# Erkki Liikanen: On the structural reforms of banking after the crisis

Speech by Mr Erkki Liikanen, Governor of the Bank of Finland and Chairman of the High-level Expert Group on reforming the structure of the EU banking sector, at the Centre for European Policy Studies, Brussels, 23 October 2012.

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## Changes in banking in the run-up to the crisis

### *The new landscape*

In the years preceding the global financial crisis that started in 2007, the landscape of banking had gone through major changes. Global financial institutions had grown ever bigger in size and scope and their organizational complexity had increased, adding to their opacity.

They had become strongly interconnected via increasingly long chains of claims as well as correlated risk exposures, arising from increasingly similar investment strategies. Their leverage had strongly increased and the average maturity of their own funding had shortened.

### *Driving forces*

Behind these trends were forces that intensified competition in banking; technological development and deregulation. Advances in information technology as well as in investment theory and practice meant that commercial banks faced increasing competition both on their liability side and asset side.[1]

New savings alternatives to bank deposits, such as money market mutual funds, proliferated and new opportunities for borrowing, in addition to bank loans, emerged. In fact, an entire shadow banking sector developed, comprising a chain of non-bank institutions which were able to provide similar financial intermediary services as traditional banks.

In this environment, deregulation was partly a response to this and allowed banks to cope with the increasing pressure from non-bank competitors.

In the US, the gradual unwinding and the ultimate repeal of the Glass-Steagall Act in the late 1990s made it possible to reunite investment banking and commercial banking which had been separated since the crisis of the 1930s.[2]

In Europe, the universal banking model already had a longer history of combining commercial banking and investment banking under the same roof.

However, there was a trend before the crisis, among the biggest European banking institutions, to strengthen their focus on investment banking, including trading operations, and to increase wholesale funding to the point of excess. Part of this trend was driven by the growing demand by non-financial firms for risk management services.

With more freedom to choose their business models, banks sought for economies of scale and scope and strived to take advantage of diversification benefits from multiple sources of income.

Commercial banking moved increasingly away from customer relationship-based banking where loans are granted and then held until maturity to the "originate and distribute" model where granted loans are pooled, then securitized and sold to investors.

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[1] See e.g. Hoenig and Morris (2011): "Restructuring the Banking System to Improve Safety and Soundness".

[2] See e.g. Pennacchi (2012): "Narrow banking".

This shift in the business model increased traditional banks' connections to the shadow banking sector and they became part of the long intermediation chains characteristic of shadow banking.[3]

The increasing influence of investment banking oriented management culture also spurred the focus on short-term profits in commercial banking, reinforced by managerial compensation schemes that were based on short-term performance.

Investment banks in turn transformed themselves from partnerships to public corporations. This helped them grow but also provided them with incentives to take risks that partners would not have taken with their own money.

## Contributing macroeconomic factors

The expansion of banks' balance sheets in the run-up to the crisis was fuelled by several macroeconomic factors.

First, global imbalances especially between the leading emerging economies and the United States developed as globalization continued. Accumulating surpluses in the emerging economies increased their demand for (seemingly) safe assets.[4]

Partly as a response to this growing demand, the advanced western financial markets offered financial innovations that increasingly utilized securitization of previously illiquid assets such as (subprime) mortgages. In Europe, imbalances started to develop within the euro area, with many countries experiencing overheating of their property markets.

Another important macroeconomic factor was that, in the aftermath of the slower economic growth of the early 2000, the monetary policy stance both in the US and Europe was relatively light.

Finally, the wide-spread consensus of "the great moderation" fostered expectations of declining macroeconomic risks. This was based on growing evidence that business cycle fluctuations were getting smaller and inflation rates were getting lower and steadier.

### *Lack of restraints from regulation, supervision and market discipline*

*Problems with capital requirements*

The Basel capital requirements on banks proved ineffective in restraining the strong growth in banks' leverage and balance sheet size. Most importantly, the Basel I and II rules required very little common equity. Much of the eligible capital had poor loss absorbing capacity, which helped trigger the crisis.

Secondly, what was important for the global reach of the financial crisis was that much of the asset and mortgage backed securities, originating from the US, ended up on European banks' balance sheets.[5]

This was partly spurred by differences in American and European banks' capital requirements as the EU moved ahead to implement the Basel II reform in full while the US largely stayed in Basel I and maintained a separate leverage ratio requirement. In effect, capital requirements on perceived low-risk assets, such as mortgage backed securities, were lower in Europe than in the US.

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[3] See e.g. Adrian and Shin (2010):" The Changing Nature of Financial Intermediation and the Financial Crisis of 2007–09".

[4] See e.g. Bernanke, Bertaut, Pounder DeMarco, and Kamin (2011): "International capital flows and the returns to safe assets in the United States, 2003–2007".

[5] See e.g. Shin (2012): "Global Banking Glut and Loan Risk Premium".

The third set of regulatory problems concerned the Basel capital requirements on banks' trading book positions. The Basel rules allowed banks to lower their capital requirements by securitizing loans from the banking book and taking corresponding risks onto their trading books.

For instance, banks provided short-term loan commitments, which had very low Basel capital requirements, to off-balance sheet special-purpose investment vehicles (SIVs) which in turn funded mortgage-backed securities. This is an important example of how and why banks were strongly connected with the shadow banking sector.

It has been suggested that many of the loan securitizations were motivated by such regulatory arbitrage rather than credit risk transfer which would aim at a better diversification of credit risks among banks and other financial institutions and insurance companies.[6]

The role of overly optimistic agency ratings used to market the securitized assets, and used as a basis for capital requirements, should not be dismissed either.

Fourth, many risk-weights used in the Basel framework to determine the effective capital requirements were simply too low, as was revealed by the crisis.

*Lack of market discipline and the too-big-to-fail problem*

The increasing complexity of structures and products, and the financial sector's increasing interconnectedness, along with growing size, led to reduced transparency of bank balance sheets.

This should logically have rung alarm bells among investors, especially among banks' uninsured debt holders, at some point. However, the opposite seems to have happened: the markets rewarded size by charging lower debt margins from the biggest institutions.[7]

This suggests that there was a perception among market participants that the biggest financial institutions enjoyed an implicit public guarantee. These institutions could not be allowed to fail; in other words, they had become too big to fail.

In a market environment where the price of a bank's own debt funding is insensitive to the risks the bank takes and decreases with the bank's size, the bank has a strong incentive to further increase its leverage by taking on even more debt and continue to grow in size.

Another way for banks to benefit from cheap funding is deposits which are explicitly insured and whose interest rates are consequently insensitive to banks' risk taking.

To sum up, neither banks' debt holders nor depositors had proper incentives to react to banks' increasing opacity, leverage and risk-taking.

*Lack of a systemic aspect*

There was clearly the lack of a sufficient, systemic (macro-prudential) aspect to banking supervision and regulation prior to the crisis.

The fundamental problem is that banks themselves do not have an incentive to fully internalize the social cost stemming from their own contribution to system wide risks into their business decisions.[8]

In the absence of substitutive regulatory and supervisory measures, systemic risks built up in the form of ever larger, more complex and more leveraged financial institutions.

Three main weaknesses ought to be mentioned.

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[6] See e.g. Acharya, Schnabl, and Suarez (2010): "Securitization without risk transfer".

[7] See e.g. Haldane (2010): "The $100 billion question".

[8] See e.g. Richardson (2012): "Why the Volcker Rule is a useful tool for managing systemic risk".

First, the Basel minimum capital requirements were based on stand-alone risks of a bank. For instance, the Basel rules entail no direct measure of an asset's exposure to *systemic* risk, such as home and real estate loans' exposure to the business cycle.

Second, liquidity risks resulting from short-term money market funding were not part of the Basel minimum capital requirements. This was a problem because excessive short-term money market funding increases interconnectedness and thereby systemic risk in the financial system.

Moreover, if a rapid growth of lending, for example to a booming property market, can only be financed from the short-term markets, it is often an indication of growing risks on a bank's asset side.[9]

Third, the existing supervisory structures focused on risks facing institutions rather than the financial system as a whole.

## Public reaction to the crisis and need to rebuild trust

The huge cost of the financial crisis, both in terms of direct public support to banks and lost economic output has sadly fallen to tax payers. This has caused an understandable and justified public outcry.

Trust needs to be rebuilt between banks and the general public, and the coordinative role of the regulatory reform is central in this process. But management teams and boards of banks also play a crucial role in rebuilding trust. In order to succeed in this, we must make sure that also in banking not only gains but also losses, incurred from private risk-taking fall on the risk-takers.

Our perspective has to be long enough, well beyond the current troubles. But it is also of vital importance to carefully plan the implementation of reforms in order to ensure the continuation of smooth provision of lending and other vital banking services in the current challenging environment.

## Regulatory response to the crisis

### *Summary of problems*

The problems in banking, revealed by the crisis, can be summarized as follows.

There has been excessive risk-taking, excessive leverage, excessive complexity and inadequate capital.

An important form of risk-taking has been the growing maturity mismatch between assets and liabilities as funding from the market has increasingly shortened. Excessive real estate lending increased banks' exposure to macroeconomic and hence systematic risks. All these factors have increased the likelihood of bank failures.

Secondly, there have been extensive interconnectedness and very limited possibilities to resolve failed banks, including possibilities to shift the burden to banks' creditors. Both these factors increase the impact of bank failures or, alternatively, the cost to tax payers. Interconnectedness also increases the risk of bank failure because it increases banks' opacity which can lead to the loss of investors' trust thereby making banks more prone to runs.

Thirdly, there have been competitive distortions via explicit and implicit subsidies, which reduce both internal market efficiency and the level playing field. For instance, the availability

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[9] See e.g. Shin (2010): "Macroprudential policies beyond Basel III".

of insured deposits to fund other, more risky, banking activities has skewed incentives and competition.

Banks' incentives to sound long-run risk management have also weakened.

National measures to implement regulatory reforms and the lack (until recently) of sufficient EU wide frameworks in supervision and resolution are a concern to the well functioning of the internal market in the area of banking. Common rules and institutions would also facilitate the much needed undoing of the bank-sovereign loop.

### *What has already been done?*

In response to the crisis, international and EU wide regulatory reforms have been focused on two crucial areas, capital adequacy and liquidity requirements (Basel III) and recovery and resolution (e.g. the Commission's proposal).

If effective, the new and still evolving capital adequacy requirements of Basel III can go a long way to reducing incentives to take excessive risks and the use of excessive leverage.

Most obviously, Basel III addresses the issue of inadequate capital. Basel III liquidity requirements can also reduce banks' interconnectedness by restricting the use of short-term market funding. They will also be helpful in reducing excessive leverage and building liquidity buffers.

Basel III also reduces complexity and interconnectedness by blocking opportunities for regulatory arbitrage which under Basel II was possible via complex securitisation structures.

Recovery and resolution regimes for systemically important financial institutions aim at creating a framework which did not exist at EU level prior to the crisis. If successful, such plans can greatly reduce the social costs of bank failures and reduce the need for the implicit public guarantees. This means that recovery and resolution plans can reduce the distortive risk-taking incentives created by public bail out expectations.

Moreover, a number of initiatives have been launched with the aim of reducing contagion and complexity in the financial market. In order to improve transparency, accounting standards are in the process of being reviewed. Banks are urged to improve risk management and corporate governance practices and new macro-prudential tools will be given to international and national authorities to better tackle asset price bubbles and *procyclicality* in lending.

## Proposals of the High-level Expert Group

The High-level Expert Group on reforming the structure of the EU banking sector has presented a structural proposal to be implemented at the EU level.

In the process of reaching the final outcome, the Group considered two avenues as a possible way forward.

In the first avenue, additional, non-risk-weighted capital requirements on trading activities and banks' credible recovery and resolution plans, subject to supervisory approval, were the main instruments.

Such measures would be in line with the ideas of academic researchers who have suggested that a review of capital requirements is the best way to tackle risks in trading [10]and who have emphasized the need to develop bank resolution and recovery mechanisms.[11]

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[10] See e.g. Duffie (2012): "Market making under the proposed Volcker Rule".

[11] See e.g. The Squam Lake Report (2010).

However, if the bank were not able to prove that its required recovery and resolution plan was credible, separation of certain banking activities could be imposed.

In the second avenue, separation of retail and investment banking would be imposed.

Separation would be consistent with research which emphasizes that capital requirements are not sufficient to limit excessive risk-taking incentives induced by deposit insurance if risks are difficult to measure and risk profiles can be changed rapidly.[12]

Sufficiently wide separation of investment banking activities would also avoid definitional problems which arise, for example, when the dividing line is pursued between proprietary trading and market making.[13]

Eventually, the Group converged to the following five proposals to be implemented at the EU level.

## 1. Proposal for mandatory separation

The Group proposes a mandatory separation of certain trading related activities according to the following three principles.

First, if the share of proprietary trading, market making and certain other securities-related businesses in the balance sheet exceeds a given threshold, banking groups must organize these businesses to a separate legal entity ("trading entity").

Second, the trading entity must be separately capitalized and must not be funded by insured deposits.

And third, the deposit-taking part of the banking group ("deposit bank") is not allowed under any circumstances to support the trading entity either directly or indirectly by making transfers or commitments to the extent that its capital adequacy including capital buffer requirements would be endangered or that the general limits on large exposures would be violated.

The threshold above which separation is required must be low enough so that the volume of activities below the threshold can be considered insignificant from the viewpoint of financial stability.

The other businesses that must be separated are loans, loan commitments, or unsecured credit exposures to hedge funds (including prime brokerage), SIVs and other such entities of comparable nature. Private equity investments must also be separated.

The client-driven trading positions against which the bank has hedged itself do not have to be separated. Also, securities underwriting does not have to be separated but it is important that risks in long-term positions possibly arising from underwriting are carefully monitored by supervisors.

All other banking businesses are allowed to the deposit bank unless firm-specific recovery and resolution plans require otherwise.

Only the deposit bank is allowed to provide retail payment services.

The trading entity can engage in all banking activities which are not specifically mandated to the deposit bank. For instance, the trading entity is allowed to make loans and loan commitments to its customers.

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[12] See e.g. Matutes and Vives (2000): "Imperfect competition, risk taking, and regulation in banking" and Boot and Ratnovski (2012): "Banking and trading".

[13] See e.g. Blinder (2010): "It's broke, let's fix It: rethinking financial regulation".

The rationale for separation as a regulatory measure can be summarized in the following four points.

First, separation is a way of prohibiting banks with insured deposits from engaging in activities whose risks are potentially high and difficult to measure precisely, and which are not essential to deposit banking.

Second, separation of activities is the most direct instrument for tackling banks' complexity and interconnectedness. As banks become simpler in structure, recovery and resolution will be easier.

Third, simpler structures can make it easier for the management and board to understand and manage and for outsiders to monitor and supervise banking institutions. This can enhance the effectiveness of market discipline and financial supervision.

Fourth, separating deposit banking and trading entities can also reduce the mixing of the two different management cultures.

The separation of activities is complementary to, rather than a substitute for, other areas of bank regulations.

The disadvantage of separating banking activities may be that the benefits of scale and scope and diversification of revenue streams are reduced. However, evidence on the economies of scale and scope in banking as well as the benefits from diversification seems to be mixed.

Most importantly, when separation is allowed to be carried out within the banking group, the banks' ability to efficiently provide a wide range of financial services to their customers is maintained.

## 2. Additional separation conditional on the recovery and resolution plan

A credible recovery and resolution plan implies that the bank stakeholders bear the costs of a possible bank failure and that there is no significant harm to the real economy, even in a crisis situation when many banks are in trouble at the same time. This would imply that no tax payer money is under threat of being used in a bail out.

Therefore it is essential to strive for good recovery and resolution plans. A solid plan will also enhance the bank's own risk management and potentially increase transparency of the bank to outsiders.

The European Commission's plan that banks need to draw up and maintain effective and realistic recovery and resolution plans (RRP) is of utmost importance. Banks should be able to demonstrate the ability to isolate retail banking activities from trading activities and to wind down significant trading risk positions in a crisis situation, in a manner that does not jeopardize the bank's financial health nor does significantly contribute to systemic risk.

A credible recovery and resolution plan is a challenging goal to achieve, so the criteria on passing the credibility "test" must be set high. The European Banking Authority (EBA) plays a central role as a standard setter in ensuring that the RRPs and their supervisory assessments are applied uniformly across the Member States.

The Group suggests that if a bank's recovery and resolution plan, assessed by the supervisor, is not acceptable, a more comprehensive separation of activities can be required than under the proposed mandatory separation. For example, a wider separation might have to cover all trading related assets.

## 3. Facilitating the use of bail-in instruments

The Group strongly promotes the proposal to use bail-in instruments to further increase the loss absorbing capability of banks.

In order to limit interconnectedness within the banking system, it is preferable that the bail-in instruments should not be held by investors within the banking sector.

In order to create a liquid market for the bail-in instruments, it would be essential to carefully define their contractual properties in order to reduce uncertainty and ambiguity and hence facilitate their efficient market pricing.

Therefore the Group is of the opinion that the bail-in instruments should be applied only to particular debt instruments and to make sure that investors know the eventual treatment of the respective instruments in a crisis situation.

### 4. A review of capital requirements on trading assets and real estate related instruments

The measurement of risks inherent in trading assets is prone to a significant "model risk"; the risk that the model itself, used in the risk measurement is inaccurate.

The severity of model risk stems largely from the presence of "tail risks" in trading assets. These are risks which cause catastrophic losses but which materialize with a very low probability. Moreover, tail risks are intertwined with severe liquidity shortages which materialize in systemic crises. Hence, almost by definition, tail risks are difficult to model and measure.

Separation of the riskiest trading activities from deposit banking is a key to limiting the impact of these risks.

Other measures available are robust capital requirements which do not heavily rely on models, and limits on risk concentrations and counterparty exposures. In this respect, the Group acknowledges the important work in reviewing the trading book capital requirements conducted by the Basel Committee on Banking Supervision.

The Group recommends that the Commission should carry out an evaluation of whether the resultant amendments, in terms of robust capital requirements and limits on risk concentrations and counterparty exposures, would be sufficient at the EU level.

The Group recommends that the Commission should also evaluate the sufficiency of the current capital requirements on real estate related lending which has been the major source of losses in many financial crises, including the most recent one.

### 5. Need to reinforce corporate governance reforms

Finally, the Group strongly promotes the strengthening of corporate governance and control of banks. In particular the Group considers that it is necessary to augment existing corporate governance reforms by specific measures to 1) strengthen boards and management; 2) promote the risk management function; 3) rein in compensation for bank management and staff; 4) improve risk disclosure and 5) strengthen sanctioning powers.

### Comparison with other proposals

An important objective of the mandatory separation, proposed by the Group, is simplicity and unambiguity. These facilitate implementation at the EU level.

Furthermore, banking activities which naturally belong together should be conducted within the same legal entity.

To promote these aims the proposed mandatory separation includes both proprietary trading and market making as differentiating these from one another would be challenging[14] and, if

[14] See e.g. Duffie (2012): "Market making under the proposed Volcker Rule".

placed in different legal entities within the same banking group, some natural synergies might be lost.

In this respect, the proposal makes deposit banks somewhat narrower than the definition under the Volcker Rule in the United States. However, an important difference is that the proposed mandatory separation in the EU can take place within a banking group whereas the Volcker Rule prohibits proprietary trading from the entire banking group.

Further, all corporate loans are allowed in deposit banks because differentiating among loans according to the customer size would be equally challenging at the EU level and important scale economies in corporate lending might be lost.

This suggests that, as regards corporate lending, deposit banks would be somewhat broader than under the UK's Independent Commission on Banking (ICB) proposal.

## Conclusions

### *Remaining concerns*

Many observers have noted that major systemic risks can remain in the various parts of the banking system, even if these are separated from one another.[15] This is a valid concern even though separation by definition reduces interconnectedness as a key source of systemic risk.

The possibility to further review capital requirements and limits on risk concentrations and counterparty exposures in trading activities, as discussed in the other recommendations, are the means to further containing systemic risks.

It is also important that the development of capital surcharges for systemically important institutions as well as macro-prudential tools such as caps on loan to value ratios (LTVs) is continued.

An obvious danger lies in the possibility that structural measures, together with higher capital and liquidity requirements, may drive an increasing part of banking to the shadow banking sector.

If this implies that market expectations of implicit public guarantees shift to the less regulated shadow banking sector, then the fundamental problem has not been solved. This is a matter that needs further consideration and needs to be constantly monitored. Proactive measures may need to be taken.

### *The role of banks in financing the European economy*

Banks play an important role in the society.

Banks have a pivotal role in providing finance to households and firms. It is particularly so in Europe where the banks' role in corporate finance has traditionally been large.

The banks' role in corporate finance is central especially for small and medium sized enterprises (SMEs). The continuous and smooth supply of banking services to SMEs is also essential to large corporations because SMEs are often subcontractors to them.

It is of utmost importance that regulatory reforms as a whole support and strengthen the banking sector's ability to continue to provide these socially vital financial services efficiently and in a stable manner.

The reputation of banks and the public trust that they rely on has been severely dented during the latest financial crisis. This has hurt not only banks themselves but also the economies and societies of Europe and the whole Western world.

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[15] See e.g. Goodhart (2011): "The Vickers Report: An Assessment".

Trust and public acceptance must now be restored, and the proposals which the High-level Expert Group has submitted for the consideration of the EU Commission will contribute to this end. Achieving this important aim will benefit the banking industry and our societies at large.