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# Resolution threats and bank discipline – What Europe can learn for the Single Resolution Mechanism from U.S. experience

Policy Letter No. 33

**SAFE | Sustainable Architecture for Finance in Europe**

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This policy letter builds on the authors' Voxeu.org piece "Resolution threats and bank discipline" of May 20, 2014.

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# Resolution threats and bank discipline – What Europe can learn for the Single Resolution Mechanism from U.S. experience

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October 2014

## **Abstract**

*Can a tightening of the bank resolution regime lead to more prudent bank behavior? This policy paper reviews arguments for why this could be the case and presents evidence linking changes in bank resolution regimes with bank risk-taking. The authors find that the tightening of bank resolution in the U.S. (i.e., the introduction of the Orderly Liquidation Authority) significantly decreased overall risk-taking of the most affected banks. This effect, however, does not hold for the largest and most systemically important banks – too-big-to-fail seems to be unresolved. Building on the insights from the U.S. experience, the authors derive principles for effective resolution regimes and evaluate the emerging resolution regime for Europe.*

## **Introduction**

In spring 2014, the European Parliament adopted key steps towards completing the proposed Banking Union for Europe – the EU Bank Recovery and Resolution Directive and the Single Resolution Mechanism – that strengthen bank resolution in the Eurozone. Starting in January 2016, the Single Resolution Board will be directly responsible for the resolution of large banks and cross-border banking groups, while national resolution authorities (that need to be established in many countries) will be responsible for all other entities. Hopes are high that the implementation of this tightened resolution regime will help not only to better handle a crisis situation, but also to discipline banks ex ante by increasing the resolution threat in case of failure. Commissioner Michel Barnier underlined this hope by claiming that ‘taxpayers will no longer foot the bill when banks make mistakes’ and that this improvement to bank resolution will help avoid future crises.

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## **Why should resolution regimes discipline banks?**

Economic theory indeed suggests that weak or inappropriate resolution regimes are associated with severe incentive distortions and agency problems, giving rise to excessive risk-taking and making regulators unable or unwilling to step in. For example, DeYoung et al. (2013) suggest in a recent theoretical model that regulators have incentives to prefer bailout if they lack proper resolution technologies that allow them to enforce discipline at low cost to short-term stability. When bank regulators do not have access to a special bank resolution regime and appropriate resolution funds, they might incur large liquidation costs – such as temporary disruptions in lending – if they have to resolve a failed bank. Despite the long-run benefits for bank discipline, they might therefore prefer bailouts or forbearance over straightforward resolution.

Improvements in resolution regimes that legally and financially empower the authorities to execute bank resolution faster and more efficiently, while preserving liquidity, make resolution a more likely choice. Consequently, to the extent that an improvement in bank resolution regimes is credible and enforceable, implicit bailout guarantees might cease. When depositors and creditors desist from believing that the regulator will bail out a bank due to the lack of appropriate resolution technologies, they have more incentives for monitoring and enforcing discipline. Likewise, equity holders and bank management that fear losing their investment or their positions in case of resolution both have incentives to avoid failure when the resolution threat becomes more credible.

## **The Orderly Liquidation Authority**

Against this background, it seems important to investigate whether banks affected by a tightening of resolution regimes alter their behavior towards less risk-taking. In a forthcoming publication (Ignatowski and Korte 2014), we propose a framework for testing this disciplining effect by investigating a particular change in the U.S. resolution regime, i.e. the introduction of the Orderly Liquidation Authority (OLA).

The OLA, established in July 2010, authorizes the Federal Deposit Insurance Corporation (FDIC) – under certain conditions – to seize control and liquidate any financial institution in distress through its administrative resolution regime. Before the introduction of the OLA, the

FDIC's resolution powers only comprised certain insured institutions. With the OLA, the FDIC's rights have been extended to institutions that were previously exempted from any specific bank resolution regime, namely bank holding companies, their subsidiaries, and non-bank financial companies. In addition to this legal empowerment, the OLA is also equipped with a fund that financially enables the FDIC to act as the receiver and to pursue the orderly liquidation of covered financial companies. Thus, we argue that the threat of being resolved in case of failure increased for the institutions affected by the OLA. This will induce a disciplining effect.

We exploit the differential relevance of the OLA to study the disciplining effect on bank behavior. We define bank holding companies (and banks belonging to them) with a large share of assets previously not subjected to the FDIC resolution regime as particularly affected by the regulatory change. Bank holding companies (and their banks) with mainly subsidiaries that have already been subjected to the FDIC resolution regime are defined as less or not affected.

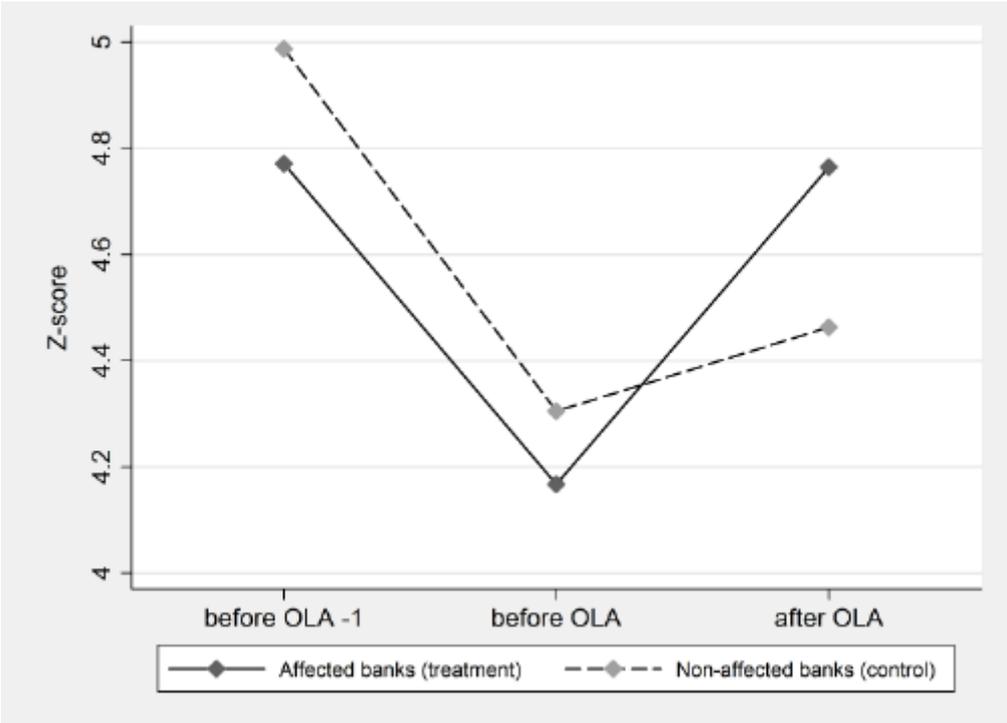
### **Banks' reaction to a tightening resolution regime**

As a measure for bank risk, we use the average z-score, which is a composite measure approximating the distance to default. Higher z-scores indicate less overall bank risk. Figure 1 provides a first indication of how affected banks' overall risk reacts to the introduction of the Orderly Liquidation Authority. Looking at the z-score for the 8-quarter periods before and after the introduction of the OLA, we find that after the introduction of the OLA, both groups decreased their risk-taking – however, the affected banks decreased risk to a much larger extent.

This figure only presents indicative evidence. More rigorous empirical testing generally confirms the disciplining effect of a change in resolution regimes. We find that banks that are more affected by the introduction of the Orderly Liquidation Authority significantly decrease their overall risk-taking after the change becomes effective relative to non-affected banks. The impact is economically considerable, as the z-scores of affected banks increase by more than 7% on average, whereas for non-affected banks they hardly change. The risk reduction for affected banks after the introduction is also perceived by market participants

as reflected in lower stock return volatility for affected bank holding companies. Looking at the micro-level of bank business, we find that affected banks shift their new loan origination towards lower risk, confirming the overall effectiveness of the resolution regime change.

**Figure 1** Bank risk-taking before and after OLA



**Is the Orderly Liquidation Authority a credible threat for banks deemed too-big-to-fail?**

For the largest and most systemically important institutions, however, the disciplining effect does not hold. This is consistent with the theoretical prediction that the disciplining effect varies with the credibility, capability, and political will of the competent authorities to indeed resolve failed institutions. Winding down larger institutions might produce material liquidity costs, even in the presence of a sizable resolution fund, which could be traded off against the benefits of ex ante discipline and therefore result in lower credibility of the resolution threat. In other words, the introduction of the OLA in the U.S. alone does not

appear to have solved the too-big-to-fail problem, and might need to be complemented with other ex ante measures to limit large and complex financial institutions' risk-taking.

### **How can resolution regimes create an effective threat?**

Our results provide an evaluation of changes in the U.S. bank resolution regime, but might also yield relevant conclusions for the general design of bank resolution law. Therefore, we propose three fundamental features of bank resolution regimes that, in our view, make resolution effective in disciplining risk-taking and preventing future financial crises.

- A bank resolution regime that takes into account the special role of financial institutions and that commands sufficient legal and financial resources is essential to increase the resolution threat to financial institutions, hence inducing discipline.
- Comprehensive coverage of financial institutions is important to avoid incentives to shift risks into de facto non-resolvable entities.
- To the extent that too-big-to-fail institutions are still unimpressed by improvements in the resolution regime, additional measures increasing their ex post resolvability or reducing their ex ante risk-taking might be required.

### **Will the proposed European resolution regime be an effective threat?**

Whether the proposed European resolution regime will induce more prudent bank behavior is difficult for us to judge from the outset, yet evaluating the EU Recovery and Resolution Directive and the Single Resolution Mechanism against the above criteria does not raise too much optimism.

First, while the new regime is explicitly established to provide a resolution framework for financial institutions, it seems to be rather insufficiently equipped with legal resources (i.e., a complex arrangement of multiple competent authorities that will need to stand the test of creating a credible threat) and most notably financial resources (i.e., a resolution fund of €55 billion to be built-up over ten years to backstop a banking sector of more than €30 trillion).

Second, having competencies for resolution distributed across several levels of government and multiple countries, one can hardly speak of a comprehensive coverage, nor is non-discretionary treatment of individual banks to be expected.

Finally, the European resolution regime contains many provisions targeted at increasing the resolvability of large and systemically relevant institutions. Whether these provisions really create an effective threat will only be visible if they allow for the first resolution of large banks in Europe.

## References

DeYoung, R., M. Kowalik, and J. Reidhill. (2013), "A Theory of Failed Bank Resolution: Technological Change and Political Economics", *Journal of Financial Stability* 9(4), pp. 612-627.

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