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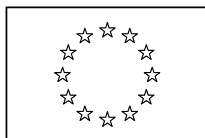

COMMISSION OF THE EUROPEAN COMMUNITIES

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accompanying the

Proposal for a

DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

amending the Settlement Finality Directive and the Financial Collateral Directive

Impact Assessment

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TABLE OF CONTENTS

1. Introduction 4
2. Procedural issues and consultation of interested parties 6
2.1. The Directive on Financial Collateral Arrangements 6
2.2. The Settlement Finality Directive 7
2.3. The Ecofin roadmap 7
2.4. Internal consultation process 8
3. Problem definition 8
3.1. Problems related to the relative scarcity of collateral in the EU economy 8
3.1.1. Background 8
3.1.1.1. The role of collateral in the economy 8
3.1.1.2. The increasing demand for collateral 9
3.1.1.3. The relative scarcity of high-quality assets that could be used as collateral 12
3.1.1.4. Using credit claims as collateral 13
3.1.1.5. The Eurosystem's decision 13
3.1.1.6. Securitisation 15
3.1.2. The problems 18
3.1.2.1. No uniform, EU-wide legal framework for use of credit claims as collateral 18
3.1.2.2. Formal requirements discouraging the use of credit claims as collateral 19
3.2. Problems related to settlement systems 20
3.2.1. Background 20
3.2.1.1. Link arrangements between systems 21
3.2.1.2. Night-time settlement 22
3.2.1.3. New players in the payments area 22
3.2.2. The problems 23
3.2.2.1. Lack of clarity regarding moment of entry/revocability 23
3.2.2.2. Finality in case of night-time settlement 24
3.2.2.3. Lack of level playing field in the payments area 24
3.3. Problems related to the conflict-of-laws regime in the securities area 24
3.3.1. Background 24

3.3.2. The problem: uncertainty concerning the location of the account 25
3.4. Is action necessary at EU level? 25
4. The objectives 26
4.1. General and specific policy objectives 26
4.2. Consistency of the objectives with other EU policies 27
5. The policy options and the policy instruments 27
5.1. Grouping the operational objectives 27
5.2. The policy options and their scope 28
5.2.1. Policy options for objectives in Group 1 (credit claims) 28
5.2.2. Policy options for objectives in Group 2 (settlement systems) 29
5.2.3. Policy options for objectives in Group 3 (conflict of laws) 29
5.3. The policy instruments 31
5.3.1. The available set of policy instruments 31
5.3.2. The preferred policy instrument(s) 31
6. Analysis of impacts and choice of preferred option(s) 33
6.1. Group 1 options (credit claims) 33
6.1.1. First set of options (Options 1.1 to 1.3) (inclusion of credit claims) 33
6.1.2. Second set of options (Options 1.4 to 1.6) (formal requirements) 36
6.1.3. Third set of options (Options 1.7 to 1.10) (waivers) 37
6.2. Group 2 options (settlement systems) 38
6.2.1. First set of options (Options 2.1 to 2.3) (links) 38
6.2.2. Second set of options (Options 2.4 and 2.5) (night-time settlement) 39
6.2.3. Third set of options (Options 2.6 and 2.7) (ELMIs) 40
6.3. Conclusions 40
7. Monitoring and evaluation 41
Bibliography 42
Annex I 44
Annex II 48
Glossary 50

1. INTRODUCTION

Over the past three decades, the European financial sector has evolved and grown with incredible speed, spurred principally by four forces: globalisation, European integration, financial innovation and technological innovation.

Globalisation has led to a tremendous increase in cross-border financial flows. At first, financial flows were simply a consequence of the increased cross-border trade in goods. However, once the liberalisation of capital flows and the integration of the European financial sector began, the growth in cross-border financial flows took a life of its own. One of the consequences was that market infrastructures, which had been designed principally to meet the needs of domestic markets, needed to adjust to the challenges posed by an increasingly cross-border reality. Another consequence was that international players were faced with the challenge of having to do business in different jurisdictions.

At the same time, increasing financial innovation has led to the creation of ever more complex financial products and consequently contributed to a stronger emphasis on risk management in both the conduct of wholesale business and the design of market infrastructure. These developments have led to more complex liquidity and collateral management requirements that market players accessing the market infrastructures are now faced with, and to the growing importance of collateralisation to support both liquidity demands and other wholesale market business.

Finally, technological innovation also played an important role. Apart from facilitating globalisation, European integration and financial innovation, technological innovation also played an important role in terms of the design of both payments and securities settlement systems, by either making it possible to develop certain solutions (e.g. real-time gross settlement (RTGS) in large-value payments) or by simply facilitating the use of existing solutions (e.g. delivery versus payment (DvP) in securities settlement). Some of these solutions are typically associated with higher liquidity pressures[1].

The Financial Collateral Arrangements Directive[2] ("the FCD") and the Settlement Finality Directive[3] ("the SFD") represent two legislative measures that were adopted in response to some of the challenges highlighted above. The importance of these two directives is due to the fact that they regulate essential processes and components of European financial markets.

The SFD was the Community legislator's response to the concerns identified by the Committee on Payment and Securities Systems (CPSS) under the auspices of the Bank for International Settlements (BIS) regarding systemic risk. With the start of

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1 Technological innovation also provides solutions for offsetting the growing liquidity and collateral demands. Bi- or multilateral netting arrangements in payments systems and automated self-collateralisation procedures in securities settlement systems are examples of such solutions.

2 Directive 2002/47/EC of the European Parliament and of the Council of 6 June 2002 on financial collateral arrangements, OJ L 168, 27.6.2002, p. 43–50.

3 Directive 98/26/EC of the European Parliament and of the Council of 19 May 1998 on settlement finality in payment and securities settlement systems, OJ L 166, 11.06.1998, p. 45–50.

the second stage of the Economic and Monetary Union (EMU) in 1994, it became evident that there was a need for a stable and efficient payment infrastructure to assist cross-border payments, to support the future single monetary policy and to minimise systemic risk[4] especially in view of the increasing importance of cross-border activity. As a response to the need to minimise systemic risk and to ensure the stability of payment and securities settlement systems, the SFD provides that transfer orders (for both payments and securities) entered into such systems cannot be revoked or otherwise invalidated. Such protection is created by stipulating the irrevocability and finality of transfer orders and of netting of transfer orders entered into a designated system[5], even in the event of insolvency proceedings against a domestic or foreign system participant[6]. In addition to protecting transfer orders, the SFD also protects the collateral provided to a central bank and collateral provided in combination with participation in a designated system from the effects of the insolvency of the collateral giver[7].

Given the limited scope of protection provided to collateral by the SFD and taking into account the important role collateral has in modern finance and the increase in cross-border financial flows, a more comprehensive approach for protecting collateral became necessary. This was due to the fact that divergent national rules applied to the use of collateral were frequently impractical and often not transparent, resulting in uncertainty as to the effectiveness of collateral as a means of protecting cross-border transactions. The introduction of the FCD created a uniform EU legal framework - based on the principle of minimal harmonisation - for the (domestic and cross-border) use of financial collateral by abolishing most of the formal requirements traditionally imposed on collateral arrangements and by insulating collateral arrangements against insolvency. The objective of the FCD was to achieve a greater integration and cost-efficiency of European financial markets by simplifying the collateral process, improving legal certainty in the use of collateral and reducing risks for market participants.

From the point of view of the treatment of collateral arrangements, the FCD could thus be regarded as an "offshoot" and a complement of the SFD. This relationship between the two directives is hinted at in the FCD itself: its first recital states that the *"[i]mplementation of [the SFD] has demonstrated the [...] benefits of common rules in relation to collateral constituted to [payment and securities settlement] systems."*

The commonalities between these two directives do not stop at collateral. An additional common point they share is the treatment of the conflict-of-laws issue. Furthermore, both share a common objective, i.e. the stability of the financial systems.

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4 The BIS defines systemic risk as "*the risk that the failure of a participant to meet its contractual obligations may in turn cause other participants to default with a chain reaction leading to broader financial difficulties.*" See "64th Annual report", p.177; 1994, BIS, Basel, Switzerland.

5 A system that fulfils the conditions stipulated in Article 2(a) of the SFD and is designated by a Member State to be included in the scope of the SFD.

6 It should be noted that such protection already existed in many Member States before the introduction of the SFD, although in different forms.

7 As specified in Article 9(1) of the SFD.

Their close relationship is also one of the reasons behind the Commission's decision to carry out their respective evaluations as close in time as possible (see next section for details on the evaluations).

2. PROCEDURAL ISSUES AND CONSULTATION OF INTERESTED PARTIES

2.1. The Directive on Financial Collateral Arrangements

In January 2006, according to the requirements stipulated in Article 10 of the FCD[8], the Commission launched an evaluation exercise on the FCD. The principal aim of the evaluation was to gather the views of interested parties on the FCD's application and possible weaknesses in its wording or transposition in the Member States. As part of the evaluation exercise, the Commission asked the Member States, the European Central Bank (ECB), and the European Economic Area (EEA) States to reply to a questionnaire regarding the implementation and application of the FCD. A less extensive questionnaire was also created for the private sector[9].

On the basis of the replies received, the Commission prepared an evaluation report[10]. In spite of the fact that market experience with the use of the FCD was relatively recent, the overall impression conveyed in the replies was that it is functioning well. Still, the report highlighted seven key issues that merited further attention (see Table 1 in Annex I for a detailed list).

One of these issues regarded the possible inclusion of credit claims within the material scope of the FCD (and the SFD). In fact, credit claims are already used as collateral in a number of Member States. However, since they are not covered by the FCD, they cannot benefit from the same regime throughout the EU and therefore their widespread use, especially in the cross-border context, is seriously hampered. In order to identify the substantial issues related to the inclusion of credit claims within the material scope of the FCD (and the SFD), the ECB established a Working Group on credit claims with participation from some central banks and the Commission. The Working Group met on 9 February 2007. Its final advice has provided a basis for the technical amendments regarding credit claims. The Commission also had a number of informal meetings with the ECB on the topic and presented it in various fora, such as the CESAME[11] and the COGESI[12].

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8 "*Not later than 27 December 2006, the Commission shall present a report to the European Parliament and the Council on the application of this Directive, in particular on the application of Article 1(3), Article 4(3) and Article 5, accompanied where appropriate by proposals for its revision.*"

9 Both the questionnaires and the replies received can be found at http://ec.europa.eu/internal_market/financial-markets/collateral/index_en.htm#evaluation.

10 Evaluation report on the Financial Collateral Arrangements Directive (2002/47/EC), COM(2006) 833, available at http://ec.europa.eu/internal_market/financial-markets/docs/collateral/fcd_report_en.pdf.

11 Clearing and Settlement Advisory and Monitoring Expert group. For more details on the group see http://ec.europa.eu/internal_market/financial-markets/clearing/cesame_en.htm.

12 Contact Group on Euro Securities Infrastructures. For more details on the group see http://www.ecb.int/paym/groups/cogesi/html/index.en.html.

2.2. The Settlement Finality Directive

In December 2005, according to the requirements stipulated in Article 12 of the SFD[13], the Commission published an evaluation report[14] on the SFD. The report was based on the responses to a questionnaire addressed to Member States on the SFD's application and transposition in their domestic legislation. The report found that the SFD was generally working well. However, it also highlighted several issues concerning the application and transposition of the directive that merit further analysis and may require the SFD to be revised in a number of areas (in ten areas, to be precise; see Table 2 in Annex I for a detailed list).

Following first reactions to these issues from the Member States and the ECB, the Commission has decided to open the report to a wider consultation with industry, consumers and other stakeholders. The public consultation was launched in May 2006. In parallel, the Commission discussed the report findings with the Member States and the ECB within the framework of the European Securities Committee (ESC). Based on the responses received in the consultation[15] and the discussions in the ESC, the Commission was able to further reduce the number of questions that needed to be tackled. Similarly to what happened in the case of the FCD, the Commission also had a number of informal meetings with the ECB on the topic and presented it in various fora, such as CESAME and COGESI.

2.3. The Ecofin roadmap

On 9 October 2007 the Economic and Financial Affairs (Ecofin) Council endorsed a roadmap that contains follow-up actions to the financial turmoil triggered by the defaults in the US sub-prime mortgages market. It is structured around four main headings: i) transparency; ii) valuation standards; iii) prudential framework, risk management and supervision; and iv) market functioning. The roadmap also contains a set of actions pertinent to crisis management, in particular steps needed to develop further the arrangements for cross-border financial stability within the EU. The actions contained in this roadmap are partly legislative and partly non-legislative. The legislative measures are largely related to clarifications and revisions of current EU financial-sector Directives and were partly already in the Commission's legislative work programme, which now deserve greater attention due to the current market situation.

The issues emerged during the evaluation processes of the FCD and SFD fit within the scope of the crisis-management part of the roadmap. For example, the establishment of a harmonised legal framework for the use of credit claims as collateral in cross-border transactions would help enhancing market liquidity, which has been hit quite severely in recent months. Furthermore, ensuring the proper functioning of settlement systems in rapidly evolving markets is indispensable for the stability of financial markets, even more so in times of market turmoil.

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[13] "*No later than three years after the date mentioned in Article 11(1), the Commission shall present a report to the European Parliament and the Council on the application of this Directive, accompanied where appropriate by proposals for its revision.*"

[14] Evaluation report on the Settlement Finality Directive 98/26/EC, COM(2005) 657, available at http://ec.europa.eu/internal_market/financial-markets/docs/settlement/evaluation_report_en.pdf.

[15] See http://ec.europa.eu/internal_market/financial-markets/settlement/consultation_results_en.htm.

2.4. Internal consultation process

The relevant Commission services (i.e. Directorate Generals ECFIN and SANCO) have been kept fully informed about the progress of the work. Their representatives were also invited to the regular weekly meetings of the DG MARKT unit in charge of the initiative, where the progress of the work was being discussed. Separate meetings with representatives of the two DGs were also held. This more focused and informal approach (rather than convening an official inter-service steering group) for obtaining input from relevant Commission services was chosen mainly because of the technical nature of the initiative.

3. PROBLEM DEFINITION

Several challenges have been identified in the areas covered by the FCD and SFD in the consultation process as shown in Tables 1 and 2 (see Annex I). In what follows, we first analyse the issues related to the role of collateral in the EU economy (FCD) and then we analyse the issues related to the settlement systems (SFD).

3.1. Problems related to the relative scarcity of collateral in the EU economy

3.1.1. Background

3.1.1.1. The role of collateral in the economy

In the traditional sense (i.e. within the scope of general bank lending), collateral are assets provided by a borrower (the collateral giver) to a lender (the collateral taker) to minimise the risk of financial loss to the lender in the event of the borrower defaulting on its financial obligations to the lender (i.e. credit risk). In recent times the use of collateral has expanded beyond its initial domain and is increasingly used to secure all types of transactions, such as capital markets and money market transactions, as well as payment transactions and the clearing and settlement of securities. While the collateral provided in the context of bank lending usually encompasses both financial and non-financial assets, the collateral provided in the types of transactions listed above is in the form of financial assets only (mostly cash or securities).

While credit-risk mitigation is arguably the most important reason behind the use of collateral, it certainly is not the only one. Using collateral for reducing credit risk allows credit institutions to reduce the amount of regulatory capital they are required to hold. Indeed, under the current Basel II/Capital Requirements Directive[16] (CRD) framework, if banks have accepted eligible collateral they can take this into account when calculating their capital requirements (i.e. the collateral reduces a bank's credit exposure to a counterparty and thus allows it to set aside less regulatory capital). Some additional reasons for the use of collateral are given in the large body of

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[16] The Capital Requirements Directive is comprised of Directive 2006/48/EC of the European Parliament and of the Council of 14 June 2006 relating to the taking up and pursuit of the business of credit institutions (recast) and the Directive 2006/49/EC of the European Parliament and of the Council of 14 June 2006 on the capital adequacy of investment firms and credit institutions (recast), OJ L 177, 30.06.2006, p.1.

research on credit markets[17]. According to this research the use of collateral can, among other things, mitigate the problems of adverse selection[18] and/or the problems of moral hazard[19].

3.1.1.2. The increasing demand for collateral

The increasing use of collateral to secure different types of transactions enables market participants to access funds and credit institutions to provide lending more efficiently. It also enables them to carry out transactions that they otherwise would not have been able to carry out. However, the expansion of the use of collateral well beyond the initial realm of bank lending has translated into a significant increase in the demand for collateral and hence for financial assets that can be used as collateral. At least five different sources of collateral demand could be identified:

1. A big source of collateral demand is the European repo market[20], now one of the largest financial markets in the world. As can be seen in Chart 1 below, in the last five years, this market has grown, on average, by almost 23% per year, reaching a size of approximately €6.4 trillion at the end of 2006 from roughly €2.3 trillion at the end of 2001[21]. The repo market is expected to continue growing in the future as well[22].

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[17] For example, Leitner (2006) provides a comprehensive review of the literature on this topic.

[18] Adverse selection refers to a market process in which bad results occur due to information asymmetries between buyers and sellers: the "bad" products or customers are more likely to be selected. In such cases, posting collateral may serve as a way of signalling to the market that you are a good customer.

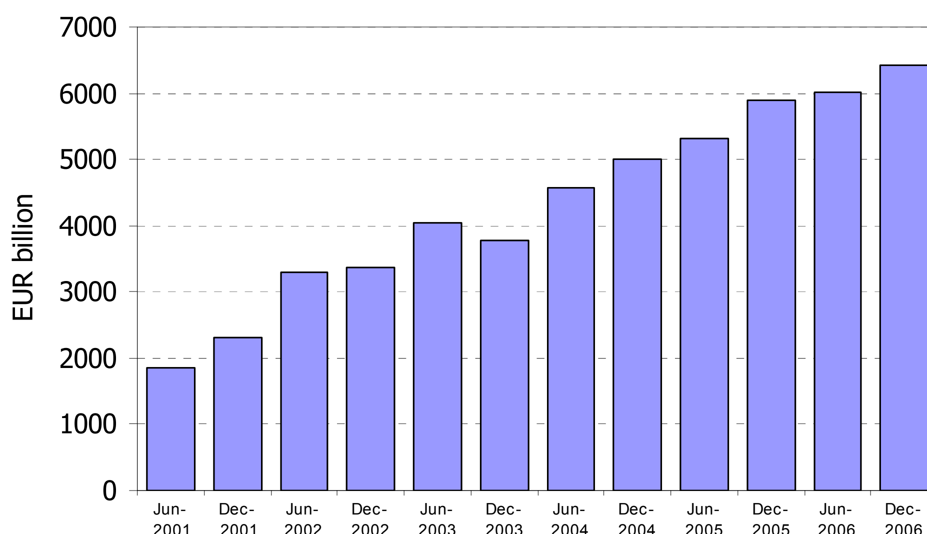
[19] This concept was first coined in the insurance industry. More in general, moral hazard arises because an individual or institution in a transaction does not bear the full consequences of their actions, and therefore has a tendency or incentive to act less carefully than would otherwise be the case, leaving another party in the transaction to bear some responsibility for the costs of those actions. For example, moral hazard arises if an individual believes that they can make risky investments with borrowed money that will pay handsomely if the investment turns out well but they will not have to bear the full costs if the investment turns out badly. Collateral mitigates moral hazard because the individual in question is aware of the fact that in the event of a loss, he/she will lose the collateral.

[20] This market is a good example since repo transactions inherently rely on collateral. The repo (or repurchase agreement) is an arrangement used in money markets and capital markets. In a repo transaction one party sells securities to another party with an agreement to repurchase the same securities at a higher price (the principal amount plus interest) at a predetermined future date.

[21] The size of the repo market can be used as a proxy for the total amount of collateral used. However, one needs to keep in mind that, since the securities provided as collateral in one repo transaction can be re-used (or re-hypothecated, as the procedure is also known) by the collateral taker in another transaction, the size of the market overstates the actual amount of collateral used.

[22] See, for example, "The European Repo Market", CELENT, May 2007.

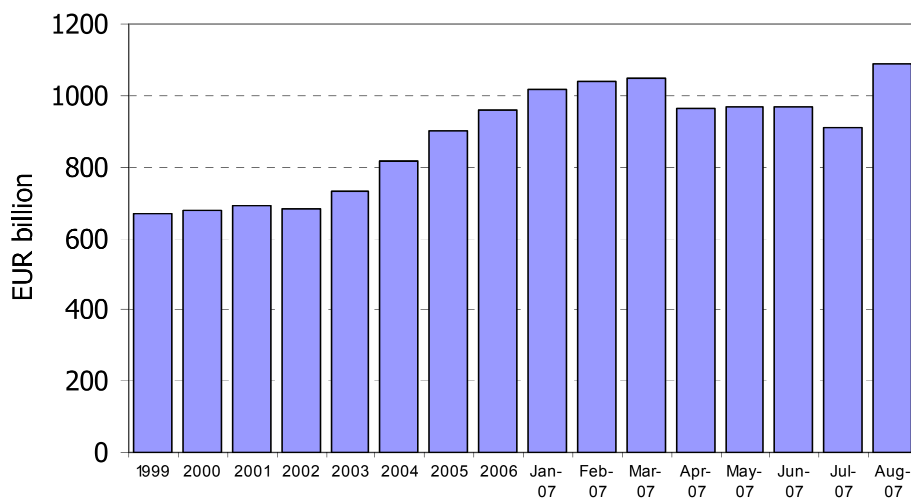
Chart 1: Size of the European repo market (end of period)[23]



Source: European repo market survey, ICMA, June 2007

2. The use of collateral is also increasing in connection with central bank operations. As shown in Chart 2 the amount of collateral deposited with the Eurosystem increased from less than €700 billion in 2002 to an average of €1 trillion in the first eight months of 2007.

Chart 2: Total collateral deposited with the Eurosystem[24]



Source: ECB

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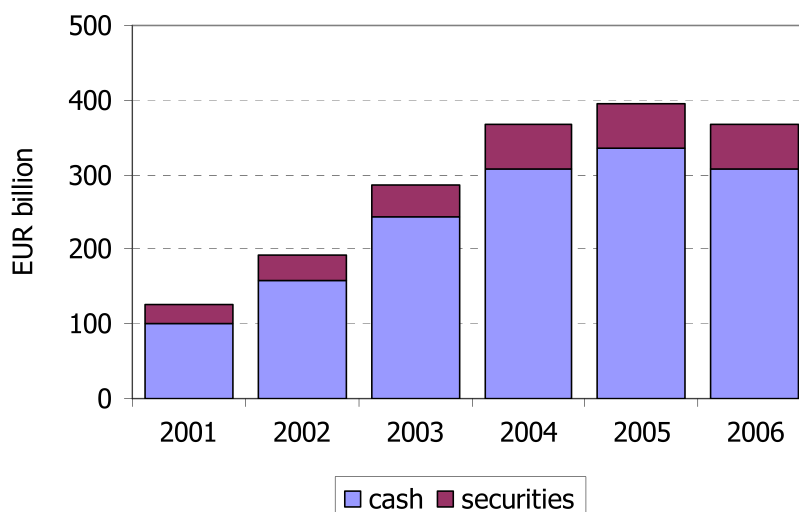
[23] The data does not cover repo transactions undertaken with central banks as part of their official money market operations, but it does include other repo transactions with central banks, e.g. as part of their reserve management operations. There is, therefore, a certain overlap between Chart 1 and Chart 2 below.

[24] The monthly data refer to the last Friday of the respective month. The annual data refer to the (simple) average of the 12 months of the respective year.

3. Other sources of collateral demand can be found in derivatives transactions. As can be seen in Chart 3 below, the value of collateral used in derivatives transactions roughly tripled in the period between 2001 and 2006. Whilst, in absolute terms, cash substantially outweighs securities as a form of collateral, the latter grew from an estimated €27 billion in 2001 to an estimated €60 billion in 2006.

Chart 3: Estimated value of collateral in derivatives transactions in the EU (end of period)[25]



Source: ISDA Margin Survey, various issues; own calculations.

4. The emergence of Central Counterparties (CCPs)26 gave rise to yet another source of demand for collateral. In order to protect itself against the risk of default of its participants, a CCP puts in place risk management procedures. The CCP calculates its participants' exposures to outstanding obligations and requires them to post collateral to cover these exposures. This requirement is generally referred to as margin. For example, according to their annual reports, at the end of 2006, the three biggest CCPs in Europe (Eurex Clearing and the two CCPs within the LCH.Clearnet Group) held on their books collateral for a total value of €75.7 billion (compared to €59.9 bn at the end of 2005).

5. Finally, in line with one of the several roles of collateral described above, many expect that the new Basel II/CRD framework will lead to an increased use of collateral by banks.

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[25] The values reported in the ISDA survey actually overstate the value of collateral used due to double counting and possible re-hypothecation of the collateral. In order to get to the values depicted in the chart, a two-stage approach was used. First, the share of reported EU-related collateral (cash in EUR and GBP for cash, EU government securities for securities) in the total value of reported collateral was calculated. Second, the resulting share was used as a proxy to calculate the value of collateral used in the EU.

[26] A CCP interposes itself between counterparties to financial contracts traded in one or more markets, becoming the buyer to every seller and the seller to every buyer. CCPs have been first introduced in derivatives markets and, at least in the EU, only recently in securities markets.

3.1.1.3. The relative scarcity of high-quality assets that could be used as collateral

The abovementioned developments constitute a multitude of competing uses for the collateral holdings of market participants (e.g. credit institutions, investment firms) which increase even further in case they are active in more than one market/country. Indeed, internationally active market participants may find it costly to hold sufficient quantities of eligible collateral in every market in which they operate directly, and may face mismatches between the location of their liquidity needs and the collateral they hold. This situation may cause some concerns particularly in the event of an emergency (i.e. in a crisis situation). For example, a participant (e.g. a bank with branches or subsidiaries in many markets) may face a large and unexpected shortfall in liquidity in a local market and find itself collateral-constrained in that same market. In spite of the fact that the participant may have plenty of collateral available in another market, it may turn out that this collateral cannot be used as it does not meet the eligibility criteria in the market where the participant faces the liquidity shortfall[27].

Whilst, in principle, the pool of available financial assets[28] that can be used as collateral to secure the types of transactions listed earlier is rather large (in theory all existing financial assets could be used as collateral), in practice this pool is quite restricted. This is due to the fact that assets need to fulfil certain criteria before being considered as eligible collateral. As Bindseil and Papadia point out in their paper[29], there are a number of properties that assets should have to be suitable as collateral in general[30]: i) legal certainty, ii) credit quality and easy availability of credit assessment, iii) easy pricing and liquidity, iv) handling costs and v) available amounts and prospective use. Usually, the most sought-after collateral is comprised of assets that rank very high on the basis of these criteria, i.e. cash and central government securities[31]. Based on the data provided by the members of the EFC[32] Sub-Committee on EU Government Bonds and Bills Markets[33], the size of the EU government securities market in 2006 was roughly €5.5 trillion.

Obviously, assets that rank high according to the above criteria are in high demand for collateral use. In other words, there is competing demand among market participants for these assets. To the extent that some market participants buy such assets to hold them (e.g. investment funds) and are not willing to lend them to those market participants who would like to use them as collateral, the available pool of assets that can be used as collateral shrinks even further.

The lower availability of collateral constrains the number of transactions that can be carried out, which has a negative impact, among other things, on market liquidity

[27] For more details see "Cross-border collateral arrangements", BIS, January 2006.

[28] For the purposes of the FCD (see Article 1(4)(a)), financial collateral is defined as comprising cash and financial instruments (the latter are defined in article 2(1)(e)).

[29] "Credit risk mitigation in central bank operations and its effects on financial markets: the case of the Eurosystem", ECB, August 2006.

[30] Bindseil and Papadia refer more specifically to suitability as central bank collateral, but the properties can easily be extended to collateral in general.

[31] Even in case of central government securities there are preferences for particular types of securities and issues.

[32] Economic and Financial Committee.

[33] See http://ec.europa.eu/economy_finance/efc/efc_market_en.htm for more detailed information.

which - in turn - negatively impacts the cost of capital to the detriment of all market participants and, in the end, the economy as a whole.

3.1.1.4. Using credit claims as collateral

A possible solution to the abovementioned problems would be to enlarge the pool of assets eligible for use as collateral. Credit claims (i.e. bank loans) represent one asset class that could be considered as a possible candidate for inclusion in such an enlarged pool.

In the EU, bank-based financing is still significantly more important than market-based financing. Credit claims therefore often remain the most important asset class on the balance sheet of banks. According to ECB data, loans represent almost 60% (€15.6 trillion[34]) of total assets in the non-consolidated balance sheet of the euro area credit institutions. This is a figure that substantially exceeds the one for the US market (€4.9 trillion[35]) which relies much more on market-based financing. In addition, the US market resorts more frequently to securitisation (see Box 1 in section 3.1.1.6 for more details on this topic), which allows financial institutions in general, and banks in particular, to mobilise credit claims.

To the extent that credit claims do not have any alternative uses, this translates into a situation in which banks are unable to use more than half of the assets they own to secure their liquidity needs. This means that in such situations there is a considerable amount of capital lying dormant on banks' balance sheets that is not put to more efficient use in the economy. In other words, banks lend less than they could if it were possible for them to use existing credit claims to obtain additional liquidity, to be invested in profitable investments. Moreover, to the extent that this increases the cost of raising funds for European banks with respect to non-European banks this may also raise concerns on the international competitiveness of the EU banking sector.

Allowing the use of credit claims as collateral for securing different types of transactions would therefore not only enlarge the pool of eligible collateral, but would also mobilise the capital currently locked on banks' balance sheets. This is actually a solution that has been adopted in a number of Member States, e.g. in France, Germany and Spain (see Charts 4 and 5 below). In those Member States, national central banks have been accepting credit claims as collateral for quite some time.

3.1.1.5. The Eurosystem's decision

In August 2004 the Governing Council of the ECB decided to include credit claims as an eligible type of collateral for Eurosystem credit operations as of 1 January

[34] The figure represents the outstanding amount at the end of June 2007. For details see "Assets of credit institutions", available at http://www.ecb.int/stats/money/aggregates/bsheets/html/index.en.html.

[35] Approximately $6.7 trillion. The figure represents the outstanding amount at the end of June 2007. See http://www.federalreserve.gov/releases/h8/data.htm for more details. The euro area and US numbers may not be directly comparable due to possible differences in definitions of institutions covered (i.e. credit institutions in the euro area and commercial banks in the US).

2007[36]. The decision followed a public consultation on measures to improve the Eurosystem's collateral framework conducted in 2003[37], in which the financial industry expressed a strong desire to expand further the range of eligible assets[38].

In July 2005, the ECB published the specific eligibility criteria applicable to those credit claims[39]. The criteria include, inter alia, the following:

(1) the place of establishment of the debtor (or alternatively the guarantor) is restricted to a euro area member country;

(2) the loan agreement must be governed by the laws of a euro area member country[40]; and

(3) the range of eligible debtors is restricted to non-financial corporations and public sector entities.

As indicated in the previous section, the inclusion of credit claims into the list of eligible collateral for the Eurosystem's credit operations does not represent a novelty in Europe. Indeed, as can be seen in Charts 4 and 5, there were already some countries within the euro area where credit claims were accepted as collateral even before the Eurosystem as a whole started accepting them. However, the charts also show that the use of credit claims as collateral increased substantially in most of those countries after 1 January 2007 (with the exception of the Netherlands and Spain, where it actually stayed the same)[41]. Among the euro area countries, financial institutions in Luxembourg, Portugal, Greece, Slovenia and Ireland currently do not use credit claims as collateral. Whilst the use of credit claims has increased, it is still well below the potential estimated by the ECB[42]. Indeed, the latter indicated that claims of up to €800 billion extended to the general government sector alone are expected to be eligible and could be used by counterparties in Eurosystem credit operations.

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36 See http://www.ecb.int/press/pr/date/2004/html/pr040805_1.en.html.

37 See http://www.ecb.europa.eu/ecb/pdf/cons/impframew/pc030611en.pdf.

38 See http://www.ecb.europa.eu/ecb/pdf/cons/impframew/collateralframeworksummaryen.pdf for a summary of the responses.

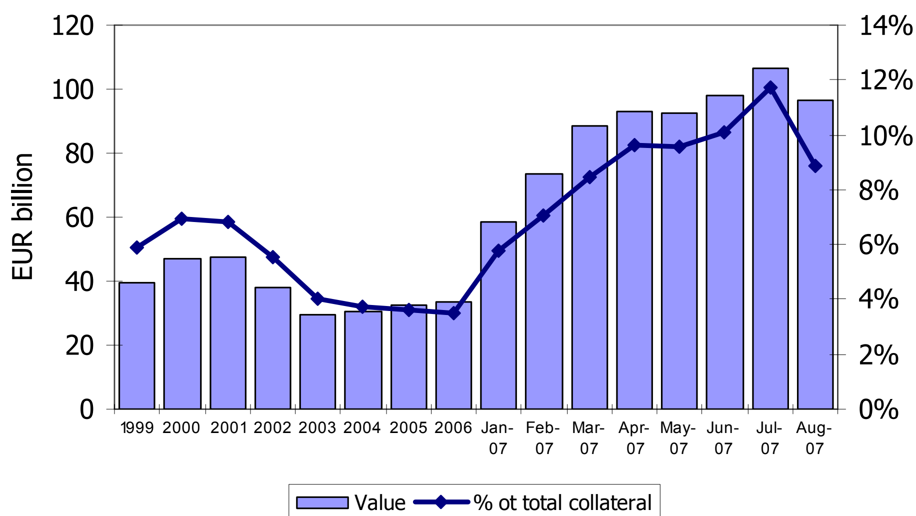
39 For further information please see the ECB's publication "The implementation of monetary policy in the Euro area: General documentation on Eurosystem monetary policy instruments and procedures", published on 15 September 2006.

40 The total number of different governing laws may not exceed two.

41 One of the reasons for the increase in France and Germany can be explained by the fact that, as of 1 January 2007, credit claims towards the public sector became eligible collateral, whereas they previously were not (conversely, in the Netherlands public sector credit claims were already eligible before, hence the lack of significant increases after the reference date). The use of credit claims in France was also boosted by the lifting of maturity ceilings, while the use in Germany was helped by the introduction of a new IT system for the handling of credit claims and the participation of new banks.

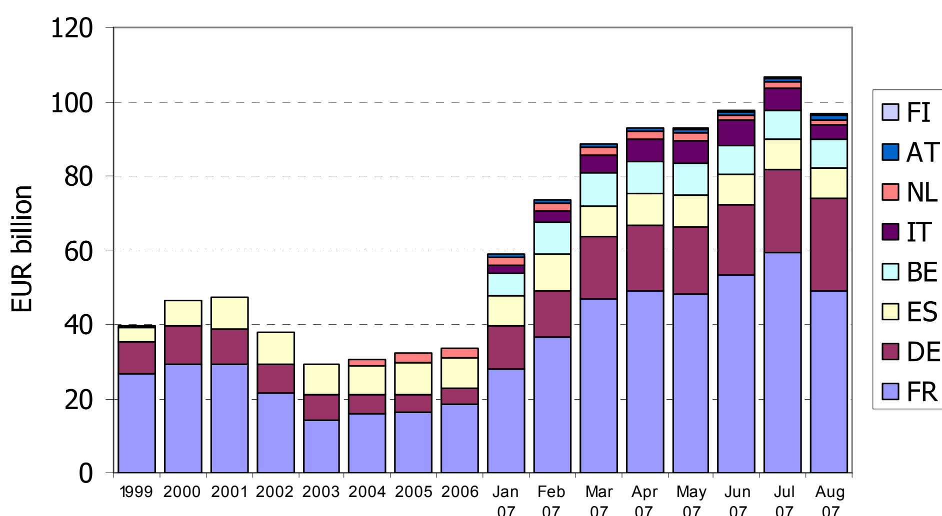
42 One of the main reasons why in some countries the increase in use is not yet significant is the fact that the main credit risk assessment source, the internal rating based systems (IRBs), have yet to be approved by supervisors. Once they are, the ECB expects the use to increase significantly.

Chart 4: Use of credit claims as collateral for central bank operations in euro area[43]



Source: ECB

Chart 5: Use of credit claims as collateral for central bank operations in the euro area, breakdown by country[44]



Source: ECB

3.1.1.6. Securitisation

Another solution adopted by Member States to address the issue of scarcity of collateral and of dormant capital lying on banks' balance sheets is securitisation. Securitisation alleviates the scarcity of collateral because, usually, at least some types of asset-backed securities created through securitisation are accepted as collateral

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43 The monthly data refer to the last Friday of the respective month. The annual data refer to the (simple) average of the 12 months of the respective year.

44 The monthly data refer to the last Friday of the respective month. The annual data refer to the (simple) average of the 12 months of the respective year.

(e.g. by central banks). Furthermore, it allows banks to put their dormant assets to better use by issuing securities backed by credit claims and thus to obtain funds they can use to create additional loans.

Box 1: Securitisation[45]

In its broadest sense, the term "securitisation" implies a process by which a financial relationship is converted into a transaction. For example, a loan to a corporation is a financial relationship; once the loan is transformed into a tradable bond, it is a transaction.

In today's capital markets, the term securitisation has acquired a more specific meaning; nowadays securitisation is understood to mean a process by which an entity pools together its interest in identifiable future cash flows, transfers the claims on those future cash flows to another entity that is specifically created for the sole purpose of holding those financial claims, and then utilizes those future cash flows to pay off investors over time. A securitisation transaction thereby achieves the purpose of providing financing, but in a unique way – by sale of assets.

The securitisation process

Suppose a company has receivables on its balance sheet that represent loans that borrowers are repaying over time. The company ("the originator", because it has originated the loans) identifies a pool of receivables ("the asset pool") that satisfy certain features that make them acceptable to be securitised. This asset pool is transferred to a special purpose entity (SPE) - also known as a special purpose vehicle (SPV) – generally at par value.

The SPV holds the asset pool, paying for it by issuing securities, called asset-backed securities (ABS). These securities differ from a usual capital market instrument, which is an exposure to the issuer’s business; an ABS is exposure to the asset pool. An ABS's credit rating will be based solely on the strength of the underlying asset pool, because it is the latter’s cash flows that will be used (on a mutually exclusive[46] basis) to repay investors of the securities issued by the SPV.

The SPV usually does not have the wherewithal to collect the receivables, and therefore cannot perform the collecting and servicing function. Generally, it is the originator company, who has the proximity with the borrowers and typically has an infrastructure and systems in place for doing so, that retains the servicing function. In some cases the servicing function may be transferred to an independent third-party entity.

One of the crucial features of securitisation is the creation of different classes of

45 The description of securitisation provided in this box draws heavily on the article "Securitisation: the tool of financial transformation" by Fabozzi and Kothari.

46 "Mutually exclusive" means that the originator would not have any direct claim on the receivables, nor would the investors in the securities issued by the SPV or the SPV itself have any claim against the general assets of the originator.

securities. In other words, ABSs issued by the SPV are structured into different classes of securities[47], each with a different credit rating. They may be senior and junior; or they may be senior, mezzanine, and junior; or they may have various classes such as class A, class B, and so on. The senior-most of the ABSs is quite often rated triple A (the highest rating possible), even if the originator's rating may be much lower. This is due to two factors: (i) the independence of the asset pool from the originator (i.e. the assets are isolated from the risk of bankruptcy of the originator); (ii) the creation of a credit risk mitigation device by subordination of B, C, etc., such that those lower classes provide credit support for class A[48].

When compared to the US, the use of securitisation is significantly lower in the EU (see Chart 6 below). The reasons often cited for the lower penetration of securitisation in the European market are many[49]. The main one is the lack of a uniform and harmonised legal[50], regulatory, tax, capital, accounting and market practice regime among individual Member States, as these have adopted solutions that suited local needs and circumstances. Another explanation often given is the relative novelty of this technique. Moreover, a deterring factor, especially for smaller financial institutions is the complexity and the ensuing high fixed costs associated with securitisation, which may be acceptable only in case of a large enough issue.

Chart 6: Issuance of securitised debt in the EU and the US

Source: ESF Securitisation Data Report, various issues, European Securitisation Forum; SIFMA; own calculations

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47 This is why securitisation is an example of structured finance.

48 In other words, the sizes of the junior classes of securities are designed in such a way as to meet the rating objective for class A. This allows for any losses or shortfalls in the asset pool to satisfy the obligations of class A would first be absorbed by the junior-most class and so on. For instance, if class A represented 95% of all assets in the pool, it would not be affected by losses unless those losses exceeded 5%.

49 See, for example, "A Framework for European Securitisation", European Securitisation Forum, May 2002.

50 For legal obstacles see "Legal obstacles to cross-border securitisations in the EU", EFMLG, May 2007. The document is available at http://www.efmlg.org/documents.htm#2007.

In light of the ongoing financial turmoil, it would appear that securitisation has several disadvantages when compared to the use of credit claims as collateral. For example, one of the main criticisms directed at securitisation that emerged during the debate following the turmoil was the opaqueness of this technique. More precisely, it was argued that investors that purchased the complex instruments created through securitisation were not able to properly assess their risks because not enough information was available on the assets present in the pool backing the instruments. From this point of view, the solution of using credit claims as collateral is much more transparent: since the various credit claims are not bundled together, the collateral taker is able to assess their creditworthiness on an individual basis before deciding whether or not to accept them. It would seem that this view was also taken by some central banks: during the ongoing financial turmoil, according to some market observers, they accepted credit claims as collateral but were, at the same time, reluctant to accept certain types of asset-backed securities.

Securitisation is mentioned in this context for completeness' sake, i.e. to show that accepting credit claims as collateral is not the only possible solution to the issues of scarcity of collateral and of dormant capital lying on banks' balance sheets. In fact, in many ways the two solutions can be considered as complementary to each other[51]. However, given the complexity of the issues related to securitisation in general and of securitisation in the EU in particular, any analysis of these issues would go well beyond the scope of the current exercise. This impact assessment will, therefore, not tackle securitisation.

3.1.2. The problems

3.1.2.1. No uniform, EU-wide legal framework for use of credit claims as collateral

As mentioned earlier, a large number of Member States allow the use of credit claims as collateral (principally, if not even exclusively, in the context of central bank operations). Given that the provisions of the FCD do not apply to credit claims, the type of legal protection that credit claims enjoy, when they are used as collateral, depends on Member States' national legislation and is thus different from one Member State to another[52]. For example, in three Member States - the Czech Republic, France and Sweden – the national legislation implementing the FCD includes also specific kinds of receivables, such as credit or other claims, in the list of assets that may serve as collateral and obtain the level of protection the Directive provides[53]. This means that in these Member States, credit claims enjoy the same type of protection as other types of financial collateral.

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[51] A financial institution could, for example, use as collateral both eligible credit claims and ABSs which have as underlying a pool of non-eligible credit claims (this is the case, for example, of retail-mortgage-backed securities).

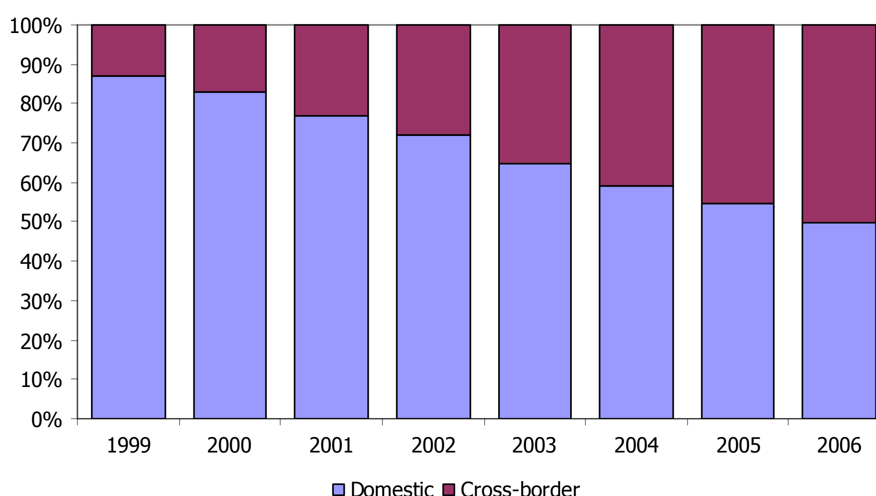
[52] This situation resembles in many ways the one that could be observed for cash and securities prior to the introduction of the FCD.

[53] The Czech Republic has included credit claims, France has also included claims and different forms of rights, provided they are assignable, while Sweden has included money loans in the law that implements the FCD.

As there is no uniform, EU-wide legal framework for the treatment of credit claims when they are used as collateral, some legal requirements[54] needed by the collateral taker to establish a legally valid security interest in the collateral in the event of a counterparty default are not treated uniformly in the different national jurisdictions. As a result, the legal requirements and the way these requirements are met vary from one Member State to another. This situation creates legal uncertainty and may therefore hamper the use of credit claims as collateral for cross-border transactions. In addition, it creates an un-level playing field for credit institutions.

Given the growing importance of cross-border collateral, for example within the scope of Eurosystem operations, this would be particularly unfortunate. Indeed, according to ECB statistics, the use of cross-border collateral surpassed that of domestic collateral for the first time in 2006 (see Chart 7 below). In order to ensure that cross-border credit claims will be able to capture the same "market share" that is currently held by other types of cross-border collateral, a harmonised legal framework for the treatment of credit claims when they are used as collateral is necessary. For the time being, credit claims used as collateral in Eurosystem operations are almost exclusively domestic in nature.

Chart 7: Total domestic vs. cross-border collateral provided to the Eurosystem[55]



Source: ECB

3.1.2.2. Formal requirements discouraging the use of credit claims as collateral

In a number of Member States the law requires that the creation, validity or admissibility in evidence of their provision as financial collateral under a financial collateral arrangement be dependent on the performance of any formal act (such as the registration or the ex-ante notification to the debtor of the credit claim provided as collateral). Several Member States (e.g. Finland, Greece, Ireland, Italy,

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[54] These include, among other things, the timing of the notification of the debtor about the mobilisation of the credit claims, banking secrecy issues concerning information about the debtors and the elimination of potential restrictions regarding the mobilisation and realisation of the credit claims.

[55] The percentages are calculated using yearly averages of the value of collateral deposited with the Eurosystem.

Luxemburg, the Netherlands and Slovakia) require ex-ante notification, whereas others (e.g. Austria, Belgium, Greece, Spain and Slovakia) have a registration system. Other Member States have neither of the two (e.g. France, Germany, Portugal and the United Kingdom). These formal requirements may discourage credit institutions from using credit claims as collateral. In other words, they may impede the efficient use of credit claims as collateral. An example in point is the German case. One of the explanations for the increase in use of the recent use of credit claims for collateral purposes is the fact that ex-ante notification to the debtor is no longer required.

There are two further requirements that may discourage the use of credit claims as collateral[56]. The first one relates to the possible exercise of set-off by the debtor of the credit claim provided as collateral. This possibility might compromise the position of collateral takers in certain jurisdictions since the collateral can as such disappear if the debtor exercises set-off right vis-à-vis the creditors of the credit claim and vis-à-vis persons to which the creditors assigned pledged or otherwise mobilised the credit claim as collateral.

The second one is banking secrecy. In certain jurisdictions the provision of data on the debtor and on the credit claim by the original creditor bank to the collateral taker might breach banking secrecy restrictions. As a result, counterparties may be reluctant to submit credit claims as collateral or collateral takers could not get sufficient information on the credit claim or the debtor.

3.2. Problems related to settlement systems

3.2.1. Background

Since the adoption of the SFD, there have been a number of market and regulatory changes that have led to the emergence of a post-trading environment that is, in many aspects, markedly different from the one that existed ten years ago, when the SFD was adopted. Market practices and solutions that were either unavailable (e.g. links between CCPs) or just emerging or rare (e.g. links between Securities Settlement Systems (SSSs)[57], night-time settlement) in that period are now either becoming more common or have become standard practice. Some of these market practices may be further encouraged by recent regulatory measures and/or market initiatives. For example, the Market in Financial Instruments Directive[58] ("the MiFID") and the industry's Code of Conduct on Clearing and Settlement[59] ("the Code") may lead to the creation of new links between market infrastructures and an increased use of

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[56] Currently, we have no definitive information on whether set-off or banking secrecy related rights can be waived in Member States.

[57] SSSs include both systems operated by CSDs and those operated by CCPs, as Member States whose markets have a CCP have tended to notify also the systems operated by the latter and not just those operated by CSDs.

[58] Directive 2004/39/EC of the European Parliament and of the Council of 21 April 2004 on markets in financial instruments amending Council Directives 85/611/EEC and 93/6/EEC and Directive 2000/12/EC of the European Parliament and of the Council and repealing Council Directive 93/22/EEC, OJ L 145, 30.4.2004, p.1.

[59] See http://ec.europa.eu/internal_market/financial-markets/clearing/communication_en.htm#code for more details.

existing links. Recent market developments and regulatory changes have also led to the creation of new entities that did not exist at the time of the adoption of the SFD.

As a consequence of all of the above developments, the SFD may no longer provide the protection that it was intended to. What is needed is protection at all times and covering all participants, which is valid not only within each system, but also across different systems.

3.2.1.1. Link arrangements between systems

One of the consequences of the tremendous growth in cross-border financial flows was that market infrastructures, which had been designed principally to meet the needs of domestic markets, needed to adjust to the challenges posed by an increasingly cross-border reality. Various solutions were adopted to adjust to the new reality; one of them was the establishment of links between SSSs.

When the SFD was adopted, such links were relatively few and basically limited to simple, i.e. Free-Of-Payment (FOP), links between systems operated by CSDs (most of these links were in the context of the two International Central Securities Depositories (ICSDs) becoming participants in local-market CSDs). The only example of an advanced type of link arrangement (in the particular example a DvP link) at the time in the securities settlement area was the "bridge" arrangement between Euroclear Bank and Clearstream Banking Luxembourg, the two ICSDs. However, in recent years the number of links has increased substantially. For example, there are currently 66 links that are eligible for the transfer of collateral in connection with monetary policy operations in the euro area[60]. In addition, there has been a move towards the development of more advanced types of link arrangements. Examples of the latter are represented by entities that emerged from cross-border consolidation in the post-trading sector in the last few years, namely the Euroclear Group and the Nordic CSD. Furthermore, advanced types of links are also emerging between CCPs. Two existing examples are CCP-clearing arrangements between LCH.Clearnet SA (France) and CC&G (Italy) for MTS[61] (Italy) and the arrangements between LCH.Clearnet Ltd. (UK) and SIS x-clear (Switzerland) for virt-x[62] (UK).

The introduction of the MiFID gives all members or participants of regulated markets *"the right to designate the system for the settlement of transactions [...] undertaken on the market*[63]*"*, provided that, inter alia, there exists a link between the system designated by the member/participant and the system designated by the market. The MiFID therefore gives market participants the choice of which SSS to use. This may therefore lead to an increase in the use of existing links and even stimulate the creation of new links between post-trading infrastructures. In the latter case, the Code will play a crucial role. Indeed, the Access and Interoperability Guideline[64]which was developed by the industry within the scope of the

[60] A two-way or bilateral link is counted as two separate links. The complete list of eligible links can be found at http://www.ecb.int/stats/payments/securities/html/eligible.en.html.

[61] MTS is an electronic market for the trading of fixed income securities.

[62] virt-x is a cross-border trading platform for pan-European blue chips. It is based in London.

[63] See Article 34(2).

[64] Available at http://ec.europa.eu/internal_market/financial-markets/docs/code/guideline_en.pdf.

implementation of the Code, was developed specifically to make the choices enshrined in MiFID an effective option, by defining the principles and conditions for establishing links between market infrastructures.

Links are by no means limited to the securities area; TARGET[65] is a very good example of advanced link arrangements in the payments area. Indeed, the latter is described as a "cluster" of interoperable payment systems. The same is true for its successor, TARGET2.

3.2.1.2. Night-time settlement

The market and regulatory developments in the global financial markets, together with the consequent growth in trading volumes and values have led to an increase in the treasurers' needs for managing their daily liquidity requirements. Market participants are increasingly expecting market infrastructures to provide them with the tools that will allow them to manage these daily requirements as early as possible during the business day. Market participants expect the large part of the instructions they send to market infrastructures to be settled as early as possible, without any need for additional liquidity or securities, so that, during the day, they are able to concentrate only on solving issues related to the few transactions that have not settled. This enables them to assess in time (and monitor) their positions in the intraday money market. Their objective is clear: to maximise the efficient usage of their funds and minimise the cost of acquiring them.

As a result of the above, night-time settlement has been introduced in a large number of Member States' settlement systems[66]. With night-time settlement finality is achieved well in advance of the opening of the daytime settlement process, either in one or many settlement cycles during the night. The value date of this settlement activity is S (settlement date) which might or might not coincide with the exact calendar date[67].

3.2.1.3. New players in the payments area

Due to recent market innovation and developments, as well as new legislative initiatives, some new institutions emerged in the EU financial markets. An example is represented by electronic money institutions (ELMIs), which were introduced by the E-money Directive[68]. They are institutions – to be specific credit institutions,

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[65] The Trans-European Automated Real-time Gross settlement Express Transfer system is the real-time gross settlement system (RTGS) for the euro. It is a decentralised system consisting of 16 national RTGS systems, the ECB payment mechanism and the Interlinking system. TARGET offers the possibility of transferring central bank money on a cross-border basis as smoothly as in the domestic market. See http://www.ecb.int/paym/target/html/index.en.html for more details.

[66] In systems not using night-time settlement, an early morning settlement cycle is used for delivering liquidity to market participants prior to intraday settlement activity. Strictly speaking, this activity is not part of night-time settlement but acts towards the same end: achieving finality as early in the day as possible.

[67] Usually, the change of settlement date (S) occurs at the end of the afternoon of the previous calendar day and the irrevocable (final) settlement at some time soon thereafter.

[68] Directive 2000/46/EC of the European Parliament and of the Council of 18 September 2000 on the taking up, pursuit of and prudential supervision of the business of electronic money institutions, OJ L 275, 27.10.2000, p.39 – 43.

according to the Banking Directive (2006/48/EC) - that issue means of payment in the form of electronic money.

3.2.2. *The problems*

3.2.2.1. Lack of clarity regarding moment of entry/revocability

Links can create significant interdependencies between systems; the more advanced the type of the link, the stronger the interdependencies. For example, a DvP link between two SSSs can create strong credit and liquidity interdependencies between the two systems, while a simple link may create only minor interdependencies. The fact that interdependencies exist, has important implications for the linked systems. Indeed, an operational problem in one system could result not only in a failure to complete deliveries between its own participants, but could also affect deliveries in between participants in the linked system. In case the second system has established a further link with another system, the latter could potentially also be affected in spite of the fact that it is not directly linked to the system with the initial operational problem.

An issue stemming form the existence of links regards the enforceability and revocability of transfer orders. Under the SFD, transfer orders are legally enforceable and even in the event of insolvency proceedings against a participant, binding on third parties from the moment they have entered a system. Furthermore, a transfer order cannot be revoked from the moment defined by the rules of a system. However, it is not entirely clear which moment of entry/revocability is applicable in the case of linked systems.

Let us take as an example a link between an SSS and a payment system. Suppose a payment order (as part of a DvP transaction instruction involving a cash and a securities leg) is entered in the SSS and is subsequently passed on to the payment system in order for the cash leg of the transaction to be settled. Suppose now that one of the parties involved in the transaction (either the seller or the buyer) becomes insolvent. The following two scenarios are possible:

the payment instruction is final according to the rules of the payment system, but not yet according to the rules of the SSS (e.g. because the securities leg is not yet settled);

the payment instruction is final according to the rules of the SSS, but not yet according to the rules of the payment system.

In the first case an insolvency court may challenge the settlement of the payment leg in the payment system, thus causing an unwinding of the instruction in the payment system. In the second case, an insolvency court may challenge the finality of the payment instruction in the SSS based on the fact that it is not yet final in the payment system (but the settlement in the payment system still occurs, e.g. because the latter is in another country), causing the whole DvP transfer to be unwound in the SSS. In both cases, the unwinding of the instruction may cause a knock-on effect on other instructions and may also cause contagion from one system to another.

The above scenarios are relatively simple, as they assume just one link. The potential problems that have been identified would be even more severe in case, for example,

the payment system were linked to multiple SSSs. Unless there is full clarity regarding which system's rules apply, a link may expose participants in one system to the spill-over effects of a default in another system with which it has established the link. Lack of clarity on which system's rules apply is an important issue that needs to be tackled, especially as links are increasingly common as well as more frequently used.

3.2.2.2. Finality in case of night-time settlement

At the time the SFD was being negotiated, night-time settlement was a relative novelty and as such its potential implications were not taken into proper account. One of the consequences of this is that the protection granted to transfer orders under the SFD is based on calendar days. This means that a transfer instruction is protected if entered on the calendar day on which insolvency proceedings are opened, provided that settlement takes place on the same calendar day (i.e. before midnight).

In a modern environment, where the business day of a settlement system does not necessarily coincide with the calendar day, a strict reading of the SFD would suggest that a transfer order entered into the system at 19:00 (after the opening of the new business day) would be protected only if settlement takes place in a batch running before midnight. If, however, the batch only runs at 1.00 in the morning, no protection would apply and the settlement would have to be unwound. If that is indeed the case, the finality of a substantial amount of orders would be put under question.

3.2.2.3. Lack of level playing field in the payments area

The concept of ELMI did not exist at the time of the adoption of the SFD, as it was introduced only later by the E-money Directive[69]. ELMIs were therefore not explicitly included in the list of possible participants in settlement systems. To the extent that these institutions may have the right to participate directly in a payment system and actually become direct participants in one, they should enjoy the same benefits - in terms of protection provided under the SFD – that are enjoyed by existing participants of that system. The fact they are currently not included in the scope of the SFD may make them less attractive from the payment system's point of view (in the sense that the latter may be reluctant to accept them as participants) and thus put them at a competitive disadvantage with existing institutions that are present in the same markets.

3.3. Problems related to the conflict-of-laws regime in the securities area

3.3.1. Background

In financial markets, securities worth trillions of euros are transferred or pledged daily in cross-border transactions. Due to dematerialisation, the great majority of these securities are held in electronic book-entry form in securities accounts with intermediaries, such as custodians or central depositaries, rather than directly in

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[69] Directive 2000/46/EC of the European Parliament and of the Council of 18 September 2000 on the taking up, pursuit of and prudential supervision of the business of electronic money institutions, OJ L 275, 27.10.2000, p.39 – 43.

physical form held by the investors. Nowadays, these intermediaries may be located in different jurisdictions with the result that - depending on the length of the intermediation chain - two, three or more jurisdictions may be involved. Market participants therefore need a clear and uniform conflict-of-laws rule to determine in advance with certainty the law (and thus relevant jurisdiction) applicable to their securities, because (e.g. in case a participant goes bankrupt) depending on the applicable law, they may either be the "owner" of these securities or not.

3.3.2. The problem: uncertainty concerning the location of the account

In order to solve this problem of legal uncertainty, already in 1998, the PRIMA-rule was introduced by the SFD (Article 9.2) and later applied in the Winding-up of Credit Institutions Directive (Article 24) and the FCD (Article 9.1). PRIMA stands for the "Place of the Relevant Intermediary Approach" and means that the place of the most relevant intermediary (or rather the place of the securities account) determines the law that is applicable to questions, e.g. regarding the creation, perfection (rights against third parties) or completion, priorities and realisation of interests in respect of securities.

For some Member States the location-of-account rule provides sufficient clarity, while others consider that this rule is hard to apply, because location in the physical sense is not easily reconcilable with records that are maintained electronically by firms that operate as far as possible without regard to national borders. While the SFD evaluation has not revealed any evidence of specific practical problems, there is room for clarification and improvement. Furthermore, the above Directives do not extend to all cases where securities are held as collateral.

Without a clear conflict-of-laws rule, there is legal uncertainty and market participants will bear the costs. They will have to pay fees for obtaining legal opinions on transactions and security arrangements in the global financial markets, but in addressing the uncertainty (legal risk) they will also have to make appropriate regulatory capital provisions (as required under the Basel II/CRD framework) for their activities involve securities transactions. As a consequence, these costs will be reflected in the prices they charge to their clients.

3.4. Is action necessary at EU level?

According to the principle of subsidiarity, action on Community level should be taken only when the aims envisaged cannot be achieved sufficiently by Member States alone. Already the SFD demonstrated the importance of limiting systemic risk inherent in such systems through common rules. As regards the FCD, the proposed changes do not impinge on the Member States' decision whether or not to allow credit claims as collateral; this decision is left entirely to Member States. What the proposal does is to grant to credit claims used as collateral the same level of protection enjoyed by other types of financial collateral. Furthermore, by applying a harmonised set or rules to credit claims used as collateral it facilitates their use in cross-border transactions.

The proposal also complies with the proportionality principle, as it is strictly limited to the changes necessary to allow for the cross-border use of credit claims as collateral, interoperability of systems and some minor simplification measures.

4. THE OBJECTIVES

4.1. General and specific policy objectives

The main goals of this exercise are to increase the efficiency and safety of the EU financial market and to ensure a level playing field among the relevant participants in this market. These general objectives can be achieved through the attainment of three more specific objectives, namely by

i. facilitating the use of credit claims as collateral (both in the domestic and the cross-border setting),

ii. ensuring the stability of settlement systems, and

iii. enhancing legal certainty.

In the specific context of the problems outlined in the previous section the above specific objectives translate into the following operational objectives:

Table 1: The operational objectives and the problems they seek to resolve

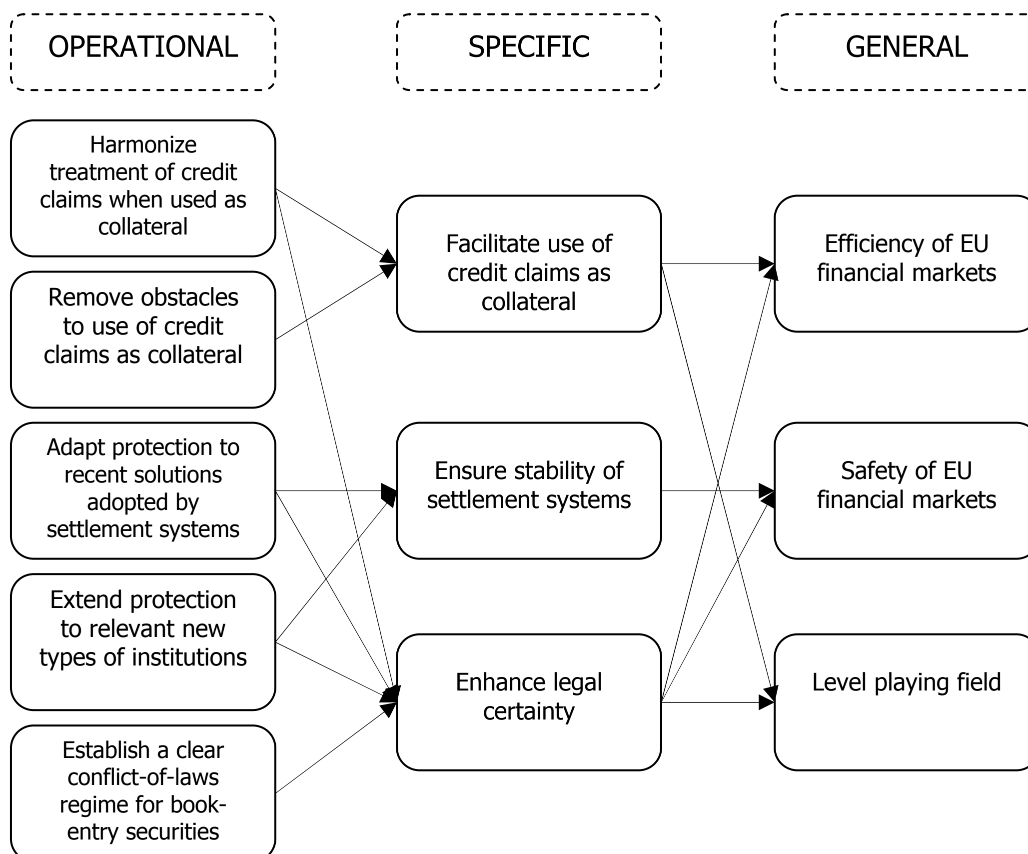
Operational objectives	Problems tackled
Harmonise the treatment of credit claims (across Member States) when they are used as collateral	No uniform, EU-wide legal framework for use of credit claims as collateral (section 3.1.2.1)
Remove obstacles that hamper the use of credit claims as collateral	Formal requirements discouraging use of credit claims as collateral (section 3.1.2.2)
Adapt existing protection to the solutions adopted by settlement systems in response to recent market and regulatory developments	Lack of clarity regarding moment of entry/revocability (section 3.2.2.1) Finality in case of night-time settlement (section 3.2.2.2)
Extend protection applied to existing participants in settlement systems to relevant new types of institutions	Lack of level playing field in the payments area (section 3.2.2.3)
Establish a clear conflict-of-laws regime for book-entry securities	Uncertainty concerning the location of the account (section 3.3.2)

As it is made clear by operational objective 1, the goal of this exercise is not to include credit claims in the pool of eligible collateral, but rather to ensure that, in case credit claims are used as collateral in a Member State[70], they enjoy the same type of protection currently enjoyed by other types of financial collateral.

[70] As indicated in section 3.1.1.5, credit claims can already be used as collateral in the majority of Member States.

The various levels of objectives, together with how they relate to each other, are depicted in Figure 1 below.

Figure 1: The policy objectives and the relationships among them



4.2. Consistency of the objectives with other EU policies

The objectives outlined above are consistent with the policies and objectives of the European Commission. Indeed, their main aim is to further improve the functioning of European financial markets (as pursued, for example, by the FSAP[71]), be it through improving the underlying market infrastructure (as pursued, for example, by the SFD, the MiFID and the Code of Conduct) or by facilitating collateralisation (as pursued by the FCD). Ultimately, this should contribute to the attainment of the objectives of the Lisbon Agenda, i.e. faster economic growth and more job creation.

5. THE POLICY OPTIONS AND THE POLICY INSTRUMENTS

5.1. Grouping the operational objectives

Before outlining the actual policy options that will need to be examined, it may be useful to divide the various objectives[72] outlined in section 4.1 in different groups.

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71 Financial Services Action Plan. See http://ec.europa.eu/internal_market/finances/actionplan/index_en.htm for more details.

72 From here on the term "objectives" will mean "operational objectives" unless stated otherwise.

This should facilitate the definition of the necessary policy options. Indeed, in spite of their heterogeneity, some of these objectives share certain commonalities. As a consequence, the policy options addressing such objectives will also be, at least partly, related to each other. Furthermore, this subdivision will also facilitate the choice of preferred policy instruments.

Following this approach, Group 1 will contain those objectives that are mainly related to credit claims (objectives 1 and 2), Group 2 will contain objectives mainly related to settlement systems (objectives 3 and 4) and Group 3 will contain objectives mainly related to the conflict-of-laws regime issue (objective 5).

5.2. The policy options and their scope

5.2.1. Policy options for objectives in Group 1 (credit claims)

Three sets of policy options need to be considered for objectives of Group 1. The first one concerns the decision on whether or not to extend the FCD to cover credit claims, and if so, which credit claims should be included. In other words, this set contains three options:

- Option 1.1: do not extend FCD to credit claims ("do nothing");
- Option 1.2: extend FCD only to credit claims accepted for central bank credit operations;
- Option 1.3: extend FCD to all credit claims.

The second set of policy options tackles the question of which, if any, of the formal requirements currently in place that discourage the use of credit claims as collateral, should be abolished or at least relaxed. As explained in section 3.1.2., two such requirements are the registration and the notification (to the debtor) of the credit claim provided as collateral. This set, too, contains three possible options:

- Option 1.4: leave the formal requirements in place ("do nothing");
- Option 1.5: relax the formal requirements without abolishing them altogether;
- Option 1.6: abolish the formal requirements.

Finally, the third set of policy options tackles the question of which, if any, additional measures should be adopted in order to ensure a more efficient use of credit claims as collateral. In particular, two such measures are contemplated, namely the possibility for debtors to waive their banking secrecy rights and their rights of set-off. The options to be considered are the following:

- Option 1.7: do not introduce any additional measures ("do nothing");
- Option 1.8: give debtors the possibility to waive their banking secrecy rights, but not their set-off rights;
- Option 1.9: give debtors the possibility to waive their set-off rights, but not their banking secrecy rights;

- Option 1.10: give debtors the possibility to waive both their banking secrecy and their set-off rights.

There are certain interdependencies between the options contained in the above three sets. The most obvious one is the one between Option 1.1 and the options in the second and third set: if the former is chosen as the preferred option, than Options 1.4 and 1.7 follow automatically. There is also one less obvious interdependency: the choice between Options 1.2 and 1.3 will depend, at least partly, on the choice of option in the third set. The reason for this is provided in the analysis of section 6.1.4. below.

5.2.2. *Policy options for objectives in Group 2 (settlement systems)*

Similar to Group 1, three distinct sets of policy options need to be considered in connection to Group 2 objectives as well. The first set of options tackles the issues identified in relation to links between settlement systems. It contains three options:

- Option 2.1: do not change the current solutions ("do nothing");
- Option 2.2: define the moment of entry/revocability according to the rules of either of the two linked systems;
- Option 2.3: each system should keep its own rules regarding the definition of the moment of entry/revocability.

The second set of options addresses the issue of night-time settlement. It contains the following two options:

- Option 2.4: do not change the current solutions ("do nothing");
- Option 2.5: take into account the existence of night-time settlement and extend the protection of transfer orders to the business day and not the calendar day.

Finally, the third set of options addresses the issue of participation of relevant new institutions in settlement systems. The options considered are the following:

- Option 2.6: do not extend the protection currently applied to existing participants in settlement systems to ELMIs ("do nothing");
- Option 2.7: extend the current protection to ELMIs.

5.2.3. *Policy options for objectives in Group 3 (conflict of laws)*

In principle there are three distinct policy options that can be considered:

- Option 3.1: stay with the current PRIMA rule (the "do nothing" option);
- Option 3.2: adopt the "Hague Convention";
- Option 3.3: develop an "enhanced" PRIMA rule.

The first option is already described in some detail in section 3.3.2, so the analysis below concentrates only on the latter two options.

On 13 December 2002, the Hague Conference adopted the "Hague Convention on the law applicable to certain rights in respect of securities held with an intermediary”, better known as the Hague Securities Convention. The Convention provides a comprehensive and global conflict-of-laws rule that, to a large extent, allows parties to choose the law governing third party rights, but which is contrary to the objective location-of--account rule. The adoption of the Convention, as proposed by the Commission in 2003, would be one way to overcome the perceived weaknesses of the location-of-account rule and to improve the legal certainty concerning the applicable law in case of indirectly held securities at a global level. Unfortunately, the Convention has become subject of growing opposition among Member States, the European Parliament – the latter approved, on 14 December 2006, a resolution[73] that reiterates its support for the PRIMA-rule - and the European Central Bank. The objections raised go to the very heart of the Convention. Therefore, it is difficult to consider the Convention in its present shape still as a realistic option for the Community.

Another and more realistic option seems to build upon the current PRIMA rule by extending it to all uses of securities and to examine how this rule could be refined to ensure that it is interpreted in the same way in all Member States in order to increase certainty and predictability. As to the latter, one could either think of using tax, regulatory or accounting requirements to determine the location of a securities account or the office maintaining a securities account, or (as DG MARKT recently wrote in a Reflection paper, published in July 2007) of making it obligatory for all securities accounts to refer to a country code, which would then be the determining factor for the country where the account is located and thus the law that would apply.

All the options for developing an enhanced PRIMA rule are currently still on the table and are being discussed with all relevant players. So far discussions have failed to narrow the divergence of opinions held by the various players involved. We therefore consider that the situation is not yet mature for proposing any changes to the current PRIMA rule, i.e. we consider the "do nothing" option to be the preferred option at this time.

In light of the above, the analysis of impacts provided in section 6 will not include an analysis of options pertinent to Group 3, nor will there be any further analysis of the preferred policy instrument(s) for this group.

* * *

As a large number of options is being considered and as, for simplicity's sake, not all possible combinations will be examined in the impact analysis in section 6, it may be useful to provide at least some indication as to which of these options can and which cannot be combined. Table 3 in the Annex I does just that.

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73 The text of the resolution can be found at http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//NONSGML+MOTION+B6-2006-0632+0+DOC+PDF+V0//EN.

5.3. The policy instruments

5.3.1. The available set of policy instruments

An additional step that needs to be taken before the definition of the policy options is the choice of the preferred policy instrument(s). In general, the Commission's "toolbox" contains the following policy instruments:

- Regulation.
- Directive,
- Recommendation,
- Communication,

In addition to using the above instruments, the Commission has, in recent years, started encouraging the private sector to pursue self-regulation in certain cases. Finally, the Commission has also the possibility of deciding not to pursue any kind of action at the Community level (this is the "do nothing" option).

5.3.2. The preferred policy instrument(s)

Following the logic of section 5.1, it is useful to define the set of relevant policy options for each group of objectives. Before doing that, however, some of the possibilities listed above can be discarded a priori. This is the case for the self-regulation option: the problems explained in section 3 arise in areas that are already covered by some type of legislation and therefore cannot be adequately addressed in a non-legislative manner. In fact, possible solutions to those problems could entail the disapplication of certain national rules on the validity of collateral provision and on insolvency. Action by market participants in the form of self-regulation could therefore be considered absurd in this case. No contractual arrangement could disallow the application of national insolvency laws or laws concerning the evidencing rules and the validity of collateral.

The Communication option can also be discarded a priori, for essentially the same reason mentioned above: the problems explained in section 3 arise in areas that are already covered by some type of legislation and therefore can only be adequately addressed by legislation, not a Communication.

Only three policy instruments remain: a Regulation, a Directive and a Recommendation. The question is which of them would be the most appropriate instrument(s) to attain the objectives defined in section 4. While one could answer to this question separately for each of the two remaining groups of objectives, the commonality that these two groups share, i.e. the areas to which they belong (i.e. financial collateral arrangements and settlement systems) are covered by an EU Directive (the FCD and SFD, respectively), allow for a joint definition of the preferred policy instrument(s).

An advantage of choosing a Recommendation is certainly the high flexibility that this instrument gives to Member States (the latter may decide whether or not to do something, and in case of the former also what exactly to do). In other words, a

Recommendation by the Commission would simply provide the national policy makers with a policy preference with no effect on the situation that needs to be addressed. Member State's legislators would then be left to address the issues individually. They would need to amend or supplement their national legislation implementing the relevant Community legislation so as to provide the proposed solutions.

Unfortunately, in the context of the problems and objectives that were defined, this flexibility is actually a severe drawback. Indeed, as

i. the identified problems concern areas that are of critical importance for the smooth functioning of financial markets and therefore the economy as a whole,

ii. the cross-border effects of diverging national rules constitute a severe drawback for the efforts to create an integrated EU financial market, and

iii. solving these problems requires a high level of harmonisation of rules (and thus legal certainty),

a legally non-binding instrument, such as a Recommendation, turns out to be inadequate. It may lead to a situation in which no action is taken by Member States or action could be undertaken only by a number of them; these may then choose not to address all but some (and potentially different) issues. Neither outcome would be acceptable.

This means that the basic policy choice - should action be considered necessary at Community level - for introducing these changes is through an harmonising legal instrument at the EU level. For this there are two options, namely to use a Directive or a Regulation.

A Regulation, could, in theory, give the highest level of harmonisation. However, in view of the fact that (i) a Directive and a Regulation have different effects on the national legal orders, and (ii) the current proposals concern the amendment of rules already contained in two Directives, the use of a Regulation would cause unnecessary confusion on the exact effects of its rules and would make the incorporation of the proposed amendments within the existing national implementing legislation difficult to envisage. A Directive is the preferred option in that respect. In our opinion, it provides the right balance between harmonisation and flexibility in implementation and it allows the seamless incorporation of the proposed changes into the national legal regime. It is therefore considered as the preferred policy instrument to achieve the desired objectives. As there is already EU-level legislation in the areas of collateral arrangements and settlement-system protection, the Directive in question would aim at modifying that legislation.

Based on the above - and taking into account the close relationship between the FCD and the SFD - the options analysed in section 6 (apart from, of course, the "do nothing" options) will represent possible items to be contained by a single amending Directive.

Table 2: Comparison between the relevant policy instruments[74]

Policy instrument / Specific objective	Facilitate use of credit claims as collateral		Ensure stability of settlement systems		Enhance legal certainty	
	Effectiveness	*Efficiency*	*Effectiveness*	*Efficiency*	*Effectiveness*	*Efficiency*
Regulation	?/+	?/+	?/+	?/+	?/+	?/+
Directive	+/++	++	+/++	++	+/++	++
Recommendation	≈/+	≈/+	≈/+	≈/+	≈/+	≈/+
Communication	?/≈	?/≈	?/≈	?/≈	?/≈	?/≈

Notes: ++ = strongly positive; + = positive; ≈/+ = slightly positive; ≈ = neutral/marginal; ≈/- slightly negative; - = negative; -- = strongly negative; ? = uncertain.

6. ANALYSIS OF IMPACTS AND CHOICE OF PREFERRED OPTION(S)

6.1. Group 1 options (credit claims)

6.1.1. First set of options (Options 1.1 to 1.3) (inclusion of credit claims)

Choosing Option 1.1 means that the development of the use of credit claims as collateral would be left to Member States and relevant institutions (e.g. the Eurosystem)[75]. This would not mean that the benefits of using credit claims as collateral would not materialise. Indeed, as explained in section 3.1.1, credit claims can already be used in a number of Member States, which means that some of the benefits have already materialised. Furthermore, with the gradual enlargement of the euro area and the resolution of the initial problems related to the use of credit claims as collateral (e.g. unfamiliarity with the technique, adaptation of IT systems and development of appropriate credit-rating tools), should lead to an increase in the use of credit claims and the benefits thereof.

Nevertheless, due to the lack of a harmonised, EU-wide legal framework for the treatment of credit claims as collateral and due to the presence of a number of formal requirements a potentially large part of the benefits would remain unrealised. Indeed, the lack of an EU-wide legal framework would hold back the use of cross-border credit claims, while the formal requirements would hamper the use of credit claims in the domestic markets. These would be the (opportunity) costs of choosing this option. And additional cost stemming from the lack of harmonisation could also be related to the issue of a level playing field for the credit institutions, i.e. credit institutions in Member States where credit claims would not be accepted as collateral could face higher funding costs than their counterparts in the Member States where credit claims would be accepted.

The main difference between Options 1.2 and 1.3 is the scope of the protection that would be granted to credit claims: under Option 1.3, all credit claims would benefit from the same type of protection that is currently granted to cash and financial instruments used as collateral. In contrast, Option 1.2 would extend this protection

[74] The baseline for this comparison is represented by the "do nothing" option.

[75] As explained in section 5.3.1, choosing Option 1.1 automatically leads to the choice of Options 1.4 and 1.7. This combination of options basically represents the “do nothing” option (from the policy instrument point of view).

only to a subset of credit claims, namely those that fulfil the eligibility criteria for use as collateral in central bank credit operations.

Before proceeding with the analysis of the impacts, three things need to be pointed out. First, neither of the two options, if chosen, would force a party to accept credit claims as collateral. However, if credit claims were offered as collateral, they would enjoy the same protection as cash and financial instruments currently do. Knowing that credit claims enjoyed this protection could actually encourage their use as collateral. In short, these two options can be seen as enabling options. Second, Option 1.2 does not imply that credit claims could only be used for collateralising transactions with a central bank. What it stipulates is simply the eligibility criteria for credit claims, irrespective of whether these are used with a central bank or another credit institution. Finally, the decision to restrict the scope of application of the protection to only credit claims eligible for central bank operations (i.e. Option 1.2) was based on three considerations:

i. there was a need to keep a certain amount of flexibility in terms of the eligibility criteria, in order to avoid amendments to the legislation every time a change occurred in the market;

ii. it was considered best to leave the decision on which credit claims to accept to those institutions that actually accept them as collateral;

iii. the currently applied criteria (see section 3.1.1.5) are in line with the Commission's view on consumer protection; more specifically, they exclude the use of credit claims where the debtor is an individual.

Both options would deliver the same type of benefits. They would harmonise the treatment of credit claims across the EU, providing the necessary legal certainty to boost the use of cross-border credit claims as collateral. Their benefits would not be limited to the cross-border dimension. Indeed, extending existing protection to credit claims would also boost their use in the domestic setting. As credit claims are a low opportunity cost type of collateral (i.e. they have hardly any alternative use), they represent a cheap type of collateral. In principle, this could mean that the cost of funding for credit institutions would decrease. Assuming a competitive credit market, this lowered funding cost would then be transferred to the clients of credit institutions, with positive effects on their investment and consumption, and ultimately the economy as a whole. A potential indirect benefit could be the creation of a cross-border secondary market for credit claims that can be used as collateral.

The size of the benefits would also depend on which option would be chosen from both the second and the third set of options. In principle, the relationship between the size of the benefits and the choice of option should be positive in that the more formal requirements are relaxed/abolished and the more other measures for facilitating the use of credit claims are adopted, the higher the attractiveness of using credit claims and, therefore, the higher the benefits[76]. A back-of-the-envelope calculation indicates that the potential benefits for the euro area countries could

[76] The same conclusion cannot be drawn when it comes to costs. More specifically, one cannot automatically conclude that the more formal requirements are abolished the more costs fall. More on this will be presented in section 6.1.4.

amount to between €3.5 billion and €263 billion. These benefits would be in the form of collateral savings/additional liquidity available to financial institutions (see Annex II for the calculation of these estimates). This estimate takes into account only the first-round effects and does not include any additional benefits that could come from financial institutions using this liquidity to fuel their businesses.

On the cost side, both options would entail the same types of costs. These would predominantly include direct costs, such as the costs for the national legislators of adapting national legislation and the costs of developing the appropriate IT solutions (in case these are not already in place). Some indirect cost may, however, also arise. For example, when a credit institution offers a credit claim as collateral, it looses its ownership of the latter. This means that, in case the credit institution goes bankrupt, the credit claim in question would not be available to repay the institution's creditors. Furthermore, in case the credit claim is used as collateral and the debtor behind the claim misses a payment, he/she either looses the possibility of renegotiating the loan or can renegotiate at less favourable conditions than he/she could do if the loan had remained with the original lender.

The potential impact of these indirect costs may actually have different implications under the two options. Indeed, in case of Option 1.3 it may actually be more severe, as this option would include also credit claims where the debtor is an individual. This is due to the fact that an individual has usually less bargaining power than a company and might therefore find herself at a greater disadvantage should she need to renegotiate the bank loan (or may not be able to take full advantage of the possibility not to waive her rights of off-set and banking secrecy).

Taking this into account, the net benefits of Option 1.2 turn out to be bigger than those of Option 1.3. As they are also significantly bigger than in case of Option 1.1, Option 1.2 is the preferred option.

Table 3: Impacts of options in set 1[77]

Option / Affected parties	**Credit institutions**	**Collateral takers**	**Debtors**		**Member States**
			Consumers	**Others**	
Option 1.1 - do not extend FCD to credit claims	n.a.	n.a.	n.a.	n.a.	n.a.
Option 1.2 - extend FCD only to credit claims accepted for central bank credit operations	+: ↑ benefits as more collateral available to secure both domestic and cross-border transactions (in latter case due to harmonised legal framework) (I) +: easier mobilisation of dormant capital on balance sheets (D) -: ↑ cost of implementing systems for handling credit claims in case they are not already in place (D)	++: ↑ legal certainty as credit claims provided as collateral would enjoy the same protection as cash and securities (D) ?/+: potentially ↑ benefits as the higher amounts of collateral available, the clients of the collateral taker may conduct more business with the latter (I) -: ↑ cost of implementing systems for handling credit claims in case they are not already in place	≈: credit claims where the debtor is an individual would continue to be ineligible	-: in case of default on his loan, a debtor would not be able to renegotiate its terms or would have to accept more unfavourable terms than if the claim remained with the original bank (I)	-: ↑ costs of modifying legislation (D) +: ↑ liquidity in financial markets (I)

77 In tables 3-8 the first option listed represents the "do nothing" option. The other options in each table are then compared against this baseline. The various sets of options are analysed independently from each other.

		(D)			
Option 1.3 - extend FCD to all credit claims	+/++: ↑ benefits as more collateral available to secure both domestic and cross-border transactions (in latter case due to harmonised legal framework) (I) +: easier mobilisation of dormant capital on balance sheets (D) -: ↑ cost of implementing systems for handling credit claims in case they are not already in place (D)	++: ↑ legal certainty as credit claims provided as collateral would enjoy the same protection as cash and securities (D) ?/+: potentially ↑ benefits as the higher amounts of collateral available, the clients of the collateral taker may conduct more business with the latter (I) -: ↑ cost of implementing systems for handling credit claims in case they are not already in place (D)	-/--: in case of default on his loan, a consumer would not be able to renegotiate its terms or would have to accept more unfavourable terms than if the claim remained with the original bank (I)	-: in case of default on his loan, a debtor would not be able to renegotiate its terms or would have to accept more unfavourable terms than if the claim remained with the original bank (I)	- : ↑ costs of modifying legislation (D) +: ↑ liquidity in financial markets (I)

Notes: ++ = strongly positive; + = positive; -- = strongly negative; ≈ = neutral/marginal;? = uncertain; n.a. = not applicable; D = direct impact; I = indirect impact; ↑ = increase/rise; ↓ = decrease/fall.

6.1.2. *Second set of options (Options 1.4 to 1.6) (formal requirements)*

As already indicated in the previous section, choosing Option 1.4 would entail a lower attractiveness of using credit claims as collateral. This would, in turn, mean that a significant part of the benefits that would come from the use of credit claims as collateral would be foregone. On the other hand, choosing Option 1.4 would maintain any benefits that the formal requirements currently in place may be delivering. A pertinent question to ask would be which of the two groups of benefits is actually bigger. In a sense, the answer to it has been implicitly provided by those Member States that have lifted the formal requirements in question (see section 3.1.2.2).

The reverse would be true in case either Option 1.5 or 1.6 were selected. The latter two options, however, differ in one important aspect. Option 1.6 would completely abolish the formal requirements, eliminating the costs these cause for credit claims mobilisation, but at the same time, eliminate the current benefits that these requirements may generate (more precisely, it would turn these benefits into opportunity costs). Option 1.5 would, on the other hand, not abolish these requirements, but rather relax them (i.e. eliminate the risk of invalidation of a transaction on the basis of unfulfilled formal requirements). While this would mean that it would not reap all the possible benefits, as Option 1.6 would, it would also not lead to the full opportunity costs, as some of the existing benefits could be preserved. One cost that both options share is the one that would need to be incurred be the Member States in order to adapt their current legislation to the solutions that these two options propose.

Based on the above analysis, Option 1.5 entails the biggest net benefits and is thus the preferred option in this set.

Table 4: Impacts of options in set 2

Option / Affected parties	Credit institutions	Collateral takers	Debtors		Member States
			Consumers	Others	
Option 1.4 - leave the formal requirements in place	n.a.	n.a.	n.a.	n.a.	n.a.
Option 1.5 - relax the formal requirements without abolishing them altogether	+: ↓ costs for using credit claims as collateral (D)	?/-: potential loss of some of the benefits that the formal requirements bring, in case they have not been already relaxed/abolished (D/I)	≈: the formal requirements do not apply to credit claims where the debtor is an individual	?/-: ↓ benefits that formal requirements entailed for the debtor (e.g. possibility to block mobilisation of credit claim), in case they have not been already relaxed/abolished (D/I)	-: ↑ costs of modifying legislation (D) ?/-: potential loss of some of the benefits that the formal requirements bring, in case they have not been already relaxed/abolished (D/I)
Option 1.6 - abolish the formal requirements	+: ↓ costs for using credit claims as collateral (D)	?/--: loss of all of the benefits that the formal requirements may bring, in case they have not been already relaxed/abolished (D/I)	≈: the formal requirements do not apply to credit claims where the debtor is an individual	?/--: loss of all benefits that formal requirements entailed for the debtor (e.g. possibility to block mobilisation of credit claim), in case they have not been already relaxed/abolished (D/I)	-: ↑ costs of modifying legislation (D) ?/--: potential loss of some of the benefits that the formal requirements bring, in case they have not been already relaxed/abolished (D/I)

Notes: ++ = strongly positive; + = positive; -- = strongly negative; ≈ = neutral/marginal;? = uncertain; n.a. = not applicable; D = direct impact; I = indirect impact; ↑ = increase/rise; ↓ = decrease/fall.

6.1.3. *Third set of options (Options 1.7 to 1.10) (waivers)*

The analysis of the impacts of choosing Option 1.4 can be easily applied to Option 1.7 as well.

For what concerns Options 1.8 to 1.10, they simply provide the debtor the possibility to waive some rights he possesses. Taking this into account, Option 1.10 would be the preferable one, as it would bring about the biggest (net) benefits (as the costs of any of the three options are roughly the same, while the benefits depend on the number of waivers that would be allowed). Indeed, it can be argued that a debtor would waive his rights only in case this would, at the very least, not leave him worse off than in the case he decided not to waive them.

One thing needs to be kept in mind, however. The above provisions should not affect in any way the rights of individual consumers as reflected in the proposed Consumer Credit Directive[78]. In light of the choice of Option 1.2, this is currently more of a political declaration of attention to the consumer than anything else. Still, it is important, because it covers the possibility of a future change in eligibility criteria that would include also credit claims where the debtor is an individual.

[78] Text of the proposal available at http://ec.europa.eu/consumers/rights/new_proposal_en.htm.

Table 5: Impacts of options in set 3

Option / Affected parties	Credit institutions	Collateral takers	Debtors		Member States
			Consumers	Others	
Option 1.7 - do not introduce any additional measures	n.a.	n.a.	n.a.	n.a.	n.a.
Option 1.8 - give debtors the possibility to waive their banking secrecy rights, but not their set-off rights	+: ↓ costs for using credit claims as collateral (D)	+: ↑ transparency of terms of credit claim provided as collateral (D)	≈/-: possibility that consumers would have no real option of waiving their right of banking secrecy but would actually be compelled to do it (I) ?: improved loan terms in case right is waived (I)	≈/-: possibility that debtors would have no real option of waiving their right of banking secrecy but would actually be compelled to do it (I) ?/+: improved loan terms in case right is waived (I)	-: ↑ costs of modifying legislation (D)
Option 1.9 - give debtors the possibility to waive their set-off rights, but not their banking secrecy rights	+: ↓ costs for using credit claims as collateral (D)	≈	?/--: possibility that consumers would have no real option of waiving their right of set-off but would actually be compelled to do it (I) ?: improved loan terms in case right is waived	?/--: possibility that debtors would have no real option of waiving their right of set-off but would actually be compelled to do it (I) ?/+: improved loan terms in case right is waived	-: ↑ costs of modifying legislation (D)
Option 1.10 - give debtors the possibility to waive both their banking secrecy and their set-off rights	+: ↓ costs for using credit claims as collateral (D)	+: ↑ transparency of terms of credit claim provided as collateral (D)	?/--: possibility that consumers would have no real option of waiving their rights but would actually be compelled to do it (I) ?: improved loan terms in case rights are waived	?/--: possibility that debtors would have no real option of waiving their rights but would actually be compelled to do it (I) ?/+: improved loan terms in case rights are waived	-: ↑ costs of modifying legislation (D)

Notes: ++ = strongly positive; + = positive; -- = strongly negative; ≈ = neutral/marginal;? = uncertain; n.a. = not applicable; D = direct impact; I = indirect impact; ↑ = increase/rise; ↓ = decrease/fall.

6.2. Group 2 options (settlement systems)

6.2.1. First set of options (Options 2.1 to 2.3) (links)

Choosing Option 2.1 would only entail the benefit of not incurring the cost of changing existing legislation. On the other hand, the main downside of choosing this option would be that neither the uncertainty highlighted in section 3.2.2.1 nor the potential risk associated with it (i.e. the risk of incurring costs in case the scenarios described in section 3.2.2.1 would actually materialise). As settlement systems are vital for the proper functioning of financial markets, a contagion spreading through interlinked settlement systems could, in a worst-case scenario, grind the markets to a halt, leading to millions, if not billions of euros in costs. Also, the legal uncertainty may potentially discourage the establishment of new links between settlement systems and the more intensive use of existing links. In case of cross-border links, this may have negative implications in terms of competition between settlement systems with all the negative consequences that this would bring (e.g. higher prices for the services these systems offer than would be the case if there were competition). This means that choosing this option also entails some opportunity costs.

The same analysis applies to the choice of Option 2.2, i.e. choosing this option would remove neither the uncertainty described in section 3.2.2.1 nor the potential risk associated with it (the only exception to this conclusion would be the case in which the two linked systems have the same rule and actually function as one[79]). On the other hand, Option 2.3 would resolve those issues and thus bring about the desired benefits. Both Option 2.2 and 2.3 would, of course, entail costs in terms of changing the existing legislation.

Based on the above, Option 2.3 is the preferred option in this set.

Table 6: Impacts of options in set 1

Option / Affected parties	Member States	Settlement systems	System participants
Option 2.1 - do not change the current solutions	n.a.	n.a.	n.a.
Option 2.2 - define the moment of entry/revocability according to the rules of either of the two linked systems	≈: would not resolve the outstanding issues -: ↑ costs of modifying legislation (D)	≈: would not resolve the outstanding issues	≈: would not resolve the outstanding issues
Option 2.3 - each system should keep its own rules regarding the definition of the moment of entry/revocability	+: ↓ systemic risk (D) -: ↑ costs of modifying legislation (D)	+: ↓ risk of contagion between linked settlement (D)	+: ↓ risk of contagion between linked settlement (D)

Notes: ++ = strongly positive; + = positive; -- = strongly negative; ≈ = neutral/marginal;? = uncertain; n.a. = not applicable; D = direct impact; I = indirect impact; ↑ = increase/rise; ↓ = decrease/fall.

6.2.2. *Second set of options (Options 2.4 and 2.5) (night-time settlement)*

Choosing Option 2.4 would only entail the benefit of not incurring the cost of changing existing legislation. On the other hand, the main downside of choosing this option would be the risk of incurring costs in case the situation described in section 3.2.2.2 actually materialises. Obviously, this risk is relevant only for those Member State whose settlement systems actually perform night-time settlement.

Choosing Option 2.5 would remove the legal uncertainty and the (potential) costs related to it, but would entail some costs in terms of changing existing legislation. These costs would most likely not outweigh the benefits. Thus, Option 2.5 is the preferred option.

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79 This would require that both systems receive a transfer order at the same time.

Table 7: Impacts of options in set 2

Option / Affected parties	Member States	Settlement systems	System participants
Option 2.4 - do not change the current solutions	n.a.	n.a.	n.a.
Option 2.5 - take into account the existence of night-time settlement and extend the protection of transfer orders to the business day and not the calendar day	+: ↓ systemic risk (D) -: ↑ costs of modifying legislation (D)	+: certainty regarding protection of transfer orders during night-time settlement	+: certainty regarding protection of transfer orders during night-time settlement

Notes: ++ = strongly positive; + = positive; -- = strongly negative; ≈ = neutral/marginal;? = uncertain; n.a. = not applicable; D = direct impact; I = indirect impact; ↑ = increase/rise; ↓ = decrease/fall.

6.2.3. *Third set of options (Options 2.6 and 2.7) (ELMIs)*

ELMIs are considered to be credit institutions. As such, in case they participate in a payments system, they should be subject to the same type of protection as other participants in the system (Option 2.7). Denying them this possibility (Option 2.6) would mean putting them at a disadvantage with respect to those participants that are subject to this protection and directly compete with them. Thus, Option 2.7 is the preferred option.

Table 8: Impacts of options in set 3

Option / Affected parties	Member States	Settlement systems	System participants	
			ELMIs	Other
Option 2.6 - do not extend the protection currently applied to existing participants in settlement systems to ELMIs	n.a.	n.a.	n.a.	n.a.
Option 2.7 - extend the current protection to ELMIs	-: ↑ costs of modifying legislation (D)	+: if an ELMI can participate in the settlement system, in case of the ELMI's default, the system enjoys the same kind of protection that it does in case of default of other participants	+: level playing field with other participants in the settlement system	+: in case the counterparty in a transaction is an ELMI, and the latter defaults, certainty about finality of transfer order

Notes: ++ = strongly positive; + = positive; -- = strongly negative; ≈ = neutral/marginal;? = uncertain; n.a. = not applicable; D = direct impact; I = indirect impact; ↑ = increase/rise; ↓ = decrease/fall.

6.3. Conclusions

Given the above analysis, it can be concluded, that of all the possible combinations of options that can be constructed, the best one for achieving Group 1 objectives is the one containing Options 1.2, 1.5 and 1.10, while the best one for achieving Group 2 objectives is the one combining Options 2.3, 2.5 and 2.7.

7. MONITORING AND EVALUATION

The proposal is expected to follow normal implementation procedures, i.e. transposition in Member States within 12 months. The amendments would enter into force 15 days after its publication in the Official Journal of the European Union.

Ex-post evaluation of all new legislative measures is a top priority for the Commission. Evaluations are planned about 5 years after the implementation deadline of each measure. Thus, the forthcoming legislation will be also subject to a complete evaluation in order to assess, among other things, how effective and efficient it has been in terms of achieving the objectives presented in this impact assessment and to decide whether new measures or amendments are needed.

In terms of indicators and sources that could be used during the evaluation, a distinction needs to be made between the evaluation of the amended FCD and that of the amended SFD.

In case of the amended FCD, the most obvious indicators that could be used are the total value of credit claims used as collateral and the share of credit claims in total collateral used. A sub-category of these indicators could be used to explore the differences between the use of credit claims as collateral in the domestic and the cross-border dimension. A potential source for the data needed to build these indicators would be the Eurosystem. The possibility of requesting the necessary data from credit or other institutions could also be considered.

In case of the amended SFD, finding meaningful indicators would seem to be more difficult. A potentially better approach could be a questionnaire directed at the operators of the different systems notified under the SFD on whether the changes made to the Directive reduced the risks they face in their daily business.

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9. ANNEX I

Table 1: Key issues identified by the FCD Evaluation report with follow-up

Key issues	Comments	Proposed Directive
Extension of the material scope of the Directive to credit claims		
a) New types of collateral – credit claims	Should credit claims be included under the scope of the FCD?	Yes.
b) Eligibility criteria	Which eligibility criteria should apply to credit claims?	Those applied by central banks.
c) Legal issues relating to use of credit claims as collateral	In order to ensure that the collateral taker is able to establish a legally valid and enforceable security interest in credit claims, which legal issues need to be addressed?	Issues tackled in proposed Directive.
Opt-out provisions		
a) Personal scope of the Directive	Should these provisions be maintained or be deleted?	Opt-out c) is deleted, the other two are kept.
b) Option to exclude certain shares		
c) Appropriation		
Right of use	Should this right be exercised also referring to credit claims?	No.
Recognition of close-out netting provisions	Should Close out Netting Provisions be included in the regulation of credit claims as collateral?	No action, as further reflection on the issue was deemed necessary.
Conflict of laws	Should Article 9 of the FCD, providing the law which shall govern certain matters, be modified?	No action, as further reflection on the issue was deemed necessary.

Table 2: Key issues identified by the SFD Evaluation report with follow-up

Key issues	Results of ESC Discussions	Proposed Directive
Absence of freedom in choosing more than one law governing the system, or parts of it	The issue is related to the implementation of the Directive. Article 2(a) is sufficiently clear.	No action required.
Clarity as to the possibility to establish an “arrangement” between system participants either by contract or by legislation	On the basis of the views provided during ESC meetings, article 2(a) is considered sufficiently clear.	No action required.
Inclusion of electronic money institutions (ELMIS), as defined in Directive 2000/46/EC, in credit institutions	Divergent implementation by MS on whether ELMIs were included in the scope of the SFD.	Explicit reference in Article 2(b).
Definitions of “participant” and “indirect participant”	Confusing environment for market participants.	Alignment of the definition of "indirect participant" with that of "direct participant".
Moment of entry of a transfer order into a system when several systems are inter-connected	The issue reflected the need for further analysis.	Clarification of the moment of entrance in case of interoperable systems.
Definition of “insolvency proceedings” related to the different types of national insolvency-like proceedings	No strong support for the expansion of the definition, in view of (i) sufficient broadness of current definition (ii) not further eroding the equality of creditors.	No action.
National definitions of “collateral security” related to the eligibility of bank loans as collateral	No particular view expressed by MS. Decision to wait the result of ECB's review.	Inclusion of credit claims as eligible collateral.
Absence of obligation by some Member States' Courts and administrative authorities to indicate the exact time of the day when an insolvency decision is taken	No strong support by MS on the obligation to set a "time-stamp" on insolvency proceedings which form part of the notification.	No action.

Clarity as to the moment of entry into the system for the rules of some RTGS payment systems, and in circumstances where several systems are inter-connected and for the purpose insolvency notification	The issue reflected the need for further analysis.	Clarification of the moment of entrance in case of interoperable systems.
Clarity as to a possible collision of insolvency laws, where the law of the system is different from the law of the Member State where the system is located	Discussion linked to the possible adoption of the Hague Convention.	No action.

Table 3: Possible combinations between the available policy options

Options	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	1.10	2.1	2.2	2.3	2.4	2.5	2.6	2.7	3.1	3.2	3.3
1.1																				
1.2																				
1.3																				
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2.4																				
2.5																				
2.6																				
2.7																				
3.1																				
3.2																				
3.3																				

Legend:

combination is possible

combination is not possible

Option

1.1	do not extend FCD to credit claims ("do nothing")
1.2	extend FCD only to credit claims accepted for central bank credit operations
1.3	extend FCD to all credit claims
1.4	leave the formal requirements in place ("do nothing")
1.5	relax the formal requirements without abolishing them altogether
1.6	abolish the formal requirements
1.7	do not introduce any additional measures ("do nothing")
1.8	give debtors the possibility to waive their banking secrecy rights, but not their set-off rights
1.9	give debtors the possibility to waive their set-off rights, but not their banking secrecy rights
1.10	give debtors the possibility to waive both their banking secrecy and their set-off rights
2.1	do not change the current solutions ("do nothing")
2.2	define the moment of entry/revocability according to the rules of either of the two linked systems
2.3	each system should keep its own rules regarding the definition of the moment of entry/revocability
2.4	do not change the current solutions ("do nothing")
2.5	take into account the existence of night-time settlement and extend the protection of transfer orders to the business day and not the calendar day
2.6	extend the current protection to ELMIs
2.7	extend the current protection to ELMIs
3.1	stay with the current PRIMA rule (the "do nothing" option)
3.2	adopt the "Hague Convention"
3.3	develop an "enhanced" PRIMA rule

10. ANNEX II

Estimating the benefits of facilitating the use of credit claims as collateral in the cross-border context

The estimate of the **lower bound** rests on the following assumptions:

unchanged liquidity needs with respect to current levels.

the haircut applied when credit claims are provided as collateral is lower than the one for asset-backed securities (ABSs) by 5 percentage points (a reasonable assumption, according to market participants);

given the chance (i.e. easier use of credit claims in the cross-border context), financial institutions would be willing to substitute part – half, to be precise - of the ABSs they provide as collateral with credit claims (50% is roughly the current share of cross-border collateral in the total collateral provided to the Eurosystem); and

ABSs are currently used instead of credit claims because financial institutions may not have enough of the latter in the same jurisdiction in which there is a liquidity need (but they do have enough of them in another jurisdiction).

According to ECB statistics, in the first 8 months of 2007, the average outstanding stock of ABSs provided as collateral to the Eurosystem by financial institutions amounted to €138 billion. Provided the above assumptions are true, multiplying this number with the parameters in (i) and (ii) yields the lower bound estimate. Due to assumption (i), this estimate represents savings of collateral.

The estimate of the **upper bound** rests on the following assumptions:

increasing liquidity needs;

an average haircut on credit claims of 25% (the simple average of the valuation haircuts applied to credit claims in the Eurosystem as reported by the ECB[80]);

financial institutions may not have enough credit claims in the same jurisdiction in which there is a liquidity need (but they do have enough of them in another jurisdiction), so they do not use all the credit claims they otherwise could;

should the use of credit claims as collateral in the cross-border context be facilitated, eventually all credit claims that could be used (i.e. roughly €800 billion, as currently estimated by the ECB) will be used; and

the share of cross-border credit claims in total credit claims used will be the same as is currently the case for other types of collateral used within the Eurosystem (i.e. 50%).

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80 See p. 53 of ECB's "The implementation of monetary policy in the euro area".

The amount of credit claims currently used within the Eurosystem is only €100 billion. Taking this into account leaves roughly €700 billion in unused credit claims (assumption (iii)). If half of this amount were provided as collateral (assumption (iv)), given the average haircut assumed, this would generate an additional €263 billion of liquidity in the system.

11. GLOSSARY

central counterparty	CCP; an entity that interposes itself between counterparties to financial contracts traded in one or more markets, becoming the buyer to every seller and the seller to every buyer
central securities depository	an institution for holding securities that enables securities transactions to be processed by means of book entries; physical securities may be immobilised by the depository or securities may be dematerialised (so that they exist only as electronic records)
clearing	the process of establishing settlement positions, including the calculation of net positions, and the process of checking that securities, funds (cash) or both are available
collateral	assets provided by a borrower (the collateral giver) to a lender (the collateral taker) to minimise credit risk
conflict of laws	a situation in which two or more different laws are applicable at the same time
credit claim	bank loan
credit risk	the risk of financial loss to the lender in the event of the borrower defaulting on its financial obligations
custody	the performing of the following functions: account provision, asset servicing (such as payment of dividends) and (in specific cases) deposit of securities and other securitised financial instruments on behalf of others
delivery versus payment	DVP; a mechanism that ensures that the delivery of securities to the buyer occurs if, and only if, the transfer of funds from the buyer to the seller occurs
designated system	a system that fulfils the conditions stipulated in Article 2(a) of the SFD and is designated by a Member State to be included in the scope of the SFD
European Central Bank	ECB; the central bank for Europe's single currency, the euro
Eurosystem	the ECB and the national central banks of those EU Member States that have adopted the euro
financial collateral	collateral in the form of cash and financial instruments (such as equities and bonds)
free-of-payment delivery	FOP; delivery of securities with no corresponding payment of funds

international central securities depository	ICSD; a central securities depository originally set up to manage clearing and settlement of Eurobonds that now also clears and settles most domestic and internationally traded financial instruments; only two ICSDs exist in the EU: Euroclear Bank (Belgium) and Clearstream Banking Luxembourg
post trading	clearing and settlement together with custody
PRIMA rule	"Place of the Relevant Intermediary Approach"-rule; a rule that determines that the place of the most relevant intermediary (or rather the place of the securities account) determines the law that is applicable to certain questions regarding securities
repo	repurchase agreement; an arrangement in which one party sells securities to another party with an agreement to repurchase the same securities at a higher price (the principal amount plus interest) at a predetermined future date
securitisation	the process of creating and issuing securities backed by a pool of assets
settlement	the act of crediting and debiting the transferee's and the transferor's accounts respectively, with the aim of completing a transaction in securities (or cash)
finality of settlement	settlement which is irrevocable and unconditional
system protection	(within the scope of the SFD) minimising the disruption to a system caused by insolvency proceedings against a participant in that system
systemic risk	the risk that the failure of a participant to meet its contractual obligations may in turn cause other participants to default with a chain reaction leading to broader financial difficulties
set off	a method of cancelling or offsetting reciprocal obligations and claims (or the discharge of reciprocal obligations up to the amount of the smaller obligations)
TARGET	Trans-European Automated Real-time Gross settlement Express Transfer system; a real-time gross settlement system (RTGS) for the euro, consisting of 16 national RTGS systems, the ECB payment mechanism and the Interlinking system
TARGET2	the successor of TARGET