# Jean-Claude Trichet: Some reflections on the development of credit derivatives

Keynote address by Mr Jean-Claude Trichet, President of the European Central Bank, at the 22nd Annual General Meeting of the International Swaps and Derivatives Association (ISDA), Boston, 18 April 2007.

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Ladies and Gentlemen,

It is a privilege and pleasure to be here at the 22nd ISDA Annual General Meeting in Boston in front of such a distinguished global audience.

Looking back at what is already **history**, I would like to express my gratitude to ISDA for its substantial contribution towards the smooth introduction of the euro on 1 January 1999. The conversion of the original 11 national currencies into one single currency, the euro, represented an enormous operational and legal challenge that had significant implications for the global markets, particularly for the cross-currency and interest rate derivatives markets. ISDA played an important role in contributing to the development of the legal framework which ensured the continuity of contracts, both in the European Union and in the United States.

I would also like to mention the crucial role that ISDA **currently** plays in promoting the smooth functioning of all derivatives market segments, especially by mitigating legal risks and supporting industry-driven initiatives to promote market integrity and efficiency. I will come back to this point later.

The main **theme** of my speech today is credit derivatives, in their different forms. The credit derivatives market segment has probably been one of the most innovative and fastest-growing in recent years. Most notably, during the last mid-year review, ISDA recorded a 52% rise in the notional outstanding amount of credit default swaps, which rose to $26 trillion. Moreover, according to the Securities Industry and Financial Markets Association, the issuance of collateralised debt obligations almost tripled between 2004 and 2006, amounting to $489 billion in 2006. The rapid development and the share of this market segment is a very important feature of today's global finance, and I would like to share with you some reflections on the developments of credit derivatives.

My **objective** is twofold: first, I would like to emphasise the importance of central banks' monitoring of developments in credit derivatives in terms of three interlinked perspectives:

1. the conduct of monetary policy,
2. financial stability and
3. market standards.

Second, I would like to take advantage of your AGM to make a call in favour of market-driven initiatives that may lead to greater transparency.

## 1) Credit derivatives and the conduct of monetary policy

Let me now turn to the development of credit derivatives from a monetary policy perspective. Empirical evidence and theoretical reasoning on this subject are admittedly still limited. However, there is growing consensus that credit derivatives have implications for the conduct of monetary policy. The question I will try to address is: do credit derivatives affect the **monetary policy transmission mechanism?**

Let me first say that the precise impact is difficult to estimate at this stage, given the scarcity of reliable data. It could be argued that there may be changes in the nature of the credit channel of monetary policy, which can be divided into a "bank lending" and a "borrower balance sheet" channel.

The nature of the traditional bank lending channel is probably changing progressively owing to technological innovations, which have significantly enhanced the ability of banks to grant credit. However, it is still too early to assess in what way this channel may be affected.

The so-called borrower balance sheet channel focuses, instead, on the impact which changes in the policy rate have on the premium between external and internal finance. This channel traditionally worked because monetary policy decisions typically drive changes in bank lending spreads and, more

recently have also affected corporate bond spreads.[1] Nowadays rates on credit default swaps may also play a crucial role. Indeed, some empirical evidence shows that credit derivatives' premia respond more to changes in the availability and cost of financing compared with corporate bond spreads.[2] Credit derivatives could therefore make the economy, and thus monetary policy, increasingly sensitive to credit market movements. At the same time, credit derivatives' activity increases the information on borrowers' default risk and may contribute to compressing the external finance premium.

In fact, three structural implications emanating from the use of credit derivatives might have affected the monetary policy transmission mechanism.

First, credit derivatives and structured credit markets affect **banks' decision-making processes when granting credit**.[3] Just consider in this regard the enhanced capability to manage both pricing and liquidity risks. Price discovery in the credit derivatives market reduces the risk of mispricing loans. Moreover, securitisation, which is another credit risk transfer instrument, offers the possibility of managing more effectively the liquidity risk of traditionally illiquid loans in the balance sheet.

Second, credit derivatives and structured credit markets are **transforming the way banks operate in the market**. Credit portfolio management practices have indeed profound implications for the banking business model. Banks are moving from the traditional "buy-and-hold" model to the "originate-and-distribute" model[4], whereby they distribute portfolios of credit risks and assets to other market players.

In this respect, banks are increasingly performing the role of risk managers in addition to pure credit providers. In particular, they increasingly find credit derivatives a highly attractive mechanism for reducing exposure concentrations in their loan books, while simultaneously allowing them to meet the needs of their corporate customers.

The third structural implication is that credit derivatives and structured credit markets are **transforming the financial system**, whereby efficient risk allocation is becoming just as important as capital allocation. It is a valid question to wonder if we are converging towards a new "integrated" financial system, whereby the traditional categories of bank-based or market-based financial systems may have to be revisited. Such an integrated system could be built on the competitive advantages of different market participants. On the one hand, banks would still maintain their superior capability to assess and originate idiosyncratic credit risk and risky assets, provided of course that informational advantages and the appropriate incentives to screen borrowers remain in place. On the other hand, subsequent aggregation and structuring of credit risks would increasingly allow these risks to be transferred to market participants with different investment horizons, asset/liability structures and risk appetites who may be less vulnerable than banks in terms of managing liquidity, interest rate and systemic credit risks.

Overall, these three structural implications of credit derivatives may have brought about increased opportunities and productivity in the banking intermediation business, which in turn implies a substantial reduction in costs. Whether this partially explains the fast growth of bank loans in the euro area, which exceeds what can be explained on the basis of traditional determinants, is a conjecture which to me seems reasonable, albeit one that has still to be substantiated. Indeed, some evidence from the United States, based on individual loan data, supports the idea that banks are increasing the supply of credit as they obtain additional credit protection through credit derivatives.[5]

A consequence of the possible impact of credit derivatives on the monetary policy transmission mechanism is that central banks have to adapt their **market monitoring and analytical tools**[6]. June 2004 marked a significant milestone in the world of credit risk, with the launch of the two single European and US credit default swap indices, iTraxx and CDX. Credit risk has now become a separate asset class, and price discovery for this risk is increasingly taking place in the derivatives market segment, as it has been the case for interest rate and inflation risk.

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1 de Bondt (2004).

2 Zhu (2006).

3 See also ECB (2004), ECB (2007) and CGFS (2003).

4 ECB, Financial Stability Review, Box 12, December 2006. See also Welling (2007).

5 Hirtle (2007).

6 See also Kohn (2007).

## 2) Credit derivatives and financial stability

Let me now consider credit derivatives from a financial stability perspective. There is growing consensus[7] that the flexibility provided by derivatives, whereby risks can be traded separately, has the potential to facilitate risk-sharing, to enhance the efficiency of risk management, and to promote market completeness.

Credit derivatives, in particular, may offer investors a tool enabling them to exploit their comparative advantage in terms of assuming different types of risk as well as the corresponding remuneration for these risks. As already stated, banks are using credit risk transfer instruments, including securitisation, to distribute credit risk exposures acquired in their lending business to non-banks.

All innovations, however, encompass advantages as well as risks.. The core question is under what conditions do credit derivatives enhance the resilience of the financial system.

I believe that at least three conditions need to be fulfilled under both normal and stressed market conditions: first, risks must be accurately measured and priced; second, risks must be properly managed; third, an appropriate heterogeneity of both investors' behaviour and risk appetite must be preserved in all market circumstances in order for trading and sharing of risk to preserve liquidity even under stressed market conditions – so-called **systemic liquidity**.[8] Taking an extreme scenario, if all investors were to attempt to take the same position at the same time, then the homogeneity of their behaviour would cause liquidity to evaporate.

Assuming these three conditions are fulfilled, the possibility of trading risks separately will result in their better allocation, making the financial system more resilient.

**However**, we are at present not sure that the three conditions are indeed always met. In particular, as the instruments for sharing credit risk have not yet really been stress-tested, it is extremely difficult to ascertain the resilience of the market accurately. Aggressive investors display a more volatile risk-taking attitude, and their balance sheets are not necessarily resilient enough to withstand major shocks or increases in volatility. In response to unanticipated events, their investment strategies may react in a way that can suddenly lead to dangerous herding behaviour and/or counterparty risk problems for banks. Such situations are also a matter of concern from a systemic liquidity viewpoint, and may take two extreme forms: market liquidity could temporarily dry up or individual funding liquidity problems may affect a significant market player.[9] Such liquidity problems are typically low-probability events, but the potential loss to the financial system if they were to materialise is great. In today's financial markets, the fear is that a large proportion of market participants may have become excessively complacent; a situation which may well have been exacerbated by high levels of liquidity, the stability of which is difficult to predict.

What then can be done to enjoy the advantages of credit derivatives, while simultaneously minimising the systemic risks they could generate?

First, we need to understand **what** the main problem is. Here, it should be acknowledged that the **opacity** of the credit derivatives market, and especially of structured synthetic instruments, is a potential source of concern. The complex interaction between cash instruments and credit derivatives has made it increasingly difficult to monitor where different, possibly sizeable, positions are taken and where risks are concentrated. It is similarly difficult to monitor whether and when simultaneous attempts by market participants to unwind their positions could have an impact on market prices and systemic liquidity.[10] It is therefore becoming increasingly important for risk managers, in both the private and the public sectors to understand which risks are being accumulated by what financial entities.

Second, since there is no simple solution to the problem of opacity, **what** is the **right direction** to take? The challenge is to work towards an adequate **transparency framework**. More and improved data on net credit risk exposures and on the concentration of positions – which tend to build up easily in highly leveraged and opaque markets – could help to mitigate sizeable shortcomings in both

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[7] See, for example, IMF GFSR (2005), Geithner FED of NY (2006).

[8] See Laganá et al. ECB (2006) and ECB Financial Stability Review, Box 9, December 2006.

[9] See Institute of International Finance (2007) and Joint Forum (2006) for further details and definitions.

[10] ECB Financial Stability Review, June 2006.

counterparty and systemic liquidity risk management. In fact, such data could help market participants and competent authorities to value, price and manage more effectively the increasing risks posed when investors behave in a homogenous way. However, it is important to note that there is as yet no broad consensus on how such a framework would be best implemented in order to provide timely and relevant information.

Third, **who** should take action in this direction? It should be acknowledged that the reduction of **systemic risk** is not an objective for central banks exclusively. Here, I would like to praise the joint initiatives of market experts from a number of leading institutions around the world in response to calls from the central bank community: the reports by the Counterparty Risk Management Policy Group[11] and the recent report released by the Institute of International Finance Special Committee on Liquidity Risk. Both documents call for "greater transparency and an incremental collaborative mechanism between the public and private sector in contingency planning". They also draw attention to the fact that standard methods for valuing contracts with defaulting counterparties under the close-out netting provisions of master agreements for derivatives transactions could be difficult to implement during periods of market stress. As noted by the Basel Committee on Payment and Settlement Systems, market associations such as ISDA are well placed to develop common understandings regarding the use of these methodologies, taking into account existing market practices and laws.

In addition, there is also scope for more private and public sector cooperation on stress-testing and gathering data that are relevant for regulatory purposes concerning the proper evaluation of systemic risk. For instance, the work on stress-testing by regulators, central banks and international organisations (such as the IMF's Financial Sector Assessment Programme activities), has revealed the difficulties for banks to introduce into their internal models a) scenarios which affect systemic liquidity, or b) assumptions on the behaviour/failure of large market participants under stress.

Fourth, **how** can we move forward? On the one hand, policy-makers are increasingly acknowledging the risk of a certain trade-off between liquidity and transparency in the credit derivatives market when the transparency framework is inappropriately designed. This can materialise under normal conditions but also under stressed conditions. To avoid the emergence of this trade-off requires a careful understanding of the market microstructure and its functioning, in order to build a transparency framework which can be adapted to the global, dynamic and complex nature of the credit risk transfer market. On the other hand, expectations with regard to market-driven initiatives are growing, which is a point that I will consider again later. In any case, it is crucial to bear in mind that the problem is not credit derivatives instruments per se, but how they are used, and especially the size, distribution and concentration of risks they allow. Increased transparency on these three issues could be useful for risk managers in both the private and public sectors, and for the market in general.

### 3) Credit derivatives and common market standards

Let me now move to the third and last point, namely to try to understand the main developments in credit derivatives with regard to market practices.

Given that the credit derivatives market has a global, innovative, complex and predominantly wholesale nature, it may be argued that global market standards are particularly well suited to meet related regulatory challenges.

ISDA is widely recognised as playing a crucial role in promoting **market standards** and mitigating **legal risk**. In this regard, there can be no doubt that the development of ISDA's library of standard-form contracts for credit derivatives has played a substantial role in promoting the development of this market. It is important that market participants clearly understand the precise rights and obligations which they assume when entering into credit derivatives transactions, as standardised contracts do not always work out in the way that contracting parties anticipate. Also, in some instances, case law has demonstrated that the courts can take divergent views regarding the meaning of ISDA's definitions of credit derivatives. These matters have been swiftly addressed by ISDA.

Turning to the overarching legal framework within which these standard-form contracts operate, the legal enforceability of close-out netting and collateral arrangements plays a central role in the smooth functioning of all over-the-counter derivatives markets, reducing counterparty risk. The need for a high

[11] Counterparty Risk Management Policy Group II (2005).

degree of legal certainty regarding the validity and enforceability of such arrangements has long been reflected in the regulatory capital requirements under the Basel Capital Accords. Legislative recognition of close-out netting and collateral arrangements plays a positive role in supporting the evolution of derivatives markets. I note that the European Commission, echoing the views of the European Financial Market Lawyers Group and ISDA, has recently stated that it intends to explore the possibility of further improving the general EU framework for netting.

Concerning other relevant ongoing initiatives, I would like to recall the current debate on **international accounting standards**. The ECB is contributing to the debate[12] and is aware that accounting standards can have a significant impact on the financial system, in particular via their potential influence on the behaviour of economic agents. The ECB's opinion is that the introduction of the International Financial Reporting Standards (IFRS), if implemented consistently and reliably, should lead to a substantial increase in comparability and transparency. This should enhance the level playing-field between banking institutions and strengthen market discipline. In this way, the IFRS can also provide various stakeholders with some early warning signals concerning exposures or risks. This holds particularly true for investment banking activities and for the use of risk transfer instruments.

Finally, I would like to return to my second objective today, and raise some suggestions on **possible future market-driven initiatives**, especially regarding transparency. These questions directly follow from what I said earlier about the risks of opaque markets.

The credit derivatives market is of a global nature, and the ECB welcomes joint initiatives driven by market participants. Is there scope in these initiatives for enhanced transparency? What are the obstacles to making available, in a form that also considers the impact on systemic liquidity, individual **volumes** of single name credit default swaps as well as regularly surveying **net credit risk exposures and concentration of positions?** The ISDA initiative in conducting a survey on concentration risk in early 2004 might, for example, may be worth revisiting in this regard.

Moreover, there have recently been some market-driven initiatives which resulted in a consolidation of post-trade information, such as the DTCC trade information warehouse. In view of these initiatives, is there not a business case for investigating how relevant information can allow the private sector to monitor, value and manage trade concentration risks more effectively?

I strongly believe in responsible private sector initiative. In the global, dynamic, and complex credit derivatives market, industry initiatives are of the essence. Therefore the ECB seeks to encourage joint initiatives to promote transparency, especially to:

1. reduce pricing risks for illiquid products,
2. enhance risk management capabilities, and
3. support market discipline regarding counterparty risks, especially non-regulated entities.

Thank you very much for your attention.

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