off.

Although the results of the statistical analysis are clear, this study has limitations. First, a possible important predictor has been excluded from the analysis. According to earlier work, the economic consequences theory and the international regimes theory, external structures play a vital role in compliance with international standards. According to Krasner (1983) the influence of external factors and actors interfere in the cost benefit analysis. External parties can influence the behavior of countries in a regime. Political and economic pressure were, however, too complex to define for this statistical research. We would recommend that future research focuses on these predictors. Second, subjective irrational arguments can play an important role. This study does not include elements like perceived danger and subjective willingness of governments to comply with international agreements. Next to that, it is possible some countries do not believe that compliance with the FATF is the best way to fight terrorism. The exact effects of these subjective elements are too complex to measure reliably.

To conclude, compliance with the FATF standards is an essential element in the fight against international terrorism. For the time to come, the international community should support developing states (by funding and transferring knowledge) with the implementation of the FATF standards.

References

Ai, L. (2012), "A cost-effective strategy of implementing international anti-corruption initiatives: enhancing the role of anti-money laundering in combating corruption", *Journal of Money Laundering Control*, Vol. 16 No. 1, pp. 83-90.

Arnone, M. and Padoan, P.C. (2008), "Anti-money laundering by international institutions: a preliminary assessment", *European Journal of Law and Economics*, Vol. 26 No. 3, pp. 361-386.

Bogers, M. and Beeres, R. (2013), "Burden sharing in combating terrorist financing", *International Journal of Social, Education, Economics and Management Engineering*, Vol. 7 No. 12, pp. 1708-1714.

Clarke, C.P. (2015), *Terrorism, the Financing of Terrorism, Insurgency, and Irregular Warfare*, Praeger, CA.

Clunan, A.L. (2006), "The fight against terrorist financing", *Political Science Quarterly*, Vol. 121 No. 4, pp. 569-596.

Czinkota, M.R., Knight, G., Liesch, P.W. and Steen, J. (2010), "Terrorism and international business: a research agenda", *Journal of International Business Studies*, Vol. 41 No. 5, pp. 826-843.

Enders, W., Sandler, T. and Gerald, F. (1992), "An econometric analysis of the impact of terrorism on tourism", *Kyklos*, Vol. 45 No. 4, pp. 531-554.

FATF (2001), "FATF IX special recommendations on terrorist financing", available at: www.fatf-gafi.org (accessed 30 January 2018).

FATF (2004/2016), "Mutual evaluation and follow up reports", available at: www.fatf-gafi.org; www.cfatf-gafic.org; www.eurasiangroup.org; www.apgml.org; www.esaamlg.org; www.gafisud.org; www.giaba.org; www.menafatf.org (accessed 30 January 2018).

FATF (2012), "International standards on combating money laundering and the financing of terrorism and proliferation", available at: www.fatf-gafi.org (accessed 30 January 2018).

FATF (2013), "Methodology for assessing compliance with the FATF 40 recommendations and the FATF 9 special recommendations", available at: www.fatf-gafi.org (accessed 30 January 2018).

Geiger, H. and Wuensch, O. (2007), "The fight against money laundering: an economic analysis of a cost-benefit paradoxon", *Journal of Money Laundering Control*, Vol. 10 No. 1, pp. 91-105.

Giraldo, J.K. and Trinkunas, H.A. (2007), *Terrorism Financing and State Responses: A Comparative Perspective*, Stanford University Press, Palo Alto, CA.

Harvey, J. (2004), "Compliance and reporting issues arising for financial institutions from money laundering regulations: a preliminary cost benefit study", *Journal of Money Laundering Control*, Vol. 7 No. 4, pp. 333-346.

Hehir, A. (2007), "The myth of the failed state and the war on terror: a challenge to the conventional wisdom", *Journal of Intervention and Statebuilding*, Vol. 1 No. 3, pp. 307-332.

Institute for Economics and Peace (2017), "Global terrorism index", available at: www.globalterrorismindex.org

Jensen, N. and Png, C.A. (2011), "Implementation of the FATF 40+ 9 recommendations: a perspective from developing countries", *Journal of Money Laundering Control*, Vol. 14 No. 2, pp. 110-120.

Johnson, J. (2008), "Third round FATF mutual evaluations indicate declining compliance", *Journal of Money Laundering Control*, Vol. 11 No. 1, pp. 47-66.

Keohane, R.O. (1983), "The demand for international regimes", in Krasner, S.D. (Ed.), *International Regimes*, Cornell University Press, Ithaca. pp. 141-172.

Krasner, S.D. (Ed.) (1983), *International Regimes*, Cornell University Press, New York, NY.

Mugarura, N. (2013), "An appraisal of United Nations and other money laundering and financing of terrorism counter-measures", *Journal of Money Laundering Control*, Vol. 16 No. 3, pp. 249-265.

Napoleoni, L. (2006), "Terrorist financing", *The RUSI Journal*, Vol. 151 No. 1, pp. 60-65.

Ridley, N. and Alexander, D.C. (2012), "Combating terrorist financing in the first decade of the twenty-first century", *Journal of Money Laundering Control*, Vol. 15 No. 1, pp. 38-57.

Simmons, B. (1998), "Compliance with international agreements", *Annual Review of Political Science*, Vol. 1 No. 1, pp. 75-93.

Stein, A.A. (1983), "Coordination and collaboration: regimes in an Anarchic world", in Krasner, S.D. (Ed.), *International Regimes*, Cornell University Press, Ithaca, pp. 115-140.

Tang, Q. (1994), "Economic consequences of the international harmonization of accounting standards: theory and its Chinese application", *The International Journal of Accounting*, Vol. 29 No. 2, pp. 146-160.

The Economist (2017), "The democracy index", available at: www.eiu.com (accessed 30 January 2018).

UN (2017), "Resolutions 1267 and 1269", available at: www.un.org/sc/suborg/en/sanctions/ 1267/resolutions (accessed 30 January 2018).

UN World Tourism Organization (2017), "The number of tourists", available at: www2.UNWTO.org (accessed 30 January 2018).

Whitaker, B.E. (2010), "Compliance among weak states: Africa and the counter-terrorism regime", *Review of International Studies*, Vol. 36 No. 3, pp. 639-662.

World Bank (2017a), "Gross domestic product figures", available at: www.worldbankgroup.org (accessed 30 January 2018).

World Bank (2017b), "Market capitalization figures", available at: www.worldbankgroup.org (accessed 30 January 2018).

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