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A vicious circle of the benchmark reform

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Abstract

- The Benchmark Regulation (BMR) imposes a **necessity of the conversion of quote-based financial indices to transactional-based ones.**
- The reform is a challenge for administrators of indices that perform **feasibility studies of the conversion process.**
- The article analyses pros and cons of various methods of the index reform **indicating the optimal path** of such activity as far as money market is concerned.
- **A choice for a “parallel listing” path** seems to be the safest one if one takes into account legal and economic risk embedded in various transition models.

Purpose of the paper

- This article describes research problems identified during the reform of money market indices and suggests how the problems can be solved.
- A solution of the **critical function of choice** for the index administrator:
 - Is the current index regulatory compliant?
 - Is a conversion feasible (do we have enough data)?
 - Does a conversion path assure the legal and economic continuity?
- **An objective function: minimisation of a probability of failure** (index discontinuation or index frustration).

Literature review

Literature about the benchmark reform:

- Brousseau et al. 2009, Abrantes-Metz et al. 2012; Brousseau et al. 2013, Hou, Skeie 2014; Duffie, Stein 2015; Mielus, Mironczuk 2015; Ghandi et al. 2015; Mielus 2016

Regulatory issues:

- Wheatley 2012, EBA/ESMA 2013, IOSCO 2013, BIS 2013, FSB 2014, MPG 2014, IOSCO 2014, EP 2016, ESMA 2017

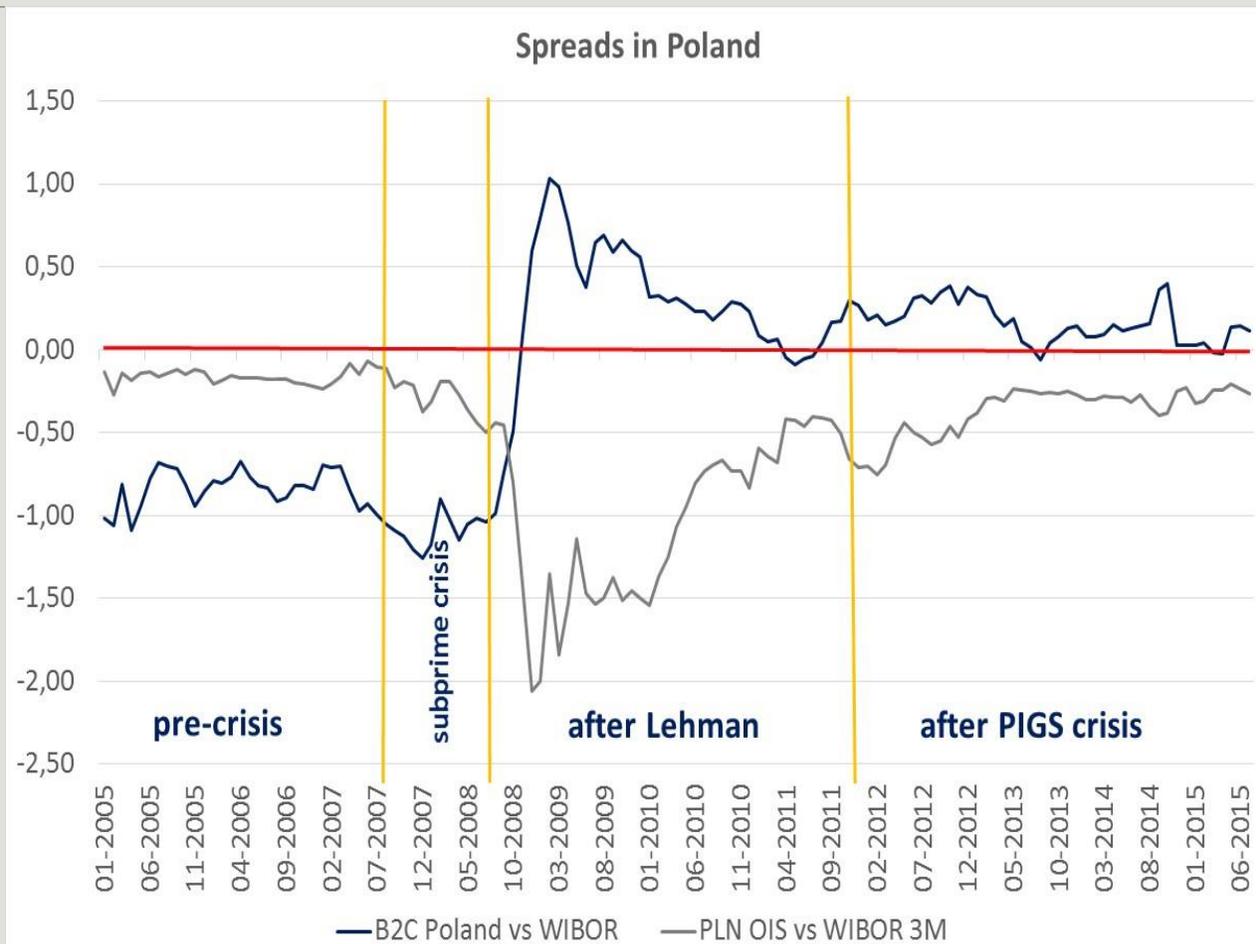
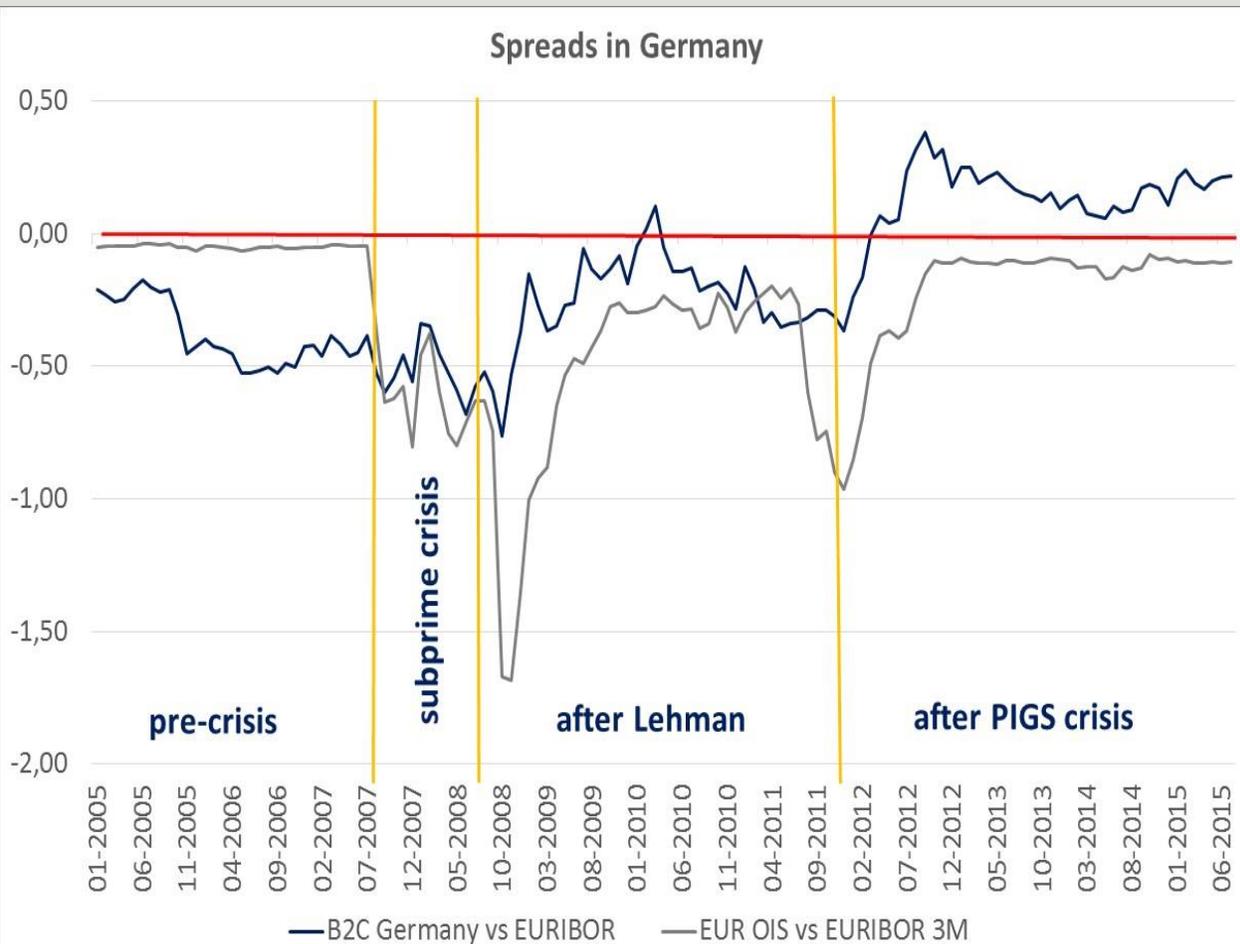
Administrators' whitepapers:

- EMMI 2013, EMMI 2015, IBA 2015, IBA 2017

Economic and legal background

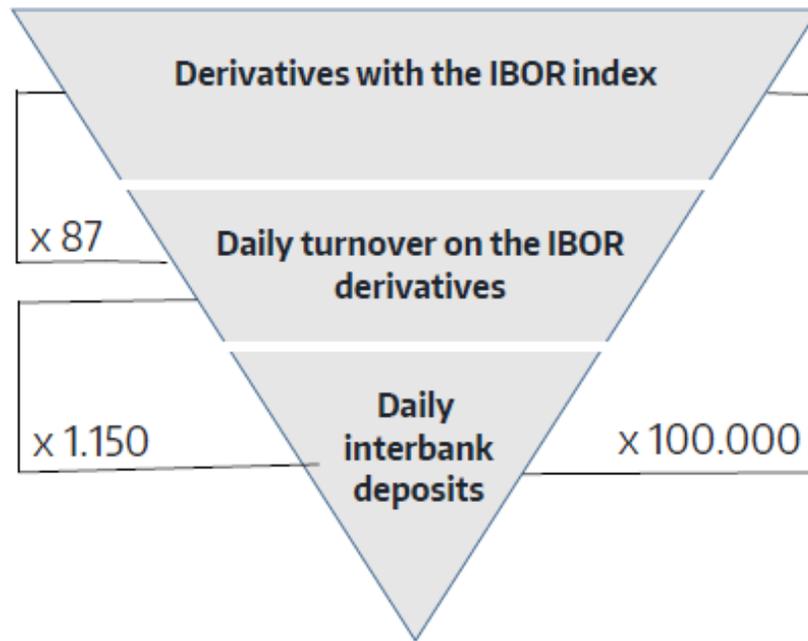
- Financial market indices **determine an amount of flows** from financial contracts (loans, bonds, derivative transactions) and **indicate an objective value** of financial instruments
- **The proven manipulation of indices** in the financial market (IBOR type and FX fixings) was an impulse for implementing the index reform
- **Benchmark Regulation (BMR)** = Regulation of the European Parliament and of the Council on indices used as benchmarks in financial instruments and financial contracts (approved June 2016, in force since January 2018)
- **Index stakeholders:** administrators, panelist (benchmark contributors), users (sellers and buyers of financial products)

Spreads - trading places

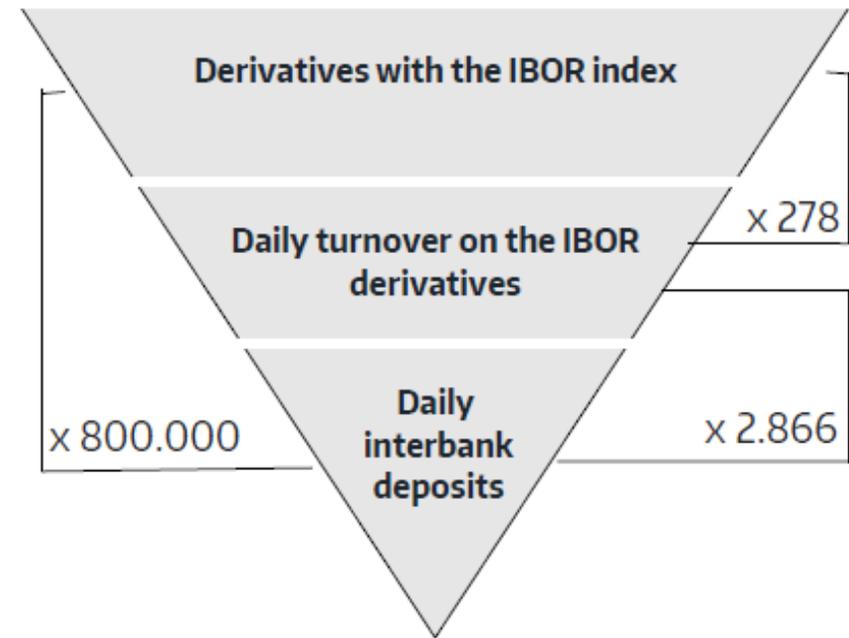


Fragile benchmarks

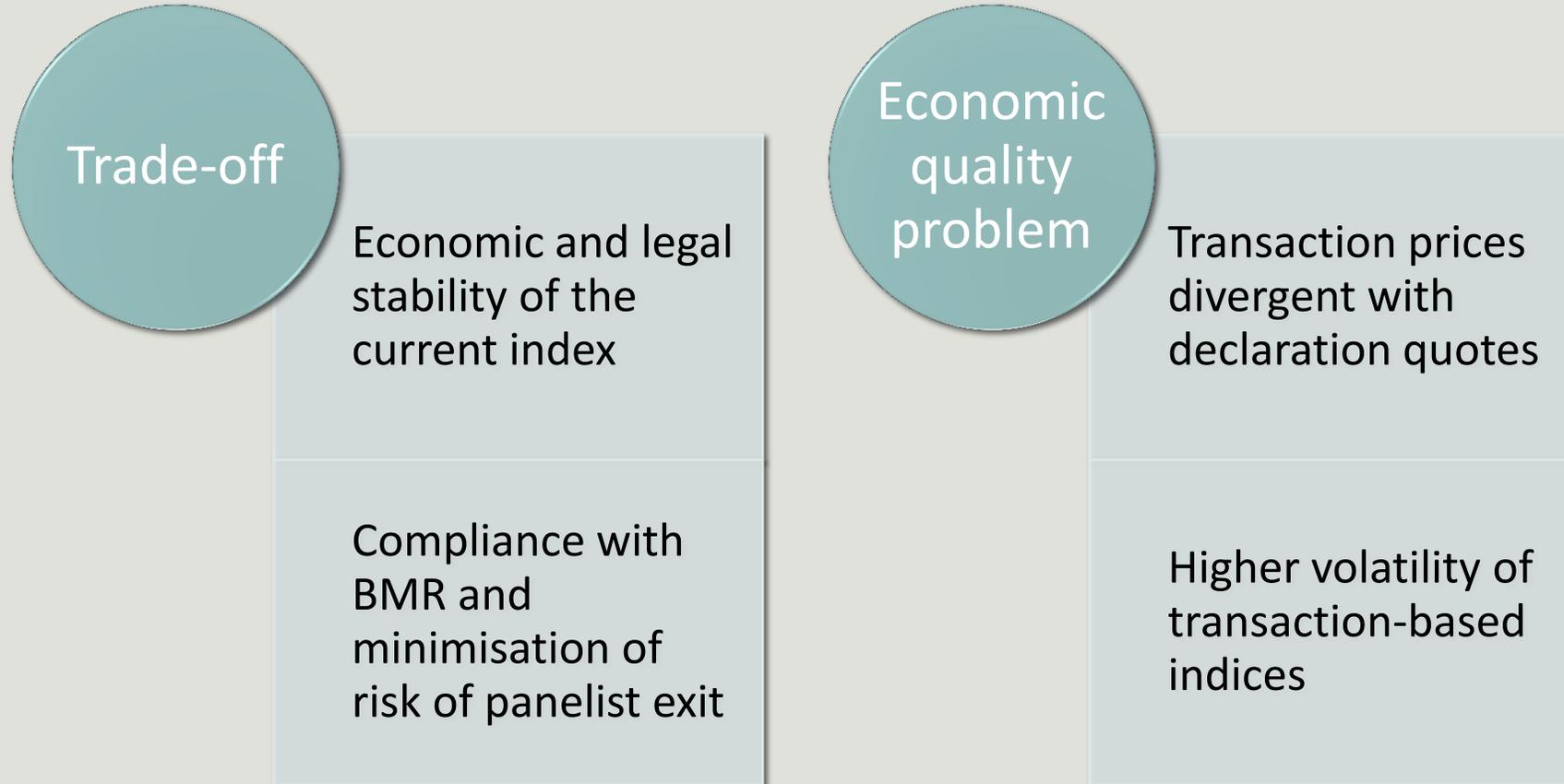
USD-LIBOR 3M



WIBOR 1M, 3M, 6M



Vicious circle



Reform models

Leave AS IT IS	SEAMLESS transition	REPLACEMENT	PARALLEL listing	Failure
<ul style="list-style-type: none"> • leaving the definition and methodology without modification • procedural changes that prevent manipulations • delaying the implementation of the reform 	<ul style="list-style-type: none"> • smoothly replacing the index methodology without changing the economic and legal character of the index • wider use of transaction data 	<ul style="list-style-type: none"> • new definition and methodology for index • change of the existing economic character of the index 	<ul style="list-style-type: none"> • creation of a parallel index based on transaction data • maintenance of the existing index for a time being 	<ul style="list-style-type: none"> • if none of positive solutions is possible, the outcome is negative • lack of regulatory sign-off, resignation of panelists, legal litigations • index frustration or discontinuation

Key questions for benchmark administrator

- Should the index change?
- Are transactions adequate?
- Can the panel be extended?
- Can we add instruments?
- Has the distribution changed?
- Are we replacing the index?
- Are contractual clauses violated?
- Do we have the regulator's consent?
- Are panelists resigning?
- Is the regulator intervening?

Probability for reform models

Reform model	Probability			
	50/50 distribution	67/33 distribution	75/25 distribution	90/10 distribution
Leave AS IT IS	18.75%	8.48%	5.08%	0.91%
SEAMLESS transition	40.63%	43.57%	40.72%	23.66%
REPLACEMENT	0.78%	1.47%	1.48%	0.59%
PARALLEL listing	1.56%	9.05%	17.80%	53.14%
Failure	38.28%	37.43%	34.92%	21.69%

Note:

- Probability given different assumptions for distribution on the „nodes of the choice”
- Probability of the final result is calculated on the assumption that a preferred variant is chosen (at the probability of at least 50%) and a probability distribution is always equal for all nodes.

Conclusions

- This article focuses on the detailed analysis of possible scenarios aimed at finalising the reform of indices. **Incorrect implementation of the reform may threaten the macroeconomic stability** of countries and markets which the reformed indices refer to.
- Unfortunately, many available paths lead us astray and do not let us find a solution consistent with the EU regulations and being safe for the financial market at the same time. **As a positive solution cannot be found, the title “vicious circle” materialises.**
- The article defines a conversion path with predefined preferred choice on each node. **A „parallel listing” solution minimises a risk of failure** (index frustration or discontinuation).
- In order to minimise the probability of negative scenarios, a **relevant consensus in the working group of stakeholders must be reached.**