José Manuel González-Páramo: Some reflections on the future of the market for credit derivatives

Keynote address by Mr José Manuel González-Páramo, Member of the Executive Board of the European Central Bank, at the 30th International Bürgenstock Meeting, organised by the Swiss Futures and Options Association (SFOA), Interlaken, 9 September 2009.

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Ladies and Gentlemen,

It is a privilege and pleasure to be here at the 30th International SFOA Bürgenstock Meeting in front of such a distinguished professional audience. The annual Bürgenstock Meetings have indeed become a unique gathering of representatives of a number of relevant market participants – exchanges, clearing organizations, banks, brokerage entities, servicing institutions and industry associations – as well as regulatory agencies from all over the world.

Today, I would like to share with you my reflections on what we have learned about credit derivatives since this business took off, on some of the weaknesses of these markets, particularly those that have become evident in the past few years, and on the measures that should contribute to strengthening these markets.

I will first recall the tremendous growth of the use of CDS and some milestones in their development, and reflect on their economic rationale. In particular, I will recall the potentially important contributions that – under the appropriate framework – over-the counter (OTC) derivatives and credit default swaps (CDS) can make in terms of achieving a more efficient financial system. Then, I will look at what we may have learned concretely during the crisis, recalling also that a number – if not most – of the financial vulnerabilities associated with these instruments, had been evident already before the summer of 2007. Then I shall move to a financial stability perspective. This financial stability assessment will suggest that, going forward, both private initiatives and public sector action are needed in order to improve the use of credit derivatives. I shall analyse both in turn, and then conclude.

To preview my intervention today, I would tend to conclude with a positive assessment of the future for these products, subject to the condition that they are appropriately organised and regulated, and traded through an adequate infrastructure. It is worthwhile to note that there is a broad consensus on this assessment, which is in line with for example the "Observations on Management of Recent Credit Default Swap Credit Events" which were submitted by the so-called Senior Supervisors Group to the Financial Stability Forum on 9 March 2009.

1) Economic and financial background

It is often assumed that financial innovation is beneficial to society because of its presumed contribution to nurturing more efficient financial intermediation. Following this line of argumentation, credit derivatives in general and particularly CDS have tended to be considered as a mechanism for improving economic well-being because they allow to trade credit risk, thereby facilitating its more efficient re-allocation.

For central banks, the development of CDS market is of interest for at least the following three reasons:

- first, central banks as key contributors to macroprudential supervision are conscious that CDS, as any OTC derivatives, have to be reflected adequately in the regulatory framework;
- second and also in its supervisory role, central banks have been attentive to the implications of the enormous size of the created exposures;

- third, financial innovation affects the transmission mechanism of monetary policy, and is hence relevant for the central banks' core task of conducting monetary policy.

Let me recall briefly some well-known facts about the development of these instruments.

The credit derivatives market segment was probably the most innovative and fastest growing derivative market since the start of this decade. CDS were first traded in the late 1990 and rapid growth started in the early years of the present decade. According to the half-yearly BIS OTC derivative statistics, the notional outstanding amount of credit default swaps increased from approximately USD 10 to 40 trillion, i.e. by a factor of 4, in the two years between June 2005 and June 2007. After reaching a record notional outstanding amount of more than USD 55 trillion in December 2007, notional values of credit default swaps contracted throughout 2008 as a result of the financial crisis, falling to USD 42 trillion by December 2008. It needs to be highlighted that the decline also reflects efforts, encouraged by regulators, to net out positions.

It is worth mentioning that gross market value of the outstanding CDS market increased in 2007 and 2008, owing to the re-pricing of credit risk in this period, reaching USD 5.7 trillion by December 2008, according to BIS data.

In addition to stunning growth rates, a key milestone in the world of credit risk was the launch in June 2004 of the two single European and US credit default swap indices, iTraxx and CDX. This allowed credit risk to become a separate asset class, and price discovery for this risk increasingly took place in the derivatives market segment. These two indices have provided valuable information throughout the crisis, reflecting the fact that, overall this market has continued to function.

However, credit derivatives have three interrelated structural implications which may have gradually affected the efficiency of the financial markets since their outset.

- *First*, credit derivatives and, more generally, structured credit markets have affected banks' perceptions of risk and propensities to lend when granting credit. However, it is not enough to consider in this regard the enhanced potential to clearly separate credit and liquidity risks and thus to enhance specialisation. As we have clearly witnessed over the last couple of years, by apparently transferring the credit risk associated with the issuance of credit, some banks may have eroded issuing criteria and thus contributed to an overvaluation of assets.

- *Second*, credit derivatives and structured credit markets have transformed the way banks operated. Innovations in credit portfolio management practices have had profound implications for the banking business model. Many banks have moved from the "buy-and-hold" model to the "originate-and-distribute" model, whereby they distribute credit risks they originated to other market participants. In this respect, banks have increasingly performed the role of active portfolio credit risk manager in addition to credit provider. In particular, they have increasingly found structured credit products an attractive mechanism for reducing exposure concentrations in their loan books, while also allowing them to meet the needs of their corporate customers. These evident advantages of the new way of operating, together with the possibilities offered for capital regulatory arbitrage, seem to have overshadowed the disadvantages, such as the excessive focus on returns and short-termism.

- *Third*, credit derivatives and structured credit markets have transformed the financial system at large, whereby the risk re-allocation activity may have become just as important as – and in some cases a full substitute for - the more traditional capital allocation. Whilst the aggregation and structuring of credit risks and their subsequent transfer to market participants with different investment horizons, asset/liability structures and risk appetites made evident the virtues of the model, it downplayed the now evident fact that the recipients of the risks were often vulnerable in terms of managing liquidity, interest rate and systemic credit risks.

Overall, these three structural implications of credit derivatives and structured credit markets may in a normally functioning financial system bring about increased opportunities and productivity in the banking intermediation business. Whether this partially explained the fast growth of bank credit in the euro area during the years before the crisis, possibly above the level that can be explained on the basis of its traditional determinants, is a conjecture that remains to be substantiated. What is clear is that, going forward, we cannot afford to ignore the downside risks embodied in the nature of credit derivatives and we need to take the necessary steps to appropriately weigh the advantages against such risks.

2) Financial stability perspective

From the investors' point of view, credit derivatives represent an asset class that allows investors to assume risks in exchange for a corresponding remuneration that suits their investment profile. At the same time, banks use credit risk transfer instruments, including securitisation, to distribute lending-related credit risk exposures to such investors.

However, the development of the market for credit derivatives also embodies features affecting the balance of risks of the different actors in the financial landscape. To begin with, the following features related to market structure should be taken into account:

1. *Concentration* in CDS trading is very high and has probably further increased since July 2007 with the exit of several major players. Such a high degree of concentration increases liquidity risk in the market. A recent report by the ECB[1] focusing on a sample of leading European banks active in the CDS market found that the top ten counterparts for each large surveyed bank accounted for between 62-72% of its CDS gross market value exposure.

2. The CDS market is *highly interconnected*, making it susceptible to contagion. One of the central lessons of the past two years is that – despite the appearance of netting positions falling outside the banking sector – credit risk has not been effectively transferred outside of the financial sector, with a number of contractual arrangements preventing a true separation of credit risks from the lending institutions. Furthermore, counterparty risk has taken as a result a prominent role, as indicated at least since 2005 by the Counterparty Risk Management Policy Group in the so-called "Corrigan report".

3. CDS have increasingly become an important tool in the *pricing of credit in other markets*. While this pricing mechanism has been shown to function well in normal times, during episodes of financial turbulence the transmission of information may be impaired, with spillovers for the access to credit, the cost of funding and, due to the increasing interlinkages between markets, the functioning of other market segments, notably equities.

These risks related to market structures are not the only concerns from the point of view of financial stability. The opacity of the credit derivatives market, and especially of structured synthetic instruments, has been a potential source of concern long before the start of the crisis, as underlined by the Corrigan report. The complex interaction between cash instruments and credit derivatives makes it difficult to monitor where different, possibly sizeable positions are taken and where risks are concentrated. It is similarly difficult to establish the mechanism through which simultaneous attempts by market participants to unwind their positions have a disproportionate impact on market prices and liquidity.

Some of the conditions needed to avoid the materialising of risks related with opacity under both normal and stressed market conditions are well known – namely that (1) risks must be

[1] ECB, "Credit Default Swaps and Counterparty Risk", August 2009.

accurately measured and priced, and (2) they have to be properly managed. There is though a third condition that has proven more elusive, namely that an appropriate heterogeneity of both investors' behaviour and risk appetite must be preserved in all market circumstances. This condition ensures that systemic liquidity is preserved even under stressed market conditions.

The ECB raised concerns already before the start of the financial crisis, in particular in its Financial Stability Review of June 2007, on whether these three conditions were always met. In particular, as the instruments for sharing credit risk had not been stress-tested, it was extremely difficult to ascertain the resilience of the market accurately. However, it is likely that, had stress testing been carried out at that stage, even the most adverse scenario would have not considered the simultaneous failure or near-failure of several key market participants tied, among other, by contractual arrangements related to off-balance sheet positions – such as credit derivatives.

In addition, aggressive investors display a volatile risk-taking attitude, and in response to unanticipated events, their investment strategies may react in a way that can suddenly lead to herding behaviour and/or counterparty problems for banks, and thus giving rise to concerns for systemic liquidity. Even though the resulting vanishing of market liquidity or of the funding liquidity of a significant individual market participant were typically considered as low-probability events, the potential loss to the financial system if they were to materialise is great. Already in the middle of this decade, the fear 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 – was real. Unfortunately, it took only the developments following August 2007 to realise how relevant these fears

What can then be done to enjoy the advantages of credit derivatives, while simultaneously minimising the systemic risks they can generate? I believe that this objective can only be achieved through a combination of interventions from both market participants and the authorities.

3) Market standards and initiatives

I shall therefore now try to assess the main initiatives in the area of credit derivatives with regard to market standards and practices. One feature is that these initiatives are multi-faceted, covering legal aspects, accounting, disclosure, etc. Another feature is that the credit derivatives market has in principle a global, complex and predominantly wholesale nature. It may therefore be argued that global market standards are particularly required to meet related regulatory challenges.

In the *legal* domain, the International Securities Dealers Association (ISDA) is widely recognised as playing a leading role amongst market participants 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 nevertheless 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 issues have been swiftly addressed by the 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 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 (e.g. through the EU Financial Collateral Directive and the Settlement Finality directive) has played 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 (and global) framework for netting.

In the field of *accounting*, I would like to recall the current debate on International Accounting Standards. The ECB is contributing to the debate 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 financial institutions worldwide 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 measurement and reporting of risk transfer instruments. However it has been widely recognised that there is a need to simplify the accounting for financial instruments and we actively support the current work of the International Accounting Standards Board in this area.

Another field comprises the *statistical* 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 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. The data on gross and net notional amounts published by the US Depository Trust and Clearing Corporation (DTCC) since November 2008 are a welcome step in this direction.

Moreover, private sector initiatives to address specific shortcomings which have been identified in the OTC market during the crisis have been forthcoming and are to be welcomed. In cooperation with the ISDA and the US Federal Reserve, major CDS dealers committed in 2008 to implementing best practices for portfolio reconciliation, in an effort to improve counterparty risk management. Further work is being undertaken and the ISDA is currently reviewing the valuation dispute resolution processes that may be necessary in dealing with unsecured exposures. Regarding operational risk, measures have been taken to reduce trade confirmation backlogs. The DTCC have been instrumental in establishing the necessary infrastructure in this regard, and they have been supported in this by the major dealers. Finally, regarding CDS contracts, several initiatives have recently been concluded in the US and Europe. In April of this year, the so-called Auction Supplement was introduced, along with amendments to the Big Bang Protocol. These introduced various measures, including the ISDA Determination Committee, a body charged with making market-wide, binding decisions in the case of a credit event, and the requirement of market participants to use an auction settlement methodology rather than physical settlement. In Europe, contract coupons were standardised, aligning them with the standardised North American contract, and the Small Bang Protocol was introduced to address settlement issues.

I strongly believe in responsible and comprehensive private sector initiative. In the global, dynamic, and complex credit derivatives market, industry initiatives are of the essence. The ECB, therefore, recognises the progress that has been made in this regard and seeks to encourage further joint initiatives to promote transparency, in particular:

1. The extension of disclosure on counterparty risk, including indicators of counterparty concentration exposure, both for individual institutions and for the market as a whole;

2. The bridging of major data sources, in terms of their data coverage and methodologies, to allow market participants and regulators to obtain and benefit from a broad and consistent market overview;

3. The enhancement of transparency with regard to turnover volumes in the market, would be beneficial for both non-dealer market participants and regulators.

I also trust that the ISDA Determination Committee will act in a transparent manner in exercising its decisions surrounding credit events in the best interests of all market participants.

4) Public sector measures

Notwithstanding their merits, market-led initiatives need to be complemented by public sector interventions. This is particularly clear as regards market infrastructures. The deficiencies of the clearing and settlement arrangements for OTC derivatives, arising in large part from the failure of arrangements to keep pace with the rapidly developing market, heighten concerns surrounding counterparty credit risk and strengthen the case for improving market infrastructure.

Indeed, central counterparty clearing or exchange trading has the potential to greatly improve the resilience of OTC derivatives trading. The use of central counterparties (CCPs) could significantly reduce counterparty risk by: 1) diversifying and netting risk exposures; 2) applying stringent risk-based margining procedures to ensure appropriate management; and 3) collateralising outstanding exposures on a daily or intra-day basis. CCPs bring further benefits, including increased market transparency and integrity, to say nothing of the significant operational efficiency gains that may be achieved. In recognising these benefits, both national authorities and industry bodies have embraced the establishment of CCPs for CDS markets. It is essential, however, to take this opportunity to ensure that this new infrastructure is carefully implemented, in particular to avoid level-playing field concerns and to minimise the potential for regulatory arbitrage.

In recognising the role CCPs may play in the future, the Governing Council of the ECB has confirmed the importance of having at least one CCP clearing facility for OTC derivatives in the euro area. To that end, the forthcoming ESCB-CESR recommendations for central counterparties and the FSB Promotion of OTC Derivative Market Standards both provide guidance on the application of CCPs for OTC derivatives; similar recommendations have been proposed by the US Treasury. These communications highlight the importance of reviewing the standards recommended for central counterparties. The Committee for Payments and Settlements Systems (CPSS) and the International Organisation of Securities Commissions (IOSCO) recently initiated such a review of their CCP recommendations. Moreover, efforts to apply them in a coordinated manner were deemed to be necessary. Market participants also have a role to play in developing this infrastructure and reducing risks in the OTC market. They should be ambitious in their aims for adopting the CCP approach; for those trades that remain outside the CCP, they should seek to refine risk management measures and ensure that they are registered with regulated trade repositories. By implementing CCPs and by actively supporting market participants in reducing the risks of OTC derivatives, national authorities can effectively mitigate the risks inherent in these markets, thereby fostering financial stability.

Let me also inform you about another initiative, regarding the measurement of the credit risk transfer. Following an initiative of the ECB, the Committee on the Global Financial System (CGFS) mandated in September 2008 a Working Group (chaired by the ECB) to review credit risk transfer statistics collected under the auspices of the CGFS. The main focus of attention was on enhancing the biannual CDS statistics published by the BIS. Moreover, the Working Group investigated (1) how to make best use of available data, notably those which I already mentioned from the US DTCC, which has been publishing weekly statistics since

November 2008, and (2) the convergence with other statistics (in particular the BIS triennial survey and BIS consolidated banking statistics). To this end, the Working Group weighed carefully users' needs against the estimated reporting costs and concluded on a number of short and medium-to-longer term proposals to enhance the availability of statistics on CDS that are now being implemented, with first results expected during the course of next year.[2] These enhanced CDS statistics will provide a better insight into the use of CDS across economic sectors allow the monitoring of the size and sector composition of credit risk transfer by financial intermediaries. Moreover, the new statistics will provide a better measure of cross-border credit risk transfer through a regional breakdown of counterparties.

5) Conclusion

Notwithstanding their potential benefits for the efficiency of the financial system and their rapid diffusion before the start of the turmoil, credit derivatives have not prevented the materialisation of risks they were conceptually aimed at addressing. The financial crisis revealed that certain risks that credit products were expected to transfer away from banks and spread across the economies, had never really left the confines of the banking sector and that returns that previously appeared generous had overshadowed risks being taken. In the future, more cooperation between market participants and public authorities is needed to jointly address certain shortcomings of the markets for credit derivatives. We see the seeds of such cooperation already in the work undertaken by various fora, but it is important that all the relevant public authorities continue to pursue the objective of strengthening the credit derivative markets in co-operation with market participants and regulatory bodies.

Thank you very much for your attention.

[2] See "Credit risk transfer statistics", CGFS Papers No 35, forthcoming.