



# Real Estate Contribution Margin System with hierarchical structure effects

A concept for real estate residential  
companies and cooperatives

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# CV

- Business Economist, Technical University of Applied Sciences, Wildau, 2004
- Since 2008 – Managing Director BBT Group, Berlin  
Leading Real Estate Residential Consulting Company, 65 Employees
- Since 2005 Managing Director Sachsen Treuhand GmbH, Dresden
- 1998 – 2005 Controller Municipal Real Estate Company, Leipzig
- 1994 – 1998 – Asset Manager, Family Office, Frankfurt/Main
- Valuation Surveyor (EIPOS)
- Visiting Lecturer for Real Estate Controlling and Real Estate Portfolio Management at Berlin School of Economics and Law, Nürtingen-Geislingen University and Academy of the Housing and Real Estate Industry (BBA) Berlin
- Author of several professional articles

## Introduction

- Real estate residential companies and cooperatives are special investors in Germany. More than 4.5 m flats are under management of these both investor groups.
- Most of the properties are belonging to the portfolios for decades.
- In order to manage the flats there is a demand for instruments and methods with functionality for decision making and offering an incentive for the managers in the long utilisation period of real estate residential properties.

## Introduction

- Current and future rents depend on market situations (offers vs. demand)
- In order to make an comparison between market rents and the own cost situation of the real estate companies, there is a demand for a closed theory of reverse rent calculation in the utilisation phase.
- An adequate cost accounting system for real estate residential purposes doesn't exist. The IT-Systems don't support real estate cost accounting in a sufficient matter.
- There's a requirement of a theory of a closed management result scheme and a reverse rent calculation for real estate residential companies.

## Introduction

- Cash flow based calculations include volatile cash-outs and cash-outs with an investment horizon. They are not adequately to give signs for an minimum economic rent level.
- There is an increase of fixed capital not only by big investments, but also by overhauling a property. The restoration costs aren't allowed to be capitalized (no entry on the asset side, showing out in the Profit & Loss statement), but the aim is the amortisation of the money with the ongoing letting process. But which rent level is the right one?
- Rent calculation in real estate residential companies has to consider different reference figures like room quantity or flat areas. There is a discussion in the literature, which reference figure fits best.

## Research Gap

- A few authors tried to transfer industrial approach of contribution margin systems to real estate industry:  
Homann 1999, Gondring 2004, Ebert et al. 2009, Wenzel 2010.
- Nobody used the contribution margin system for reverse rent calculation.
- All authors didn't separate the service charges. (This position is apportionable in Germany. That is the reason for it's exclusion from contribution margin systems.)
- A derivation to a contribution margin flow account is missing.

## Research Gap

- Can cash flow accounts be the basis for reverse rent calculation in real estate residential industry?
- If **not completely** possible, other methods have to be founded, which suits better for the purposes of reverse rent calculations. (“Lücke theorem”, Transfer from cost accounting methods from industry to real estate industry, contribution margin systems)
- For a correct use in accounts, aspects of different reference figures and their hierachical classification have to be discussed. Is it allowed to allocate the overhead expenses? What´s about target covering positions?
- Which type of variance analysis is the right one due to real estate contribution margin systems for residential companies?

## Hypotheses

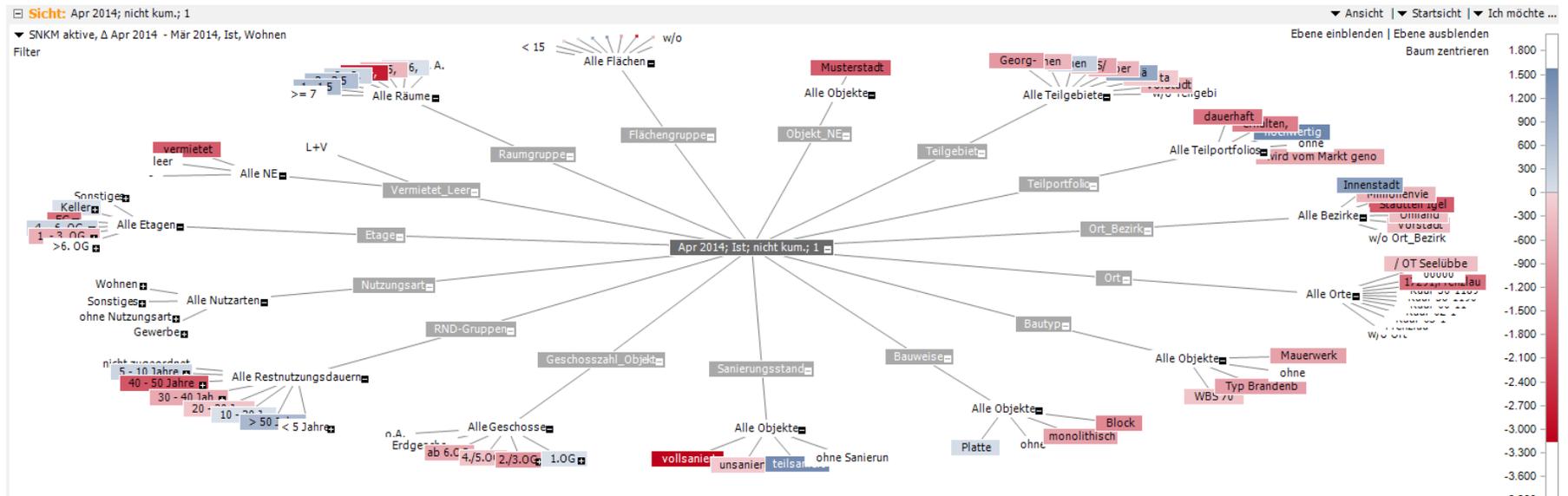
- Single cash flow accounts don't fit best to control real estate residential portfolios in the long utilisation period.
- Aperiodic cash outs for refurbishment and main restorations cause problems for long-term reverse rent calculation on the basis of a cash flow account.
- Cost accounting systems from the industry may be transferred to real estate residential sector by regarding the specifics of real estate assets.
- The adequate representation of contribution margin stages and the automatic splitting of variances are important for the control and the portfolio management of real estate residential assets.
- The implementation of contribution margin systems has to be achieved by software systems.

## Data/Methodology

- Only a handful of the round 600 customers of BBT in German real estate residential industry are engaged in Contribution Margin Systems and reverse rent calculation → empiricism makes no sense → deduction of industry approaches → transfer to real estate residential sector
- Critical review to the few literature sources to contribution margin systems: Homann 1999, Gondring 2004, Ebert et al. 2009, Wenzel 2010
- Transfer from cost accounting methods to real estate sector by regarding the specifics of residential properties. The author expects difficulties in the transfer of industry terms of cost accounting to real estate industry.
- Derivation of a residential real estate contribution margin account
- Derivation of a contribution margin flow statement

# Expected Results

- Derivation of a residential real estate contribution margin system as the basis for reverse rent calculation
- Development of a contribution margin flow statement
- OLAP system for a better visualization of the hierarchical structure effects, the results and the variance analysis



## Structure of the monograph

1. Scientific aims of the monograph, classification of current research approaches, current status of scientific research
2. Basics: real estate (residential) industry, accounting result categories, decision support, behavioural orientation
3. Controlling, real estate controlling, systematisation of cash flow account, „Lücke theorem“, Cost accounting, Contribution margin system
4. Contribution margin flow statement
5. Multi-dimensional structures/hierarchical structure effects
6. Outlook/further research demand