Vítor Constâncio: Shadow banking – the ECB perspective

Speech by Mr Vítor Constâncio, Vice-President of the European Central Bank, at the European Commission Conference "Towards better regulation of the shadow banking system", Brussels, 27 April 2012.

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Dear Commissioner Barnier,

Ladies and Gentlemen.

I am pleased to be here today at this conference to address the "better regulation of the shadow banking system". The term shadow banking is widely used to cover activities related to credit intermediation, liquidity and maturity transformation taking place outside the regulated banking system. This term should not have a pejorative meaning as shadow banking activities perform basic functions of the financial system. It has however the merit of clearly indicating the nature of the problem. Indeed, it is evident that before the crisis part of the shadow banking system has significantly expanded by moving from light into shadow, by shifting regulated banking activities into institutions, transactions or markets which are not within the scope of regulation.

In this context, today I will first address the general problems created by the unregulated shadow banking as well as the main guidelines for the necessary regulatory reform that is progressing internationally under the aegis of the FSB. In the second part of my remarks I will focus on repo markets, given their importance for the functioning of money markets and consequently for central banks. To address concrete practical issues, I will make some proposals on how to create a database, which I believe is indispensable to provide us with basic information about the functioning of the European repo market, at least on a similar basis to the one existing in the US. I will also briefly discuss some policy proposals concerning repo markets that have been raised in the international debate.

I. The relevance of shadow banking for European financial stability

The activities of shadow banking before the crises were widely mentioned as triggers or factors contributing to the financial crisis. These activities can be largely traced back to the prevalence of the originate-to-distribute banking model, which gave the possibility to transfer part of the balance sheet and the related regulatory requirements from the regulated to the unregulated part of the financial sector.

Shadow banking includes entities involved in securitisation and other activities extending the intermediation process, such as special vehicles and other financial intermediaries. Differently from the U.S., in continental Europe lending activity *per se* is seldom moved outside the regulated financial system. Also, securitisation activities in Europe and in the euro area never attained the level observed in the U.S., notwithstanding the large drop in US issuance after the financial crisis.

On the funding side, a main component of shadow banking is the secured lending markets, particularly the repo market. In the U.S., the money market funds are usually included in the shadow banking sector and were an important source of funding for other shadow financial institutions, like securitisation vehicles, via the purchases of their short-term debt. They are much less important in the euro area. However, in this respect, the relevance of their intermediation activity varies across countries and they are more closely tied to banks, therefore providing a powerful link between the shadow and the regulated banking sector.

As policy makers, we are interested in the possible dangers for financial stability arising from shadow banking activities. In particular, we are concerned about the implications of these activities for global liquidity. If shadow banks are involved in a large share of the activities of the financial sector, it is more likely that in periods of stress liquidity dries up very quickly in certain markets leading to sudden stops in funding. Also, shadow banking extends the intermediation chain and increases the associated contagion risks.

There are various forms of interplay between the regulated banking system and the shadow banking system resulting in a substantial amplification of systemic risk. One of the elements for the US market, has been the "run on repos" of shadow banking entities that were funded using asset-backed-securities as collateral. When the value of these assets declined dramatically, these entities, which could not access central bank liquidity, got quickly into trouble.[1] "Bank runs" involving shadow banking entities have systemic risk implications since they can quickly spill over to the regulated financial sector. This happens via contagion propagating through market dynamics – liquidity squeeze, fire sales – or via the interconnectedness with the regulated banking sector. Shadow banking activities exacerbate the build-up of leverage and asset price bubbles and therefore amplify the procyclicality of the financial system.

Based on these characterisation and the available data, recent estimates published recently by the ECB[2] put the value of the assets of shadow banking in the euro area to about one half of the assets of the banking system. In the U.S., in view of the lower weight of banks in the overall financial system, the size of the shadow banking, although not much higher than in Europe in absolute terms, is practically equal to the total assets of the banking sector. In the euro area, there is a certain degree of heterogeneity and most importantly, there is a high degree of interconnectedness between the European banking sector and the shadow banking. Some segments of the shadow banking provide funding to the regulated banks and the liabilities of financial vehicles set up outside the balance sheet of banks may actually be guaranteed in some form by the originator banks.

II. The regulatory debate on shadow banking

Following the mandate received by the G20, the FSB has made remarkable efforts to prepare policy recommendations addressing shadow banking. It has been clear from the outset the importance of pooling expertise and resources from several authorities, as a comprehensive assessment of all the financial sectors was needed to clearly understand the problem. This has been possible thanks to the steering of the FSB. To give an indication of the complexity of the matters, the FSB put in place five different workstreams, also relying on the support of international standards setters. Two of these workstreams address specific regulatory issues, including the regulatory treatment for money market funds and securitisation. The other workstreams assess broader issues, such as the banks' interactions with shadow banking entities, the need for new regulation on shadow banking entities, and systemic risks stemming from practices in securities financing and repo markets.

This last topic is of close interest for central banks, and I will devote some specific consideration to it. Before that, I would like to make some more general observations.

First, given that one of the main risks stemming from shadow banking relates to regulatory arbitrage, it is important, and indeed crucial in Europe, to ensure **consistency of policy initiatives across countries**. In this context, I note that in the US the Dodd-Frank Act prohibits banks from proprietary trading (the so-called Volcker rule) and restricts investments in hedge funds and private equity by commercial banks and their affiliates. The imposition of such restrictions is not being considered by the FSB, which is looking instead at a possible

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1 Gorton and Metrick (2009), Securitised Banking and the Run on Repo, NBER Working Paper No 15223.

2 See Bakk-Simon et al. (2012), Shadow Banking in the Euro Area: An Overview, ECB Occasional Paper No 133, April.

enhancement of the prudential requirements related to the interplay between banks and hedge funds. This could create the potential for an asymmetry leading to distorted regulatory incentives.

Second, also on the basis of the FSB analysis, we need to look with new eyes at the EU regulatory framework and ask ourselves whether it can properly address systemic risks stemming from shadow banking. In the past, regulation was sectoral-based, without specific consideration of the interconnections existing in reality between financial sectors. In this context, I welcome the Commission's Green Paper, which contains a very helpful preliminary analysis on whether the regulatory initiatives undertaken so far in Europe are addressing such new perspective. It also indicates outstanding policy issues on which further regulatory initiatives might be needed.

The Green Paper is also referring to the need for Europe to establish a permanent process for the collection and exchange of information by all relevant authorities to address shadow banking entities and activities. In this regard, I note that the ESRB, as the EU macro-prudential body with authority over the whole EU financial sector, is well placed to conduct a continuous monitoring of systemic risks stemming from shadow banking.

III. Policy issues concerning securities financing: the ECB's views

I would like now to focus on the repo market, which is of particular importance for central banks.

The repo market is a key source of financing for the banking sector and the shadow banking system. Most recent estimates of the size of the repo market in the US are in the range of USD 12 trillions in early 2010.[3] **There are no official data on the overall size of the repo market in the euro area**, but according to the latest December ICMA survey, the total value of outstanding repos on the book of the 64 offices of 59 financial groups in the EU in December 2011 was of EUR 6.2 trillion in gross terms. Secured lending via repos has been increasing significantly in the past recent years in detriment of unsecured forms of interbank lending in money markets. Indeed, we estimate that since 2002 the daily turnover of the interbank secured lending more than doubled whereas the unsecured part of that marked decreased slightly.

Secured financing provides benefits over unsecured lending, especially during turbulent market times. At the same time, however, the reliance on secured financing provides a powerful channel of transmission of shocks in the financial system. The decline in collateral values translates in additional collateral calls possibly compounded with higher haircuts and margins requirements. A system in which financial institutions rely substantially on secured lending tends to be more pro-cyclical than otherwise.

Government bonds accounts for two third of the EU-originated collateral used in repo transactions.[4] The powerful shock amplification system of these markets became particularly evident over the last couple of years with the loss in value of the debt of some euro area countries.

In Europe, an increasing share of repos is cleared via central counterparty clearing houses (CCPs) – with a share of 32% of outstanding amounts in December 2011 according to the ICMA survey, which is multicurrency in scope. CCPs' share seems to be even larger, about 50% in the euro repo market, according to the ECB annual money market survey. CCPs

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[3] Gorton (2010), "Questions and Answers about the Financial Crisis", paper prepared for the U.S. Financial Crisis Inquiry Commission, February and Gorton, G. (2010), "E-coli, Repo Madness, and the Financial Crisis", Business Economics, Vol. 45, No 3, pp. 164–173.

[4] See International Capital Market Association (2012), European repo market survey, No 22, September.

increasingly interpose themselves between the original counterparties in repo market transactions, although this trend may reverse if counterparty risk would recede to pre-crisis levels. The rest of the euro repo market relies largely on bilateral trading, clearing and settlement modalities (about 40%) and, increasingly, on triparty repo which represents slightly more than 10% of the market. Triparty repo is certainly a dynamic segment which after the 2008 contraction shows again a growing trend.

I would like to make some preliminary considerations on three policy issues that are currently at the centre of the international debate on repo markets.

First, the pro-cyclical nature of margin requirements used in securities financing transactions.

Recent analytical studies (largely based on empirical studies on US markets) have highlighted that margin requirements and haircuts in repo markets are pro-cyclical. To counter this effect, it has been proposed that minimum haircuts could be applied permanently as a means of limiting system leverage or used temporarily in response to overheated market conditions as a macro-prudential tool.

However, when assessing such proposals, it should be noted that the main pro-cyclical factor may not be the level of the haircuts or margins but the level of market prices for collateral which can be irrationally high in a boom and correspondingly low amidst fire sales in a crisis. Moreover, a relevant share of the EU repo market is constituted by bilateral trades which cannot be easily controlled by a regulatory agency.

Such proposals will need to be carefully assessed as regards their impact on the money market and the possible effect on monetary policy implementation.

This brings me to my second consideration: should we encourage the use of CCP in repo markets?

During the crisis, the volume of repos declined with the exception of a few market segments. The reduction in outstanding repo values was however less pronounced for CCP-cleared repos than for other repo segments. It is well known that some CCPs actually saw an increase in their business at a time when counterparty-risk adverse market participants turned to safer avenues.

The good performance of CCPs could be explained by the fact that it addresses effectively most of the vulnerabilities which affected repo markets during the 2008 crisis. When cash lenders withdrew from the market due to misperceptions of the credit and liquidity risk, CCP-cleared repos were significantly less affected. Amidst a general decline of repo market trading at the peak of the crisis, some euro area CCPs actually saw an increase of volumes. This happened because CCPs provide effective protection against counterparty risk by interposing themselves between the original repo parties.

From a financial stability perspective, properly supervised and overseen CCPs act as a firewall against the propagation of default shocks and can mitigate counterparty credit risk, enhance market transparency, facilitate collateral liquidation, and foster standardisation of repo terms and eligible collateral. There is also the advantage that policy makers can monitor the cleared repo markets since CCPs are regulated institutions.

Therefore, moving repo clearing to CCP seems to be the appropriate solution which by the way is already gaining ground in Europe, having already attained half of the market.

***Third,* some repo and securities lending market practices raise concerns from a financial stability point of view.** This is the case for practices related to cash collateral reinvestments in securities lending and to rehypothecation by prime brokers of securities given as collateral by hedge funds. I support the work on-going by the FSB on finding adequate regulatory responses, which should be aimed to constrain negative incentives and increase disclosure.

The three issues I discussed merit careful reflections. The ECB will support the developments of policy solutions at European level also giving its contribution to the Commission's consultation.

IV. How to enhance the monitoring of repo and securities financing markets

I would like now to focus on enhancing the monitoring of the repo markets. This market is largely an OTC market where rates and volumes are difficult to observe in real time with the implication that there is no comprehensive source of information in Europe. There are some important trading platforms where operations of short-term and more standard maturity take place, which can provide us some useful information. However, significant limitations or shortfalls do exist as regards existing data sets.

First, market data are not timely and hardly comparable. The ICMA survey is conducted every 6 months, the ECB Money Market Survey every year and the ECB Money Market Study biannually. Timelier sources of data are available among others from CCPs or from trading platforms e.g. Eurex Repo Euro Market, ICAP BrokerTec or MTS. As regards the ECB Money Market survey, there will be a pilot phase with a limited panel of banks to have a quarterly review. However, most data refers mostly or exclusively to the interbank market.

Second, there are significant limitations as regards data stemming from market infrastructures. Data are fragmented and not complete, and are also not easily retrievable for analytical purposes[5].

Finally, there are no statistical sources available as regards the repo and securities financing markets.

One recent initiative will be of some help, notably the global initiative coordinated by the Committee on the Global Financial System (CGFS) and by the ECB, together with other central banks of the Eurosystem, which plans to launch a qualitative quarterly survey on credit terms and conditions in euro-denominated securities financing and over-the-counter (OTC) derivatives markets. This survey is driven in particular by a need to monitor developments in securities financing, i.e. lending collateralised by securities, and OTC derivatives markets, as well as in shadow banking more generally. The survey will provide information about changes in credit terms applied by the largest banks for lending against euro-denominated security collateral and for OTC derivatives transactions with key counterparty types, as well as about main reasons behind the changes in those terms. This makes it a valuable monitoring and potentially early warning tool to support risk surveillance work and the risk identification process.

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5 First, available data is not complete. Repos that are settled in the books of custodian banks or in commercial bank money are not reflected, for instance in payment systems settling in central bank money, as TARGET. Furthermore, there is no link in TARGET data to the settlement of the securities leg of a repo transaction, therefore repo-related cash transfers cannot be separated from other payments. Analytical efforts are on-going to design algorithms that identify the repo-related payments indirectly, but this may not be enough for repo market monitoring purposes. Repo-related deliveries of securities for collateral purposes are not singled out from other instructions to deliver securities, for instance from outright trades. Furthermore, participants in payment and settlement systems are largely banks; therefore the shadow-banking dimension is not reflected in payment balances even when banks act as intermediaries for non-bank entities. Second, reflecting the European market and the post-trade landscape, *data is fragmented* across infrastructures and countries. The euro repo market relies on a variety of securities clearing and settlement systems (CCPs, CSDs and ICSDs, triparty agents, custodian banks) and data may be available only in different formats. Third, *data is not easily available*. Even in those cases where the national supervisors and overseers may have access to the repo data available at the local market infrastructure (for example at CCPs) this is not enough to build a complete picture and timely monitor developments in the market. A central view is indispensable to gain insight from the wider financial stability perspective.

V. Proposal for a database on the euro repo market

The ECB has a keen interest in obtaining detailed information on repo market activity both for monetary policy implementation and financial stability considerations.

Any financial transaction that significantly affects the functioning of money markets is relevant for the transmission mechanism of monetary policy as well as for the operational framework of monetary policy implementation. The continuous gain in importance of the repo market is consequently of great importance for the Eurosystem.

An assessment of financial intermediaries' funding environment and financing activities is also a key element of any financial stability analysis. The monitoring of underlying developments on the basis of a regular data collection would benefit the ECB's tasks in pointing to potential risks stemming from this market.

While differences in market structure ought to be taken into account, the U.S. model may provide a starting point for a European blueprint. In the U.S. primary dealers voluntarily report on a weekly basis on their trading activities, as well as on their cash and financing positions, in a wide variety of underlying securities[6] differentiating according to the counterparty type.

To improve the data availability for repo markets, it could be argued that some existing surveys can be enhanced and the frequency of the reporting increased. However, the information collected would not fill the information gap for the non-bank segment of the repo market.

So how to improve the data availability to monitor the repo market?

Ideally, a central database would serve the purpose. Trade repositories have been a solution adopted to foster transparency in other market segments, as in case of the OTC derivatives alongside the introduction of mandatory clearing. In the case of repos, however, it has to be considered that transactions are to a large extent already channelled to formal infrastructures for clearing and settlement purposes. For instance, Central Securities Depositories (CSDs) already centralise in their systems, for their respective market, information relating to repo that can be derived from the settlement instructions. It could be argued that they *de facto* perform already a function that is similar to that of a trade repository. CCPs, triparty agents and custodian banks for the bilateral segment are in a similar position with respect to repos of their participants, or customers.

A central database fed by infrastructures and custodian banks to the extent that they internalise repo settlement in their own books, would be the place for the much needed central view on repo market and its participants, both banks and non-banks. This solution would have to be investigated from a technical point of view. For instance, infrastructures would have to report data based on a common format to be defined taking into account their respective special focus. To name one, CCPs would have to report pre-netting repo data, whereas CSDs would have to retrieve and report data on the ordering party, often a customer of the CSD participant.

Therefore, I propose the creation of a ***EU Central Database on Euro Repos*** as a joint effort by public authorities and the financial industry, similarly to the model followed in the U.S. Due to its role in macro-prudential financial stability and the closeness of repo to monetary policy, and as it is the case with the Federal Reserve, **the ECB would be well placed to centralise the *data gathering*** for the euro repo market.

For a solution to be possible, however, it would be required the support of the European Commission by taking the necessary legislative initiative for the creation of a basic reporting

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[6] Underlying securities include U.S. Government, Federal Agency, Government Sponsored Enterprise, Mortgage-backed, and Corporate Securities.

framework at the EU level for market infrastructures. This would aim at ensuring that the data gathering would provide a complete and uniform picture of the euro repo market, while also safeguarding any legal and confidentiality requirements regarding the use of the data. The market would also benefit from this solution: reporting infrastructures would have to set-up procedure to retrieve and transmit the data, but they may offer an additional service to their participants given the economic value of information.

Ultimately, not only authorities, but market participants and the financial markets more widely would benefit from the general increased transparency on the euro repo market.

VI. Conclusions

This conference today by the Commission is a crucial moment in setting the stage for some key policy decisions in order to avoid financial stability risks stemming from shadow banking.

In my view, among the list of actions to be considered, the establishment of a set of timely data concerning the repo market would be of key importance for supervisors, central banks and market participants. In order to make a first step, I propose the preparation of a detailed feasibility study for the repo market database in cooperation with the European Commission.

I hope that the preliminary considerations I developed today will foster further reflections and timely actions.

Thank you for your attention.