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## ABSTRACT

### **The (Hidden) Financial Flows of Terrorist and Organized Crime Organizations: A Literature Review and Some Preliminary Empirical Results<sup>\*</sup>**

The financial means of international terror and organized crime organizations are analysed. First, some short remarks about the organization of international terror organizations are made. Second and in a much more detailed way a literature review is provided about the financing of terrorist and organized crime organizations, their sources and the various methods they use. Third, an attempt is made to estimate the financial means of terror organizations with the help of a latent estimation approach (MIMIC procedure). The figures show that Al Qaeda and other terror organizations have sufficient financial means. Fourth, some remarks are made about the negative effects of terror on the economy in highly developed countries and some strategies are presented to combat (the financing) of terrorism.

JEL Classification: K42, H56, O17

Keywords: financial flows of terrorist organizations, financial flows of organized crime, Hawala banking, money laundering, organized crime, terrorist organizations, kinds of terrorist financing

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## **1. Introduction**

Until 2009, the development of the world economy and globalization made enormous gains in economic well-being possible, but this development has always contained risks, too. One of them is (transnational) terrorism and the global number of terrorist attacks, which rose from 208 in 2003 to ca. 864 in 2008<sup>1</sup>. The terrorist attacks on September 11, 2001 are an example of how extreme critics of globalization and of the western type of civilization fight violently against its economic advantages. Among others this raises the following questions: (1) What forms of terrorism are there? (2) How is terrorism and organized crime financed, and what do we know about this financing? (3) Which economic implications do terrorism and the combating of terrorism have? In this paper question (1) and (3) will be very briefly answered, the main focus lies on providing a much more detailed answer on the financing of terrorism and organized crime – question (2).

### **1.1. Transnational Islamistic Terrorism - The Example of Al-Qaeda<sup>2</sup>**

In the case of terrorism, national and transnational (usually religious fundamentalist) terrorism have to be distinguished (see also Sedgwick (2007)):

Transnational terrorism has three basic features:

- (1) Almost unlimited operational range of religious terrorism (global theatre).
- (2) Global support base, e.g. on the internet with spontaneously emerging local cells.
- (3) Broad concept of the enemy without limitations – meaning there is no overarching goal (Islamist global domination) but ‘only’ a common enemy (usually the USA and / or the highly developed Western world).

A major goal of Al-Qaeda is to weaken Western civilization; to unleash a ‘Global Jihad’. Al-Qaeda is ‘only’ a brand with an extremely shallow hierarchy. Instead of being an organization it is rather a ‘virtual business corporation’; its slogan is that ‘dying is more important than killing’ and ‘mass murder becomes a sacred act’, meaning that there are no limits to the choice of means. There is no global strategy, apart from destroying Western civilization. Thus one should adjust to a long-term ideological conflict and resort to offensive (including military) approaches to Al-Qaeda.

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<sup>1</sup> On the emergence of terrorism, its financing and consequences for the economy see: Schneider (2004), Freytag et.al. (2009), Lai (2007), Krueger and Malecková (2003), Li and Schaub (2004), as well as Schneider, Brück and Meierrieks (2010).

<sup>2</sup> Also see: Addison und Murshed (2005), Enders and Sandler (2002, 2006), Tavares (2004), Brück (2004) as well as Alexander and Alexander (2002).

## **1.2. The Terror Attack in Mumbai: A Case of Transnational Terrorism**

The international conglomerate of Islamist terrorism, which is most probably being steered by Al-Qaeda, once again struck in Mumbai in a terrible manner. The target was again chosen according to the following pattern:

1. A healthy and open democracy with a free press which guarantees that the news of a terrorist attack will immediately be spread worldwide.
2. A location that is globally known and at which many important economic, political and religious institutions can be found whose function can be severely hampered by terrorist attacks (tourism, stock exchange, economic life, religious institutions).
3. The possibility to cause maximum damage within a short time-frame with 15 to 20 terrorists and guaranteeing global attention.

Unfortunately, Mumbai fits this pattern in an excellent way. Additionally, the attacks should have led to a destabilization of the entire region by furthering distrust between India and Pakistan, possibly causing high tensions and armed conflicts between the two countries.

The craft of international Islamist terrorism is a modern form of terrorism, a mixture of Jihad and cynical calculations, aiming at demolishing open democracies and the Western way of life through terrorist attacks. This form of terrorism develops in the mind of a handful of analyzers and is then implemented by a couple of well-trained terrorists who were probably continuously instructed by their 'mastermind'. Of course they were ready to put their lives on the line. Their own martyrdom is not the crowning finale, but the execution as such, and the assurance of gaining the world's attention. It is obvious that the war of Islamistic terror is wearing on, and that those Al-Qaeda (and other terrorist organizations), who have lasting political, logistic and financial support can always cause shock and awe on a global scale. This approach of world-wide terror attacks perpetrated in an unpredictable pattern is pursued with the intention of spreading a permanent feeling of a state-of-emergency, which leads to increased distrust between different countries, regions and power blocks and restrains the freedom, democracy and pluralism of the Western lifestyle.

What can be done against this form of terrorism?<sup>3</sup> A dialogue in the region and also between the cultures is surely indispensable, and mutual respect and tolerance can lead to gains for all parties involved. It is obvious that the terrorists would fall short of achieving one of their most critical aims, if India and Pakistan were to cooperate against terrorism instead of confronting each other. On the one hand, tolerance and understanding will not be enough to put an end to the terrorists' game. It will be crucial to reduce the breeding ground for terrorism in two ways: on the one hand, by reducing poverty and – even more importantly – providing people with a perspective. This would be a significant step forward for many people in India, Pakistan and other poor regions. On the other hand, a spiritual and religious confrontation with this kind of terrorism and its mastermind has to be undertaken in order to deprive it of its religious breeding ground.

In this line a detailed analysis of the finances of terrorist and of organized crime organizations is crucial to fight terrorism by reducing their financial possibilities, so that the basis of their operations is at least limited. Such an analysis is the main goal of this paper. Chapter 2 provides an extensive literature review at about the kinds of terrorist and organized crime financing. In chapter 3 an estimation of the amount of financial flows of Islamistic terrorist organization is undertaken. In chapter 4 some implications and damages of transnational terrorism are shortly presented, and finally in chapter 5 some policy conclusions are drawn.

## **2. The Kinds of Terrorist and Organized Crime Financing: A Preliminary Literature Review**

The literature review is supposed to meet the two objectives: to widen the knowledge of this subject and the understanding of the main issues under debate and to focus on the literature closely related to the research topic. The body of literature on terrorist and organized crime financing, and their mechanisms is diverse and quite often very descriptive, hence here only some and important contributions are summarized, of course this selection is subjective, but I think most areas are covered.

### **2.1 A Short History of the Terrorist Financing Issues**

The capacity of transnational organizations to generate world panic and cause intensive damage to a nation is an old and well known phenomenon. The anarchist movements at the end of the nineteenth century are a good example. For example, the late 1960s and 1970s

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<sup>3</sup> See also: Tavares (2004), Indridason (2008), Gross et.al (2009) as well as Frey and Luechinger (2008).

were characterized by the rise of secular separatist and mostly left-wing terrorist groups, and since the early 1980s the emergence of *religiously motivated terrorism especially extreme Islamist movements dominated the terrorist scene*.<sup>4</sup> The recent literature is influenced quite heavily by Al-Qaeda's attacks in the U.S. in September 11, 2001. These attacks proved that terrorist groups have both the capacity and the willingness to cause mass destruction and death. Furthermore, other attacks illustrate this point: the February 1993 bombing of the World Trade Center, the March 1995 sarin gas attack in the Tokyo subway, the April 1995 bombing of the federal building in Oklahoma City-seemed to signal the arrival of a new and deadlier kind of terrorism- characterized by Enders and Sandler (2002, 2006, 2008), Napoleoni (2005, 2007), and Brechner (2007).

In this case of Bin Laden and Al-Qaeda, their economic and financial empire constitute a transnational financial engine, a considerable section of which is composed of legitimate businesses as already stated by Schneider (2002a, 2002b, 2004); Napoleoni (2005) and Comras (2005, 2007). According to Yepes (2008) Al-Qaeda's controlled companies in Africa included the holding company Wasi al AQU, a Sudanese construction firm, Al-Hiraj, an ostrich farm, and shrimp boats in Kenya. In the Middle East, the group has shares in the Al-Shamal Islamic Bank and large tracks of forest in Turkey; in Asia, it has agricultural holdings in Tajikistan; in Europe and the United States, holding companies, venture capital firms, banks, and import-export companies.<sup>5</sup> Further, the importance of the Al-Qaeda network in terms of correspondent banking can be seen by examining the case of the Al Shamal Islamic Bank in Khartoum, in which foreign currency accounts were set up at Al Shamal for a number of the companies belonging to Bin Laden. Shamal's correspondent banking relationships were with a variety of reputable banks such as CityBank and others, which is why Al-Qaeda was able to move money rapidly and without impediments around the world. Alternative remittance or banking systems (ARS), i.e. Hawala, have been also important to Al-Qaeda's ability to move finances as well as generate Funds. Al-Qaeda is a terrorist network with international linkages that have been generally focused on a number of theatres of operation (sometimes in different countries), where they have managed to have money available. Their operations have been driven by a particular cause. Funding is generally specific, derived from

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<sup>4</sup> For further discussion of „religious motivated terrorism groups“, see Koh (2006). She discusses the dramatic increase of identifiable religious terrorist groups from 1968 to 1992 based on the *US Department of State (2003) The Patterns of Global Terrorism 2003*;

<sup>5</sup> These „facts“ are taken from *Shahar, Y. (2001). Tracing Bin Laden's money. [www.ict.org](http://www.ict.org); and Mintz, J. (1998). Bin Laden's Finances are Moving Target. The Washington Post.*

sympathetic supporters, and especially from major crime activities. Contributions in the diaspora and monies from political and religious sympathizers have been important, too.

The high flow of funds to terrorists was substantial during the cold war <sup>6</sup> and scholars explain these flows as stemming from oil-rich Regimes that began to pump large sums of money into the terrorist financial system (e.g. Libya in the 1970s and Iran under Ayatollah Khomeini, beginning in the 1980s). Another important idea states that many of the terrorist groups of the Marxist-Leninist type of the 1960s and 1970s relied on various criminal activities – particularly kidnapping, bank robberies, and extortion – to supplement their funding. Other organizations including FARC in Colombia and Shining Path in Peru financed their activities through drug trafficking (compare Yepes (2008)).

Since the mid-1970 the size of the legal international financial flows has grown to hundreds of billions of dollars a day. The same international financial system that allows commerce to flow freely between nations also provides terrorists with a way to move money around the globe within seconds. Transnational terrorism and organized crime have become a global problem, and therefore the effort to disrupt its financing ought to extend beyond borders in order to block the money wherever it is hidden and track it down wherever it moves. Barth et al (2006) argue that since 2005 and during the past 35 years, the world had nearly 20.000 terrorist incidents, ranging from the hostage takeover during the 1972 Munich Olympics to 2002 and 2005 tourist bombings in Bali. According to Barth et al. (2006) terrorist incidents worldwide during this time period have resulted in more than 90.000 casualties or injuries.

Since the events of 9/11, the nations affected and their security institutions have been facing serious challenges from transborder flows, global forces, and complex networks such as Transnational Companies, NGOs, etc. According to Bantekas (2003) and the IMF (2001), terrorism has turned out to be one of the most significant threats to (i) peace, (ii) international security and (iii) economic development from the point of view of good governance. Following Meter (2003) transnational terrorism is now perceived as a different threat compared to past dangers due to its transnational, non-state composition and its high capacity to destroy human lives and undermine states and international regimes / institutions.

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<sup>6</sup> See, *US.(1996). Patterns of Global Terrorism 1996*  
<http://www.state.gov/www/global/terrorism/1996Report/overview.html>. The United States actively promotes international cooperation in condemning state sponsorship of terrorism and in bringing maximum pressure to bear against state sponsors. The Secretary of State has designated seven countries as state sponsors of terrorism: Cuba, Iran, Iraq, Libya, North Korea, Sudan, and Syria.

## 2.2 Trends in Terrorist Financing

In general it is very difficult to identify trends in the Money Laundering/ Terrorist Financing (ML/TF) area, because the activity of ML/TF cannot be neither observed nor recorded in statistics<sup>7</sup>. Intelligence, law enforcement investigations, and criminal prosecution try to identify trends in connection with ML/TF. According to the Money Laundering and Terrorist Financing Typologies (FATF-GAFI 2005), the ML/TF activity could be classified by:

- (i) predicate or other related offence,
- (ii) country or region,
- (iii) financial sector involved,
- (iv) development stage of the financial market, and
- (v) weak points or vulnerabilities in AML/CFT system.

The 9/11 terrorists took advantage of the lack of a financial system control, which gave them the ability to transmit and receive money with relative anonymity and to find the financial resources to carry out their plans of Al-Qaeda inspired groups and other terrorist organizations. The terrorist financing mechanisms that have emerged since September 2001 are characterized according to Geraldo et al (2007), p. 11) by “*the use of formal and informal global financial system that terrorists can easily manipulate.*”

According to the evolution of terrorist financing explained above, it has been argued by Giraldo et al. (2007) and in the Wilton Park Report (2007) that the intelligence process to fight against terrorist financing should combine expertise from different fields to detect the various indicators and trends. The experts according the Wilton Park Conference point out that the current indicators and trends of terrorist financing are the important challenges that face international cooperation. The following list sums up the constraints presented by intelligence agencies to follow the money trail:

- (1) The need for examining financial transactions will oblige national security intelligence personnel and law enforcement agents to deal with accountants and banking and financial experts if they want to follow the money trail.

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<sup>7</sup> Compare here Bierstecker (2002), Costa (2005), Pieth (2005) and Schneider (2008, 2008a, 2008b).

- (2) Recognizing that it is necessary to analyze the suspicious activities reports collected as well as to share this information between Financial Intelligence Units of the various countries.
- (3) Information should be disseminated at a local level because terrorist organizations are engaged in organized crime networks.
- (4) The intelligence process against terrorist financing requires the cooperation of governments, and that of the multilateral institutions dealing with financial integrity and transnational intelligence.

### **2.3 Some Common Aspects of Transnational Crime and Terrorist Groups Financing**

Similarities between transnational crime and terrorist groups are fully described by Schneider (2008a, 2008b, 2009), Sanderson (2004); Gilmore (2004), Shelley (2005); Wilkinson (2005); Makarenko (2002, 2003a, 2003b, 2003c) and Koh (2006). They are.

- (1) Both are generally rational actors,
- (2) both use extreme violence and the threat of reprisals,
- (3) both use kidnappings, assassinations, and extortion,
- (4) both operate secretly, though at times publicly in friendly territory, and
- (5) both defy the state and the rule of law(except when there is state sponsorship).

According to Masciandaro (2004, 2005, 2006), Picarelli (2006), Shelly (2007) and Yepes (2008) the issues of transnational crime, money laundering, and the financing of terrorism have the following common aspects:

- (1) They can use wire transfers or electronic payment systems to move money through multiple jurisdictions.
- (2) They engage in a variety of criminal activities like traffickers and other criminal syndicates. However, the line is now becoming less defined, since terrorists often resort to crime and cooperate with criminals in generating money, obtaining arms and explosives. According to Makarenko (2003a, 2003b) criminals are likely to use terrorism tactics and random violence in pursuits of revenues:
  - (i) Drug, arms and human trafficking<sup>8</sup>, trading in precious stones (diamonds) and other commodities,

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<sup>8</sup> Makarenko (2003a), p. 66 writes: "The most common criminal activity terrorist groups have been involved in is the illicit drug trade. Since the 1970s groups such as FARC, Basque Fatherland and Liberty (Euzkadi Ta Askatasuna – ETA), the Kurdistan Workers Party (Partiya Karkaren Kurdistan – PKK) and Sendero Luminoso have all been linked to the drug trade by well-documented evidence. Since the early 1990s additional groups such as Hizbullah and the IMU have also realised the financial utility of participating in the illicit drugs trade. It is

- (ii) smuggled cash, cigarettes, and other addicted good,
- (iii) counterfeit, goods, and
- (iv) kidnapping.

Both groups benefit from: shell companies, offshore bank facilities. Money laundering experts<sup>9</sup>, for instance, argue that both groups use a technique known as a “starburst”: A deposit of dirty money is made in a bank with standing instructions to wire it in small, random fragments to hundreds of other bank accounts around the world, in both onshore and offshore financial centres. Tracking down the money becomes very difficult, since getting legal permission to pursue bank accounts in multiple jurisdictions can take years. Napoleoni (2005, p.33) argues, “You build a long chain of representative offices at the end of which there is a shell company registered offshore, and you are lucky, if you get to the end of the chain. Financial investigations often run into a blind alley always through, somewhere, in a tiny offshore office”.

#### **2.4 The Main Differences between Organized Crime and Terrorist Groups Financing**

It is obvious that there are many differences between organized crime and terrorist groups with respect to financing. To some extent it is possible to make a distinction in the roots and operational characteristics:

##### **(1) Terrorist Financing**

A number of scholars (Napoleoni, Krueger, Yepes) explain terrorism through religion, development of socio-political causes, and even the economy is sometimes important. Typical operational characteristics of terrorist groups and their financing are:

- (i) low costs / low technology made possible some recent attacks with a great impact on human lives, on nations, and on economies (e.g. 9/11 New York, Madrid, London and Mumbai).
- (ii) Flexible and decentralized organizations with independent decisions and actions.
- (iii) Common ideology with indiscriminate targets (no purpose related to profit).
- (iv) Financial means are needed to plan and execute (future) terrorist attacks; there is only a limited need to hide assets.

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alleged that Hizbullah continues to protect heroin and cocaine laboratories in the Bekaa Valley; and evidence strongly indicated that the IMZ – prior to the Afghan campaign – controlled drug trafficking routes into Central Asia from northern Afghanistan”.

<sup>9</sup> See: Koh (2004), Schneider (2004, 2008a, 2008b, 2009); Savona (2002); and Masciandaro (2004).

(v) Self-financing with possible criminal activities but also obtaining money from legal sources (e.g., donations and charity organizations). Terrorists use different sources of money, depending on their motivations, their mode of operations, and the resistance they face from law enforcement. Quite often the money starts off clean, becoming “dirty” only when the terrorist crime is committed later on. Hence, terrorist enterprises use clean money to commit crimes. The money sometimes consists of legally obtained resources that are used for a limited period of time and of smaller amounts of money to prepare attacks.

## **(2) Organized (Transnational) Crime Turnover and Money Laundering<sup>10</sup>**

Dirty money is earned through various criminal activities, like drug, weapon and human trafficking. How much illicit crime money in all its forms can be observed? Baker (2005) estimates the illicit money to range between US\$ 1.0 and 1.6 trillion a year. This estimate has been adopted by the World Bank. Moreover, Baker estimates that half – US\$ 500 to 800 a year – comes out of developing and transitional economies. These are countries that often have the weakest legal and administrative structures, the largest criminal gangs of drug dealers, and, far too often, economic and political elites who want to take their money out by any means possible.

In table 2.1, the global flows from illicit activities worldwide are shown. In cross-border illicit financial flows, the proceeds of bribery and theft are the smallest, at only perhaps three percent of the global total. Criminally generated funds account for some 30 to 35 percent of the global total. Commercially tax evading money, driven in particular by abusive transfer pricing and faked transactions as well as mispricing is by far the largest component, at some 60 to 65 percent of the global total.

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<sup>10</sup> For a detailed analysis see Schneider (2008a, 2008b and 2009), Schneider and Windischbauer (2008), Schneider, Dreer and Riegler (2006), and Takats (2007).

**Table 2.1: Global Flows from Illicit Activities worldwide, years 2000/2001**

<b>Global Flows</b>	<b>Low (US\$ bn)</b>	<b>%</b>	<b>High (US\$ bn)</b>	<b>%</b>
Drugs	120	11%	200	12.5%
Counterfeit goods	80	7.5%	120	7.5%
Counterfeit currency	3	0.2%	3	0.2%
Human trafficking	12	1.1%	15	0.9%
Illegal arms trade	6	2.0%	10	0.6%
Smuggling	60	5.6%	100	6.3%
Racketeering	50	4.7%	100	6.3%
<i>Crime subtotal</i>	<b>331</b>	<b>31.2%</b>	<b>549</b>	<b>34.3%</b>
Mispricing	200	18.9%	250	15.6%
Abusive transfer pricing	300	28.3%	500	31.2%
Fake transactions	200	18.9%	250	15.6%
<i>Commercial subtotal</i>	<b>700</b>	<b>66.0%</b>	<b>1,000</b>	<b>62.5%</b>
<i>Corruption</i>	30	2.8%	50	5.1%
<b>Grand Total</b>	<b>1,061</b>	<b>100.0%</b>	<b>1,599</b>	<b>100.0%</b>

Source: Baker (2005)

In the next step the main characteristic of money laundering is to make dirty money appear legal (compare Walker (2000, 2004, 2007)). There are numerous methods of money laundering; in table 2.2 the 12 most important methods are shown. Which of these methods is mostly used, depends on the crime activity and on the specific institutional arrangements in a country where the criminal money is “earned”. For example, in the drug business method 8, business ownership, is quite often used. In the drug business and in big cities smaller amounts of cash are earned by drug dealers in a lot of different spaces, which they infiltrate in to cash intensive operations such as restaurants which are especially well suited for money laundering purposes. But also cash deposits (the so called smurfing method) or illegal gambling is quite often used. Obviously, these methods clearly show, there are a number of ways to launder money. It might be more efficient to reduce the crime activities then to fight against these methods.

**Table 2.2: The Methods of Money Laundering<sup>1)</sup>**

1)	<b>Wire transfers or electronic banking</b>	The primary tool of money launderers to move funds around in the banking system. These moves can conceal the illicit origins of the funds or just place the money where the launderers need them. Often the funds go through several banks and even different jurisdictions.
2)	<b>Cash deposits</b>	Money launderers need to deposit cash advances to bank accounts prior to wire transfers. Due to anti-money-laundering regulations they often 'structure' the payments, i.e. break down large to smaller amounts. This is also called 'smurfing'.
3)	<b>Informal value transfer systems (IVTS)</b>	Money launderers need not rely on the banking sector, other transfer providers, such as the hawala or hindi are readily available to undertake fund transfers. These systems consist of shops (mainly selling groceries, phone cards or other similar items), which are also involved in transfer services. IVTSs enable international fund transfers, as these shops are present in several jurisdictions.
4)	<b>Cash smuggling</b>	Money launderers might mail, Fedex or simply carry cash with them from one region to another, or even to different jurisdictions.
5)	<b>Gambling</b>	Casinos, horse-races and lotteries are ways of legalizing funds. The money launderer can buy (for 'dirty' cash) winning tickets – or in the case of casinos chips – and redeem the tickets or the chips in a 'clean' bank check. Afterwards, the check can be easily deposited in the banking sector.
6)	<b>Insurance policies</b>	Money launderers purchase single premium insurance (with dirty cash), redeem early (and pay some penalty) in order to receive clean checks to deposit. Longer term premium payments might make laundering even harder to detect.
7)	<b>Securities</b>	Usually used to facilitate fund transfers, where underlying security deals provide cover (and legitimate looking reason) for transfers.
8)	<b>Business ownership</b>	Money might be laundered through legitimate businesses, where laundering funds can be added to legitimate revenues. Cash-intensive operations, such as restaurants, are especially well suited for laundering.
9)	<b>Shell corporations</b>	Money launderers might create companies exclusively to provide cover for fund moves without legitimate business activities.
10)	<b>Purchases</b>	Real estate or any durable good purchases can be used to launder monies. Typically, the item is bought for cash and resold for clean monies, like bank checks.
11)	<b>Credit card advance payment</b>	Money launderers pay money in advance with dirty money, and receive clean checks on the balance from the bank
12)	<b>ATM operations</b>	Banks might allow other firms to operate their ATMs, i.e. to maintain and fill them with cash. Money launderers fill ATMs with dirty cash, and receive clean checks (for the cash withdrawn) from the bank.

<sup>1)</sup> Source: Unger (2007, pp.195-196).

Schneider (2008a, 2008b) estimates with the help of the MIMIC estimation procedure that money laundering from organized transnational crime has increased from 1995 USD 273 billion (1,33% of official GDP) to USD 603 billion (or 1,74% of the official GDP) in 2006 for

20 OECD countries (Australia, Austria, Belgium, Canada, Denmark, Germany, Finland, France, Greece, Great Britain, Ireland, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Switzerland, Spain and the United States). On a world wide basis in 2006 USD 600 billion are estimated to be laundered coming only from the drug (crime) business.

Unger (2007) estimates the amount of laundered money and their top 20 destinations, which is shown in table 2.3 over the time span 1997-2000. Here two estimates are presented, one by Walker (1999, 2007) and one by the IMF. The Walker figure is with 2.850 billion USD much larger than the IMF figure with 1.500 billion USD (both figures are for the year 2005). Walker's figures have been criticized as much too high which was one reason why the IMF estimates have been chosen, too. Table 2.3 clearly shows that two thirds of worldwide money laundering was sent to the top 20 countries listed. One should realize, that most of these countries are very established, well developed and have a quite sizeable legal/official economies. What is also amazing, that there are only a few microstate offshore countries (OFCS) and tax heavens among them (Cayman Islands, Vatican City, Bermuda and Liechtenstein)<sup>11</sup>. The majority of countries that attract money laundering flows are economic prepotencies at not tiny unimportant countries. The United States has the largest worldwide share of money laundering of almost 19%, followed by the Cayman Islands (4,9%), Russia (4,2%), Italy (3,7%), but also smaller countries like Switzerland (2,1% of worldwide money laundering), Liechtenstein (1,7%) and Austria (1,7%) are also quite attractive. If one takes the lower IMF value for Austria, Switzerland and in the United Kingdom, roughly 5.5 % of the total amount is laundered, which comes close to roughly 10% of official GDP of the three countries. However, it should be clearly stated that it is not clear whether this money is only laundered in these countries or stays in these countries. It might leave these countries when it was laundered. In general, table 2.3 clearly demonstrates, how important the amount of laundered money is and that two thirds of this are concentrated in 20 countries.

Bagella, Busato and Argentiero (2009, pp.881) use a theoretical two-sector dynamic general equilibrium model to measure ML for the United States and the EU-15 macro areas over the sample 2000:01-2007:01 at a quarterly frequency. Their series are generated through a fully micro-founded dynamic model, which is appropriately calibrated to replicate selected stochastic properties of the two economies. Their model (and the analysis) has a short run perspective, and for this reason, the paper discusses the stochastic properties of the Hodrick-

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<sup>11</sup> Compare also Masciandaro (2005, 2006), Masciandaro and Portolano (2004), Zdanowicz (2009), Truman and Reuter (2004), and Walker and Unger (2009):

Prescott filtered series. Bagella et al. (2009, pp.881) got the following results: First the simulations show that ML accounts for approximately 19 percent of the GDP measured for the EU-15, while it accounts for 13 percent in the US economy, over the sample 2000:01-2007:04. Second, the simulated ML appears less volatile than the corresponding GDP. As regards the EU-15 macro area, the simulated statistics suggest that ML volatility is one-third of the GDP ones; for the US economy, the same statistics produce a figure of two-fifths. Considering these estimates one must admit, that they are pretty high and unfortunately no consistent check was done by Bagella et. al, whether such figures are plausible.

**Table 2.3: The Amount of Laundered Money and Top 20 Destinations of Laundered Money, Year 2005<sup>1)</sup>**

Rank	Destination	% of worldwide money laundering	Walker estimate 2.85 trillion US\$ Amount in billion US\$	IMF estimate of 1.5 trillion worldwide Amount in billion US\$
1	United States	18.9%	538,145	283,500
2	Cayman Islands	4.9%	138,329	73,500
3	Russia	4.2%	120,493	63,000
4	Italy	3.7%	105,688	55,500
5	China	3.3%	94,726	49,500
6	Romania	3.1%	89,595	46,500
7	Canada	3.0%	85,444	45,000
8	Vatican City	2.8%	80,596	42,000
9	Luxembourg	2.8%	78,468	42,000
10	France	2.4%	68,471	36,000
11	Bahamas	2.3%	66,398	34,500
12	Germany	2.2%	61,315	33,000
13	Switzerland	2.1%	58,993	31,500
14	Bermuda	1.9%	52,887	28,500
15	Netherlands	1.7%	49,591	25,500
16	Liechtenstein	1.7%	48,949	25,500
17	Austria	1.7%	48,376	25,500
18	Hong Kong	1.6%	44,519	24,000
19	United Kingdom	1.6%	44,478	24,000
20	Spain	1.2%	35,461	18,000
	SUM	67.1%	1,910,922	1,006,500

1) Source Unger (2007, page 80)

From a global perspective for 2000, the IMF (2003, 2001) as well as the World Bank estimate that 2-4% of the world gross domestic product (GDP) stem from illicit (criminal) sources. Agarwal and Agarwal (2006) estimate from economic intelligence units, that global money laundering amounts to more than 2.0 to 2.5 trillion US\$ annually or about 5-6% of World

GDP in 2006 (4,444 trillion US\$ in 2006) to be contrasted against an observed figure of US\$ 500 billion to one trillion in 2004 from the same authors (Agarwal and Agarwal (2004)). Recent IMF estimates on money laundering by the drug traffickers, who “introduce” the proceeds gained through the selling of drugs into the legitimate financial market, amount to 600 billion annually. The IDB (2004) reaches the conclusion that for Latin America a rough estimate appears to be somewhere between 2.5 and 6.3 % of annual GDP of Latin American countries.

In their latest study again Walker and Unger (2009, page 821) undertake an attempt, measuring global money laundering and the proceeds of transnational crime that are pumped through the financial system worldwide. They criticize that methods such as case studies, proxy variables, or models for measuring the shadow economy all tend to under- or overestimate money laundering. They present a model, which is a gravity model which makes it possible to estimate the flows of illicit funds from and to each jurisdiction in the world and worldwide. This “Walker Model” was first developed in 1994, and used and updated recently. The authors show that it belongs to the group of gravity models, which have recently become popular in international trade theory. Using triangulation, they demonstrate, that the original Walker Model estimates are compatible with recent findings on money laundering. Once the scale of money laundering is known, its macroeconomic effects and the impact of crime prevention, regulation and law enforcement effects on money laundering and transnational crime can also be measured. Walker and Unger (2009, p. 849-850) conclude, that their model still seems to be the most reliable and robust method to estimate global money laundering, and thereby the important effects of transnational crime on economic, social and political institutions. Rightly they argue, that the attractiveness and distance indicator in the Walker model are a valid first approximation, but are still quite ad hoc. A better micro-foundation for the Walker Model will be needed in the future. For this, the behavior of money launderers, and in particular what makes them send their money to a specific country, is important. Hence, Walker and Unger (2009, p. 850) argue that an economics of crime micro-foundation for the Walker Model would mean that, similarly to international trade theory, behavioral assumptions about money launderers have to be made. The gravity model must be the (reduced form) outcome of their rational calculus of sending their money to another country and possibly getting caught, but potentially making large profits.

## **2.5 The Various Terrorist Financing Sources**

### ***2.5.1 Legitimate Sources of Terrorist Financing***

Not all the financing received by terrorist comes from illegal activities. Yepes (2008) argues, that the legitimate financing is related to completely legal activities conducted by charities, diaspora, and firms. The 9/11 commission pointed out a core number of financial facilitators involved in raising, moving, and storing the money Al Qaeda used – from donors primarily in the Gulf Region but also from other countries around the world. According to Comras (2007) these groups used legitimate charities and businesses as covers to develop a substantial financial network.

#### **(1) State Sponsors**

According to Yepes (2008) Afghanistan and Sudan have been sponsoring terrorist groups, e.g. it has been proven that the majority of companies and banks used by Bin Laden were located in Khartoum (Sudan) such as Faisal Islamic Bank, Ladin International, Taba investment Co. Ltd, Al Themar Al Mubarak, Al Qudarat, Islamic Bank Al Shama.

#### **(2) Private (Individual and Corporate) Donors**

Kohlmann (2006) and Simpson (2007a, 2007b, p.10) conclude, that among the most important cases of the private donors involved in terrorist financing, is Mr. Al Rajhi and his family members, “they have been major donors to Islamic charities that are suspected by Western intelligence agencies of funding terrorism, according to CIA reports and federal-court filing by the US Justice Department. An endowment holding much of Saleh Al Rajhi’s wealth gives an indication of the scale. His Web site details nearly USD 50 Mio. in direct donations within the kingdom to Islamic causes and at least USD 12 Mio. in donations abroad. The overseas money went to aid embattle Muslims in Kosovo Chechnya and the Palestinian territories and to finance Islamic instruction”. According to Simpson (2007b), the U.S. Justice Department is investigating possible criminal tax-law violations by a Boston private-equity firm that manages hundreds of millions of dollars for Muslim investors in Europe and the Middle East and is affiliated with a Swiss investment group that U.S. authorities suspect of financing Islamic extremists. Some private corporate donors have been cited in Morigi (2004), and furthermore, Fried et al. (1975) concludes that private individual and corporate donors could be related to those individuals or enterprises that recycled Petrodollars in 1974.

### **(3) Ethnic Communities and Religious Financing**

According to Comras (2007) the factor explaining religious financing consists in a “Coranic Tax”, explaining the support offered by from the richest to the poorest, and it is obligatory to pay this within the Islamic community. Charity forms a very important part of Muslim law an tradition. Furthermore Comras (2007) argues, that Al Qaeda took advantage of it to solicit funds through collection boxes at mosques and Islamic centres. Similarly Napoleoni (2005, p.22) argues that the Mosque Network seems to provide financial support for the Jihad. He writes: “The Mosque Network is as efficient as ever and continues to be the main vehicle through which Islamist organizations, countries, state-shells, armed groups and their sponsors link up and do business with each other”.

### **(4) Charities**

Donations to NGOs and charities are perfectly legal in most countries, but the problem arises when some objectives of a NGO are not legal or are linked to a diversion of some of the funds legally received for illegal activities. Kohlmann (2006) and Raphaeli (2003) have highlighted how terrorist organizations have resorted to a variety of charitable as well as front and fraudulent organizations to mobilize financial resources for terrorists to carry out their actions. Raphaeli demonstrates the linkage between charity and terrorism in the case of Enaam Arnaout. Arnaout served in the office of an organization known as Maktab al Khidamat, run principally by Sheikh Abdullah Azzam and Osama bin Laden, for the purpose of providing logistical support to the Mujahideen (holy warriors) who were fighting the Soviet Union in Afghanistan.

In Eaton’s (2007) work with the title “The Role of Islamic Charities in International Terrorist Recruitment and Financing” the author notes that a number of sympathetic NGOs provided various kinds of assistance, which proved to be invaluable in the long term struggle and in explaining the roots of support of contemporary radicalisation.

### **(5) Legal Business**

The truly transnational financial engine of the Al Qaeda terrorist group and its sympathizers continue to raise money through their own business activities. The legal business support to terrorist activities are noted by Napoleoni (2005), Gunaratna (2003), Schneider (2004, 2008a, 2008b), Millard (2006) and Comras (2007). Following Napoleoni (2005) and Mintz (1998) the Al-Qaeda group consists of the following companies among others: In Africa, a holding company, Wadi al Aqiq, a Sudanese construction firm, Al Hiraj, an ostrich farm and shrimp

boats in Kenya; in the Middle East shares in the As-Shamil Islamic Bank and large tracks of forest in Turkey; agricultural holdings in Tajikistan in Europe and the United States, holding companies, venture capital firms, banks and import-export companies. The portfolio includes real estate in London, Paris and French Riviera; dairy business in Denmark; wood and paper industries in Norway; and hospital equipment in Sweden. Some scholars like Comras (2007) paid attention to the use of trusts by terrorists groups. The use of networks of companies and shell companies, shell bank, and offshore trusts to raise money, hide assets, and protect their identity of other financial contributors.

### ***2.5.2 The Illegal Sources of Terrorist Financing***

#### **(1) Drug Trafficking**

According to Yepes (2008) in May 2002 a report called “Global Overview of Narcotics-Funded Terrorist and Other extremist groups” was launched, prepared by the Federal Research Division of the Library of Congress and the US Department of Defence. The report examined connections between extremist groups and narcotics trafficking in the following regions of Latin America: Triborder Region (Argentina, Brazil, and Paraguay), Colombia, and Peru; in the Middle East: Lebanon, in Southern Europe (Albania and Macedonia); in Central Asia: Kyrgyzstan, Tajikistan, and Uzbekistan and in East Asia: The Philippines.

#### **(2) Oil Smuggling**

According to Johnson (2001) and Napoleoni (2005) another business is oil smuggling, where terror, criminal, and legitimate economies interact. Countries, where oil smuggling is a significant problem are Thailand, China, Russia, Cambodia, Iran and Tanzania. In all these countries oil smuggling earn for themselves significant profits, a substantial portion of which enters the laundering cycle. Oil smuggling is also related to arms trade.

#### **(3) Arms / Diamonds Trafficking**

Besides drugs trafficking according to Levi and Gilmore (2002), Schneider (2004, 2008a, 2008b, 2009) and Yepes (2008) arms trafficking, and illegal diamonds trade are some of the most important illegal sources of funding of terrorist groups. The illicit arms trade demonstrates how comparatively easy it is to obtain false documentation accompanying arms shipments, especially end-user certificates. Inconsistent documentation requirements between states, and inefficient control in customs and port authorities in many states, have created an

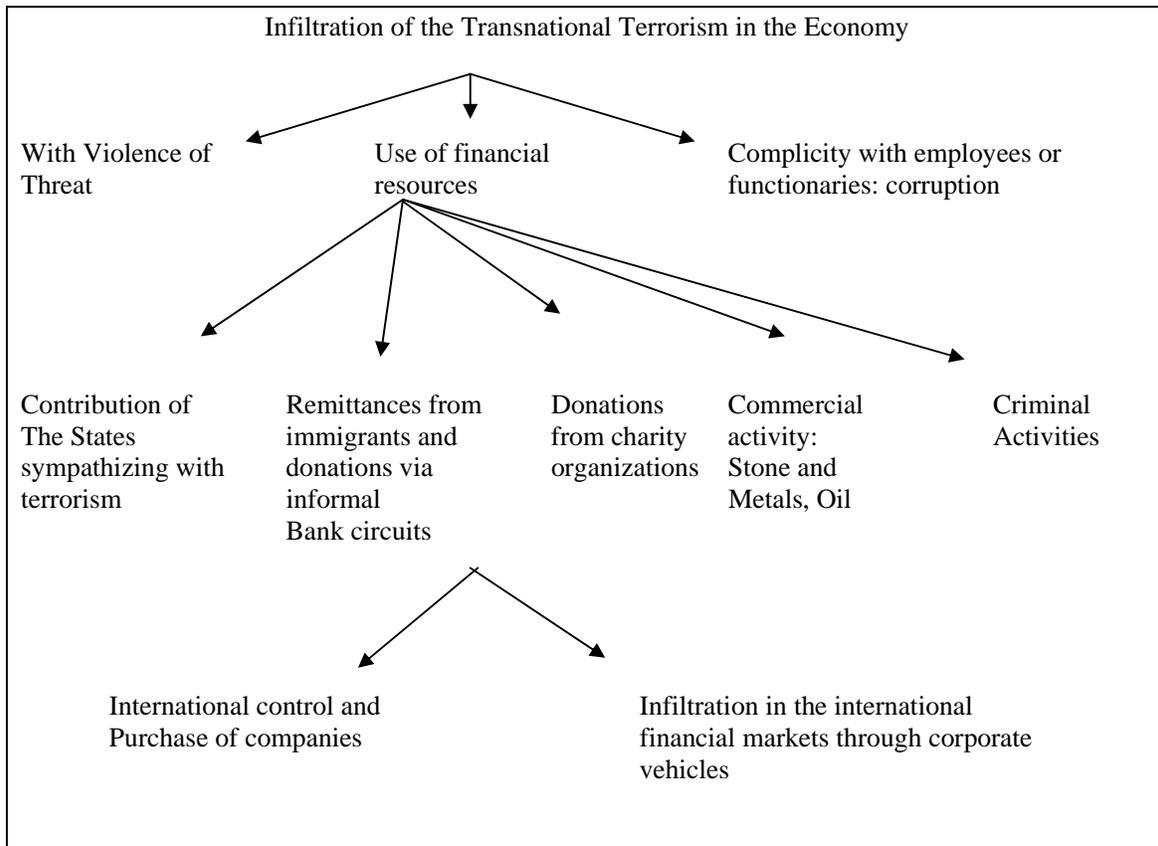
environment in which the illicit arms trade does not need to rely entirely on criminal activities:

- (1) When a state is involved in supplying arms to an embargoed state, payments often come in the form of commercial payments, such as an “oil for arms” deals to avoid bank involvement.
- (2) When an arms broker supplies an embargoed state of an insurgent/terrorist group, banks are often used because shipments are usually paid for in the form of letters of credit or by the direct transfer of hard-currency funds. In this case, money laundering becomes an important factor to ensure that the final arms destination is disguised. It is at this point that offshore banks play an important role because their facilities can ensure that any deposit or transfer is routed via several intermediary institutions; and deposits or transfers can be conducted in the name of a series of shell companies. Both of these techniques are used to hide the financial trail behind multiple administrative layers.
- (3) In situations where access to normal banking channels is very difficult (for example, as with most non-state actors), the financing of arms deals often takes a different form, most often through commodity exchanges. According to Smillie et al (2000), illicit arms transfers to Liberia and Sierra Leone were often financed with diamonds and timber concessions.

### ***2.5.3 Summary***

In figure 2.1 the various channels of the infiltration of the transnational terrorist groups are summarized. Figure 2.1 concentrates on the use of financial resources and clearly demonstrates that the financial means / flows stand on 5 pillars ranking from donations to criminal activities.

**Figure 2.1: Infiltration of the Transnational Terrorism in the Economy**



Source: Yepes (2008, p. 56)

## 2.6 The Informal Money Transfer (Hawala) System

Especially during the 1990s, international concern grew over the “underground banking” and its abuse by serious offenders. Some academic works by Williams (2007), Savona (1997) and El-Quorchi (2003) have explained how informal systems operate, including their risks. The Informal Value Transfers Systems (IVTS) changes from region to region (Hawala or door-to-door). Some scholars (Williams (2007), El-Quorchi (2003)) argue that hawala is vulnerable to criminal abuse, and like the other financial institutions, there is evidence that money derived from drug trafficking, illegal arms sales, body part trade, corruption, tax evasion, and all kinds of fraud have indeed moved through Hawala networks.

Hawala banking still takes place up to now and there is some of literature (Passas (2005), Bunt (2007)) about the Hawala banking system, where these authors point to the need for a regulation of the Hawala system. As argued, another way to transfer criminal financial flows is the Hawala banking. According to Bunt (2007), Hawala bankers<sup>12</sup> are financial service

<sup>12</sup> Several traditional terms, like Hundi (India) and Fei-ch’ein (China) remind one of the fact that hawala banking came up independently in different parts of the world. At present, a range of other terms is used to refer to the

providers who carry out financial transactions without a license and therefore without government control. They accept cash, cheques or other valuable goods (diamonds, gold) at one location and pay a corresponding sum in cash or other remuneration at another location. Unlike official banks, Hawala bankers disregard the legal obligations concerning the identification of clients, record keeping, and the disclosure of unusual transactions, to which these official financial institutions are subject.

To summarize: Through the Hawala system that forms an integral part of the informal black market economy, underground bankers ensure the transfer of money without having to move it physically or electronically. When a payment needs to be made overseas, the underground banker will get in touch with a courier (or more recently using email, fax or phone) in that country informing him of the details of making the payment. If the recipient of the payment wishes to personally obtain the money, a code referring to the underground banker in the country of payment is given to the recipient. Such a system is almost untraceable since it leaves little if any paper trail. Transaction records are, if they are kept at all, being kept only until the money is delivered, at which time they are destroyed. Even when there is a paper or electronic record of sorts it is often in dialects and languages that serve as de facto encryption system.

According to Fischer (2002,p.17) the annual turnover of the Hawala banking system in the early 70ties was already 60 billion USD in the Arabic countries; e.g. six million foreign labourers in Saudi Arabia, who are sending home 40 billion USD a year home, make substantial use of the “ethnic” Hawala system. Fletcher and Baldrin (2002, p. 119) estimate with regard to Pakistan that 2.5 billion USD inherit the country in remittances via the Hawala system in 2001; the amount of money in India’s Hindi system was 50 billion USD in 1971. Despite the growing competition by formal remittance services, the use of Hawala banking has probably not declined. According to a recent estimate by the IMF, (especially Asian) migrants transfer 100 billion dollars per annum to family members and relations in their country of origin through the official financial system. In addition, a similar amount of money is transferred in the form of goods, cash, and through underground bankers (IMF 2005).

According to Bunt (2007), there are at least two different perspectives on Hawala banking. From the first point of view, Hawala banking is regarded as a centuries-old institution which

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same phenomenon, such as ‘informal banking’, ‘underground banking’, ‘ethnic banking’ or ‘informal value transfer system’.

has not yet outlived its usefulness. Low-income workers and migrant workers in particular supposedly put more trust in Hawala bankers than in formal banks. This viewpoint emphasizes the problem associated with subjecting Hawala banking to the same rules as formal banks. Regulation either through registration or licensing is seen as ineffective because it will simply push the system further into the underground, further complicating the already problematic task of controlling Hawala transactions (Razavy (2005), p.292; Perkel (2004), p.210-211)). Hence, Hawala banking might be the closest thing of a free market banking, without government regulation and it functioned well for centuries. One should clearly emphasize these advantages of Hawala banking when criticizing it. From the opposite point of view, Bunt (2007) argues that Hawala banking is described as ‘underground banking’, a system that flies under the radar of modern supervision of financial transactions. Underground banking is considered a threat to the effectiveness of anti-money laundering measures and the fight against terrorist financing. To prevent underground bankers from becoming a safe haven for criminals and terrorists, they should be subject to the standard regulations regarding record keeping, disclosure of unusual transactions and identification of clients<sup>13</sup>.

## **2.7 Summary: The Principal Sources of Terrorist Financing**

The sources of terrorist financing, which are channeled through formal and informal systems, come from a variety of origins, some criminal, some not. As discussed the most important are:

- (1) Domestic – individual and corporate: voluntary contribution;
- (2) Diaspora-migrant communities: voluntary contribution;
- (3) Co-ethnic and co-religious support: donations and contributions from people with religious or ethnic affinity;
- (4) State-sponsorship: patron states supporting terrorist group;
- (5) Public and private donors and individual financiers who support terrorist-controlled, social and religious organizations;
- (6) High level organized crime: fraud, illegal production and smuggling of drugs, kidnapping, armed robbery, trafficking in human beings;
- (7) Investments and legitimate business: money is used to acquire enterprises and engage in trade with profits being used to finance terrorism; and
- (8) Non-governmental organizations and community organizations: terrorist organizations set up front organizations which receive funds from sister NGO’s in other countries or infiltrate established community organizations which receive grants.

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<sup>13</sup> Compare also Richard (2005) and Rider (2004).

### **3. The Amount of Financial Flows and the Ways of Financing Islamic International Terror Organizations**

The financing of cells of (Islamic) terrorist organizations is conducted independently, and financial transactions are deliberately targeted at single cells in order to avoid moving larger sums and calling attention. Usually these transactions are carried out with the help of traditional trading companies (for example within the scope of exporting honey in the Middle East). They are camouflaged to an extent that makes tracing them nearly impossible. This form of transactions is barely distinguishable from normal import/export or other monetary dealings.<sup>14</sup> Hence, in this chapter an attempt is made to estimate the amount of financial flows and to analyse the ways of financing international terror organizations. Before showing the results the estimation procedure is shortly described.

#### **3.1 Estimation Procedure (latent estimator MIMIC approach)**

As the size of financial flows of the Islamic terrorist groups is an unknown (hidden) figure, a latent estimator approach using a MIMIC (i.e. **m**ultiple **i**ndicators, **m**ultiple **c**auses estimation) procedure is applied. This method has quite successfully been used to estimate the size of the shadow economy and is now shortly described.<sup>15</sup> This estimation procedure is called the “model approach” which explicitly considers the multiple causes of as well as multiple indicators of the hidden variable. 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 organizations). A factor-analytic approach is used to measure the hidden economy (here size of financial flows of the terrorist organizations) as an unobserved variable over time. The unknown coefficients are estimated in a set of structural equations within which the “unobserved” variable cannot be measured directly. The MIMIC (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 financial flows of (Islamic) terrorist organizations. It is assumed to be influenced by a set of indicators for these financial flows, thus capturing the structural dependence of these financial

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<sup>14</sup> See: Schneider (2004, 2002a, 2002b).

<sup>15</sup> For a detailed discussion compare Schneider and Enste (2000) and Schneider (2005).



### Figure 3.2

In Figure 3.2 the estimation (MIMIC approach) of the financial flows (unobserved / latent variable) of over 8 terrorist organizations and over the period 1999 to 2006 is shown. If we first turn to the causal variables, the number of active members and number of supporters, the tribute payments from Islamistic countries, the financial flows from wealthy people and from Islamic religious organizations have the expected sign and the estimated coefficients are highly statistically significant. This is also true for the causal variable, amount of illegal drug trading, which has the expected sign and is statistically significant. The amount of illegal diamond trading and GDP per capita in Islamic countries have the expected signs, but are not statistically significant using the usual confidence intervals. Hence, out of the 6 variables 4 turn out to be highly statistically significant. If I now turn to the indicator variables, all 3 have the expected signs and are statistically significant. Starting with the variable cash currency flows in Islamic countries and continuing to the one, the amount of currency trading between Islamic countries as well as the rate of GDP. This estimation shows, that there is systematic relationship between the major courses of financial sources for the financing of Islamistic terrorist groups and important indicator variables.

The MIMIC method has the disadvantage, that one gets only relatively estimated values and not absolute ones, hence one has to calibrate these values with the help of other estimations into absolute ones. Doing this<sup>16</sup> I achieve the following two results. The main results are shown in tables 3.1 and 3.2. The first can be demonstrated in the case of Al-Qaeda.

### Tables 3.1 and 3.2

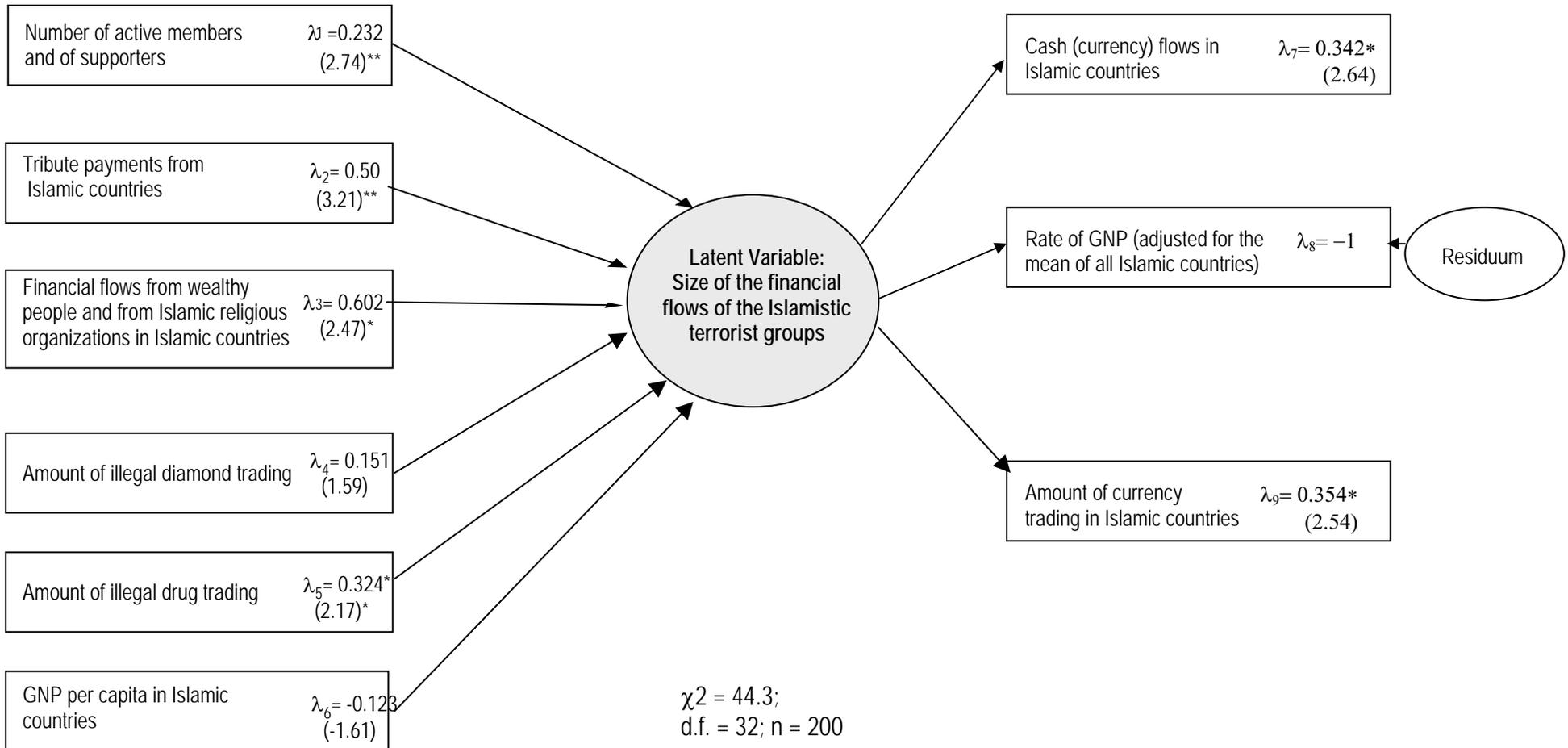
Considering table 3.1 one realizes that over 1999-2004 the annual financial flows (i.e. the budget) of Al-Qaeda varies between 20 to 50 million USD per year. What is the origin/source of these annual financial flows? This is shown in the second part of table 3.1. The drug business (mainly transporting drugs) contributes 30-35%, donations and tribute payments of governments of wealthy individuals, and of religious groups vary between 35-50% and classical crime activities (i.e. blackmail and mostly kidnapping) contribute between 10-15%.

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<sup>16</sup> See here Schneider (2008a, 2008b, 2009)

In table 3.2 a rudimentary overview is given about the preliminary results of the financial flows of 8 Arabic and Islamistic terror organizations. Table 3.2 shows that the financial flows of these 8 Islamistic terror organizations are quite small but (compared to the ones of the organized crime scene) but that they have enough financial means to train and to equip well their active terrorist members in order to create a maximum of destruction. If one compares these financial flows with the overall figure of “dirty or crime money” given by the IMF these financial flows of Islamic terrorist organizations are of minor importance with respect to magnitude: The IMF calculates that the total sum of “dirty money” being whitewashed through the financial system ranks between 500 billion USD and 1,500 billion USD a year, which amounts up to 3% and 5% of the gross world product. The financial flows of Islamic terrorist organizations range between 0,9 and 5,8% of the total sum of “dirty money“.

Figure 3.2: Estimation (latent estimator approach) of the financial flows (budget) of Islamistic terrorist groups using causes (determinants) and traces (indicators), MIMIC estimation procedure, combined cross section and time series over 8 Islamistic terrorist org. and over 1999 to 2006



**Table 3.1: The Financial Flows and the Kind of Finances of Al-Qaeda and other Terror Organizations**

<b>Annual financial flows (budget) of Al-Qaeda (Average 1999-2006)</b>	<b>20-50 mill. \$</b>
<b>Ways of financing of terror organisations (using the example of Al-Qaeda)</b>	
<b>Drug business (mainly transporting drugs)</b>	<b>30-35%</b>
<b>Donations from governments or wealthy individuals or religious groups</b>	<b>20-30%</b>
<b>Tribute payments from Islamic countries</b>	<b>15-20%</b>
<b>Number of active members and supporters (including classical crime activities like kidnapping, blackmail, etc.)</b>	<b>10-15%</b>
<b>SUM</b>	<b>75 – 100%</b>

Source: Own calculations.

**Table 3.2: Preliminary (Incomplete) Overview of Financial Flows of Arabic Islamic Terror Organizations**

<b>Name</b>	<b>Members (worldwide)</b> <b>Average over 1999-2006</b>	<b>Current financial flows (annual budget)</b> <b>Average over 1999-2006</b>
<b>Al-Qaeda</b>	<b>1500-3000</b>	<b>20-50 mill. \$</b>
<b>Front Islamique du Salut (Algeria)</b>	<b>ca. 400</b>	<b>ca. 5 mill. \$</b>
<b>Hamas</b>	<b>ca. 2000</b>	<b>ca. 10 mill. \$</b>
<b>Hizbullah</b>	<b>ca. 10.000</b>	<b>ca. 50 mill. \$</b>
<b>Arabic Mujahedin (terror) organisations:</b>		
- 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-Qaeda; islam./arab.)	ca. 600	ca. 8 mill. \$

Source: Own calculations.

## **4. Economic Implications and Damages of Transnational Terrorism**

The 9/11 attacks showed that in particular the indirect costs of terrorist attacks are very high. The world GDP dropped by 0.25 percent in 2001/2002 due to the attacks. These losses were spread across all regions of the world and several economic sectors and had long-term consequences for the global economy.<sup>17</sup>

### **(1) Demand Shock and Heightened Transaction Costs**

The terrorist attacks shook people's mind and trust and lastingly weakened the already fragile consumer confidence in countries across the globe. A reduction in the spending patterns of businesses, private consumers and governments followed. The combination of a demand shock and heightened transaction costs increased in the wake of security and defence policy reactions, further damaging the global economy.<sup>18</sup> An example of the consequences of a worldwide demand shock was the slump in the stock prices (up to -50 percent) of nearly all air carriers on the American and European stock exchanges after 9/11.<sup>19</sup>

### **(2) Increased Risks and Insecurity**

Insurance companies reacted to this new form of terrorism with an immediate increase in insurance rates, since potential maximum damages had to be re-evaluated. As a result, contracts were adapted and some reinsurance companies reacted by strongly limiting or ruling out the insurability of damages from terrorist attacks.<sup>20</sup>

### **(3) Political Implications for the Financial and Money Markets**

Investors adapted their portfolios to new risk structures and the yields of some stocks changed. In many cases terrorist attacks lead to an outflow of capital from the stock markets to more secure investments like gold. Central banks had to react by lowering the rates to support the level of investments. After the 9/11 attacks the Federal Reserve lowered the short-term interest rates to a 40-year low of 1.2 percent.

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<sup>17</sup> Many studies have been written on this topic. Some of the most recent ones include: Enders and Sandler (2008), Gaibulloev and Sandler (2008), Abadie (2006), Abadie and Gardezabal (2008), Drakos (2004, 2009a, 2009b) and Frey, Lüchinger and Stutzer (2007).

<sup>18</sup> See: Blomberg, Hess and Orphinades (2004), Drakos and Kutan (2003), Gaibulloev and Sandler (2008), as well as Sandler and Enders (2004).

<sup>19</sup> See: Chen and Siems (2004), who analysed the reactions of the stock markets after 14 different terrorist attacks and detected highly negative implications.

<sup>20</sup> See: Brown, Cummis, Lewis and Wei (2004), Brück (2004) as well as Li and Schaub (2004).

## **5. Summary and Conclusions**

In this paper it is firstly and shortly elaborated how Islamistic terrorist organizations work and how effective they can be. Second and in a much more detailed way a literature review is provided about the finances of terrorist and organized crime organizations, their sources and the various methods they use. Also a short discussion is provided with respect to the interaction of organized crime and terrorist organizations. Then in part 3 with the help of a latent estimate approach it is investigated how large the financial flows of some Islamistic terrorist organizations are and what are their ways of financing. Finally in part 4 some short remarks are made about the economic implications and damages of transnational terrorism, which is really sizeable.

### **5.1 Strategies to Tackle the Financing of Terrorism**

On the basis of the results of this paper, a double step strategy is needed to overcome the failings and discrepancies between countries in building a more coordinated global strategy against the financing of terrorism and of organized crime.

In the first step, the states should recognize that they should pay much more attention to the adequate criminalization of terrorist financing, to establish a clear approach towards informal transfer systems, to establish consistent freezing of assets and an approach towards international legal cooperation. This strategy should contain the following aspects / measures:

- (1) achieve a common definition of terrorism and a definition of the financing of terrorism;
- (2) take into account the increasing global nexus between crime and terror and its negative effect on the global economy;
- (3) create a global index of country vulnerability to terrorist financing to improve the capacity of international community to monitor and control key safe havens used by terrorist financiers;

In a second step states / countries should be able to redesign their strategy against terrorism finances taking into account not only previous weaknesses but also a recognition that one size model does not fit all, especially when there are cash economies and failed states involved. The following points should be taken into account when building up the new strategy:

- (1) The traditional risk-based approach to combat the financing of terrorism must be redefined and newly implemented, because a high number of recommendations from international bodies have created a number of requirements that overlap efforts and undermines efficiency. A high level interagency is needed to harmonize the national efforts on combating of the financing of terrorism.
- (2) The policy makers should design a strategy to manage and map different levels of analysis (EU, National and Cross Borders); then they should think about determining the main information requirements how to combat the financing of terrorism.
- (3) This change of strategy would compel the international organizations to provide clear policy guidance to the private sector. There is a question of how much information law enforcement agencies should get from financial sector in order to maximize the efficiency of data collection, and thus contribute to keeping financial institutions informed of the new patterns, indicators and typologies relevant to fighting against terrorist financing. The complexity of terrorist financing requires a coordination of public and private sectors, and law enforcement and intelligence agencies need to advice financial institutions on what kind of data they need.
- (4) In the case of prosecutions, one of the largest challenges law enforcement faces, is in compiling evidence around a terrorism case. There is a large amount of information that will never be seen in a court room, because it cannot be verified. There is a conflict between collecting evidence for courts (law enforcement) and collecting information to inform government (intelligence agencies).
- (5) More and better information exchange is another fundamental component of combating the financing terrorism. There still remain many legal barriers when two or more jurisdictions are involved and when gathering information in one country is a criminal offence if data privacy and bank secrecy laws remain in place. This poses many restrictions on which institutions can disclose data in their possession (compare e.g. SWIFT “case”). The current legal framework of most countries is not designed to deal efficient with the combating the financing of terrorism, because financial institutions must comply with five players: institutions, regulators, law enforcement agencies and society.

## 5.2 General – Strategies for Combating Terrorism<sup>21</sup>

The threat of terrorism (and organized crime) to the world economy can be countered through the following six politico(-economic) measures:<sup>22</sup>

- (1) Combating poverty, especially in countries with fundamentalist religions;
- (2) ensuring and strengthening democratic basic rights, freedom of speech, tolerance and openness;
- (3) intellectual confrontation of (esp. radical) Islamism; financial support of moderate streams;
- (4) law and order measures alone, like the death penalty, do not help since they turn terrorists into martyrs;
- (5) complying with human rights when dealing with terrorists and a moderate rhetoric; and
- (6) building growth-stimulating institutions in the native regions of terrorists.

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<sup>21</sup> See Winer (2002), Ware (2004), Kurrild-Klitgaard, Justensen and Klemmensen (2006), Lai (2007), Piazza (2008), Endres and Sandler (2002, 200&) and Indridason (2008).

<sup>22</sup> Similar recommendations are made by Krueger and Malecková (2003), Li (2005), Piazza (2008a), Abadie (2006), Li (2005), Li and Schaub (2004), Williams (2007) as well as Llussa and Tavares (2008).

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