2002-G7 *Combating the Financing of Terrorism: First Year Report:* It's monitored the implementation of the G7 Action Plan (2001).
2003-*Evian Summit, Building International Political Will and Capacity to Combat Terrorism: a G8 Action Plan*: It's underlined the need of an international cooperation and institutional network to support CTC, FATF and to encourage fulfilling UNSCR 1373 obligations. Creation of Counter-Terrorism Action Group (CTAG).
2004-*Washington, Joint Statement on Combating Terrorist Financing*

2. Country Endowments, Policymakers and Lax Financial Regulation. A Simple Model

To design the key elements of our approach, we shall use a very simple model, in order to present the economic intuitions in a compact and casual framework. Our goal is to discuss the possible relationships between specific country features, policymaker payoff maximization and lax financial regulation against money laundering, highlighting the key variables of the problem.
Let us assume that a policymaker is aware that a potential demand for money laundering exists on the part of one or more criminal or terrorist organizations[10], for a total amount equal to *W*. We analyze a situation in which the international market for money laundering is demand-driven, as it is likely to be in the real world. Therefore every potential lax regulation jurisdiction is a relatively "small country".
The policymaker can decide to launder an amount of money equal to *Y*, where, of course, $0<Y<W$. For the sake of simplicity in our model, the decision on the optimal level of money laundering services is equivalent to the choice of the optimal degree laxity in financial regulation. Calling *U* the payoff function of the policymaker, it is obvious that the expected payoff from unlaundered liquidity is zero, whatever the amount:

$$U(W-Y)=0 \qquad (1)$$

On the other hand every dollar (or euro?)[11] laundered can have a positive expected value for the policymaker, if his country, given scarce natural resources, derives benefits from offering financial services that facilitate money laundering. In particular, we can intuitively assume that the *lower* the national income and the

[10] For a general microeconomic analysis of the money laundering demand see Masciandaro (1996) and (1998). For the peculiar relationship between money laundering demand and tax evasion see Yaniv (1994) and (1999); see also Alldridge (2001).
[11] For the use of dollar or euro in the black economy, see Boeschoten and Fase (1992), Rogoff (1997), Sinn and Westermann (2001).

higher the proportion of that income that depends on the financial industry, the greater will be the propensity to offer money laundering services, all other things being equal. In general, let us to define those expected benefits as *laxity national benefits*.

To be more precise, the fact that the laundered money provides an expected profit for the policymaker may be captured by imagining that the monetary value B of this benefit is equal to:

$$B = mY \qquad (2)$$

Where $m > 0$ is the expected net rate of return on the money laundering services offered (i.e. on the degree of laxity) by the country. The inflow of black and grey foreign capital produces national revenues, increasing the activity of the financial industry and then throughout the traditional macroeconomic multiplier effects[12]. On the contrary, the implementation of a severe regulation against money laundering in the same country generates high compliance costs[13]. The role of the financial industry represents an economic endowments that determine the policymaker choices.

If the decision to launder were cost-free, it would be a trivial matter to see that we shall have $Y = W$. But things are not that simple.

First of all, policymakers may face *international reputation costs*. To be more attractive to criminal or terrorist organizations, a country must make legislative and regulatory choices that increase its credibility as a lax financial regulation (LFR) jurisdiction[14]. These choices may carry a reputation cost, however, since being an LFR jurisdiction may cause negative repercussions, whether in relation to capital, intermediaries and companies sensitive to integrity or to international relations in general. In fact, we have to acknowledge the possibility that under-regulation may be as unattractive for some legal investors as over-regulation[15]. As we noted in the Introduction, the existence of the international reputation costs represents the rationale for the blacklisting device.

Secondly, a policymaker must consider that laundering money means strengthening internal organized crime or terrorism, i.e. there may be *national crime and terrorism costs*. Policymakers have to consider the possibility that domestic social damage may derive from the fact that the country may became a

[12] For a macroeconomic analysis of the interrelationships between money laundering, banking industry, legal and illegal economic sectors see Masciandaro (2000). For the peculiar vulnerability of securities markets see Jayasuriya (2003).

[13] Masciandaro (1999).

[14] Masciandaro and Portolano (2003).

[15] The inflow of legal capital can be assumed as negatively correlated with financial laxity, because of two main effects: 1) in the legal financial sector, competition is distorted and the allocative efficiency of the market is undermined because of extreme financial laxity (competition effect); and 2) legal customers may fear a loss of reputation by locating their business in a country highly suspected for money laundering (reputation effect). See Basel Committee on Banking Supervision (1988).

possible growth engine for illegal organizations. It is obvious, on the other hand, that the less the country registers the actual or potential presence of criminal or terrorist organizations internally, the lower the policymaker will perceive the costs of crime to be. The level of criminal and terrorism risk is a peculiar social endowment that influences the policymaker decisions.

Within our framework, we do not separate expected crime costs from expected terrorism costs. From the theoretical standpoint, we prefer to stress the different sensitivity of the policymaker to expected international costs and expected national costs, based on a clearly different political cost-benefits analysis. Furthermore, for each country, it should not be difficult to introduce in expression (3) a specific parameter for each expected national cost factor.

Therefore the overall cost C of offering money laundering for a policymaker will consist of two parts. First, let us assume that the reputation cost is proportional—according to a parameter $c > 0$—to the amount of money he is asked to launder. Secondly, there will be a crime or terrorism cost whose expected value rises as the amount of laundered money increases, by a multiple of the parameter $g > 0$. Let us assume that for political-electoral reasons the policymaker, all other things being equal, is more sensitive to the crime and/or terrorism costs, which can weigh directly on the country's citizens, than to the international reputation costs, whose effect on the citizens-voters is probably less perceptible and direct. We have:

$$C = cY + g^2 Y \qquad (3)$$

Finally, we must consider that being a lax financial regulation jurisdiction could be an increasing source of economic, political and social risk for the international community as a whole. Therefore, when policymakers decide whether and to what extent to institute a financial regulatory design that will in essence offer money laundering services, they must consider that this activity is risky, since presumably the international community might consider it a bad policy, perhaps even prohibited, and as such subject to sanctions and punitive countermeasures.

Let us assume, therefore, that offering *de facto* money laundering services may bring with it an international sanction, with an equivalent monetary value of S, and a probability p that this conduct will be discovered by the international community and thus sanctioned. The probability p can be defined as the *degree of technical enforcement* of the international stigma. Let us call these risks the *expected international sanction costs*. Our model can thus contemplate in the simplest way the possibility that the international community will issue explicit sanctions against the LFR country[16].

The monetary value of the damage from sanctions S against the money laundering must at least equal the value Y of the laundered money. In reality, the damage from a sanction is certainly a multiple, because of the value of the intangible non economic damage related to such an international sanction. So we can assume that

[16] Sanctions and enforcements characterized the classic a' la Becker approach: Becker (1968).

the amount of the international sanction is a multiple of the "laundry" volume, equal, for simplicity of computation, to the square of that sum.
And we should also consider that once the crime is recognized, the international community would apply the sanction with a varying degree of severity, based on its own political cost-benefit analysis. The rapidity and procedure for applying the punishment may vary, affected by national or international structural variables; this *severity* with which the sanction is applied (or *the degree of international political enforcement*)[17] can be captured by variations in the parameter t:

$$S = tY^2 \qquad (4)$$

Thus the dilemma of choice facing a policymaker is the following: if I design lax financial regulations that favor the offering of money laundering services, and the international community does not sanction it, the benefit for the country is positive, net of the expected cost associated with international reputation costs and national crime and terrorism risks. If, on the other hand, the LFR country is hit by an explicit international sanction, it will not only sustain the relative costs but will also be damaged by the international sanction. This game is the classic interaction between the policymaker and Nature, given that we assume the "small country" hypothesis.
The policymaker, modeled as a risk-neutral agent, is thus faced with the problem of deciding whether and how much to launder, i.e. defining the optimal level of laxity. The optimal policy is not derived by any social utility function but is just the result of the policymaker's maximizing process, based on his own political cost-benefits analysis.
The policymaker's expected payoff E can now be better specified as:

$$E(U) = \left[(1-p)(B-C) - p(C+S)\right] \qquad (5)$$

But since we have defines $B = m\,Y$ and $C = c\,Y + g^2\,Y$, then 5) becomes:

$$E(U) = (1-p)\left\{mY - cY - g^2Y\right\} - p\left(cY + g^2Y + tY^2\right) \quad (6)$$

Therefore It is possible to define the policymaker's optimal level of laxity, depending , coeteris paribus, on the structural parameters of the model, that represent specific country endowments.

$$Y^* = \frac{m(1-p) - c - g^2}{2pt}$$

[17] Rider (2002) noted that, in the field of financial regulation, international monetary policy has been susceptible to political considerations.

*Y** represents the optimal level of money laundering supply services, which is equivalent to the optimal degree of financial regulation laxity. Let us observe that for Y* > 0 it must be $m(1-p)-c-g^2>0$, i.e. the factor of expected benefit from the money-laundering activity, considering the probability of an international sanction, is greater than the sum of the reputation and crime and terrorism cost factors. Let us define this condition as the *laxity condition*.

Now we can evidence the relationships with the structural variables of the model for the optimal level of laxity. Firstly, the optimal offering of money laundering will be inversely proportional to the probability of international sanctions:

$$\frac{\partial Y^*}{\partial p}=\frac{\left(c+g^2-m\right)}{2p^2t}<0$$

$$\frac{\partial^2 Y^*}{\partial p}=\frac{-4pt\left(c+g^2-m\right)}{4p^4t^2}=\frac{m-c-g^2}{p^3t}>0$$

Secondly, the laxity of financial regulation is affected by the severity of the international community in applying the sanction:

$$\frac{\partial Y^*}{\partial t}=\frac{-2p\left[m(1-p)-c-g^2\right]}{4p^2t^2}<0$$

The laxity of financial regulation will also depend on the profitability of offering money-laundering services:

$$\frac{\partial Y^*}{\partial m}=\frac{(1-p)}{2pt}>0$$

Furthermore, we can express the relationship between the reputation cost of money-laundering operations and the amount of money to be laundered :

$$\frac{\partial Y^*}{\partial c}=\frac{-1}{2pt}<0$$

Finally, the money-laundering activity of the LFR country will also depend on the expected crime and terrorism costs, represented by the parameter *g :*

$$\frac{\partial Y^*}{\partial g} = \frac{-g}{pt} < 0$$

3. Lax Financial Regulation and Non Co-Operative Countries: An Empirical Investigation

In the previous paragraph we illustrated the following relationship in a formal framework: given the specific structural features and endowments of his own country, a policymaker may find it rational to design lax financial regulations in order to attract capital of illegal origin.
The policymaker finds it advantageous to transform his country into an LFR jurisdiction because, in defining its objective function, the national economic benefits expected from offering money-laundering services are greater than the expected national costs associated with the internal risk of developing terrorism and organized crime, the international risk of loss of reputation and, finally, the possibility of a sanction by the international community. Therefore, peculiar economic and social country endowments can increase the probability of having lax financial regulation.
Now, how we can test this relationship? In the real world, the international community considers LFR countries as potential non-cooperative jurisdictions (NCCTs) in the fight against money laundering. Therefore we can assume that the NCCT jurisdictions share common structural features; we can test this hypothesis using econometric techniques.
In particular, since the international context (i.e. the technical and political enforcement described in our model) is constant, we can assume that:

- An NCCT jurisdiction will be one that, in terms of economic characteristics, has relatively scant physical resources to spend in international trade, and that this is the first channel of *national benefit* expected from lax financial regulation ;
- At the same time, an NCCT jurisdiction has the potential for developing financial services, fundamental for money-laundering purposes, and this is the second channel of *national benefit* expected from lax financial regulation ;
- An NCCT jurisdiction also has social characteristics that shield it to some extent from the risks of terrorism and/or of organized crime, thus reducing the *expected cost* of lax financial regulation;

Now the time has come to analyze the NCCT jurisdictions. Since 22 June 2000, the FATF has been publishing a periodic report on the NCCT jurisdictions: the blacklist. The report lays down 25 criteria, plus eight recent special recommendations on terrorist financing, that, if violated, identify the national rules that in each country are detrimental to international cooperation in the fight against money laundering. From June 2000 to February 2004, 45 countries have been