



## Discussion: The Winner's Curse: Evidence on the Danger of aggressive Credit Growth in Banking (T. Kick, T. Pausch, B. Ruprecht)

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*\* The views expressed are those of the discussant and do not necessarily reflect the official position of the EBA*

# 1. Objectives and scope of the study

## ■ Four areas of investigation :

- Why do banks engage in excessive credit growth? (Theoretical analysis)
- How to characterise/identify excessive credit growth (vs adequate credit growth) before a bank fails ? (Empirical analysis)
- Do banks engaging in excessive credit growth experience higher write-offs than other institutions? (Empirical analysis)
- Are they more vulnerable (i.e. more likely to default)? (Empirical analysis)

## ■ Policy objective :

- To suggest a new approach to identify, *ex ante*, institutions which are likely to :
  - incur abnormal write-offs
  - be subject to capital surcharge.

## ■ Scope :

- The analysis focuses on banking sector in Germany and on the evolution of German domestic loan portfolios during 1999-2013.

## 2. Methodology

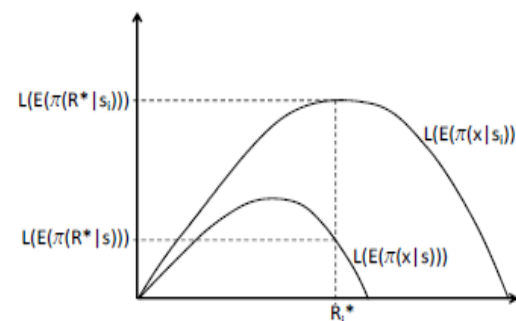
### ■ Theoretical analysis

- Demonstrate that the loan supply function  $L(E(\pi(R|s)))$  is a “backward bending” and how this function is affected by bank’s perception of risk.
- Based on literature on auction theory (Williamson 1987) and calculus.

### ■ Empirical analysis

- Measures of (excessive) credit growth

Figure 1: Loan Supply with  $s_i < s$



*L*, Loan supply  
*E(π)*, expected profit  
*R*, nominal repayment of loan by borrowers  
*s*, risk

	Explanatory variables	Description	Further explanation/objective
Standard measures	Credit growth	$\Delta \ln \text{credit} (\in [0, \infty])$	Look at the magnitude of the positive change in lending
	Dummy large credit growth	$\Delta \text{lending} > 2 \text{ SD above mean of banking sector}$	
New measures	Gap excessive credit growth	% positive deviation from the bank's long term lending trend (derived from the HP filter)	Look at the cyclical deviation from the long-term lending trend
	Rel. gap excessive credit growth	% positive deviation from the banking sector's long term lending trend (derived from the HP filter)	

- Impact of credit growth on loan write-offs
- Impact of credit growth on bank risk (bank stability)

$$LWO = f(CG, BS, C, ME, u) \text{ (OLS + Tobit models)}$$

$$ZSCORE = f(CG, BS, C, ME, u) \text{ (OLS model)}$$

$$DISTRESS = f(CG, BS, C, ME, u) \text{ (Probit model)}$$

$$DEFAULT = f(CG, BS, C, ME, u) \text{ (Probit model)}$$

**Dependent variable** : LWO, Loan Write-offs (loss rate deviation to overall loss rate (OLS) / write-offs to total credit (Tobit model))

**Main explanatory variable**: CG, Credit Growth (“Credit growth” / “Dummy large credit growth” / “Gap excessive credit growth” / “Rel. gap excessive credit growth”)

**Control variables** BS, Bank-specific control variables; C, market competition control variables; ME, macro economic control variables; *u*, error term

## 3. Results and conclusions

### ■ Main results

- Uncertainty regarding the actual risk level => overoptimistic banks behaviour (i.e. underestimation of risk) => Excessive loan growth.
- Standard measures of excessive loan growth do not capture loan loss risk and bank 's vulnerability.
- However, excessive loan growth measured as cyclical deviation of bank's long-term lending trend has:
  - a positive and statistically significant impact on loss rate,
  - a negative and statistically significant impact on bank's stability.

### ■ Conclusions

- Measures of excessive loan growth derived from the HP filter have a predictive power in identifying vulnerable banks.
- Such an approach could be used as a supervisory tool to identify institutions which may need capital surcharge under SREP.

## 4. Comments

- Very detailed and clear study which encompasses most of the supervisory concerns regarding excessive lending growth and implications for the banking sector.
- Strong empirical analysis:
  - Benefit from a very granular and adequate database
  - Adequately built econometric model (e.g. lagged values, Lerner index)
  - Display robust results
- Suggested approach regarding the identification of excessive lending growth provides added value to the literature and new insights to supervisors.

## 5. Suggested improvements and extension

- Suggested improvements in the paper
  - Clarification in the definition used for the dependant variable *LWOs* (e.g. treatment of provisioning?).
  - Further explanation/clarification of the reason why standard measures of credit growth do not capture loss risk, especially as contra to literature.
  - Interpretation of the magnitude of the impact of excessive growth loan on loss rate and bank stability.
- Suggested extension for the empirical study
  - “Risk adjusted” parameters (explanatory variables): decomposition of total lending growth by portfolio (sovereign, real estate...) to capture estimates in relation to risk level and identify more precisely portfolios that are more risky to excessively increase.



## 6. Policy implications

- Can the suggested new measures of excessive loan growth be used as a supervisory tool, at microeconomic level, to assess banks' robustness and to determine potential capital surcharge?
  - The measure requires a large set of data to capture long term lending trend => availability of the data needed by NCAs at bank level?
  - The measure is not risk sensitive i.e. affects total bank lending and not only the most risky portfolios => excessive credit growth should be primarily analysed at portfolio level?
  - The measure does not account for loss provisioning policy and may overestimate *ex ante* the negative impact of loan growth on bank's robustness => could be completed by other risk indicators (e.g. coverage, provisioning rate).



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