14

The Effectiveness of Anti-Money Laundering Policy: A Cost-Benefit Perspective

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Introduction

Basically all countries in the world have an anti-money laundering framework in place based on the 40 recommendations of the Financial Action Task Force (FATF), an intergovernmental body established by the G-7 countries in 1989.[1] Now that all these countries are spending tax money to fight money laundering, a natural question to ask is how effective is this policy. Do taxpayers receive value for the money spent? In this chapter we discuss the effectiveness and efficiency of anti-money laundering policies and perform a measurement for countries in the European Union.

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Effectiveness of Anti-Money Laundering Policy

Effectiveness is the extent to which an intended result is achieved. This definition brings us to an important question for measuring the effectiveness of anti-money laundering policies: what is the goal of anti-money laundering policy? Although it might seem logical that the goal must be reducing money laundering, in practice the answer seems to be more complicated. When travelling through the European Union (EU) and speaking with policy makers, practitioners and public prosecutors, a whole range of answers is given apart from the obvious 'fighting/reducing money laundering'; other answers include reducing/fighting crime, confiscating criminal assets, fighting drug crimes, fighting tax evasion, preventing money laundering, being compliant with the FATF 40 recommendations, making sure crime does not pay and implementing the EU Anti-Money Laundering (AML) Directives.[2] Some primarily see the international pressure to comply, while others see fighting money laundering more as an intermediate result with the higher goal being to fight or prevent (specific) crime. The goal of anti-money laundering policy, therefore, is not sufficiently clear for accurate measurement of effectiveness.

But even if the simplest answer is adopted—fighting/reducing money laundering—another problem arises. Money laundering is an activity that is shielded from the public eye, which obstructs direct measurement. There are several estimates of money laundering,[3] but this literature is still developing and has not yet reached a reliable consensus. As such, we lack yearly estimations or useful indicators. One can, for instance, look into the amount of suspicious transactions reported by banks and other reporting institutions. The problem with such an indicator is that its message about the amount of money laundering is unclear. If the number of transactions reported increases, this could mean that money laundering is increasing (the phenomenon happens more often and is therefore more often detected) or decreasing (more transactions are detected, reducing the attractiveness of the country leading to less money laundering) or even staying the same (the reporting institutions increased the effectiveness of their detection framework).

Given these problems, this chapter focuses on the efficiency of anti-money laundering policy. It surveys the costs and benefits of the fight against money laundering to assess the net costs, so that policy makers and taxpayers can gain a better understanding of whether this policy is worth its costs.

A Cost-Benefit Analysis of Anti-Money Laundering Policy

Although a cost-benefit analysis is a standard way to evaluate current and proposed policies in almost all fields, for anti-money laundering policy it is extremely rare to find one.[4] Whitehouse concludes that 'The cost of compliance is increasing rapidly but it would be a brave person who steps up to say that it is too high a price to pay for countering terrorism and serious crime'.[5]

This chapter outlines how to set up a cost-benefit analysis for anti-money laundering policy given the current state of information available on the costs and benefits of the fight against money laundering in the European Union.

Before starting to identify the components and its associated data, we should identify what we want to assess exactly. We can calculate how much has been expended to establish anti-money laundering policy and compare that sum with how much benefit was derived from it (called here the 'historical approach'). Alternatively, we can also assess which costs we would save if the current anti-money laundering policy was halted and what consequent benefits would be lost (called here the 'current approach'). Although these two methods both measure the costs and benefits of anti-money laundering policy and although they seem to be much the same, there is one important difference: With the 'historical approach', the set-up costs of the policy should be included, but these costs are not included in the 'current approach'. These set-up costs could be quite substantial, including not only the work of the FATF to devise the international policy, but also costs like setting up a Financial Intelligence Unit (FIU) in every country in the world, implementing new laws into the legal system, training personnel in both law enforcement agencies and reporting institutions, and other work. The 'historical approach' would tell us whether starting AML/CTF policy has been a good idea, while the 'current approach' considers whether we should continue the current efforts. Geiger and Wuensch conclude that AML regulation is unthinkingly extended instead of assessed and ask themselves why a review does not take place.[6] In this light it seems most fruitful to concentrate on the 'current approach' for now, since it is more policy relevant.

Based on a literature research, plus interviews and discussions during regional workshops with stakeholders involved in money laundering,[7] we can identify the most important components at the country level shown in Table 14.1 below:

Table 14.1 The components of a cost-benefit analysis for AML

Costs	Benefits
Ongoing policy making	Fines (preventive and repressive)
Sanction costs (repressive)	Confiscated proceeds
FIU	Reduction in the amount of ML
Supervision	Less predicate crimes
Law enforcement and judiciary	Reduced damage effect on real economy
Duties of the private sector	Less risk for the financial sector
Reduction in privacy	
Efficiency costs for society and the financial system	

Although there is still very little information on the costs and benefits of anti-money laundering policy,[8] each component will be briefly discussed with findings for countries in the EU.[9] Note that this cost-benefit analysis is at the country level and not at the level of the particular institutions involved. It is also interesting to look at the costs and benefits of AML policy for individual institutions, because this might determine their incentive to cooperate.[10]

It turns out to be hard to gather sufficient statistics—or to make reasonable estimates—for all EU member states and all components. For most components, statistics can be gathered only for some countries, and the countries for which statistics exist differ from component to component. Because this variation rules out a comprehensive cost-benefit analysis, we make a cost-benefit analysis for a hypothetical country which combines the information that was gathered for 27 EU Member States. To correct the statistics for size and price level, our hypothetical country has a population of 10 million people and a price level of 100. The average population in the EU-27 is around 18.5 million, but since a number of countries have a population around 10 million (BE, CZ, EL, HU and PT),[11] we choose this nicely rounded number for our hypothetical country. The international price level statistics normally take the level of the US as 100. The simple average in the EU-27 is only about 5% lower. Bulgaria has the lowest price level in the EU with 53, while Denmark is the highest with 146. The price level of Greece is the closest to the price level of our hypothetical country with 98.5.[12] The calculation will involve all the possible statistics available for every component of the cost-benefit analysis and are corrected to match the size and price level of our hypothetical country.[13] Consequently, we take the average of the statistics available as our best estimate and use the lowest and highest statistics to indicate the bandwidth of the estimations. Although such a procedure does not meet the standards for a cost-benefit analysis,[14] it allows us to illustrate the order of magnitude of the different statistics and show the components without available statistics.

The Costs of AML Policy

Ongoing Policy Making

Since the set-up costs are omitted (see discussion above), we only consider the ongoing policy making costs. Normally this consists only of some policy staff at the relevant ministry. Estimations of these costs are often hindered by the fact that the policy staff are not only responsible for anti-money laundering policy, which makes estimation necessary of their time spent on anti-money laundering policy.

To find out the level of these costs in the 27 Member States, we asked the relevant ministries the following question in an online survey and in a personal interview if the online survey was not answered.[15]

> What is the overall budget for the year 2010 at your Ministry (and other ministries, if applicable) for AML/CTF[16] policy? (please provide the overall budget which includes personnel and specify the currency, in case you do not have a statistic, please estimate the amount and indicate this with an asterisk (*) behind the number)
>
> What is the number of staff dedicated full time (or full-time equivalent) on money laundering and terrorist financing matters at your Ministry (and other Ministries, if applicable)?

The responses of the countries are shown in Table 14.2 below.[17]

The initial idea was to estimate the budget based on the data on the number of staff for the last couple of countries that were unable to answer this question. Unfortunately, the data we gathered here falls far short of what is necessary to make such estimations. We are left with three relevant answers that can be used to estimate the ongoing policy making costs for our hypothetical country: €75,000 in Estonia, €980,000 in Ireland and €131,194 in Sweden. Hence, when corrected for the price level and size of these countries, our best estimate for ongoing policy costs for our hypothetical country is €896,754 with a bandwidth of €116,762–€1,813,000.[18]

FIU

Each Member State has set up an FIU to receive reports on money laundering and terrorist financing suspicions from banks and other reporting institutes. Since the FIU is focused on AML/CTF, we should count all costs of the FIU

Table 14.2 Budget and staff of the relevant ministry or ministries

	AML/CTF Budget Ministry	AML/CTF Staff Ministry
Austria		
Belgium		
Bulgaria		
Cyprus		
Czech Republic		
Denmark		4
Estonia	75,000	2
Finland		
France		
Germany		
Greece		
Hungary		3
Ireland	980,000*	15
Italy	11,168,506#	128#
Latvia		
Lithuania		
Luxembourg		
Malta		
Netherlands		5
Poland		
Portugal		3
Romania		
Slovakia		
Slovenia		16
Spain		
Sweden	131,194	1.2
UK		6

#The figures for Italy on the budget of and staff in the Ministry are for a department that is also responsible for policy against usury, corruption, financial embargoes and related international cooperation

and can therefore derive a good estimation of these costs from the budget of the FIU. We have data on the budget of the FIU for 11 EU Member States as in Table 14.3.

After correcting for the size and price level in our hypothetical country, our best estimate for FIU costs for our hypothetical country is €2,892,349 with a bandwidth of €685,460–€9,860,636.

Supervision

The supervision costs for AML/CTF policy are rather difficult, because each supervisor has AML/CTF as just one of its supervision tasks. Moreover, the supervision of the AML/CTF duties of the private sector is normally

Table 14.3 Statistics collected on the number of staff and the budget of FIU

Country	Staff (in fte)	Budget (in euros)
Austria	13 (in 2010)	
Belgium	45 (in 2012)	4,257,645
Bulgaria	32 (in 2011)	
Cyprus	21 (in 2011)	
Czech Republic	35 (in 2011)	1,429,473 (without IT)
Denmark	18 (in 2011)	No budget
Estonia	16 (in 2011)	
Finland	24 (in 2011)	1,565,000
France	73 (in 2009)	4,981,688
Germany	17 (in 2010)	
Greece	29 (in 2011)	1,500,000
Hungary	30 (in 2010)	1,000,000###
Ireland	11 (in 2011)	
Italy	104 (in 2011)	207,000 (only expenses)
Latvia	17 (in 2011)	341,490
Lithuania	10 (in 2011)	
Luxembourg	14 (in 2012)	
Malta	10 (in 2011)	330,107
Netherlands	56 (in 2010)	4,800,000
Poland	45 (in 2008)	
Portugal	30 (in 2011)	
Romania	96 (in 2011)	
Slovakia	30 (in 2011)	
Slovenia	18 (in 2010)	691,000
Spain	79 (in 2011)	11,000,000
Sweden	27 (in 2009)#	1,400,000##
UK	60 (in 2012)	

Source: statistics collected by the EU-funded ECOLEF project, via interviews, online questionnaires and regional workshops, except: # = FATF Mutual Evaluation Report Sweden 2009 and ## = FATF Mutual Evaluation Report Sweden 2006. ### = this figure is estimated using the overall budget of the CCIB; representatives of the Hungarian Ministry of Finance and the Hungarian FIU said that it seems to be a reasonable estimation

Fte full time equivalent

fragmented over different supervisory authorities based on the type of the institutions under supervision. This would normally not be a problem if we were able to get data for all the supervisory institutions. Unfortunately this is not the case. We asked all supervisors in all 27 EU Member States the following two questions via an online survey and sometimes also in a face-to-face interview.

> What is the annual overall budget at your authority for supervising AML/CTF regulations? (please provide the overall budget which includes personnel and specify the currency, in case you do not have a statistic, please estimate the amount and indicate this with an asterisk (*) behind the number)

How many persons work in your organization in total in full time equivalence (so two half time employees count as one full time employee)?

The responses of the countries are shown in Table 14.4 below.

Because there is not a single country for which we have data for all the supervisors, we have to devise a way to make an estimation for all the supervisors in total. If we had a good way of knowing the size of the different supervisors in each country, then we would be able to estimate the share of a single supervisor for the overall supervision costs. The staff would be a good indicator for this, but this information is also not available for any single country for all supervisors. We therefore assume that all supervisors are of equal size and expect that, because we use an overall average, the extreme values counter each other out. This assumption would also be indicated by an increased bandwidth. After calculating the supervision costs for nine countries corrected for the number of supervisors and the price level and population of our hypothetical country, our best estimate for supervision costs is €14,332,941 with a bandwidth of €291,906–€112,200,000.

Law Enforcement and Judiciary

Although the total budget of law enforcement agencies and the judiciary is often published, separating the specific AML costs is hard. Many investigations and court cases have money laundering as just one of the crimes. The question then is, if money laundering was left out of the package of crimes that are investigated/prosecuted, how much money would be saved? Such a question seems to be impossible to answer. In the hope that some countries collect relevant statistics, we asked the following questions via an online survey and sometimes in face-to-face interviews.

What is the overall budget for the year 2010 for law enforcement in general (public prosecutor, police and other investigating authorities) in your country? *(please provide the overall budget which includes personnel and specify the currency, in case you do not have a statistic, please estimate the amount and indicate this with an asterisk (*) behind the number)*

Which share of the annual overall budget of law enforcement is spent on AML/CTF? *(Please provide us with an estimate of the percentage, and specify for different law enforcement authorities in case you think their share differs)*

What is the number of staff dedicated full time (or full-time equivalent) to money laundering and terrorist financing in law enforcement agencies?

What is the overall budget for the year 2010 for the judiciary in general in your country? *(please provide the overall budget which includes personnel and*

Table 14.4 Statistics collected on the number of employees and the budget of supervisors

Country	Budget supervisor	Staff supervisor	Number of supervisors[19]
Austria			7
Belgium	GC: 12,000,000	GC: 2	11
Bulgaria			4
Cyprus			7
Czech Republic	CTA: 30,000	CTA: <1, FIU: 5*	7
Denmark		BLS: 1	4
Estonia	FSA: 50,000–75,000*	FSA: 3*	4
Finland			9
France	ACP: 2,700,000	ACP: 14 control + 51 monitoring	11
Germany		CPA: <1	5
Greece		BoG: 13, HCMC: 4, PISC: 3	8
Hungary		TLO: <1	8
Ireland			13
Italy		BoI: 348*	7
Latvia	LGSI: 20,500	FCMC: 4, CSA: <1, LGSI: <1, SIHP: 5*	9
Lithuania			9
Luxembourg		CSSF: 5	8
Malta		FIU: 3, MFSA: 38	3
Netherlands	BFT: 2.2 mln, BHM: 1.5 mln	BFT: 15, BHM: 26	4
Poland	FSA: 250,000	FSA: 6, FIU: 7	7
Portugal			11
Romania			7
Slovakia			3
Slovenia		SMA:5	10
Spain		FIU: 10 full time + 17 part-timers	4
Sweden	BSEA: 54,664*	BSEA: <1, GB: <1	6
UK	OFT: 1.4 mln, ICB: 61,896	GC: 0.2, AIA: 0.2	28

Note: In France, the ACP has a designated 14 staff working exclusively on AML/CTF control and another 51 staff supervising and directing the on-site staff.[20] All budgets are (calculated) in euros. All staff measured in full-time equivalence. * indicates an estimation

CTA Chamber of Tax Advisors, *BLS* Bar and Law Society, *FSA* Financial Services Authority, *CPA* Chamber of Patent Attorneys, *TLO* Trade Licensing Office, *FCMC* Financial and Capital Market Commission, *CSA* Council of Sworn Advocates, *LGSI* Lotteries and Gambling Supervisory Inspection, *SIHP* State Inspection for Heritage Protection, *SMA* Securities Market Agency, *BSEA* Board of Supervision of Estate Agents, *GB* Gaming Board, *BoG* Bank of Greece, *HCMC* Hellenic Capital Market Commission, *PISC* Private Insurance Supervision Committee, *BoC* Bank of Cyprus (not to confuse with the Central Bank of Cyprus), *BoI* Bank of Italy, *MFSA* Malta Financial Services Authority, *BFT* Bureau Financieel Toezicht, *GC* Gambling Commission, *AIA* Association International Accountants, *OFT* Office of Fair Trading, *ICB* Institute of Certified Bookkeepers, *CSSF* Commission de Surveillance du Secteur Financier

specify the currency, in case you do not have a statistic, please estimate the amount and indicate this with an asterisk (*) behind the number. In case you have difficulties to estimate this, keep in mind that the percentage of time the staff spends on AML/CTF might be a good benchmark)

Which share of the annual overall budget of the judiciary is spent on AML/CTF? *(Please provide us with an estimate of the percentage. In case you have difficulties to estimate this, keep in mind that the percentage of time the staff spends on AML/CTF might be a good benchmark)*

What is the number of staff dedicated full time (or full-time equivalent) to money laundering and terrorist financing in the judiciary?

The responses of the countries are shown in Table 14.5 below.

Although we captured the overall budget for law enforcement agencies and judiciary for some countries, the amount spent on AML/CTF was available in none. In Hungary, spending by the police was revealed, but the amount spent by the public prosecutor's office is missing. We therefore assume that the amount spent on AML/CTF is proportional to the overall spending of the police and the public prosecutor. In Hungary, 7.57 times more is spent by the police than by the PPO. Using this proportion, we derived an (very rough) estimate for our hypothetical country on the amount spent by LEAs to fight money laundering of €1,423,565. If we use, with the same reasoning, the fact that the amount spent by the judiciary is about 28% of the spending by LEAs, our estimate for the amount spent by the judiciary on AML/CTF is €400,245.

Sanction Costs (Repressive)

AML policy has two types of sanctioning: preventive and repressive parts of the policy. The sanctions in the preventive part of the policy are the sanctions against banks and other reporting institutions for not performing their AML duties appropriately. Since these are normally imposed by the supervisors of these reporting institutions, these costs are not considered here to prevent double counting. The sanctions in repressive policy are the sanctions against the money launderers. The main costs here are probably the prison costs for locking up the money launderers, but we can also consider costs for going after money launderers to pay their fines for example. We assume that these costs are relatively low.

To have some basis for estimation, we asked the following questions via an online survey and sometimes in face-to-face interviews.

What is the average imprisonment duration regarding sanctions for natural persons for the offence of money laundering in practice? *Please estimate if you do not have statistics and indicate this with an asterisk (*) after the number.*

Table 14.5 Statistics collected on the number of employees and budget for LEAs and judiciary

Country	Budget LEA	AML/CTF budget LEA	Staff LEA	Budget judiciary	AML/CTF budget judiciary	Staff judiciary
Austria						
Belgium						
Bulgaria						
Cyprus						
Czech Republic						
Denmark						
Estonia	194,778,068			25,035,612		
Finland						
France						
Germany						
Greece						
Hungary	880,270,081	ML police: 658,664 TF police: 220,675		247,494,010		
Ireland	1,485,805,000			134,000,000		
Italy						
Latvia						
Lithuania						
Luxembourg						
Malta						
Netherlands	3,616,600,000			315,800,000		
Poland						
Portugal						
Romania						
Slovakia			31			
Slovenia						
Spain						
Sweden	4,162,982,320			578,191,989		
UK						

- Suspended imprisonment
- Unsuspended imprisonment

What is the average imprisonment duration regarding sanctions for natural persons for the offence of terrorist financing in practice? *Please estimate if you do not have statistics and indicate this with an asterisk (*) after the number.*

- Suspended imprisonment
- Unsuspended imprisonment

The responses of the countries are shown in Table 14.6 below.

Only unsuspended imprisonment is taken to be relevant for our estimation of the prison costs. An estimate of the costs for keeping a criminal in prison for a day can be found, but an important proviso here is to consider whether

Table 14.6 Statistics collected on the average imprisonment for money laundering and terrorist financing

Country	Suspended imprisonment ML	Unsuspended imprisonment ML	Suspended imprisonment TF	Unsuspended imprisonment TF
Austria	6 months*	12 months*	0 years*	3 years*
Belgium	2 years*	2 years*		
Bulgaria				
Cyprus				
Czech Republic				
Denmark				
Estonia	3.8 year*	3.8 year*		
Finland				
France				
Germany				
Greece				
Hungary				
Ireland	1 year*	3 year*		
Italy				
Latvia				
Lithuania				
Luxembourg				
Malta				
Netherlands				
Poland				
Portugal				
Romania				
Slovakia				
Slovenia				
Spain				
Sweden				
UK	40 months*	40 months*		

Note: Belgium, Estonia and UK did not differentiate between suspended and unsuspended in their answers

this criminal would also be in prison if not convicted for money laundering? This question seems impossible to answer, because money laundering is often only one of the offences for which the defendant is convicted. In Ireland the representatives of anti-money laundering policies indicated to the researchers that they normally do not add money laundering to a prosecution which also involves the predicate crime because this complicates the case needlessly. Furthermore, in countries where self-laundering is not criminalized, we would expect that money laundering prosecutions and convictions do not include the predicate crime. Unfortunately, none of these countries was able to answer our questions on the average duration of imprisonment. We therefore only have the Irish estimate to work with. According to the Irish Prison

Service[21] the average annual cost to incarcerate a person in a prison in 2009 was €77,222 and since Irish representatives indicated an average unsuspended imprisonment for money laundering of 3 years, a money laundering conviction costs on average an estimated €231,666. The average number of convictions in Ireland is five per year in the period 2005–2010. This means that the annual prison costs for Ireland would be estimated at €1,158,330, which means that, correcting for size and price level, the very rough estimate based on only one observation for our hypothetical country is €2,142,911.

Duties of the Private Sector

This component comprises all the costs incurred by reporting institutions in fulfilling the duties required by the Third EU Money Laundering Directive. These costs seem to receive most attention in the literature. In relation to the private sector, Alexander states that these costs comprise:

> those tangible operational costs that relate to investments that institutions will make in the form of physical and human capital required to carry out the compliance function. This is a task based on the assumption that laundering activity will be evidenced via some unusual account transaction that the banks will be able to detect through their 'inside knowledge' of all financial transactions. It is without a doubt an immense task to pick out the illegal from the multitude of legitimate financial transactions that pass through the system. [22]

Harvey mentions that 'many costs of compliance are not additional but are part of due diligence activity'.[23] A PricewaterhouseCoopers report notes that 'the costs of AML to a firm will vary enormously between different industry sectors'. [24]

We explore three ways to estimate these costs. Our first intuitive approach is in line with how we calculate most of the components for this cost-benefit analysis. We asked a number of reporting institutions in every Member State to answer the following two questions.

> How much does it cost, on average, to file one report to the FIU? *(This figure should include all possible costs related to filing a report, like personnel, material etc. Please specify per type of report, the currency and in case you do not have a statistic, please estimate the amount and indicate this with an asterisk (*) behind the number)*
>
> How much do you spend annually on total training costs (and compliance systems, if applicable) for AML/CTF policy? *(Please specify the currency and in case you do not have a statistic, please estimate the amount and indicate this with an asterisk (*) behind the number)*

The responses of the countries are shown in Table 14.7 below.

There are several reasons why it is hard to use these answers to derive an estimation of these costs. First of all, the response rate is very low.[25] Second, there is a clear incentive to overestimate the amount. Third, it is hard to extrapolate from the costs for one institution to an estimate for the whole sector, and even more complicated to estimate for all reporting entities in a certain country. We therefore explored a second approach which relied on earlier estimates from a cost-benefit analysis in the UK. This cost-benefit analysis was attached to the Money Laundering Regulations 1993 and consisted of only the costs and benefits for the reporting institutions. The results of this cost-benefit analysis are estimates for the total amount of costs for different type of companies: a large building society, a large unit trust and

Table 14.7 Statistics collected on the institutional costs of AML/CTF

	Filing a report, OE	Training costs, OE
AT		
BE		
BG		
CY	450*	BoC: 90,000
CZ		
DE		Warburg: 20,000
DK		
EE		
EL		
ES		
FR		
FI		
HU		
IE		
IT		
LV	50–100*	
LT		Snoras: 110,000*
LU		
MT		
NL		
PL		
PT		
RO		
SK		
SL		
SE		
UK		

Note: BoC = Bank of Cyprus (not to confuse with the Central Bank of Cyprus). All budgets are (calculated) in euros. All staff measured in full-time equivalence. * indicates an estimation

PEP plan management company, a large life assurance/pensions company and a medium sized motor finance house. Unfortunately, these different types of companies do not come even close to covering all reporting entities in the UK or any other EU Member State. Moreover, there is no precise description of the characteristics of these types of companies, which makes it hard to classify companies in a certain country accordingly. We therefore tried to find a reasonable estimate based on literature research and found a report that estimated the total costs for reporting entities in the Netherlands for their reporting and identification duties at €40.1 million in 2007.[26] We then corrected this estimate for our hypothetical country to have an estimate of €22,055,000 for the duties of the private sector.[27]

Reduction in Privacy

The screening of all financial transactions to filter the ones related to money laundering, and the additional customer due diligence that is required from reporting entities, is—at least in theory—a reduction in privacy, which could be seen as a social cost of anti-money laundering policy. Geiger and Wuensch also mention a reduction in privacy as a cost of AML policy.[28] Whether this reduction in privacy is severe and how much it matters is extremely difficult to measure or estimate. We therefore do not explore such costs further.

Efficiency Costs for Society and the Financial System

The AML policy that is executed by banks and other reporting entities is focused on criminals, but also harms legitimate users/customers. The increased customer due diligence, for instance, is needed for all customers. Moreover, the financial transactions of criminals can be delayed for further analysis, but also other people might have their transaction delayed inadvertently. One could argue that the costs of the AML duties of reporting entities are passed onto their customer by higher prices, but this possibility is excluded here to prevent double counting since these costs for reporting entities were mentioned above. The efficiency costs for society due to AML policy can be substantial, but are very hard to measure or estimate. The delay of a financial transaction can have very severe effects (like stopping an important business deal), but can also be completely harmless (as when transferring money from a checking account to a savings account). The same holds for the intensified identification duties. It could for instance, hamper financial inclusion in Africa—because banking with a mobile phone requires an identification—but

it could also be completely harmless if identification would be needed anyway (for instance when doing a real estate transaction through a notary). Other scholars mention these costs, but none has been able to estimate it[29]—except the study by Transcrime that estimated such costs for a small part of AML/CTF policy, namely the transparency requirements in the company/corporate field and banking sector.[30]

The Benefits of AML Policy

Fines (Repressive)

There are two types of fines in AML policy. One in the preventive policy, which are fines for reporting entities that do not comply with their duties, and one in the repressive part of the policy, which are fines for money launderers that are prosecuted and convicted. According to Harvey reporting institutions are usually fined for a lack of compliance rather than for complicity in money laundering.[31] The fines are benefits in the AML framework, but they are at the same time costs for reporting entities. Both components are relevant, and it is here assumed that they will always counter each other out, no matter the size and so no estimate is required. Hence, in this section we only consider the fines on money launderers in the repressive part of the AML/CTF policy.

On this aspect, we asked the following questions via an online survey and sometimes in face-to-face interviews.

> What is the average (criminal) fine for natural persons for the offence of money laundering in practice? Please estimate if you do not have statistics and indicate this with an asterisk (*) after the number.
>
> Does there exist corporate criminal liability, that is: the criminal sanctioning of legal persons, with regard to the offences of money laundering? If YES: What are the corresponding minimum and/or maximum of criminal fines?
>
> What is the number of administrative sanctions for money laundering on an annual basis between 2005–2010 (specified per year), and what is the number of natural persons and the value involved? Please estimate if you do not have statistics and indicate this with an asterisk (*) after the number.

The responses of the countries are shown in Table 14.8 below.

For many countries, it is unknown how often criminal fines are imposed, and since no information is available on the (average) amount, insufficient information exists to make an estimate here. For criminal fines for corporate

Table 14.8 Fines for money launderers and terrorist financiers

Country	Average number of criminal fines imposed per year[32]	Average height of criminal fines	Min/max criminal fines for corporate criminal liability	Administrative law sanctions
Austria	0.75	ML: 100 daily rates,[33] TF: 0		
Belgium				
Bulgaria	10			
Cyprus	0			
Czech Republic	7			
Denmark				
Estonia	0.33			
Finland	1.67			
France	6.67			
Germany	288.75			
Greece				
Hungary	1			
Ireland				
Italy				
Latvia	2.75			
Lithuania	0			
Luxembourg				
Malta	2			
Netherlands				
Poland	0.33			
Portugal	0.25			
Romania				
Slovakia	1			
Slovenia	0.5			
Spain				
Sweden	4.25			
UK	81			

criminal liability and administrative law sanctions, our data availability is the worst; not a single statistic for these fines could be obtained. Even if more statistics were available on the amount of the fines imposed, these totals are not necessarily benefits for our analysis, because we do not know whether these fines are actually paid.

Confiscated Proceeds

Once a money launderer is caught, the risk of confiscation arises, which is designed to take away the incentive of the criminal while generating income for the state.

Regarding confiscation, we asked the following questions via an online survey and sometimes in face-to-face interviews.

> What is the average amount of proceeds confiscated for natural persons for the offence of money laundering in practice? Please estimate if you do not have statistics and indicate this with an asterisk (*) after the number.[34]
>
> How many money laundering prosecutions have led to a conviction on an annual basis between 2005–2010 (separated per year), in how many convictions was confiscation of proceeds imposed and what was the total value? Please estimate if you do not have statistics and indicate this with an asterisk (*) after the number

The responses of the countries are shown in Table 14.9 below.

Three countries offered statistics on the amount confiscated from money laundering. These statistics show that the amounts differ greatly from year to year, so an average for the period 2005–2010 was taken to avoid these extreme values. The main question remaining is to what extent the proceeds would be confiscated if there would have been no anti-money laundering policy. Most of the convictions in these three countries are for self-laundering, which means that these proceeds might also be confiscated based on a conviction for the predicate crime. We therefore adjust these statistics to take this possibility into account by multiplying the statistics with the share of convictions for third-party money laundering.[38] After also correcting for the size and price level of our hypothetical country, our best estimate for the annual amount of confiscated proceeds is €474,294 with a bandwidth of €14,715–€1,039,896.

Reduction in the Amount of Money Laundering and Terrorism

Harvey concludes that 'there is presumed to be an inverse relationship between the degree of regulation and the amount of money laundering taking place. While there is theoretical support for this approach, it has not been empirically tested on a wide scale, nor has account been taken of changes in money laundering behavior resulting from changes in regulatory requirements'.[39] Equally, Geiger and Wuensch conclude that 'whilst this deterrence mechanism sounds logically reasonable, its effectiveness and efficiency for fighting predicate crime is doubtful'.[40] We were also unable to estimate to what extent this goal of AML policy is reached.

Table 14.9 Confiscation statistics for ML and TF

Country	Average confiscation ML	Average confiscation TF
Austria		
Belgium		
Bulgaria	2,870,200[35]	0
Cyprus	3,106,267[36]	
Czech Republic		
Denmark		
Estonia		0
Finland		
France		
Germany		
Greece		0
Hungary		
Ireland		0
Italy		
Latvia	2,849,213[37]	0
Lithuania		
Luxembourg		0
Malta		
Netherlands		
Poland		0
Portugal		
Romania		
Slovakia		
Slovenia		
Spain		
Sweden		
UK		

Effects of Money Laundering: Fewer Predicate Crimes, Reduced Damage Effect on Real Economy and Less Risk for the Financial Sector

The literature on money laundering mentions many indirect effects. A comprehensive literature review yields 25 effects of money laundering on the real economy and the financial sector, as indicated in Table 14.10[41]:

Money laundering can affect the real economy by distorting consumption, savings, investment, inflation, competition, trade and employment. Furthermore, money laundering can affect the financial sector with an increased risk to the solvency, liquidity, reputation and integrity of the sector. On the other hand, money laundering could also be good for the economy, because it increases the profits for the financial sector and leads to a greater availability of credit. Overall, the literature remains uncertain whether money laundering would have a net positive or negative effect on the economy in the long run.

Table 14.10 The effects of money laundering as mentioned in the literature

Effect	Source(s)
1. Law enforcement gets a second chance	Levi (2002) p. 182, Levi and Reuter (2006) pp. 292 and 349
2. Distortion of consumption	Bartlett (2002), Mackrell (1997), Walker (1995)
3. Distortion of investment and savings	Aninat et al. (2002), Bartlett (2002) p. 19, Camdessus (1998), Mackrell (1997), McDonell (1998) pp. 10–11, McDowell (2001), Quirk (1997), Tanzi (1997) pp. 95–96, Walker (1995)
4. Artificial increase in prices	Keh (1996) p. 5, Alldridge (2002) p. 314, FATF (2007)
5. Unfair competition	Mackrell (1997), McDowell (2001), Walker (1995)
6. Changes in imports and exports	Baker (1999) p. 33, Baker (2005), Bartlett (2002) pp. 18–20, Walker (1995), Zdanowicz (2004b)
7. More (or less) economic growth	Aninat et al. (2002), Bartlett (2002) pp. 18–20, Camdessus (1998), Ferwerda and Bosma (2005), McDonell (1998) p. 10, McDowell (2001), Quirk (1997), Tanzi (1997) pp. 92–96
8. Change in output income and employment	Bartlett (2002) p. 18, Boorman and Ingves (2001) p. 8, McDowell (2001), Quirk (1997), Tanzi (1997)
9. Lower revenues for the public sector	Alldridge (2002) p. 135, Boorman and Ingves (2001) p. 9, Mackrell (1997), McDonell (1998) p. 10, McDowell (2001), Quirk (1997)
10. Threatens privatization	McDowell (2001), Keh (1996) p. 11
11. Changes in the demand for money, interest and exchange rates	Bartlett (2002), p. 18, Boorman and Ingves (2001), Camdessus (1998), FATF (2002), McDonell (1998) p. 10, McDowell (2001), Quirk (1997), Tanzi (1997) p. 97
12. Increase in the volatility of interest and exchange rates	Tanzi (1997) p. 8, McDonell (1998) p. 10, Camdessus (1998) p. 2, FATF (2002) p. 3, Boorman and Ingves (2001) p. 9
13. Greater availability of credit	Tanzi (1997) p. 6, Levi (2002) pp. 183–184
14. Higher capital inflows	Baker (2005), Gnutzmann et al. (2010), Keh (1996) p. 4, Tanzi (1997) p. 6, Unger and Rawlings (2008), Levi (2002) pp. 183–184
15. Changes in foreign direct investment	Baker (2005), Boorman and Ingves (2001) p. 9, FATF (2002), Walker (1995)
16. Risk for the financial sector, solvability and liquidity	Alldridge (2002) p. 310, Aninat et al. (2002), Boorman and Ingves (2001) pp. 9–11, Camdessus (1998), FATF (2002), McDonell (1998) p. 10, McDowell (2001), Tanzi (1997) p. 98, Levi (2002) pp. 183–184
17. Profits for the financial sector	Alldridge (2002) p. 310, Takáts (2007), Levi (2002) pp. 183–184

(*continued*)

Table 14.10 (continued)

Effect	Source(s)
18. Reputation of the financial sector	Aninat et al. (2002) p. 19, Bartlett (2002), Boorman and Ingves (2001) pp. 9–11, Camdessus (1998), FATF (2002), Levi (2002) p. 184, McDonell (1998) p. 9, McDowell (2001), Quirk (1997), Tanzi (1997) pp. 92–98, Walker 1995)
19. Illegal business contaminates legal business	Alldridge (2002) p. 315, Camdessus (1998), FATF (2002), Levi (2002) p. 184, McDonell (1998) p. 11, Quirk (1997)
20. Distorting of economic statistics	Alldridge (2002) p. 306, McDonell (1998) p. 10, Quirk (1997), Tanzi (1997) p. 96, Zdanowicz (2004b)
21. Corruption and bribery	Alldridge (2002) p. 308, Bartlett (2002) pp. 18–19, Camdessus (1998), FATF (2002), Keh (1996) p. 11, McDowell (2001), Tanzi (1997) pp. 92–99, Quirk (1997) p. 19, Walker (1995), Levi (2002) pp. 183–184
22. Increase in crime	Bartlett (2002) pp. 18–22, FATF (2002), Ferwerda (2009), Levi (2002) p. 183, Mackrell (1997), Masciandaro (2004) p. 137, McDonell (1998) p. 9, McDowell (2001), Quirk (1997) p. 19, Levi (2002) p. 183
23. Undermines political institutions	Camdessus (1998), FATF (2002), Mackrell (1997), McDonell (1998) p. 9, McDowell (2001), Tanzi (1997) pp. 92–99
24. Undermines foreign policy goals	Baker (1999) pp. 38–39, Baker (2005)
25. Increase in terrorism	Masciandaro (2004) p. 131

Hardly any of the effects claimed in the literature have empirical support. Most of them are theorized, and some even seem to have no traceable source at all. Bartlett provides examples of this approach, with explanations like 'it is clear from available evidence', without ever mentioning this evidence.[42] Empirical research on the effects of money laundering is mainly hampered by the lack of a reliable estimate of the amount of money laundering in every country in every year.[43] Unger et al.[44] conclude that 'most literature on money laundering effects is pure speculation […] one source refers to the other source, without much of an empirical solid back up'. Geiger and Wuensch[45] conclude—based on research of Baker,[46] Cuellar[47] and Bolle[48]—that the empirical evidence suggests that the relationship between detecting money laundering and an increased chance of detecting the predicate crime is only weak, if verifiable at all. All these effects of money laundering need empirical testing, but at this stage it is impossible to make any reasonable estimate for the size of these effects for our hypothetical country.

Conclusion

Table 14.11 summarizes the estimates for the annual costs and benefits in our hypothetical country. Most of the costs are possible to estimate, but hardly any of the benefits are. Consequently, the cost-benefit dilemma for AML policy is reduced to the question, 'Are we willing to spend almost 44 million euro with a reduction in privacy and efficiency costs for unknown benefits?' To answer with the words of Whitehouse: 'it would be a brave person who steps up to say that it is too high a price to pay for countering terrorism and serious crime'. [49]

Apart from the actual estimation of costs and benefits, this exercise also shows that the principal costs of AML policy seem to be the duties of the reporting sector and its supervision. In our estimation these two components are responsible for 84% of all the costs that could be estimated. Furthermore, we can conclude that the information available for a cost-benefit analysis is very limited (illustrated by the many components that are based on single estimates) and very diverse (illustrated by the wide bandwidths for certain components).

Table 14.11 Estimates for the annual costs and benefits of AML policy

Costs	Best estimate (bandwidth)	Benefits	Best estimate (bandwidth)
Ongoing policy making	896,754 (116,762–1,813,000)	Fines	Unknown
FIU	2,892,349 (685,460–9,860,636)	Confiscated proceeds	474,294 (14,715–1,039,896)
Supervision	14,332,941 (291,906–112,200,000)	Reduction in the amount of ML	Unknown
Law enforcement	1,423,565 (single estimate)	Less predicate crimes	Unknown
Judiciary	400,245 (single estimate)	Reduced damage effect on real economy	Unknown
Sanction costs (repressive)	2,142,911 (single estimate)	Less risk for the financial sector	Unknown
Duties of the private sector	22,055,000 (single estimate)		
Reduction in privacy	Moral cost		
Efficiency costs for society and the financial system	Unknown		
Total cost estimate	44,143,765 + 2 unknown	Total benefit estimate	474,294 + 5 unknown

Note: these are estimations for a hypothetical country with 10 million people and a price level equal to the US. The numbers are for illustration purposes only, since all estimates are very sensible to many possible biases and estimation procedures

Table 14.12 Estimates (in €) for the annual costs and benefits of AML policy for each country and the whole EU

Country	Estimated costs of AML/CTF	Estimated benefits of AML/CTF
Austria	39,331,650 + 2 unknown	422,591 + 5 unknown
Belgium	52,109,975 + 2 unknown	559,885 + 5 unknown
Bulgaria	16,697,035 + 2 unknown	179,398 + 5 unknown
Cyprus	4,749,348 + 2 unknown	51,028 + 5 unknown
Czech Republic	34,239,484 + 2 unknown	367,879 + 5 unknown
Denmark	35,545,389 + 2 unknown	381,910 + 5 unknown
Estonia	4,355,149 + 2 unknown	46,793 + 5 unknown
Finland	28,707,338 + 2 unknown	308,440 + 5 unknown
France	320,821,916 + 2 unknown	3,447,008 + 5 unknown
Germany	378,177,540 + 2 unknown	4,063,254 + 5 unknown
Greece	46,737,736 + 2 unknown	502,164 + 5 unknown
Hungary	30,925,483 + 2 unknown	332,273 + 5 unknown
Ireland	23,870,414 + 2 unknown	256,471 + 5 unknown
Italy	286,270,198 + 2 unknown	3,075,774 + 5 unknown
Latvia	7,480,286 + 2 unknown	80,370 + 5 unknown
Lithuania	10,304,206 + 2 unknown	110,712 + 5 unknown
Luxembourg	2,517,861 + 2 unknown	27,053 + 5 unknown
Malta	1,477,812 + 2 unknown	15,878 + 5 unknown
Netherlands	80,858,428 + 2 unknown	868,767 + 5 unknown
Poland	109,126,093 + 2 unknown	1,172,484 + 5 unknown
Portugal	44,676,164 + 2 unknown	480,014 + 5 unknown
Romania	60,662,875 + 2 unknown	651,780 + 5 unknown
Slovakia	18,516,679 + 2 unknown	198,949 + 5 unknown
Slovenia	7,404,790 + 2 unknown	79,559 + 5 unknown
Spain	201,599,523 + 2 unknown	2,166,046 + 5 unknown
Sweden	49,501,570 + 2 unknown	531,860 + 5 unknown
UK	260,394,648 + 2 unknown	2,797,759 + 5 unknown
EU-27	2,157,059,590 + 2 unknown	23,176,102 + 5 unknown

With the correction factors[50] used to correct the national data to the size and price level of our hypothetical country, it is possible to estimate the costs and benefits for each country in the EU-27 and for the EU as a whole, as shown in Table 14.12 below.

Notes

1. Joras Ferwerda, 'The Multidisciplinary Economics of Money Laundering' (2012) PhD Dissertation Utrecht University. See further Chapter 3 (Bergstrom) in this collection.
2. Personal experience from the EU-financed project ECOLEF in which we travelled to the EU member states to analyse money laundering policies and interview people involved in the fight against money laundering, such as

policy makers at the relevant ministry/ministries, public prosecutors, employees of the FIU, compliance officers and relevant law enforcement agencies. For a list of the formal interviews, see Unger and others 'Report' (see article note).

3. For an overview, see Chap. 2(2) of Ferwerda (n 1).
4. Martin Gill and Geoff Taylor, *Tackling Money Laundering: The Experiences and Perspectives of the UK Financial Sector* (2002) Report by the Scarman Centre, University of Leicester, 44. For similar issues concerning counter-terrorist financing, see Chap. 34 (Anand) in this collection.
5. Antony Whitehouse, 'A Brave New World: The Impact of Domestic and International Regulation on Money Laundering Prevention in the UK' (2003) 11(2) Journal of Financial Regulations and Compliance 138, 144.
6. Hans Geiger and Oliver Wuensch, 'The Fight Against Money Laundering: An Economic Analysis of a Cost-Benefit Paradoxon' (2007) 10(1) Journal of Money Laundering Control 91, 100.
7. These interviews and regional workshops were part of the EU-financed project ECOLEF (n 2).
8. Gill and Taylor (n 4) 44.
9. The data collection presented in this chapter started before Croatia joined the EU. Therefore, only 27 EU Member States are included in the analysis.
10. For such analyses, see Elöd Takáts, 'A Theory of Crying Wolf: The Economics of Money Laundering Enforcement' (2007) IMF Working paper 07/81 <www.imf.org/external/pubs/ft/wp/2007/wp0781.pdf> accessed 21 March 2017; Jackie Harvey, 'Compliance and Reporting Issues Arising for Financial Institutions from Money Laundering Regulations: A Preliminary Cost Benefit Study' (2004) 7(4) Journal of Money Laundering Control 333.
11. Population statistic from 2010 from Alan Heston, Robert Summers, and Bettina Aten, 'Penn World Table Version 7.0' (2011) Center for International Comparisons of Production, Income and Prices at the University of Pennsylvania. The values are also listed in Unger and others 'Report' (see article note) Annex 12(1).
12. Price level statistic (p) from 2010 from Heston, Summers, and Aten (n 11). The values are also listed in Unger and others 'Report' (see article note) Annex 12(1).
13. See Unger and others 'Report' (see article note) Annex 12(1) for these correction factors for each Member State.
14. The results can for instance be biased when certain costs or benefits are not proportional to population (because of fixed costs or economies of scale for example) or when the countries that provided data are not representative for the EU-27.
15. The online surveys and interviews were part of the EU-financed project ECOLEF (n 2).

16. Since the policies against money laundering and terrorist financing have a significant overlap and are often tied together (especially in terms of policy making), the question asked for the overall estimation of both. As a result, the eventual estimations could overestimate the costs of anti-money laundering policy.
17. Throughout this chapter, all values that are not directly derived from statistics but are estimated by the responsible authority are marked with an asterisk (*).
18. Calculation example of how these numbers are calculated: first the three relevant budgets are multiplied by the overall correction factors mentioned in Unger and others 'Report' (see article note) Annex 12(1). This means we have 3 estimates of this budget: 760,500; 1,813,000 and 116,762. The average of these three numbers is 896,754, which is our best estimate. The lowest (116,762) and highest (1,813,000) estimates indicate the bandwidth.
19. The number of supervisors is based on the specifications in the relevant law, inaccuracies can arise because of unspecified, regional and unclear grouped supervisors.
20. Financial Action Task Force, *Third Mutual Evaluation Report on France* (2011) 420 (footnote) <www.fatf-gafi.org/media/fatf/documents/reports/mer/MER%20France%20ful.pdf> accessed 21 March 2017.
21. Irish Prison Service, 'Annual Report' (2010) 4 <www.irishprisons.ie/images/pdf/annualrepo rt2010.pdf> accessed 21 March 2017.
22. Kern Alexander, 'The International Anti-Money Laundering Regime: The Role of the Financial Action Task Force' (2000) 1 Financial Crime Review 9, 11.
23. Harvey (n 10) 341.
24. Price Waterhouse Coopers LLP, 'Anti-Money Laundering Current Customer Review Cost Benefit Analysis' (2003) Report prepared for the FSA, 19 <www.fsa.gov.uk/pubs/other/ml_cost-benefit.pdf> accessed 21 March 2017.
25. To make a similar type of estimate for a cost-benefit analysis as the Annex of UK's Money Laundering Regulations 1993, the HM Treasury sent out 1000 requests, of which only 60 responded and of which only 1 respondent attempted to quantify these costs.
26. Brief van de Algemene Rekenkamer, Bestrijden Witwassen en Terrorismefinanciering, Tweede Kamer der Staten-Generaal, vergaderjaar 2007–2008, 31 477 no 1. This letter reports the estimate and cites another source, namely, Financiën (2007) Vaststelling van de begrotingsstaten van het Ministerie van Financiën (IXB) voor het jaar 2008. Tweede Kamer, vergaderjaar 2007–2008, 31 200 IXB, no 2. Den Haag: Sdu in which we were unable to find the cited estimate.
27. This estimate is probably an underestimation, since Institut der deutschen Wirtschaft Köln, Consult GmbH (2006) Bürokratiekosten in der Kreditwirtschaft, 9 estimates the costs for AML for the financial sector in Germany at €775 million (if we were to use that figure, the estimate for our

hypothetical country would be €93 million). Unfortunately, this report focuses on the financial sector only, and since there is no estimate for the other reporting institutions in Germany, we could not use this report directly for an estimation on our component 'duties of the private sector'.

28. Geiger and Wuensch (n 6) 98.
29. See for example Donato Masciandaro, 'Crime, Money Laundering and Regulation: The Microeconomics' (1998) 8(2) Journal of Financial Crime 103; Geiger and Wuensch (n 6).
30. Ernesto U Savona, Mario A Maggioni, and Barbara Vettori (eds), 'Cost Benefit Analysis of Transparency Requirements in the Company/Corporate Field and Banking Sector Relevant for the Fight Against Money Laundering and Other Financial Crime' (2007) Study financed by the European Commission—DG JLS <www.transcrime.it/wp-content/uploads/2013/11/CBA-Study_Final_Report_revised_version.pdf> accessed 21 March 2017.
31. Harvey (n 10) 338.
32. The average is over the period 2005–2010 for the years for which statistics are available. The statistics for Hungary are the answers from our online survey, the other statistics come from Cynthia Tavares, Geoffrey Thomas and Mickaël Roudaut, *Money Laundering in Europe, Report of Work Carried Out by Eurostat and DG Home Affairs* (2010).
33. The daily rate differs from defendant to defendant and is for natural persons 360th of the yearly proceeds, reduced or augmented up to 30% taking into consideration its overall economic situation. See IMF, 'Detailed Assessment Report on Anti-Money Laundering and Combating the Financing of Terrorism' (2009) Report 9/298 <www.imf.org/external/pubs/ft/scr/2009/cr09298.pdf> accessed 21 March 2017.
34. Initially the idea was to use this statistic in combination with the number of conviction to make a reasonable estimate for the total amount confiscated per year. However, this question was only answered by the countries that had exact and publicly available statistics on confiscation. Since there is no need to make an estimate when exact statistics are available, their answers for this question were not used in our research.
35. The amount changes considerably per year: 350,000 in 2006, 415,000 in 2007, 286,000 in 2008, 5,700,000 in 2009 and 7,600,000 in 2010, retrieved from Moneyval, 'Mutual Evaluation Report Bulgaria' (2011) 77–79 <www.coe.int/t/dghl/monitoring/moneyval/Evaluations/Progress%20reports%202y/MONE YVAL(2011)5_ProgRep2_BLG.pdf> accessed 21 March 2017.
36. The amount changes considerably per year: 5605 in 2005, 2,645,039 in 2006, 7,388,602 in 2007, 34,853 in 2008, 5,457,236 in 2009, the data comes from our online survey.

37. The amount changes considerably per year: 174,000 in 2005, 17,676 in 2006, 3,130,383 in 2007 and 8,074,795 in 2008, retrieved from Moneyval, 'Second Progress Report Latvia' (2009) 67–68 <www.coe.int/t/dghl/monitoring/moneyval/Evaluations/Progress%20reports%202y/MONEYVAL(2009)39-ProgRep2LAT_en.pdf> accessed 21 March 2017.
38. The amount confiscated then becomes for Bulgaria 175,000 in 2006, 207,500 in 2007, 11,400 in 2008, for Cyprus 0 in 2005, 0 in 2006, 0 in 2007, 1584 in 2008 and for Latvia 58,000 in 2005, 4419 in 2006, 0 in 2007 and 0 in 2008. Shares of convictions for third-party money laundering are calculated from Tavares, Thomas and Roudaut (n 32); when it is not possible to distinguish the conviction statistics between self-laundering and third-party laundering, we assume a 50–50 division between self-laundering and third-party laundering.
39. Harvey (n 10) 343.
40. Geiger and Wuensch (n 6) 92.
41. This overview is an updated version of the literature overview that has been published in Brigitte Unger, *The Scale and Impacts of Money Laundering* (Edward Elgar Publishing 2007) 110–113 and Ferwerda (n 1). Not in all sources it is clear whether the effects of money laundering are described, or also (or only) the effect of anti-money laundering policy.
42. Brent L Bartlett, 'The Negative Effects of Money Laundering on Economic Development' (2002) 77 Platypus Magazine 18.
43. Michael Levi and Peter Reuter, 'Money Laundering' (2006) 34 Crime and Justice 289, 294.
44. Brigitte Unger and others, 'The Amounts and Effects of Money Laundering' (2006) Dutch Ministry of Finance Report <https://pdfs.semanticscholar.org/06d7/b2a51b10c96018fd92fa5eec19f389304f52.pdf> accessed 21 March 2017.
45. Geiger and Wuensch (n 6) 94.
46. Raymond W Baker, *Capitalism's Achilles Heel, Dirty Money and How to Renew the Free-Market System* (John Wiley, 2005) 173–74.
47. Mariano-Florentino Cuellar, 'The Tenuous Relationship Between the Fight against Money Laundering and the Disruption of Criminal Finance' (2003) 93(2/3) The Journal of Criminal Law and Criminology 311.
48. Alain Bolle, 'Le Blanchiment des Capitaux de la Criminalite Organisee' in Ludovic Francois, Pascal Chaigneau, and Marc Chesney (eds), *Blanchiment et Financement du Terrorisme* (Sentinel 2004).
49. Whitehouse (n 5) 144.
50. See Unger and others 'Report' (see article note) Annex 12(1) for these correction factors for each Member State.

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