



Universidad
de Navarra

Facultad de Ciencias Económicas y Empresariales

Working Paper nº 10/09

A note on the effectiveness of national anti-terrorist
policies. Evidence from ETA

Carlos P. Barros
Technical University of Lisbon

and

Luis A. Gil-Alana
Facultad de Ciencias Económicas y Empresariales
Universidad de Navarra

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Working Paper No.10/09
October 2009

ABSTRACT

This paper analyses the effectiveness of anti-terrorism policies implemented by the Spanish government to counteract ETA terrorist attacks. The aim is to investigate what the best policy is for counteracting terrorist groups: proactive political/retaliatory deterrence policies or reactive political/retaliatory deterrence policies. Counting models are used and the results show that proactive political policies are the most effective.

Luis A. Gil-Alana
Universidad de Navarra
Depto. Economía
Campus Universitario
31080 Pamplona
alana@unav.es

1. Introduction

The analysis of alternative deterrence policies is a subject that has attracted more theoretical research than applied research due to the unavailability of suitable data with which to perform the latter. Applied research using econometric models can be found in Enders and Sandler (1993, 1995) and Enders, Sandler and Cauley (1990a,b). Theoretical research presenting game theoretical models of deterrence versus preemption can be found in Arce and Sandler (2005), Rosendorff and Sandler (2004), Sandler and Siqueira (2005) and Faria (2006).

In this paper the impact of alternative anti-terrorist policies is analysed for the case of ETA terrorism. The paper expands upon previous research adopting a large number of alternative policies, some of which are mutually exclusive and others which are complementary in the fight against ETA. Moreover, contextual variables are included in the analysis since they may influence the terrorist attacks. A count data model allowing for heterogeneity is adopted.

The motivation for our analysis is the observed persistence of ETA terrorist activity in the Basque Country. Despite the signing of various political agreements to put an end to violence, terrorist activity has survived in a different form. This persistence, notwithstanding the stated intention and apparent political will of the Spanish government to find a solution to the Basque problem, suggests that the two sides are not engaged in a very effective dialogue, and therefore that terrorism activity might still be carried out in the near future.¹ Moreover, the emergence of the radical Islamic terrorism in Europe raises the possibility of its developing links with the terrorist activities of ETA, which is a nationalist terrorist group.

In order to analyse the banning of Herri Batasuna (HB, the radical nationalist party close to ETA) and other measures against ETA terrorism this paper analyses alternative anti-terrorist measures for controlling ETA killings. It improves upon related studies (Barros, 2003; Abadie and Gardeazabal, 2003; Barros and Gil-Alana, 2006; Barros, Passos and Gil-Alana, 2006) in three ways: first, it focuses on alternative anti-terrorist policies; second, it examines explicitly their effects on the terrorist attacks; third, it uses an alternative approach based on counting models.

The paper is organised as follows: in Section 2, we put the analysis into context by briefly reviewing the history of ETA; in Section 3, we survey the empirical literature on this topic; in Section 4, we present the theoretical background and the methodology is described in Section 5; in Section 6, we present the data and describe the empirical results, while Sections 7 and 8 contain the discussion and some conclusions.

2. A brief history of ETA

The acronym ETA stands for Euskadi Ta Askatasuna, or Basque Fatherland and Liberty. The aim of its terrorist activities is to establish an independent state for the Basque people in seven provinces in North-Eastern Spain and South-Western France where they have lived since ancient times. The group was created as an extreme, radical expression of the Basques' deep pride in their own unique identity and culture and their determination to be recognized as a nation. Their language, Euskera, is a living testament to their origins and longevity, given that it has no links with any other known language and precedes all the Indo-European languages spoken in Europe. The protection of Euskera has long been a vital element of the Basque struggle. This long tradition makes their position within Europe quite unique.

Today, following four decades of harsh repression of the Basques and their homeland under Franco as a punishment for their opposition during the Spanish Civil War, the language is thriving in the autonomous region. Euskera radio and TV stations, newspapers and literature serve an estimated 750,000 fluent speakers (of a total population of 2.5 million Basques).² The future survival of this language would appear to be secured, since more than 90% of Basque children study in Basque language schools.

The nationalists consider the Basque Country to comprise seven provinces. Four of these (in what is referred to as Hegoalde, or Southern Basque Country) are part of Spain (Bizkaia, Gipuzkoa, Araba and Nafarroa). The other three (in Iparralde, or Northern Basque Country) belong to France. However, Spain only recognizes three provinces in the Basque Country, in what is called the “Comunidad Autónoma del País Vasco” (Basque Country Autonomous Community), formed only by Bizkaia, Gipuzkoa and Araba. Navarra (or Nafarroa, in the Basque language) is a distinct province, not recognized as part of the Basque Country. The three provinces in the French part are subdivided into two departments.

Whilst many Basques may traditionally harbour dreams of sovereign nationhood, it should not be assumed that ETA therefore enjoys mass active support for its terrorist activities among the majority of the population. Since democracy returned to Spain in 1975, the region has undergone great development and increased prosperity under the degree of autonomy granted by Madrid. Many Basques favour self-determination or increased autonomy, but wish to see this achieved through peaceful, political means rather than violence.

ETA's first military action took place in 1961 with an unsuccessful attempt to derail a train carrying civil war veterans travelling to Donostia (San Sebastian) to celebrate the twenty-fifth anniversary of the Spanish Civil War. They then planted explosives in the police headquarters of the Basque cities of Bilbao and Vitoria (Abadie and Gardezabal, 2003).³ Henceforward, they have maintained continuous terrorist activity, with assassinations and kidnapping beginning in 1968. After a popular ETA activist was killed by the police in 1968, ETA produced its first victims, assassinating an inspector of the Policia Nacional and a member of the Guardia Civil. The Franco Government reacted by putting the entire Basque region under a prolonged siege. Thousands were jailed, tortured, and exiled, culminating in the 1970 Burgos trial and imprisonment of over a dozen ETA leaders. During the mid-1970s, ETA activities increased sharply, with 1978 to 1980 being their bloodiest years. In December 1973, ETA assassinated the Spanish premier and putative successor to Franco, Luis Carrero Blanco, marking a watershed in terrorist actions.

The long-ruling dictator Franco died in 1975, and democracy was restored. This was to lead to the Basque region being granted a degree of autonomy (by the Estatuto de Autonomía del País Vasco, promulgated in 1979) with its own parliament, control over several areas such as education and taxes, and the promotion of the Basque language in schools.

In the last 15 years or so, ETA activity has substantially decreased, but also changed. The number of victims has fallen considerably, the type of killings becoming more specialized (politicians, reporters, etc.), in what it was euphemistically described as the "socialization of suffering", which consisted in extending violent action wider and wider sectors of society. Thus, political representatives of non-nationalist parties,

university professors, judges and so on became ETA targets. (Gurruchaga, 2002). On the other hand, a new phenomenon based on urban guerrilla tactics, and called in Basque “Kale Borroka” (street fighting), has emerged, creating an atmosphere of violence in the streets. This can be characterised as low-intensity urban terrorism fomented by ETA, and amounts to street hooliganism perpetrated by the youth wing of the terrorist movement.

The Spanish Constitution of 1978 does not explicitly provide for the independence of the Basque Country, and it was against this backdrop that ETA continued its strategy of individual terrorism during the transition period as well. In December 1982, the left-wing Socialist Party came to power and set up the anti-terrorist group GAL (Anti-Terrorist Liberation Group) to combat ETA. These were active from 1983 to 1987, killing 27 people (Woodworth, 2001). In January 1988, all the political parties with representation in the Basque Parliament, with the exception of HB, signed the agreement known as the Pact of Ajuria-Enea, in the firm belief that the only way to achieve normality and peace in the Basque Country was to respect the choices and desires of the Basque people. Negotiations to end ETA violence were held in Algeria in 1989 but failed in their objective. Unsuccessful ETA attempts on the life of Prime Ministerial candidate José María Aznar and of King Juan Carlos, in April and August 1995 respectively, were among the most notorious attacks. Aznar’s Popular Party was elected in May 1996 and reinforced and maintained the hard-line approach on terrorism until its unexpected demise in March 2004, precipitated by what turned out to be radical Islamic terrorist attacks in Madrid 3 days before the elections.

By the late 1990’s ETA had lost most of its support in the main cities and important ETA commando cells had been eliminated by the police. As a result, the organization changed its strategy. Together with other nationalist parties, the

parliamentary representation of ETA (EH, Euskal Herritarrok, or "We Basque Citizens", former HB), approved the so-called "Treaty of Lizarra" in the fall of 1998. This declaration contained the obligation to hold open, but exclusively Basque, negotiations on the political future of the Basque Country. Following the signing of this treaty, ETA announced a permanent ceasefire in September 1998.

The ceasefire was maintained until 3 December 1999. ETA's justifications for resuming its attacks were the unchanging hard-line stance of the Spanish Government against the separatists and the weak response of the moderate nationalists to the latter. In fact, scarcely any negotiations took place. Aznar was only willing to discuss the transfer of a few ETA prisoners to Basque Country jails and the disarming of the organization.

On 22nd March 2006, ETA announced a "permanent ceasefire". In their communiqué, ETA stated that the French and Spanish governments should cooperate and respond positively to this new initiative. This ceasefire was abruptly broken by ETA on December 30, 2006 with a bomb in Barajas airport in Madrid which killed two people. On June 6, 2007 ETA "officially" called off the ceasefire. Since then, there have been continuous terrorist attacks. Two members of the Guardia Civil were assassinated by ETA members in December 2007; four people were killed in 2008 and another one in June 2009.

3. Literature Review

The economic literature on terrorism is an expanding field of research, for a relatively up to date survey, see Enders and Sandler (2006). Three types of empirical studies can be found, which are based on time series, cross-section and panel data models. Within this literature, ETA has been the subject of more papers than any other known terrorist

organisations. (See, e.g. Clark, 1984; Dominguez, 1988; Sullivan, 1988; Elorza et al., 2000; Reinares, 2001; Uriarte, 2001; etc.). One reason for such emphasis on ETA is its longevity. Many time series studies on ETA use intervention analysis, regressing the number of terrorist incidents on indicators of policy intervention, to evaluate the effectiveness of the adopted policy (Enders and Sandler, 1993). Papers in this mould are Enders and Sandler (1991, 1996), who analyse the impact of the Spanish terrorist groups in tourism and foreign investment; Barros (2003), who analysed ETA killings and kidnaps with a VAR model from 1968 to 2000; Barros and Gil-Alana (2006), who estimated a fractional integration model for ETA attacks; and Barros, Passos and Gil-Alana (2006), who investigated the duration of ETA attacks with several duration models. Also, in the context of ETA terrorism, Abadie and Gardeazabalv (2003) analyse the relationship between the Basque stock market and terrorism; Broek (2004) and De La Calle (2007) analysed the kale borroka street fights, while De la Calle and Sanchez-Cuenca (2009) used a simple theoretical model to analyse the target selection of ETA and IRA activities. From a less quantitative approach, Alonso and Reinares (2005) examined ETA terrorist activity, focussing on the systematic violation of human rights, and investigating the relationships between terrorism, human rights and law enforcement in the context of political change.

More in line with present research, anti-terrorist policies have been analysed by several authors. Landes (1978) first addressed the effectiveness of anti-terrorist policies ignoring substitution effects among alternative modes of terrorist attacks. Enders and Sandler (1993) introduced the substitution effect in terrorist attacks, showing that metal detectors in airports reduced skyjackings but increased other kinds of terrorist attacks. An alternative substitution effect is the intertemporal allocation of resources (Brophy-

Baermann and Conybeare, 1994) in which terrorists decide whether to attack in the present or in the future. For a survey on this topic, see Enders and Sandler (2006). The present research aims to extend the research on terrorism, analyzing the effectiveness of the Spanish security policy against ETA. The security policies are differentiated into proactive and defensive deterrence policies and these policies are also differentiated into political and retaliatory policies. Contextual variables are also allowed to identify the impact of the context in the terrorism attacks.

4. Theoretical background

Several models of antiterrorism deterrence policies have been proposed in the literature, supported either in game theory (Arce and Sandler, 2005; Rosendorf and Sandler, 2004; Sandler and Siqueira, 2005), or in optimal control theory (Faria and Arce, 2005; Faria, 2006). While these models have been proposed for international terrorism, they can accommodate national terrorism too. According to Faria and Arce (2005), the terrorist organization grows through a process of recruitment from the pool of its supporters due to the popular support enjoyed by the terrorists' cause. For example, Faria (2006) develops a theoretical cat-and-mouse model of the attacks and counter attack process where the government has numerous objectives, including national security and the terrorist groups have a budget constraint that do not enable them to sustain the terrorist campaign indefinitely. The government fights the terrorism with deterrence policies and the terrorism lulls. When there is a lull in terrorism the public attention begins to wane and deterrence policies are relaxed with public budgets allocated to alternative social ills. The terrorist group views this lax time as ideal for launching a new round of attacks. The cycle is complete when the government reacts and cracks down on the terrorist activities.

This model serves as reference for ETA terrorism, but the cycle is a never ending process, since political measures have to be undertaken to eliminate the terrorism problem.

Transnational terrorism is an externality-generating activity that results in costs to agents in other countries (Enders and Sandler, 1984). An example of such terrorist events is the Al-Qaeda terrorism attack in Madrid, where a grievance of Middle East origin spilled over to Spain. The presence of a transnational externality signals the need for countries to coordinate their antiterrorism policies. ETA generates national-generated costs in Spain and therefore is a national terrorism event.

5. Methodology: Count data models

Most of the empirical studies based on terrorism rely on count analysis (Drakos and Kutun, 2003). The Poisson count models are adequately based on the fact that the number of terrorist attacks is a counting variable and Gaussian linear models ignore the restricted support (non-negativity and the integer-value character) of the dependent count data variable (Winkelmann, 2000). The Poisson regression model is based on the assumption that the endogenous (count) variable y , given the vector of explanatory variables, x_i , is independently Poisson-distributed with density:

$$f(y/x) = \frac{\exp(-\lambda_i)\lambda_i^{y_i}}{\Gamma(1+y_i)},$$

where $i = 1, \dots, N$, indexes the N observations in a random sample and $E[y_i/x_i] = \lambda_i$.

The model implies that the conditional mean and the conditional variance are equal, i.e.

$E(y/x) = V(y/x) = \lambda_i$. Note that the Poisson regression is equidispersed.

It is currently assumed that the basic Poisson model is too restrictive (Cameron and Trivedi, 1998) with regard to the features of the observed data (see, also Gouriéroux, Monfort and Trognon, 1984; McCullagh and Nelder, 1983). Common deviations from the basic Poisson model are: (i) Overdispersion, the failure to equal conditional mean and conditional variance restriction. If the conditional variance of the data exceeds the conditional mean, overdispersion is presented. The most commonly given explanation for overdispersion is the unobserved heterogeneity in the data, i.e. there are omitted variables in the mean function. Other explanations are measurement errors in explanatory variables and that the structural parameters are random. A common approach to handling this problem is to estimate Poisson models allowing for heterogeneity in the mean (Greene, 1997). (ii) Another deviation is a high relative frequency of zero observations, which is not consistent with any standard count regression model (Lambert, 1992). Two common approaches to dealing with “excess zero” problems are to use a hurdle model or a Zip model (zero-inflated model). (iii) A third common deviation from the basic Poisson model is truncation and censoring. Left-zero truncation is common in data sets, and right-censored appears when the counts exceeding some values are aggregate. The heterogeneous Poisson model is represented by:

$$f(y/x) = \frac{\exp(-h_i \lambda_i) (h_i \lambda_i)^{y_i}}{\Gamma(1 + y_i)}.$$

The integrals in the log likelihood function do not exist in closed form for the Heterogeneous Poisson model and has to be estimated by simulation (Greene, 2007).

The random effects Poisson model is formed with:

$$\lambda_i = \exp(x_{it}' \beta + \mu_i).$$

See Greene (2007) for the log likelihood function.

5.1 Hypotheses

The Poisson model will be used to test the following hypotheses:

Hypothesis 1: Proactive deterrence policies are important for decreasing the terrorism attacks (Sandler and Siqueira, 2005). This is the traditional hypothesis in terrorism studies, however some authors conclude that if proactive deterrence is excessive, it may result in the increase of terrorist attacks (Rosendorff and Sandler, 2004), for example in the case of ETA proactive retaliatory policies such as the illegalization of HB or the closure of EGIN lead to massive protests in the streets increasing the *kale borroka* activity, etc.

Proactive policies are offensive by nature with the government confronting the terrorist group directly with police forces and can assume many forms, including retaliatory raids against safe havens, infiltrating the terrorist group and gathering intelligence, etc.

In this paper proactive policies are separated into two groups. First, *political proactive policies* aiming to change the framework in which the terrorist fight is carried out. With regard to ETA terrorism we consider the following variables:⁴

(i) AJURIA: The signing of the political pact of Ajuria-Enea (1988m1 – 1989m4) formed by all political parties with representation in the Basque Parliament with the exception of HB.

(ii) LIZARRA: The signing of the political pact of Lizarra-Garazi (1998m12 - 1999m11) formed exclusively by the Basque nationalist parties including HB.⁵

In the *second group of proactive policies* we include those producing direct retaliation:

- (iii) EGIN: the shutdown of EGIN and EGIN IRRATIA, (July, 1998) a newspaper and a radio station banned by Spanish authorities, and
- (iv) HB: the banning of Herri Batasuna, (August, 2002), the political party which represented politically ETA in parliament.

Within the above context we can also include four extra variables referring to: (v)

ARREST: a variable adopting a value of 1 if one or more ETA leaders were arrested in a given month;

(vi) DEATHS: a variable adopting a value of 1 if one or more ETA members were killed in a given month as a consequence of police action or using their own explosives; and

(vii) FRANCE: a shift dummy variable adopting a value of 1 after France started closely collaborating in the fight against ETA (July, 1984).

Hypothesis 2: Defensive deterrence policies aiming to counteract terrorism have a positive impact in controlling terrorism attacks (Enders and Sandler, 1993, 1995). However too much defensive deterrence may increase terrorist attacks (Enders and Sandler, 2000; Frey, 2004). Defensive policies protect potential targets either making attacks more costly or reducing the likelihood of success (Clark, 1984).

The defensive deterrence policies forces are separated into political defensive deterrence policies and direct retaliatory defensive deterrence policies. A *political defensive deterrence* measure is:

- (viii) AMNESTY: the general Amnesty for ETA prisoners in October, 1977;

and a direct *retaliatory defensive deterrence policy* can be measured by:

(ix) ERTZAINZA: the setting up of a police force in the Basque Country (Ertzainza), (in February, 1982).

Contextual variables may also affect terrorism attacks. The contextual variables adopted in this paper are the incumbent party and the results of the ETA terrorist attacks on its own social support. In the contextual variables we have political contextual variables and terrorist attack contextual variables.

The *political contextual variables* are:

(x) TGOV: Transition government just after the death of the dictator Franco (1975m1-1976m12);

(xi) PSOE1: Partido Socialista Obrero Español, (Socialist Party) led by Felipe Gonzalez (1983m1-1996m3);

(xii) PP: Popular Party, led by José María Aznar (1996m4-2004m3);

(xiii) PSOE2: Partido Socialista Obrero Español, led by José Luis Rodríguez Zapatero (2004m4-2006m12).

Finally, the *terrorist attacks contextual variables* are:

(xiv) C.BLANCO: the killing of Admiral Carrero Blanco, putative successor of Franco (December, 1973);

(xv) MASSIVE: the first ETA massive attack in Madrid (12 death) (September 1974);

(xvi) RYAN: the kidnap and killing of Jose María Ryan, a nuclear plant engineer after the authorities refused to bow to a demand for the plant to be dismantled (February, 1981);

(xvii) YOYES: the killing of M. Dolores Katarain, “Yoyes”, (September, 1986) a former member of ETA that had abandoned the armed struggle and rejoined civil society;

(xviii) HIPERCOR: the Hipercor attack (June, 1987), an ETA bomb in a supermarket in Barcelona (21 killed and 40 seriously wounded).

Other important events such as the killing of Miguel Angel Blanco (July, 1997) a young politician of the Popular Party that produced massive protests against ETA; the promulgation of the Ley de Partidos (June, 2002) a law barring political parties which may support political violence (a previous step to the banning of HB); the social rehabilitation measures and the dispersion policy of ETA prisoners, the closing of Egunkaria, a Basque language newspaper (February, 2003), or the Islamic attack in Madrid (March, 2004) among others have not been taken into account to avoid multicollinearity in the regression models. All these measures were initially taken into account and they have been removed one by one by checking their corresponding correlation matrices. Additionally, there was an important pact signed by the most influential Spanish parties (PSOE and PP) in December 2000 (“Acuerdo por las Libertades y contra el Terrorismo”) and that was found to be very effective in the fight against ETA. However, we have not considered this event as an influential measure itself in the sense that we believe that it was not the pact itself but its consequences (such as the illegalization of HB) that represented the real effective anti-terrorist measure.

It should be noted here that in spite of the illegalization of HB, the radical nationalist movement has continued to be politically active under alternative names (EH, EHAK, ANV, D3M, etc.). Furthermore, it has been only during the last elections for the Basque Parliament, in 2009, when they have not been present in that institution since

their votes were declared illegal. This has made it possible for the Basque Parliament to be governed by non-nationalist parties for the first time.

6. Data and Results

The time series of interest is the number of monthly killings by ETA (and all its satellite groups, such as Iraultza, Iparretarrak, ETA p-m, etc.), , from January 1968 to December 2006, obtained from COVITE (El Colectivo de Víctimas del Terrorismo en el País Vasco, The Collective of Victims of Terrorism in the Basque Country) along with other sources such as the webpages of the (Spanish) Ministry of Interior (http://www.mir.es/policia/linea/ter_prin.htm and <http://www.mir.es/oris/infoeta/index.htm>) and the ITERATE database. The dependent variable is killings. However, other variables could have been used such as the overall terrorism events or specific terrorism events such as kidnappings, extortion and street violence. Nevertheless, *killings* is the most important specific terrorism event and has been used previously by other authors (e.g. Enders and Sandler, 2000).

INSERT TABLE 1 AND FIGURE 1

It can be verified from Table 1 and Figure 1 that ETA attacks display a high level of persistence across time (Barros and Gil-Alana, 2006) and a high plethora of terrorist events, signifying that it is a complex terrorist group deserving to be the object of research. Table 2 presents the results.

INSERT TABLE 2

The first model is a Poisson model with heterogeneity (column 3), the second model is a ZIP model with heterogeneity and finally the third and last model is the Poisson random coefficient model. The first thing we observe is that the signs of variables are maintained throughout the various models. Additionally, a political proactive policy (AJURIA) is found to be statistically significantly positive in reducing ETA activity. With regard to the retaliatory policies, the shutting down of EGIN and the banning of HB were also found to be effective in the fight against ETA. These two measures, though highly controversial (and being against the wishes of the majority of the population in the Basque Country) seem to have been the most effective measures in this context. On the other hand, DEATHS (of ETA members) produces a negative effect to the elimination of terrorism probably because people from the *kale borroka* movement or those close to HB are more willing to collaborate with ETA. This is a vindictive effect of the terrorist killed (Enders and Sandler, 2000). In this respect, it is important to note that the detention of ETA terrorists (ARRESTS) appears insignificant in several cases and even positive in the last two models, explaining first the insufficiency of this measure to combat ETA, and also the capacity of ETA to reorganize itself.⁶ This reorganisation capacity reflects increased social support for ETA among the Basque population, a precondition for longevity in the life of any successful terrorism group. In this group of variables, only French collaboration (FRANCE) appears effective. Note that even though most of the population in the Basque Country condemn any type of violence, ETA still has some social/popular support, particularly in small towns and villages, (see Table 3) These small rural areas have preserved Basque identity and culture

at its strongest level, remaining uninfluenced by the great migration that took place during the 60's from other Spanish regions to the main cities in the Basque Country.⁷

Looking at the defensive variables, the general amnesty of ETA prisoners increased ETA activity and the same happened with the setting-up of the Basque police (ERTZAINZA), while all governments seem to have contributed to decreasing ETA activity. Additionally, the killing of Admiral CARRERO BLANCO, the first ETA massive attack and the HYPERCOR atrocity increased ETA activity while the killings of Jose María RYAN and YOYES decreased it. Therefore, the results provided by these contextual variables do not provide clear-cut information, the reason being probably that some of these attacks occur simultaneously with other events. Thus, for example, in the case of the HIPERCOR attack, the increase of the criminal activity may be explained by the fact that during that period various ETA militants died in retaliatory police attacks or while being held in police custody implying that these facts were socially more valued than the Hipercor attack by ETA-related members and therefore did not affect their behaviour. Finally, DEATHS and FRANCE are found to present random parameters in the last model, signifying that they vary along the period, but DEATHS increases ETA activity while FRANCE decreases.

INSERT TABLE 3

Concerning the hypotheses, it is verified that for Hypothesis 1 the political pact of Ajuria-Enea (AJURIA) was a significant variable in reducing ETA activity, signifying that this proactive policy was effective in controlling ETA activity. Relative to Hypothesis 2, the two defensive measures (AMNESTY and ERTZAINZA) were both

ineffective in the fight against ETA. With respect to the (political) contextual variables all governments produce negative coefficients (and thus positive effects) on reducing ETA activity, observing a monotonic increase in the magnitude of the coefficients across time, and thus implying a type of learning process for the successive governments in the fight against ETA.

Finally it can be concluded that there are some heterogeneous variables while others are homogenous. The homogenous variables behave systematically in the same way throughout the period; while the heterogeneous variables change their behaviour due to unknown reasons, and any policy to target the heterogeneous variables have to take into account this heterogeneity.

7. Discussion

What is the meaning of these results? These results imply that ETA and the Spanish government are involved in a cat-and-mouse terrorist game (Faria, 2006). The cat-and-mouse game is based in a first movement by the terrorist attack, followed by the government deterrence policy. In a second round, the vindictive action by ETA increases ETA killings until the government enforcement of law results in the terrorism retreat. In a third round, the government and terrorist group negotiate a ceasefire accord. Therefore the terrorist attack intuitively increases ETA killing activity followed by arrests and eventual deaths of ETA members. All these variables increase ETA killing activity. In a second stage, ETA reacts and vindicates the Government action with killings of prominent individuals and in a third phase the process ends in a ceasefire and trials of terrorist members as well as the banning the HB party resulting in a decrease in ETA

activity. Government action decreases ETA activity and contextual variables may decrease or increase it, depending on its position on the game stage. When a main contextual variable is in the initial phase it increases ETA activity. If it is in the final retreat phase, it decreases activity.

It is therefore concluded that the ETA anti-terrorist policies are effective but this game tends to be a never ending game, unless active political activity is implemented to curb it. The pact between the Socialists and the Popular Party in the last regional elections, allowing the Socialists to win the regional presidency is a result of such policy and based on it we could expect that ETA terrorism activity will wane in the future. This result, however, should be taken with caution, noting that the access of the Socialists to power has been a consequence of the illegalization of the radical nationalists and the majority of the population in the Basque Country is still nationalist. Herri Batasuna has to be accepted in the parliament with its minority position, signifying that terrorism policies that reduce repression and increase economic opportunity are effective in abating terrorism recruitment and promoting peace (Faria and Arce, 2005).

8. Conclusions

The present paper has analysed the effectiveness of policies to counteract ETA terrorist attacks. The policies are differentiated into proactive and defensive deterrence policies and these policies are differentiated into political and retaliatory policies. Contextual variables are allowed to identify the impact of the context in the terrorism attacks. The general conclusion is that political proactive measures seem to be effective in reducing ETA activity. Proactive retaliatory policies were not effective in most cases. The number of arrests of ETA leaders has not been proven so far to be significant, implying that ETA

still has enough strength to recover. Defensive deterrence policies were not significant across the sample. The contextual political variables are significant in all cases, implying that all governments have contributed to some extent in the fight against ETA.

Based on these results, the policy implication is that proactive political policies are needed to curb terrorist attacks. The reasons behind the ineffectiveness of proactive retaliatory policies should be investigated since they are the most visible part of any anti-terrorist policy. Why are they ineffective? Several reasons can be advanced for their ineffectiveness, but the most important reason is that they feed vindictive feelings in terrorists, which based on the social support ETA terrorists still have in the Basque population, allows them to react and recover easily, resulting in ineffectiveness.

Note that in spite of ETA's perseverance in its terrorist activity, the radical nationalist movement has continued receiving support in the Regional Basque Parliament though there was a reduction in the last election in 2009 (see Table 4).⁸ It is probably this strong fidelity of vote in this movement what makes the retaliatory policies insufficient in the fight against ETA. On the other hand, it is a fact that the majority of the population in the Basque Country declare itself to be against ETA and there exist a large number of surveys conducted in the Basque Country and in the rest of Spain documenting it. (See, e.g., Elzo, 1997). However, in our opinion, there are two points to be noted here. The first one is related to the intrinsic nature of the surveys and the difficulty of discovering the truth in this matter. The second is related to the support for the radical nationalist groups. It is probably true that a large percentage in these groups rejects ETA violence but since they justify it at least partially, some of them may join the organization in the near future.⁹ In this context, two controversial measures such as the closing down of Egin and the banning of Herri Batasuna were proven to be highly effective in reducing ETA

activity, probably affecting the economic-financial apparatus of the organization itself or of its supporters. The banning of HB closed down an ETA funding route and therefore negatively affected the *killings*. The ineffective defensive deterrence policy should also be investigated. Thus, the general amnesty of ETA prisoners (defensive political measure) was highly ineffective probably because at the time of this measure (October, 1977) other strong repressive actions were being carried out against ETA. The setting up of a police Basque force (Ertzaintza) (a defensive retaliatory policy) was insignificant due to its confronting dual implications: On the one hand, it could be viewed positively from the organization's point of view in the sense that it implied a higher degree of autonomy for the region, but, on the other hand, once it became an anti-ETA force it clearly became an enemy, feeding retaliatory feelings.¹⁰

The results of the contextual political variables are intuitive, signifying that there is a learning process across time, with the past experience as a positive value in the fight against ETA.

How does this research compare with other research papers that have analysed deterrence policies? The present research does not directly compare with previous research in this issue, because the present paper focuses on national terrorism, while the reference papers cited in Section 3 focus on transnational terrorism. However, there are some comparisons that can be made. Using as a reference the more up to date paper on this issue (Enders and Sandler, 1995), the present paper does not include passive deterrence measures such as the fortifying of the USA embassies and metal detectors at airports, but it includes legal policies such as life imprisonment laws. For example the banning of HB is negative for ETA and statistically significant thus supporting previous research on this measure.

The general conclusion is that political variables should be at the forefront of any nationalist effective antiterrorist policy. Nationalist terrorist groups are a political problem, and not only a defence problem. Retaliatory measures should be used with extreme reluctance since they tend to feed counter-retaliatory feelings. Therefore they should only be used as a support for the enforcement of political measures. More research is needed to confirm the present results.

Notes

1. Though it may be argued that any negotiation with terrorist groups like ETA is unethical, a recent poll carried out for the Spanish radio station Cadena SER for El País, (20-02-2006) indicated that 77% of the respondents in Spain were in favor of a negotiation if ETA declared a permanent ceasefire. This percentage was even higher in the Basque Country.
2. The issue about who are the Basques is a controversial one. In this paper we declare Basques those people living in the Basque Country Autonomous Community as well as those feeling themselves Basques and living in the Autonomous Community of Navarra and in Southern France. That means an estimated population of about 2,500,000 people.
3. Some authors argue that ETA's first victim was a 22 month-old baby in June 1959. However, ETA has never claimed the attack.
4. A full description of the variables is given in Table 1.
5. These two political measures were led by the Basque Government along with other political parties in the Basque Parliament. In case of the Lizarra-Garazi pact, the signing was adopted with the opposition of the Spanish government.
6. Other variables related with the detention of ETA members were found to be insignificant and removed from the analysis.
7. According to the Instituto Nacional de Estadística (INE) (Spanish National Institute for Statistics) more than 50% of the Basque population is not originally Basque, proceeding mainly from Galicia, Castilla and Andalucía.
8. Note however that the radical nationalists were declared illegal in this election and their votes were officially considered null in the polling count.

9. Note that only a minority of the radical nationalists voted for a new left-wing party (Aralar, which also advocates Basque independence but condemns ETA's violent methods).
10. 13 members of the Basque police have been killed by ETA since 1982.

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Figure 1: Number of ETA killings

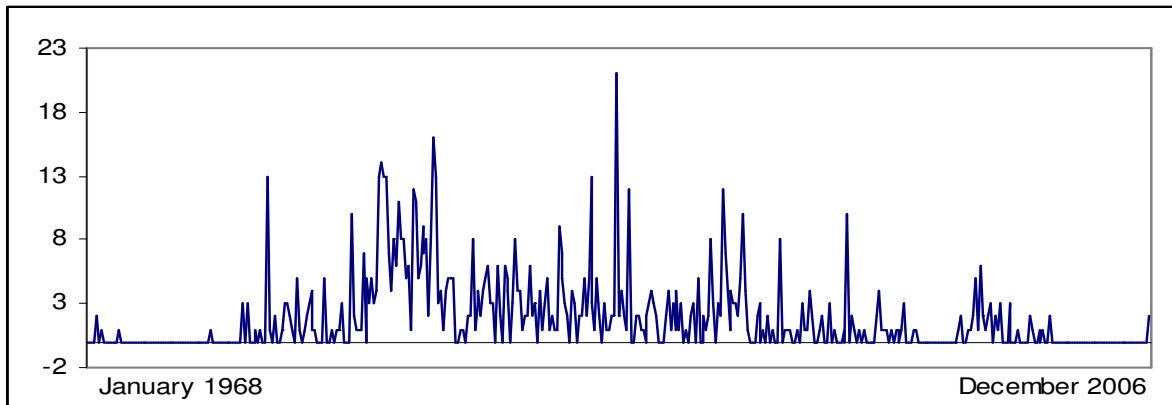


Table 1: Data descriptive analysis

Variables	Description	Mean	Std Dev	Min.	Max.
Killings	Number of killings	2.503	3.411	0	21
Ajuria-Enea Pact (AJURIA)	I(88m1 - 98m11)	0.148	0.356	0	1
Lizarraga-Garazi Pact (LIZARRA)	I(98m12 - 99m11)	0.026	0.158	0	1
Closure of Egin (EGIN)	I($t \geq 98m7$)	0.217	0.413	0	1
Illegalization (HB)	I($t \geq 00m8$)	0.113	0.317	0	1
ETA coup leaders (ARRESTS)	1=ETA leader arrested	0.163	0.370	0	1
Death ETA members (DEATH)	1=ETA member dead	0.322	0.468	0	1
France collaboration (FRANCE)	I($t \geq 84m7$)	0.297	0.458	0	1
General ETA Amnesty (AMN)	I($t \geq 77m10$)	0.750	0.433	0	1
Ertzaintza (ERTZAINA)	I($t \geq 82m2$)	0.400	0.490	0	1
Transition Government (TGOV)	I(75m1 – 76m12)	0.085	0.279	0	1
P. Soc. Obrero Español (PSOE1)	I(83m1 – 96m3)	0.361	0.481	0	1
Partido Popular (PP)	I(96m4 – 04m3)	0.205	0.404	0	1
P. Soc. Obrero Español (PSOE2)	I(04m4 – 06m12)	0.070	0.256	0	1
Carrero Blanco (CBLANCO)	I($t \geq 73m12$)	0.748	0.434	0	1
ETA massive att. (MASSIVE)	I($t \geq 74m9$)	0.716	0.451	0	1
Jose María Ryan (RYAN)	I($t \geq 81m2$)	0.443	0.497	0	1
Dolores Katarain (YOYES)	I($t \geq 86m9$)	0.205	0.404	0	1
Hypercor attack (HIPERCOR)	I($t \geq 87m6$)	0.173	0.379	0	1

Table 2: Results

Type of variable	Variables	Poisson with heterogeneity	Poisson ZIP model with heterogeneity	Poisson random Coefficient Model
	Constant	-3.109 (-9.102)*	-1.092 (-5.562)*	—
	Trend	0.020 (5.466)*	0.012 (4.980)*	0.022 (14.721)*
Proactive political	AJU	-1.465 (-4.477)*	-1.002 (-4.134)*	-1.440 (-11.094)*
Proactive retaliatory	EGIN	-2.146 (-3.353)*	-1.470 (-4.029)*	-2.186 (-8.762)*
Proactive retaliatory	HB	-1.516 (-3.353)*	-0.736 (-2.899)*	-1.583 (-6.110)*
Proactive retaliatory	ARREST	0.072 (1.796)	0.081 (2.896)*	0.080 (2.923)*
Proactive retaliatory	DEATHS	0.277 (2.217)**	0.205 (2.419)**	—
Proactive retaliatory	FRANCE	-0.800 (-2.033)**	-0.521 (-2.138)**	—
Defensive political policy	ANM	1.512 (3.210)*	1.031 (2.926)*	0.931 (3.007)*
Defensive retaliatory policy	ERTZ	0.158 (1.817)**	0.132 (2.217)*	0.151 (-2.125)*
Contextual political variable	TGOV	-0.631 (-2.276)**	-0.597 (-3.162)*	-0.542 (-4.455)*
Contextual political variable	PSOE1	-0.700 (-2.147)**	-1.744 (-0.081)	-0.505 (-4.054)*
Contextual political variable	PP	-1.818 (-3.458)*	-0.993 (-2.810)*	-1.740 (-7.505)*
Contextual political variable	PSOE2	-4.143 (-4.466)*	-2.027 (-3.685)*	-4.163 (-8.419)*
Contextual retaliatory variable	CBLANCO	0.234 (-2.966)*	0.217 (2.885)*	0.143 (3.134)*
Contextual retaliatory variable	MASSIVE	1.718 (4.526)*	0.929 (3.536)*	1.557 (8.407)*
Contextual retaliatory	RYAN	-1.274 (-4.012)*	-0.897 (-4.042)*	-1.365 (-12.863)*

variable				
Contextual retaliatory variable	YOYES	-1.037 (-2.136)**	-0.636 (-1.821)***	-0.906 (-5.014)*
Contextual retaliatory variable	HIPERCOR	0.913 (1.768)***	0.688 (1.800)***	0.816 (4.197)*
Means of Random parameters model				
	Constant	—	—	-3.120 (-18.817)*
	DEATHS	—	—	0.279 (6.017)*
	FRANCE	—	—	-0.385 (-3.256)*
Scale Parameters for distribution of random parameters model				
	Constant	—	—	0.680 (27.307)*
	DEATHS	—	—	0.168 (4.401)*
	FRANCE	—	—	0.123 (3.483)*
Statistics of the model				
	Sigma ¹	0.735 (10.421)*	0.574 (8.472)*	—
	Tau ²	—	-1.52 (-4.580)*	—
	Nobs	468	468	468
	Log Likelihood	-763.457	-763.457	-761.433
	Chi-Square	151.089	157.037	159.489
	Degrees of freedom	1	2	4
	Prob[chisqd>value]	0.0000	0.0000	0.000
	Overdispersion test	—	—	—
	Vuong test	4.388	-4.362	—

1 – Sigma-standard deviation of heterogeneity. 2- Parameter of ZIP model. It favours the Poisson model. The simulation of the Poisson Random model was based in 1000 random draws.

Table 3: % of votes in rural areas for the Basque Parliament elections in 2001

Town	Radical Nationalist	Moderate Nationalist	Right Spanish parties	Left Spanish parties
Orexa	88.5%	11.4%	0.0%	0.1%
Baliarrain	56.7%	41.7%	1.4%	0.0%
Belaunza	53.5%	39.7%	1.7%	4.3%
Lizartza	52.3%	42.6%	1.6%	3.1%
Leaburu	49.2%	44.2%	3.4%	2.6%
Errezil	45.4%	53.1%	0.0%	1.5%
Zaldibia	43.1%	44.6%	4.7%	7.2%
Ezkio	41.2%	56.0%	1.2%	1.3%
Orendain	40.0%	58.8%	1.1%	0.0%

Table 4: Composition of the Regional Basque Parliament

Political	1980	1984	1986	1990	1994	1998	2001	2005	2009
Moderate Nationalists	47.92%	49.99%	50.43%	47.65%	40.15%	36.70%	42.72%	38.67%	43.48%
Radical Nationalists	20.63%	14.65%	17.47%	18.33%	16.29%	17.91%	10.12%	14.77%	8.84%
Right Spanish parties	13.29%	9.36%	8.40%	9.64%	17.14%	21.39%	23.12%	17.40%	14.61%
Left Spanish parties	14.21%	23.07%	22.05%	19.94%	26.28%	23.28%	23.48%	28.05%	27.67%

Moderate nationalists: PNV (Partido Nacionalista Vasco), EA (Eusko Alkartasuna), and EE (Euskadiko Ezkerra).

Radical nationalists: HB (Herri Batasuna), EPK (Euskadiko Partido Komunista) and EH (Euskal Herritarrok).

Right Spanish parties: AP (Alianza Popular), UCD (Union Centro Democratico), CDS (Centro Democratico y Social) and PP (Partido Popular).

Left Spanish parties: PSE-PSOE (Partido Socialista Obrero Español) and IU-EB (Izquierda Unida-Esker Batua).

IU-EB has been included within the Left Spanish parties, though it is not opposed to the nationalists and in fact governed with the PNV and EA in the Basque Government.

Note that the radical nationalists were declared illegal in the last election.