

**The hidden financial flows of Islamic terrorist organisations:
Some preliminary results from an economic perspective *)**

by

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1. Introduction

Since the disastrous terror activities in the United States on September 11, 2001 international and especially Islamic terror organizations have gained great attention all over the world.¹⁾ These terrorist activities had a great economic and political impact²⁾ and such activities could not have been undertaken without an appropriate and well-functioning financing system of such organisations. Hence, it is the goal of this paper to provide some preliminary results about the financial flows of international (mainly Islamic) terrorist groups. Also an attempt is made to try a rudimentary economic analysis how these organisations “raise” their financial means. Finally some countermeasures are developed, how these financial flows can be reduced or even stopped.

Crime in general and the financial flows of criminal organisations have gained great importance with respect to their size and their development over time in the western world. This will be demonstrated with the following four tables and three figures.

Tables 1.1-1.4 und Figures 1.1-1.3

In tables 1.1-1.4 as well as in figures 1.1-1.3 it is shown how large have been the size and development of the shadow economy and of the classical underground economy for the countries Germany, Italy, France and Great Britain over the period 1996 to 2001.³⁾

¹⁾ There is a rather large literature on the analysis of terrorism compare e.g. Enders and Sandler (1991,1993, 1996, 1999, 2000), Stern (1999), Williamson (2000), as well as Henderson (2001) and Bloomberg, Hers and Wierapana (2002).

²⁾ Compare e.g. Drakos (2002), Chen and Siems (2002) and Sandler and Enders (2002).

³⁾ Shadow economy (i.e. in principal legal activities, but with holding tax and social security payments, and violating other labour market regulations) and underground economy are different activities, which can not be summed up as the underground economy (typical crime

If one considers Germany as a first case, one realizes that in the second half of the 90s the underground economy has grown faster and is bigger than the shadow economy and first preliminary estimations for the year 2001 clearly demonstrate that the underground economy, i.e. classical crime activities (like burglary, drug dealing, etc.), will reach a volume of 355 billion Euro or 16.9% of the official GDP. These criminal activities are bigger than the classical shadow economy with a volume of 336 billion Euro (or 16.0% of the official GDP) and this development shows that the crime activities in Germany have been strongly rising; i.e. the growth of these criminal branches is 2-3 times bigger than the official GDP-growth.

In Germany the size of the underground economy is not as large compared to the one of Italy: Italy has by far the biggest underground economy of these four countries with the size of 18.2% of the “official” GDP in the year 1996, which has been grown to 20.6% of the “official” GDP in the year 2000. In France the size of the underground economy was 8.9% of the “official” GDP in the year 1996 and has been growing to 10.9% of the “official” GDP in the year 2000. In Great Britain it raised from 9.4% of the “official” GDP in the year 1996 to 10.6% of the “official” GDP in the year 2000. In Italy, Great Britain and France, the size of the traditional shadow economy is larger than the size of the underground economy and only in Germany the underground economy is growing faster than the shadow economy and is larger in 2001.

What can we conclude from the figures of the development of the shadow and underground economies in Germany, France, Great Britain and Italy?

activities, like burglary, drug dealing, etc.) produces no positive value added for an economy. Hence, they can not be treated as a complement to the official GDP, whereas to the traditional shadow economy can be seen as a complement to the official GDP. For both economies we have overlapping areas. For further definitorial questions see Friedrich Schneider and Dominik Enste (2000).

- (1) Both are important “economic branches” with more than 10% of the official GDP.
- (2) The shadow economy is more or less stagnating in the last years (except for Germany) whereas the underground economy (classical crime activity) is still strongly increasing.
- (3) The German underground economy (i.e. classical crime activities) has reached a far bigger size than the shadow economy for the years 2000 and 2001.

These empirical results clearly demonstrate, that not only the shadow economy, but also classical crime activities (captured as the underground economy) are strongly growing in the most western countries. Hence, the requirements to detect and reduce the financial flows of classical and terrorist criminal organisation by public authorities is an absolute necessity.⁴⁾ In the following part 2 some short remarks about the organisation of international (mainly Islamic) terrorist organisations will be made and the ways of financing activities will be analysed. The structure of terrorist organisations will be only shortly discussed and the major part of the analyses is the type of financing and to calculate the amount of financial flows of Islamic terrorist organisations have. In part 3 first strategies/countermeasures to detect and reduce the financial flows of international terror organisations are discussed where first single (i.e. national) countermeasures and strategies are shown. Then three suggestions are developed about (1) an efficient international task force, (ii) criminal network analyses in order to detect and reduce the financial flows of international terror organisations, and (iii) an award system. Part 4 summarizes the major results and draws some conclusions.

⁴⁾ Compare e.g. Alexander (2001), FitzGerald (2002), Masciandaro and Portolano (2002).

2. The structure and financial systems of Islamic international terror organisations and their ways of financing

Most international (in this paper investigated and Islamic) terror organisations have an organisational structure by using many single terrorist cells which work independently from each other and the members of the cells have in most cases no or very limited knowledge about other cells.⁵⁾ The hierarchical structure is organised top down and only a few leaders know the number and structure of the single cells and are able to guide the cells. As said, the cells work independently from each other and quite often the cells are occupied with inactive (sleeping) members, which can be activated in using certain code words in order to fulfill certain criminal terrorist activities.

2.1. The financial structure of Islamic (international) terror organisations and their financing

The financing of the terrorist cells is independently undertaken and the financial flows (in small units between 10.000 and 15.000 USD) are only transferred to the cells, if it is necessary in order to create no suspicion by state authorities. Quite often this financial flows for terrorists are camouflaged with quite normal import/export-business like selling and buying honey and if honey-stores or import/export-organisations are belonging to terrorist groups they can provide legitimate revenue for terrorist networks. But not only the income created from honey business may be valid for terrorist groups, but also the operational assistance of the honey-business is quite important, because the smell and consistency of the honey makes it easy to hide weapons and drugs in the

⁵⁾ For a microeconomic approach of terrorist behavior, which is not developed here, compare Frey and Luechinger (2002), Wintrobe (2002) and Eppstein and Gang (2002).

shipments. Hence, using quite normal export/import-business might be a quite efficient way to steer financial flows to the terrorist cells.

The methods the international terror-organisations use, to move money from regions that finance them to their target country are often identical to those used by typical criminal gangs. For instance, money laundering experts⁶⁾ say that both groups use a technique known as a “starbust”. A deposit of dirty money is made in a bank with standing instruction to wire it on a small, random fragments to hundreds of other bank accounts around the world. Tracking down the money does become a war of attrition since getting legal permission to pursue bank accounts in multiple redistrictions can take years.

The “boomerang”-method is another technique: Money is sent on a long arc around the world before returning to the country where it came. En route it travels through what money launderers refer to as “black holes”, meaning countries that lack the means or the inclination to investigate banks.⁷⁾

Another way of financing is that the source of terrorist money might, for a start, be legal. It might come from a wealthy individual or religious charity or as a donation from a country. If so, the money starts off clean, becoming “dirty” only when the terrorist crime is committed later on. That makes it almost impossible for the banks to trace it down or spot it. Another way of financing the terrorist organisations with money is to use “tax optimisation experts”; these are people, who know to construct “shell companies” and other structures to hide wealth or dirty money and they also introduce their clients as new customers for banks. They know far more than do bank officials about any new customer’s potential

⁶⁾ Compare Lemay (1998, 2001), Savona (2001), Seymour (2001), Tarrat (2001), Fitzgerald (2002), and Masciandro and Portolano (2002).

⁷⁾ Compare OECD (2000), U.S. Financial Crimes Enforcement Network (2000) and Fitzgerald (2002).

link with terrorism or organized crime. The various kinds of financial flows, in order to supply the terrorist cells with money, are shown in table 2.1.

Table 2.1

2.2. The amount of financial flows and the ways of financing Islamic international terror organisations

In this chapter a first attempt is made to estimate the amount of financial flows and to analyse the ways of financing international terror organisations. Before showing the results the estimation procedure is shortly described.

2.2.1. Estimation procedure (latent estimator DYMIMIC approach)

As the size of financial flows of the Islamic terrorist groups is an unknown (hidden) figure, a latent estimator approach using a DYMIMIC (i.e. multiple indicators, multiple causes estimation) procedure is applied. This method has quite successfully been used to estimate the size of the shadow economy and is now shortly described.⁸⁾ This estimation procedure is called the “model approach” which explicitly considers the multiple causes of as well as multiple indicators of the shadow economy. The method is based on the statistical theory of unobserved variables, which consider multiple causes and multiple indicators of the phenomenon (size of the shadow economy, size of the financial flow of Islamic terror organisations).

A factor-analytic approach is used to measure the hidden economy (here size of financial flows of the terrorist organisations) as an unobserved variable over

⁸⁾ For a detailed discussion compare Schneider and Enste (2000) and Giles and Tedds (2002).

time. The unknown coefficients are estimated in a set of structural equations within which the “unobserved” variable cannot be measured directly. The DYMIMIC (dynamic multiple-indicators multiple-causes) model consists in general of two parts, the measurement model links the unobserved variables to observed indicators. The structural equations model specifies causal relationships among the unobserved variables. In this case, there is one unobserved variable, the size of the shadow economy. It is assumed to be influenced by a set of indicators for the shadow economy’s size, thus capturing the structural dependence of the shadow economy on variables that may be useful in predicting its movement and size in the future. The interaction over time between the causes Z_{it} ($i = 1, 2, \dots, k$) the size of the shadow economy X_t , and the indicators Y_{jt} ($j = 1, 2, \dots, p$) is shown in figure 2.1.

Figure 2.1

The estimation results using the modal approach for the size of the shadow economy are shown in figure 2.2 and the estimation results in order to estimate the size of financial flows of Islamic terrorist groups are shown in figure 2.3.

Figure 2.2 and Figure 2.3

As causes for the estimation of the size of the financial flows of the Islamic terrorist groups I have the following variables:

- (1) number of active members,
- (2) number of active supporters,
- (3) tribute payments from Islamic countries,
- (4) financial flows from wealthy people in Islamic countries,
- (5) financial flows from Islamic religious organisations,

- (6) amount of diamond trading,
- (7) amount of drug trading, and
- (8) GDP per capita in Islamic countries.

As indicators I use the following variables:

- (1) the cash flows in Islamic countries,
- (2) the rate of GDP adjusted for the means of all Islamic countries,
- (3) the amount of financial means trading in Islamic countries,
- (4) and the amount of currency trading.

What type of results does we now achieve using this estimation method? This will first be demonstrated in the case of Al-Kaida. The main results are shown in table 2.2.

Table 2.2

One realizes that the wealth of Al-Kaida has an average over 1999-2001 is 5 billion USD and the annual financial flows (i.e. the budget) of Al-Kaida varies between 20 to 50 million USD per year. What is the origin/source of these annual financial flows? This is shown in the second part of table 2.2. The drug business (mainly transporting drugs) contributes 30-35% donations or tribute payments of governments of wealthy individuals, and of religious groups vary between 20-30%, classical crime activities (i.e. blackmail and mostly kidnapping) contribute between 10-15%, and unknown is between 30-5%.

In table 2.3 a rudimentary overview is given about the preliminary (still incomplete) results of the financial flows of Arabic and Islamic terror organisations. Roughly 25 different organisations have been identified and table

2.3 shows that the financial flows of most Islamic terror organisations are quite sizeable and that they have enough financial means to train and to equip well their active terrorist members in order to create a maximum of destruction with the terrorists are given orders to operate. If one compares these financial flows with the overall figure of “dirty money” given by the IMF these financial flows of Islamic terrorist organisations are quite sizeable: The IMF calculates that the total sum of “dirty money” being whitewashed through the financial system is huge: Between 500 billion USD and 1.5 trillion USD a year, which amounts up to 5% of the gross world product. The financial flows of Islamic terrorist organisations range between 0,9 and 5,8% of the total sum of “dirty money“ and hence, is quite sizeable.

3. Strategies and countermeasures to detect the financial flows of terror organisations and to prevent attacks

Since the terrorist activities from September 11, 2001 in the United States an intensive discussion started all over the world which type of countermeasures can be undertaken to detect and reduce the financial flows of international terrorist organisations and, of course, to prevent future attacks. In a lot of countries countermeasures have been undertaken in order to detect and reduce the financial flows of terrorist organisations. In order to do this, there are two major problems: The first is, that legal tax heavens/offshore financial centres are quite attractive, also for terrorist organisations.⁹⁾ This is due to the following reasons:

⁹⁾ The role of Lax Financial Regulation (LFR) countries in international money laundering schemes has long attracted the attention of policy makers. Virtually all initiatives aimed at combating money laundering, both at the domestic and international level, tackle the issue. In the aftermath of September 11th, growing attention has been paid to the role of LFR countries in ensuring terrorist financing, adding new perspectives to the debate concerning the initiatives to be taken against such countries. For future details compare Masciandro and Portolano (2002).

- (1) an almost absolute business discretion,
- (2) weak money-laundering laws,
- (3) high level of communications (air travel, information communication technologies),
- (4) the US-\$ often used as everyday money,
- (5) independent governments,
- (6) all large international banks have subsidiaries located on these islands,
- (7) easy implementations and business set ups, and
- (8) many local intermediaries are able to set up in order to camouflage complex operations in order to camouflage the real purpose.

The second main problem is that in many countries (not only in the offshore financial centres with light-regulation and tax laws as just discussed) bank customers are protected by privacy and secrecy laws. Political pressure on these countries has intensified in recent years and sanctions have been implemented against countries with particularly unhelpful laws or inept enforcement. But this had a limited impact. Banking secrecy is lucrative for those who practice it. When money passes through secret centres it is hard to see where it has come from or where it goes. For foreign banks with clients in such centres knowing the customer can be all but impossible particular given the global network of correspondent banks.

3.1. Single country countermeasures

In table 3.1 the reaction and the strategy to detect and reduce financial flows of terrorist groups are shown for the United States, the European Union and Germany.¹⁰⁾

Table 3.1

In the U.S. the FATAC (= Foreign Terrorist Asset Tracking Centre) has been founded which has a budget of 6.4 million USD. This organisation should detect the wealth and financial flows of criminal and terrorist organisations and undertake direct investigation policies to control foreign money with the help of the internal Revenue Service as well as the Custom Authorities. The FATAC can also use the help of the FBI and CIA for their operations. In the European Union the FATF (=Financial Action Task Force) has also given the competence not only to fight money laundering but also to fight the financial flows of terrorist organisations. In Germany a “Zentralstelle für verfahrensunabhängige Finanzermittlungen” has been founded which should be a competence centre against money laundering and the financial flows of terrorist organisations. Also a central data base at the “Bundesaufsichtsamt für Kreditwesen” will be created with the goal to detect dirty money and the financial flows of terrorist organisations. Also additional competences have been given to existing state institutions as for example the “Bundesaufsichtsamt für Wertpapierhandel” or “Bundesaufsichtsamt für Versicherungswesen”.

¹⁰⁾ Compare OECD (2000), Lemay (2001), Fitzgerald (2002) and Masciandaro and Portolano (2002) for these and other countermeasures or suggestions against money laundering and the detection of terrorist financial flows.

For sure all these countermeasures are useful and can help to detect and reduce the financial flows of terrorist organisations. The question is whether this is enough or whether one shouldn't do much more.¹¹⁾ Having analysed how the origin of the financial flows and the amount of international terrorist groups, international cooperation is the key in order to develop some efficient instruments to detect and reduce the financial flows of the terrorist groups. In a lot of Arabic and Moslem countries there is no traceable trail to follow in the kind of traditional, trust based banking known as "Hawala" and Al-Kaida may have been used extensively this payment method. Here, Muslim bankers in different places make payments on the promise that the corresponding payment has taken place in another bank – with no money necessarily passing into accounts that can be linked to the money as owners. As Al-Kaida has relied most heavily on cash again with the aim that no "financial trace" be left this type of banking system might be ideal but it is only working within Arabic and Moslem countries and not outside, and hence, there is a chance with an more efficient international cooperation to do something.

3.2. Further ideas/countermeasures to detect the financial flows and to prevent attacks of international terror organisations.

In table 3.2 three additional strategies countermeasures to detect and reduce the financial flows of criminal and also Islamic terror organisations are shown.

Table 3.2

¹¹⁾ Masciandaro and Portolano (2002) develop an interesting and challenging model why a country offers money laundering services. These countries are grouped in a list of LFR (Lax Financial Regulation) countries, in sum 23 countries (like Liechtenstein, Philippine, Russia, etc.) are on this "black" list, which was developed by the FATF.

The idea behind the table is that in order to efficiently reduce the international organised criminal activities (like the one of the terrorist organisations) one needs a global vision and global activities/countermeasures. This means first the widest possible cross checking of financial activities and cross checking between different financial activities and trade activities. This also means transversal and coherent communication around the world about possible terrorist financial activities and to start and develop a competitive intelligence culture in order to break down the network and/or tools of these terrorist activities. In order to do so one should buy and install the latest technologies and software and put together a task force and develop communications platforms on teams level, so that all necessary information can be communicated and provided around the globe in an extreme short time. This should be supplemented by guided criminal search and criminal network analyses to achieve the goal that an intelligently guided search, which links all possible traces detects (at least partly) the financial flows of terrorist organisations. Here, the criminal network analysis, which is a method of graphical representation of criminal networks, comes in. Criminal network analyses allows to reproduce the structure of criminal networks, to analyse these structures using the classical social network analyses, and to simulate actions. In combination with guided criminal search using all possible information on the financial markets this type of investigation may lead to a higher success rate. However, the greatest obstacles to anti-money-laundering, international cooperation seem to be found in the lack of regulation, because it is very difficult to identify the real beneficial owner. Here new regulations should be put forward in such a way that the real beneficial owner should be tracked down, possibly with the help of an electronic ear-marking system of financial transactions. The problems questions with the guided criminal research and criminal network analyses are the authorisation and implementation of the necessary competences and guidelines in the single

countries and the creation of the respective national and international organisations.

The second suggestion may be a financial worldwide Interpol/task force. This should be a task force with specialists working in crime detection, in all finance “affairs” and in other terrorist activities, in order to fight the terrorism and their financial flows using guided criminal research and network analyses with the help of the respective national jurisdictional institutions and police force. The idea here is that this task force should be able to operate in all countries around the world under their respective law of the single countries but all possible and legal help should be given to them so that they can efficiently work and move as quick as terrorist groups. The problems/questions are: Who is supervising this task force? E.g. the United Nations, the IMF or the World bank and is it possible to give this task force clear enough goals as well as instruments to work efficiently?

A third suggestion may be an award and/or another incentive systems with the idea that key terrorists might be tempted to leave the unit and to work with state and public authorities. Whether this is possible with Islamic terrorist organisations can be doubted but at least this award and other incentive systems should be installed so that those who would like to leave the terrorist organisations have a chance.

A fourth suggestion is put forward by Fitzgerald (2002, pages 20-21), where he argues that the nature of the international financial system makes limiting terrorist finances more difficult. However, even within formal institutional structures, the nature of bank secrecy makes the tracking of transactions difficult. With the growth of the Internet and the increasing impersonalisation of the banking industry, banks find it more difficult to detect suspicious

transactions. For many offshore banking companies, their very comparative advantage is in high secrecy and minimal records. As a result, cooperation faces obstacles from all sides. Indeed, governments are often unwilling to share information with banks, expecting instead that banks will act as a conduit for information of the government. There is no strong economic incentive for non-bank financial intermediaries to comply in reporting dubious transactions as the probability of conviction is low and fines small. There are strong incentives for non-compliance as the sums of money involved are large and costs of monitoring are substantial-especially is high-wealth clients value secrecy highly. As proposed by Fitzgerald (2002, p. 20), a solution to this problem could be to shift from the present “blacklist” system administered by the US Office of Foreign Assets Control to an equivalent “whitelist” system based on persons or firms registered for tax purposes (and thus monitored) in OECD countries and qualified emerging markets. Basically, transactions with entities that are not properly registered for tax purposes would be subject to a substantial withholding tax (e.g. 25% of the gross transaction). This would create a strong incentive against dealing with unregulated agents. This would have three strong positive effects:

First, it would make handling unregistered funds unprofitable – or at worst cost criminals a great deal to transact, reducing their liquidity and eroding their assets.

Second, the process of levying the tax would provide a steady information flow on the pattern of payments not now available.

Third it would mean the virtual closure of tax havens and a large increase in fiscal resources for both developed countries (to balance increased security expenditure) and developing countries to reduce social disparities.

A fifth suggestion is put forward by Frey and Luechinger (2002, pages 9-10). They suggest that one of the most effective ways to immunize a country against terrorist attacks is to decentralize actively both with respect to the polity and the economy. They argue that strengthening political decentralisation via the devision of power and federalism contributes strongly to a country being less vulnerable to terrorist attacks. The attraction of such actions for terrorists may be diminished. The marginal benefit of terrorism falls and the equilibrium amount of terrorism is reduced. Such measures may be attractive but they can only be realized under a long term perspective.

What can we expect, if these five suggestions/countermeasures would be installed? I think, we would have much more efficient tools of detection and prevention because the conditions to efficiently fight terrorist organisations would be to a greater extend fulfilled: Linking all transactions, people and situations in order to trace down terrorist activities, and to use comprehensive and intelligent means that combine functions for a quick registration, detection and workflow management. In this toolbox information technology is the key-element of the process of detection. One should realize that however it is essential in this environment which is characterized by complexity and the extreme high level of automatic financial and commercial transactions that all necessary information should be screened and efficiently looked through.

4. Summary and conclusions

In this preliminary paper it is firstly elaborated how Islamic terrorist organisations work and how they finance their activities and what type of financial means they use. Then in part 2 with the help of a latent estimator approach it is investigated how large the financial flows of this terrorist organisations are and what are their ways of financing. In part 3 then some suggestions have been taken forward how to efficiently more fight terrorists activities and to detect and reduce their financial flows. Let me clearly summarize and emphasize that this is a very preliminary paper with first and rough findings and especially the estimations can be only seen as crude figures.

What can we conclude from the findings of this paper?

(1) For the western world it is a major political and economic problem to fight terrorism and to detect and reduce the financial flows of terrorists. This means on the one side we should be able not to use too many instruments of repression and on the other side we should have efficient instruments to detect and reduce the financial flows of terrorists so that the actions are impeded or made impossible.

(2) This difficult trade-off will only be masterminded with a lot of good will and closing reaction in the western hemisphere. Only with source interaction and the creation of new international organisations and task forces it will be possible to overcome the thread and challenge of Islamic and other international terror organisations without giving up key elements of our democracy.

Table 1.1: Shadow Economy and Underground Economy in Germany from 1996-2001

Year	Germany			
	Shadow Economy ¹⁾		Underground Economy ¹⁾ (classical crime activities)	
	in % of offic. GNP	in bill. Euro	in % of offic. GNP	in bill. Euro
1996	14.50	263	10.4	189
1997	15.00	280	11.6	217
1998	14.80	286	12.8	248
1999	15.51	308	14.1	280
2000	16.03	329	16.3	334
2001 ²⁾	16.00	336	16.9	355

¹⁾ Shadow economy (=in principle legal activities, but withholding tax and social security payments, and violating other labour market regulations) and underground economy are different activities, which *can not* be summed up as the underground economy (typical crime activities, like burglary, etc.) produces no positive value added for an economy and hence can not be treated as a complement to the “official GNP”, whereas the “traditional” shadow economy can be seen as a complement to the “official” GNP. For both “economies” we have overlapping areas.

²⁾ Preliminary first estimations.

Source: Own calculations.

Figure 1.1: Shadow economy and Underground economy in Germany (1996-2001), in % of official GNP

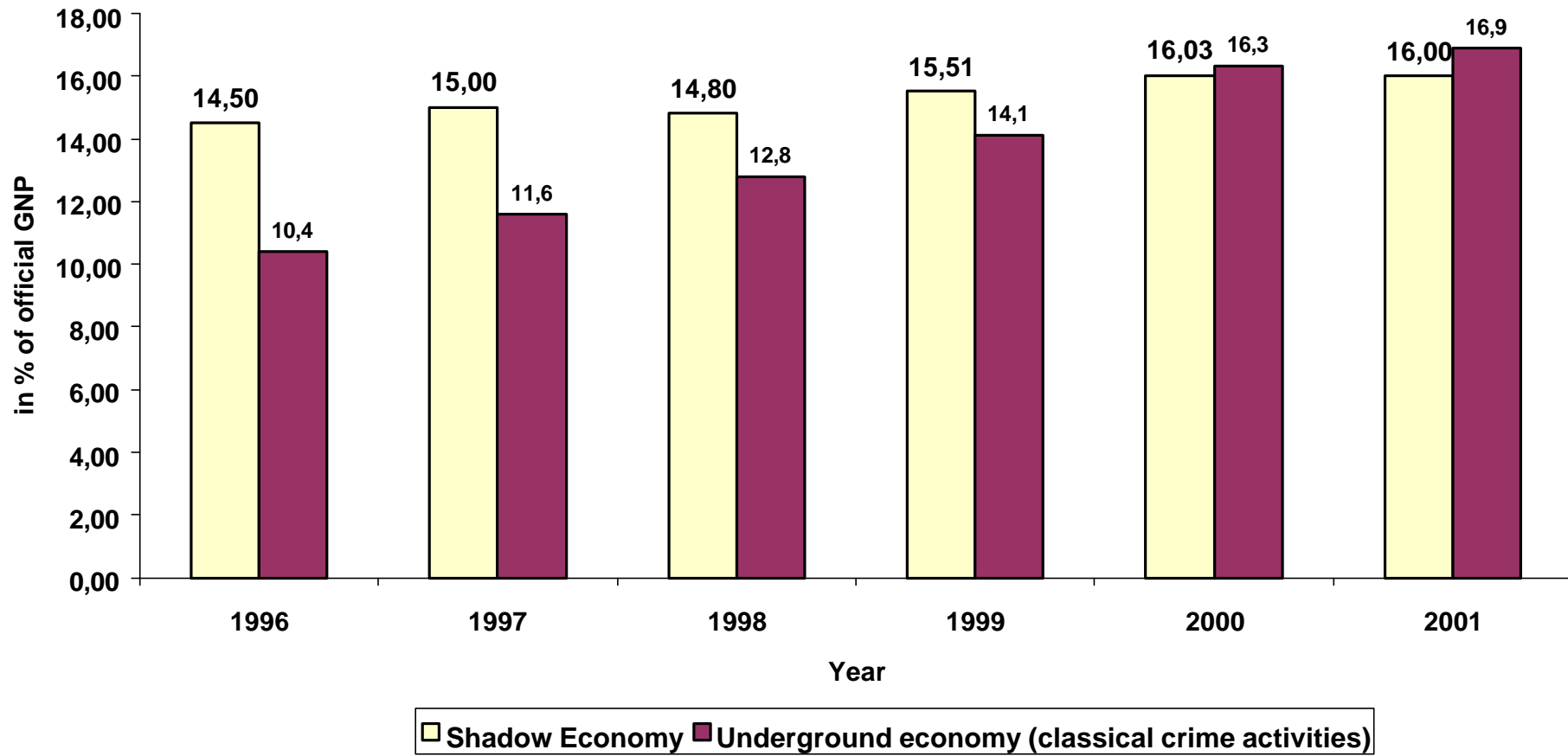


Figure 1.2: Shadow economy and Underground economy in Germany (1996-2001), in bill. Euro

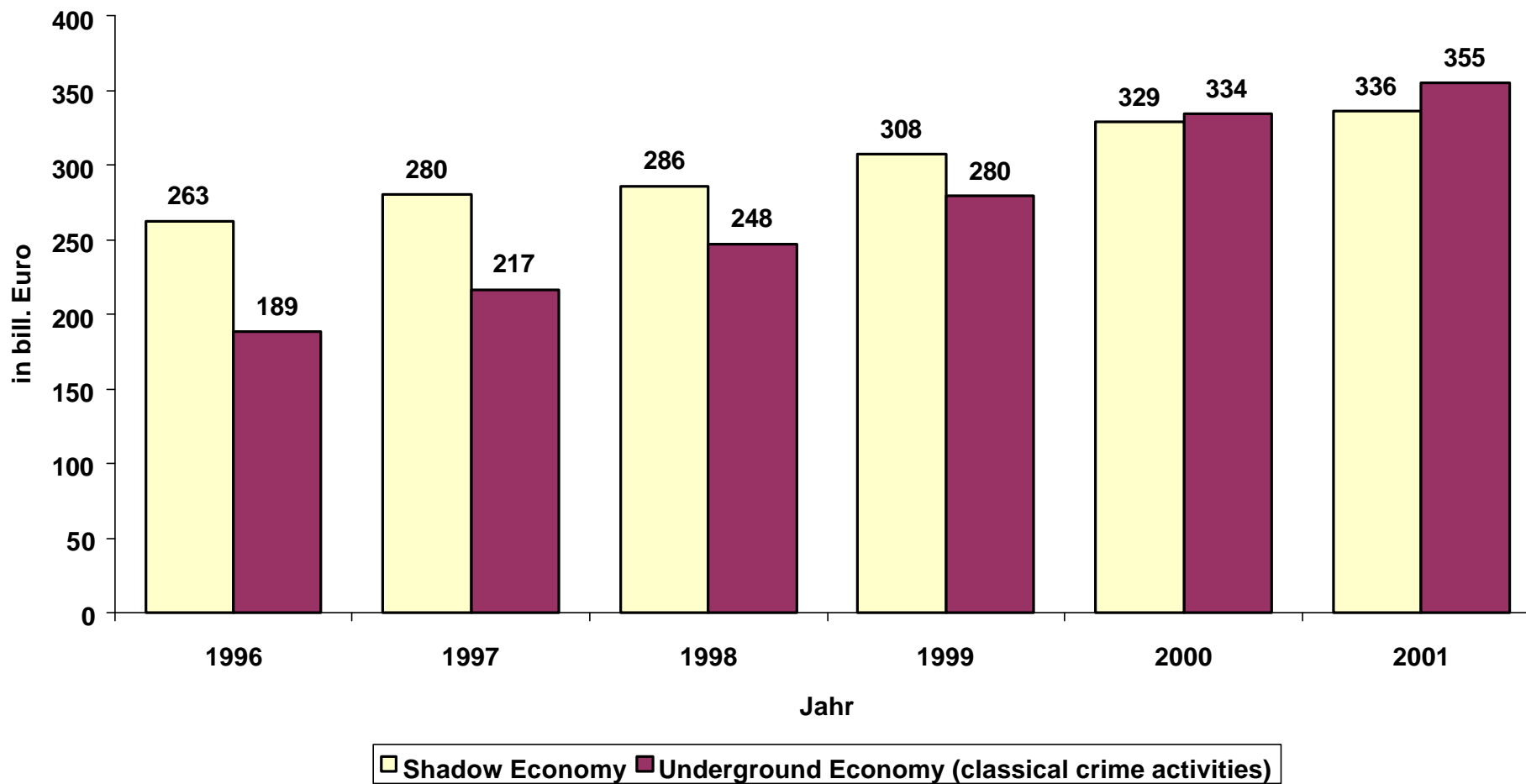


Figure 1.3: Underground Economy for Germany, Italy, France and Great Britain from 1996-2001, in % of official GNP

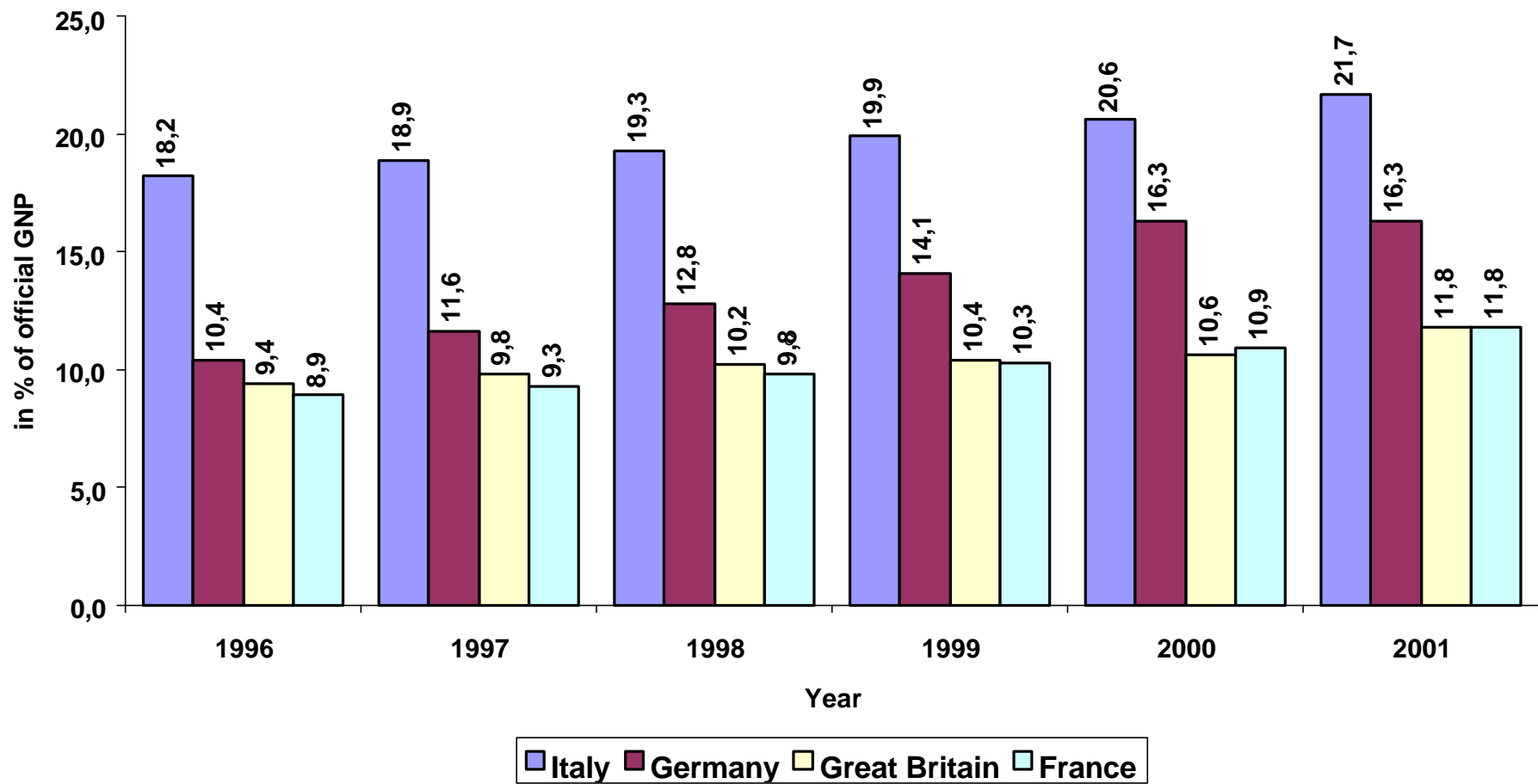


Table 1.2: Shadow Economy and Underground Economy in Italy from 1996-2001

Year	Italy	
	Shadow Economy ¹⁾	Underground Economy ¹⁾ (classical crime activities)
	in % of offic. GNP	in % of offic. GNP
1996	27.0	18.2
1997	27.3	18.9
1998	27.8	19.3
1999	27.1	19.9
2000	27.2	20.6
2001	27.0	21.7

¹⁾ Shadow economy (=in principle legal activities, but withholding tax and social security payments, and violating other labour market regulations) and underground economy are different activities, which *can not* be summed up as the underground economy (typical crime activities, like burglary, etc.) produces no positive value added for an economy and hence can not be treated as a complement to the “official GNP”, whereas the “traditional” shadow economy can be seen as a complement to the “official” GNP. For both “economies” we have overlapping areas.

²⁾ Preliminary first estimations.

Source: Own calculations.

Table 1.3: Shadow Economy and Underground Economy in France from 1996-2001

Year	France	
	Shadow Economy ¹⁾ in % of offic. GNP	Underground Economy ¹⁾ (classical crime activities) in % of offic. GNP
1996	14.9	8.9
1997	14.7	9.3
1998	14.9	9.8
1999	15.2	10.3
2000	15.2	10.9
2001	15.1	11.8

¹⁾ Shadow economy (=in principle legal activities, but withholding tax and social security payments, and violating other labour market regulations) and underground economy are different activities, which *can not* be summed up as the underground economy (typical crime activities, like burglary, etc.) produces no positive value added for an economy and hence can not be treated as a complement to the “official GNP”, whereas the “traditional” shadow economy can be seen as a complement to the “official” GNP. For both “economies” we have overlapping areas.

²⁾ Preliminary first estimations.

Source: Own calculations.

Table 1.4: Shadow Economy and Underground Economy in Great Britain from 1996-2001

Year	Great Britain	
	Shadow Economy ¹⁾	Underground Economy ¹⁾ (classical crime activities)
	in % of offic. GNP	in % of offic. GNP
1996	13.1	9.4
1997	13.0	9.8
1998	13.0	10.2
1999	12.7	10.4
2000	12.7	10.6
2001	12.6	11.8

¹⁾ Shadow economy (=in principle legal activities, but withholding tax and social security payments, and violating other labour market regulations) and underground economy are different activities, which *can not* be summed up as the underground economy (typical crime activities, like burglary, etc.) produces no positive value added for an economy and hence can not be treated as a complement to the “official GNP”, whereas the “traditional” shadow economy can be seen as a complement to the “official” GNP. For both “economies” we have overlapping areas.

²⁾ Preliminary first estimations.

Source: Own calculations.

Table 2.1: The kind of financial flows in order to supply the terrorist cells

<p>1) STARBUST:</p>	<p>A deposit of dirty money is made in a bank with standing instructions to wire it on in small, random fragments to hundreds of other bank accounts around the world.</p> <p><i>Goal: To hide the original source of the money and to increase the financial flows for terrorist groups organized in cells.</i></p>
<p>2) BOOMERANG:</p>	<p>Money is send on a long arc around the world before returning to the country where it came. En route it travel through what money launderers refer as “black holes” meaning countries, that lack the means also in clination to investigate banks.</p> <p><i>Goal as 1)</i></p>
<p>3) CHARITY MONEY:</p>	<p>The source of terrorist money might, for a start, be legal. It might come from a wealthy individual or from a religious charity.</p>
<p>4) SHELL COMPANIES:</p>	<p>Via faked firms and with the help of “tax optimisation experts” dirty money will be whitewashed.</p> <p><i>Goal as 1)</i></p>

Figure 2.1: Development of the shadow economy (size of financial flows of Islamic terrorist organisations) over time

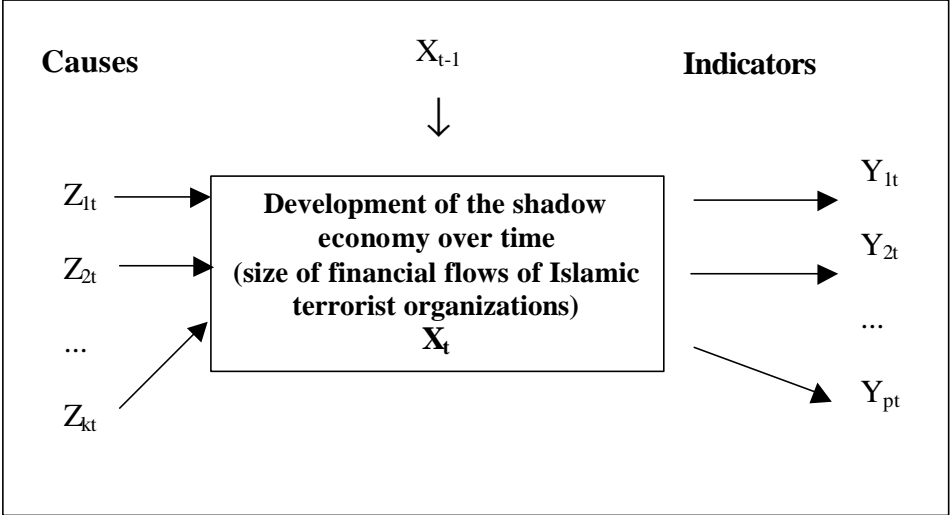


Figure 2.2: Estimation (latent estimator approach) of the size of the shadow economy using causes (determinants) and traces (indicators), DYMMIMIC estimation procedure, combined cross section and time series over 17 OECD countries and over 1984-1999

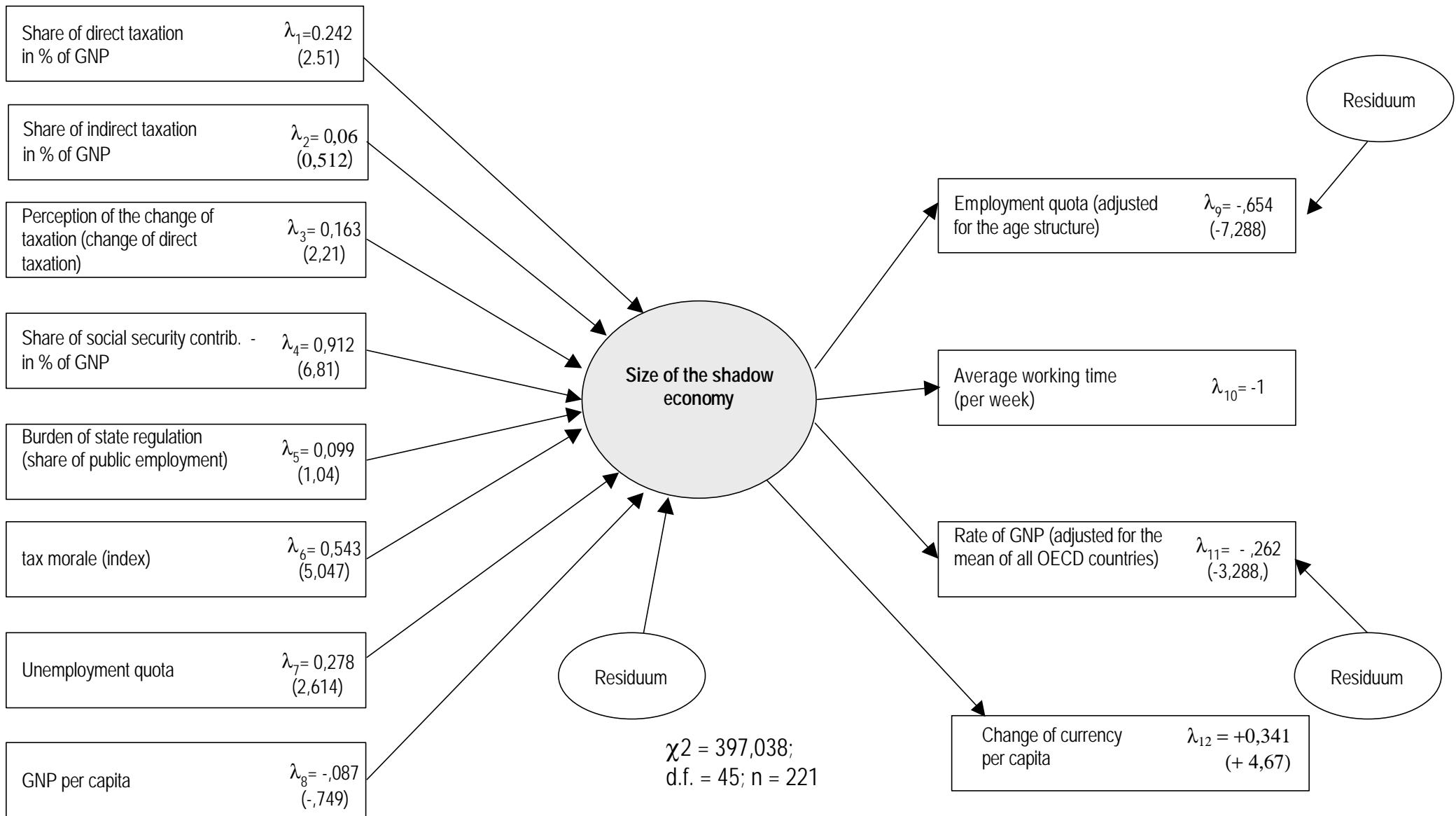


Figure 2.3: Estimation (latent estimator approach) of the financial flows (budget) of Islamic terrorist groups using causes (determinants) and traces (indicators), DYMMIMIC estimation procedure, combined cross section and time series over 20 Islamic terrorist org. and over 1990-1999

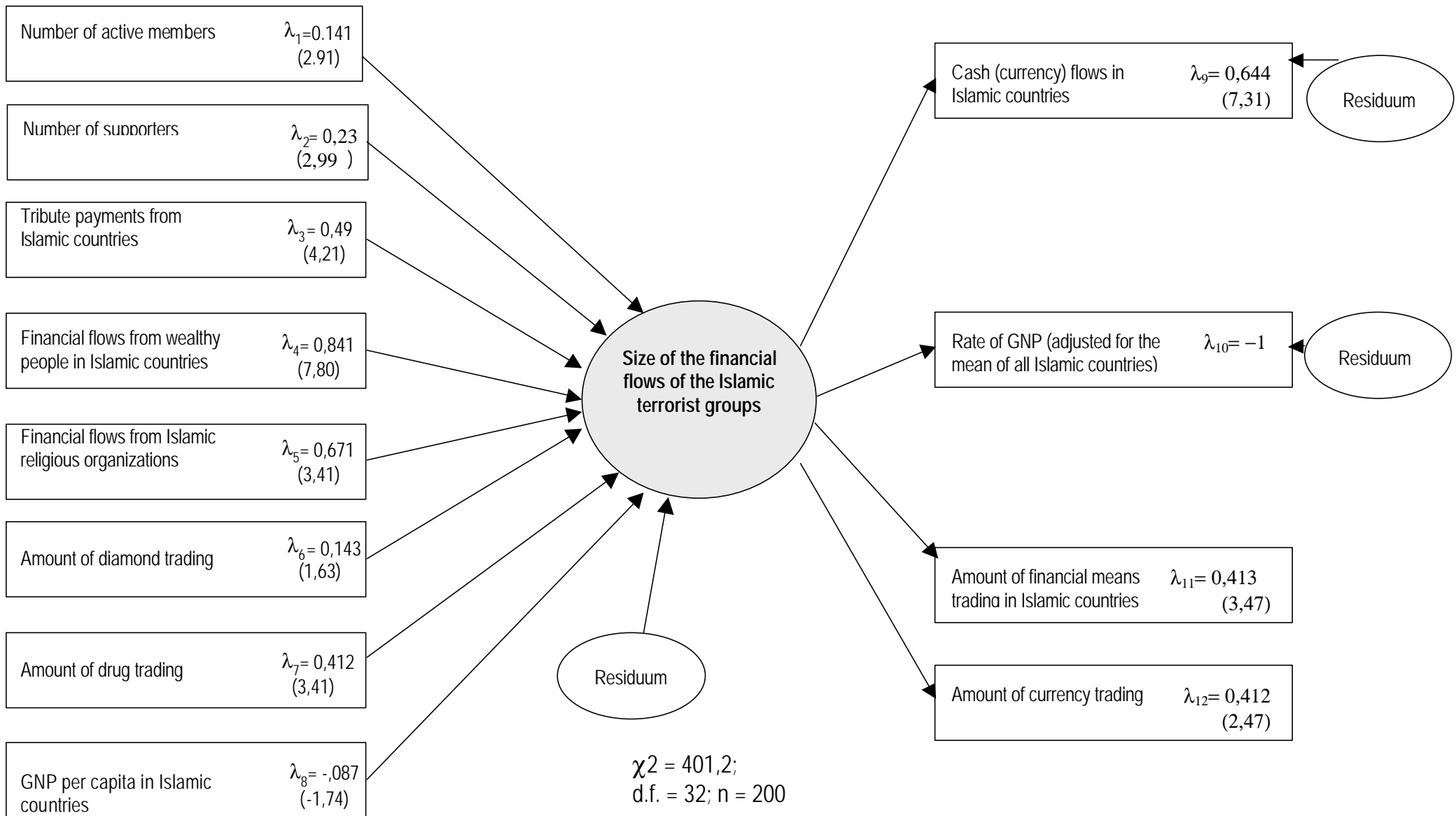


Table 2.2: The financial flows and the kind of finances of Al-Kaida and other terror organisations

Wealth (Stock value) of Al-Kaida (Average 1999-2001)	ca. 5 bill. \$
annual financial flows (budget) of Al-Kaida (Average 1999-2001)	20-50 mill. \$
Ways of financing of terror organisations (using the example of Al-Kaida)	
Drug business (mainly transporting drugs)	30-35%
Donations/Tribute payments of governments or wealthy individuals or religious groups	25-30%
Classical crime activities (blackmail, kidnapping, etc.)	10-15%
Illegal diamond trading	10-15%
Additional unknown financial means (legal + illegal)	25-5%

Source: Own calculations.

Table 2.3: Preliminary (incomplete) overview of financial flows of Arabic Islamic terror organisations

Name	Members (worldwide)¹⁾ Year 2001/02	Current financial flows (annual budget) Year 2001/02
Al-Kaida	1500-3000	20-50 mill. \$
Front Islamique du Salut (Algeria)	ca. 400	ca. 5 mill. \$
Hamas	ca. 1000	ca. 10 mill. \$
Hizbullah	ca. 10.000	ca. 50 mill. \$
Arabic Mujahedin (terror) organisations:		
- Irak	ca. 800	ca. 5 mill. \$
- Iran	ca. 600	ca. 5 mill. \$
- Libyan	ca. 600	ca. 10 mill. \$
- Egypt (Egyptian Islamic Jihad; most likely united with Al-Kaida; islam./arab.)	ca. 600	ca. 8 mill. \$
additional 17 Organisations	ca. 27.000	ca. 150 mill. \$
PKK (Turkey)	ca. 2.000	ca. 10 mill. \$

¹⁾ Active (well trained) members belonging to the hardcore (stock).

Source: Own calculations.

Table 3.1: Reactions/Strategies to fight the terror organisations and their financing

<p>1) USA:</p>	<p><i>FTATC (Foreign Terrorist Asset Tracking Centre)</i></p> <p>Budget: 6,4 mill. \$</p> <p>To detect the wealth of criminal/terrorist organisations. Direct investigation policies of the bureau to control foreign money with the help of the Internal Review Service as well as Customs Authorities.</p> <p>Direct use of the staff against the FBI, CIA and NSA. Additional competences for the FBI + local investigation teams.</p>
<p>2) EU</p>	<p><i>FATF (Financial Action Task Force)</i></p> <p>Fighting of money laundering and fighting the financial flows of terror organisations.</p>
<p>3) Germany</p>	<p>(i) A new founding of a „Zentralstelle für verfahrens-unabhängige Finanzermittlungen“</p> <p>Task: Competence centre against money laundering.</p> <p>(ii) Additional competence to servile of financial transfers; Creation of a central data base at „Bundesaufsichtsamt für Kreditwesen (KAKred)“. Goal: to detect “dirty” money and the financial flows of terror organisations and money laundering activities of classical crime groups.</p> <p>(iii) Additional competences and power for the existing state institutions, for example: „Bundesaufsichtsamt für Wertpapierhandel oder Bundesaufsichtsamt für Versicherungswesen“.</p>

Table 3.2: Further and comprehensive ideas/countermeasures to detect and reduce the financial flows of international terror organisations

<p>1) Guided criminal search and criminal network analyses</p>	<p><i>Goal: guided search and linking all possible traces of the financial flows of terrorist organisations with the link to the traditional criminal search.</i></p> <p>Problems/Questions:</p> <p>(1) Authorisation and implementation of the necessary competences and guidelines in the single nations</p> <p>(2) national/international institutions have to be created</p>
<p>2) The Financial Interpol/ Task Force (worldwide)</p>	<p>Goal: International unit to fight terrorism and their financial flows using guided criminal search and network analyses with the help of national jurisdictional and police force.</p> <p>Control: UNO (IMF, World Bank) and/or national parliaments?</p> <p>Problems/Questions as 1)</p>
<p>3) High award- and other incentive systems</p>	<p>Goal: to create incentives that key terrorist or other active members leave their unit. Promise of new identity and a lot of money.</p>

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