



ELTINGA Centre for Real
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Office Market Turning Points in the Financial Crisis

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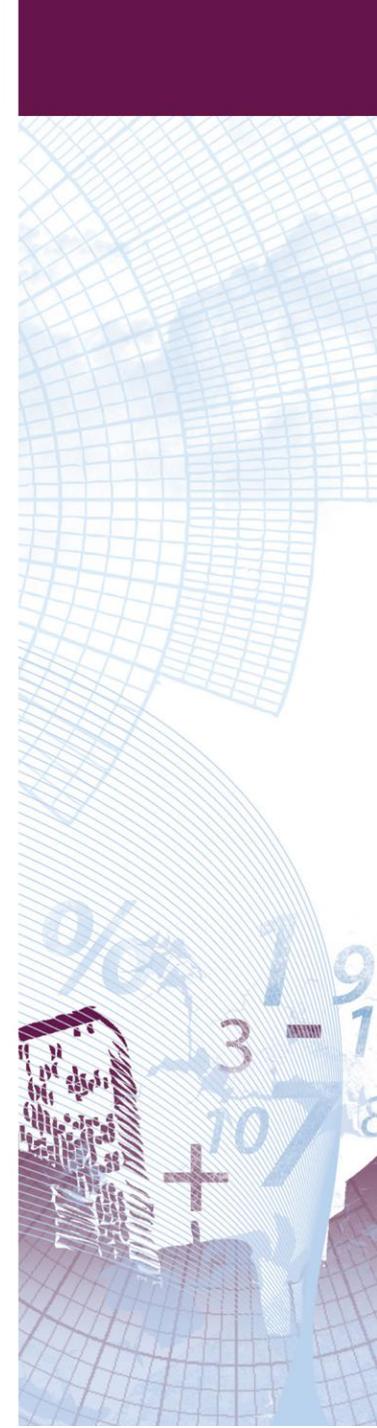
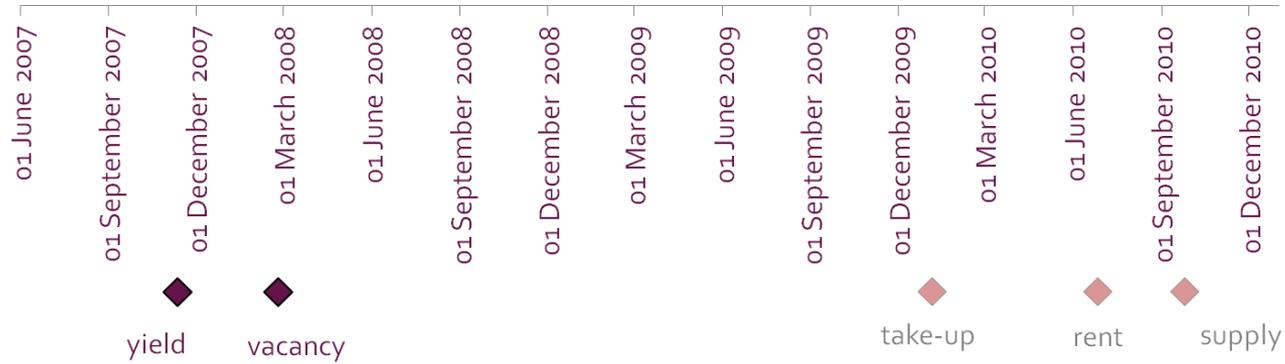
DTZ Research Institute
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Office market turning points in the Crisis – on average

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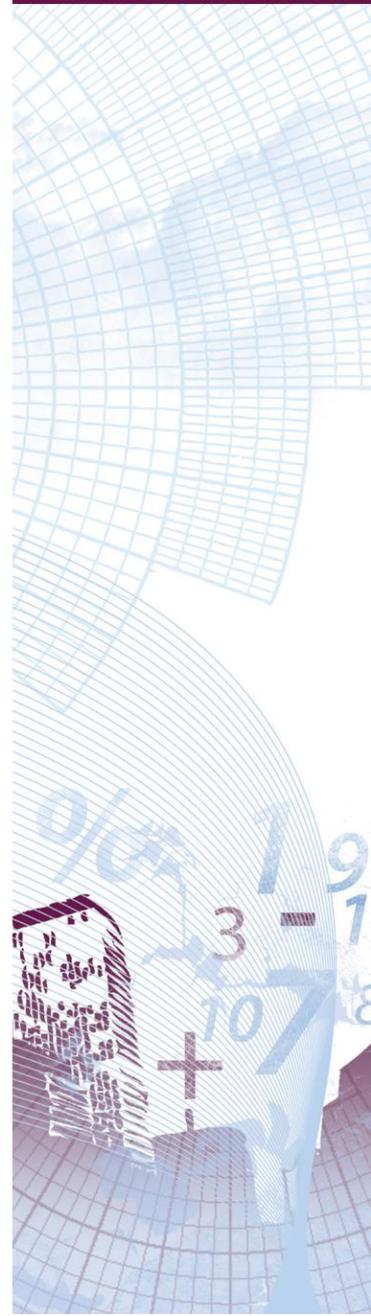
take-up rent supply yield vacancy

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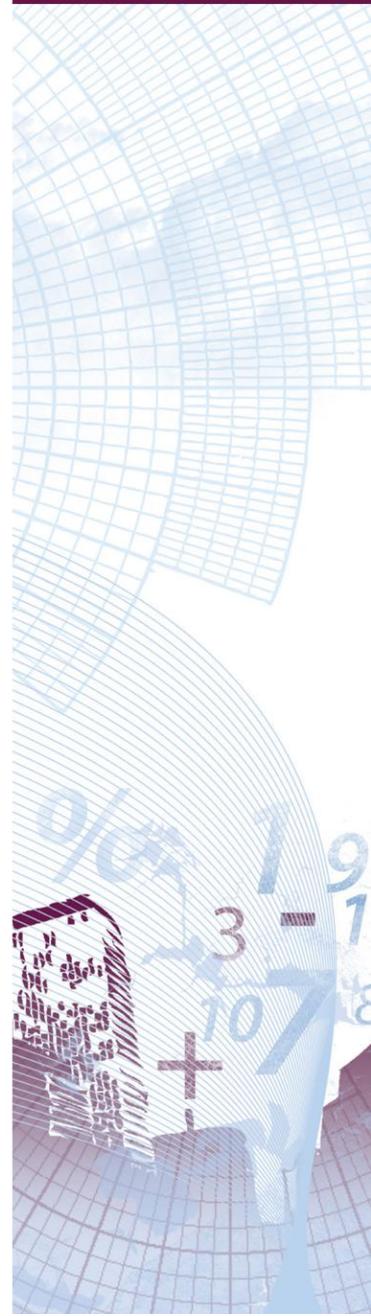
Office market turning points during the Crisis

- An approximately **one-year** lag is calculated between office market yield and new **supply**.
- A **somewhat shorter** distance of **rents** and yields is revealed.
- According to the concluded calculations, **vacancy and take-up** respond after the yield.
- At the beginning of the **crisis, take-ups** followed the downward movement of yield somewhat **later than at the recovery**.
- A **larger gap** can be seen **between take-ups and vacancies** during the recovery.

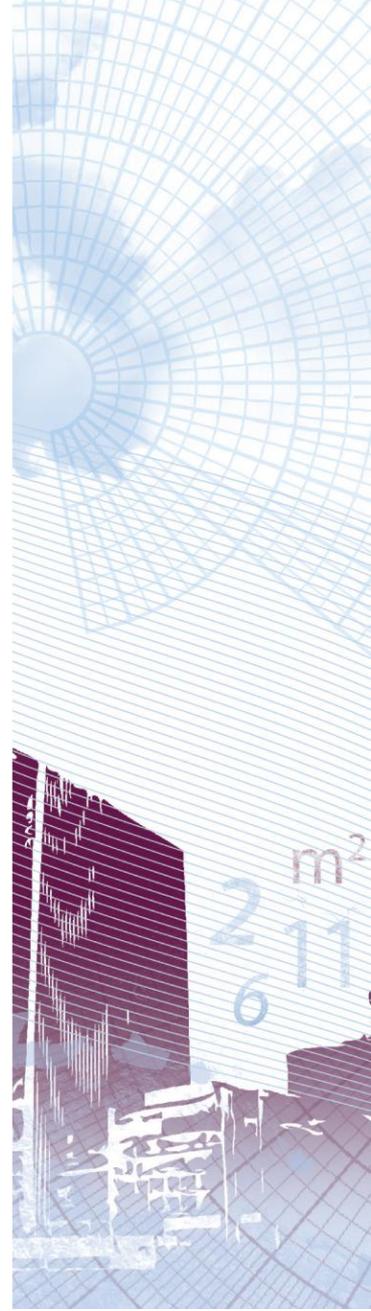


Presentation plan

1. Lead-lag correspondences of office market indicators.
2. Turning point method.
3. Results.



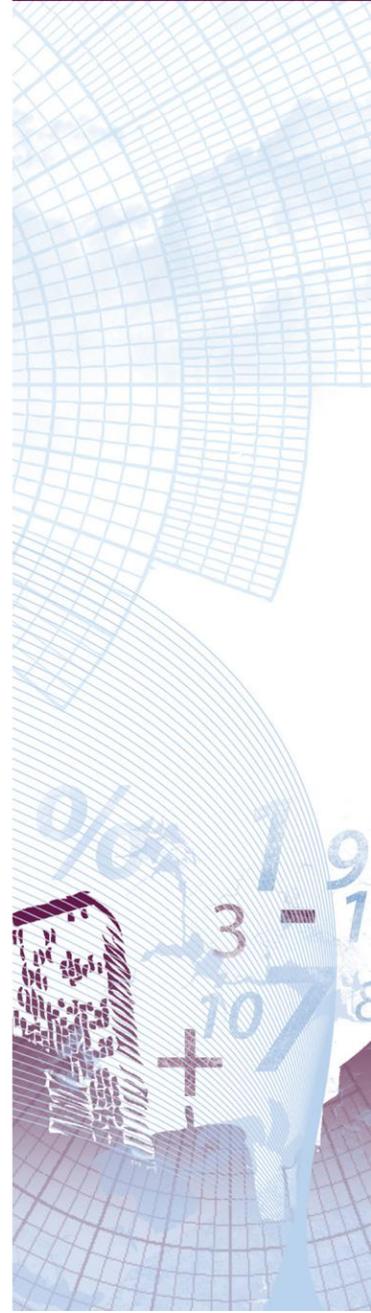
1. LEAD-LAG CORRESPONDENCES OF OFFICE MARKET INDICATORS



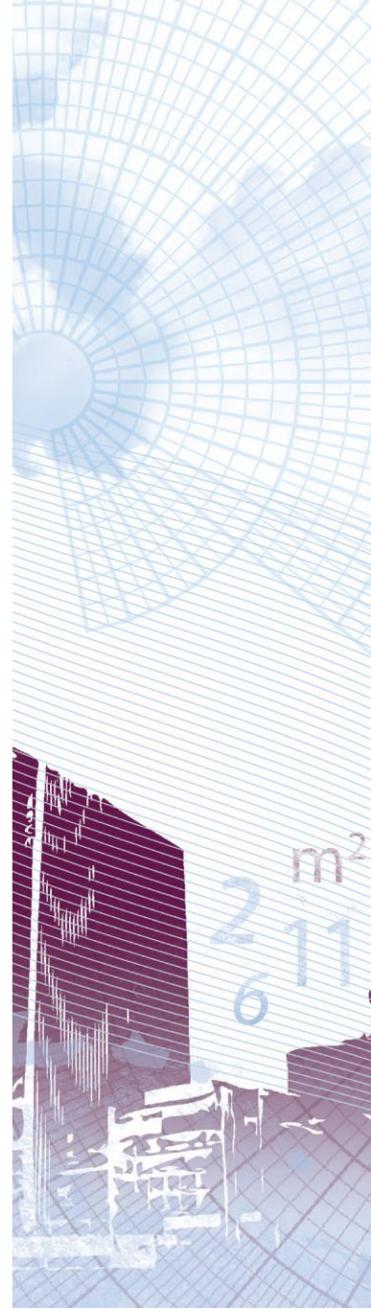
Lead-lag on the office market

- Time-lag is consequential of numerous factors.
- Economists look for **general lessons** to learn.
- Results are important for practical **forecasting purposes**.

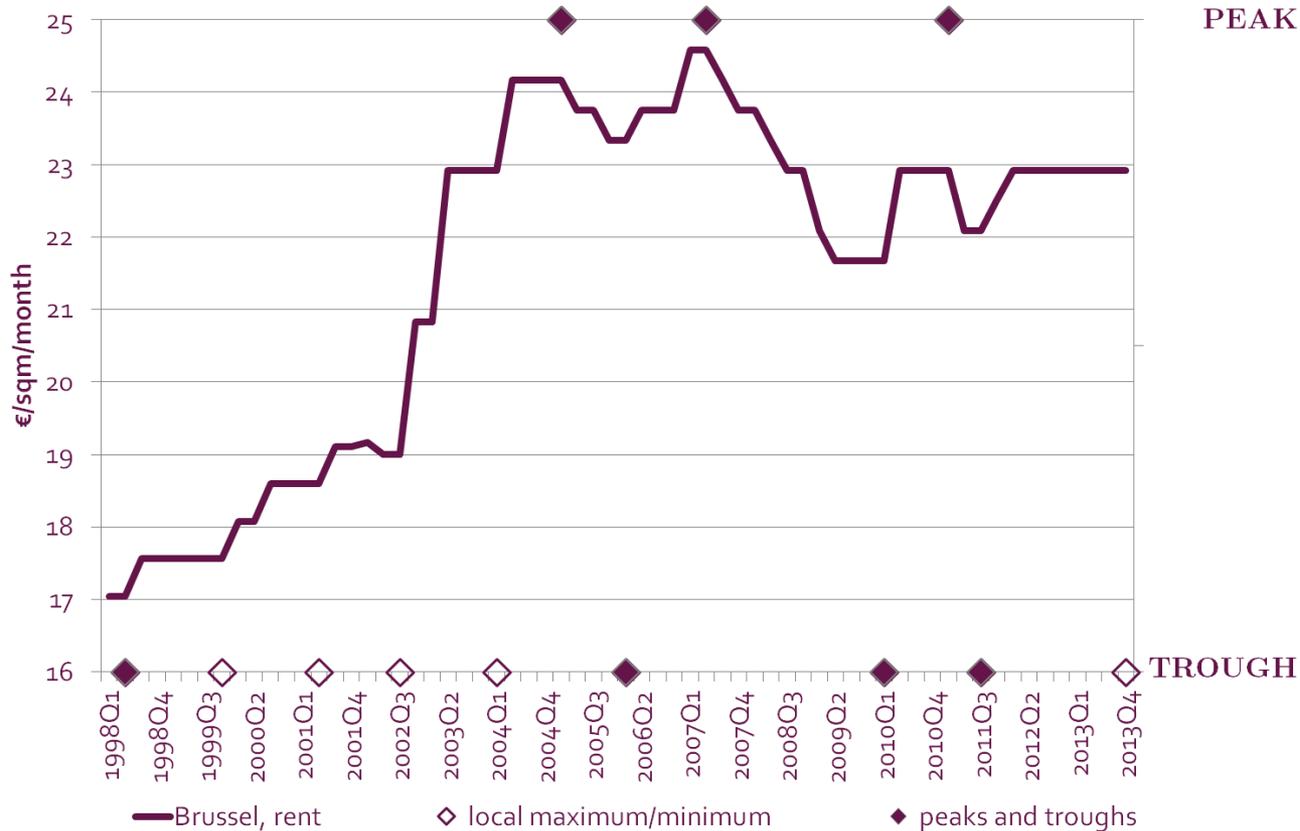
- **Rent** is referred as **sticky** because of living and valid contracts.
- New **supply needs time** to be constructed.



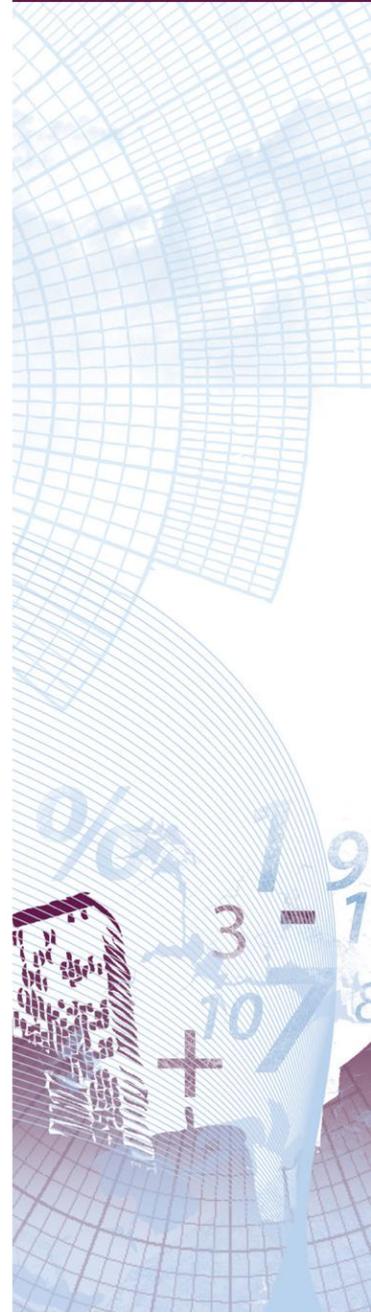
2. TURNING POINT METHOD



Turning point identification



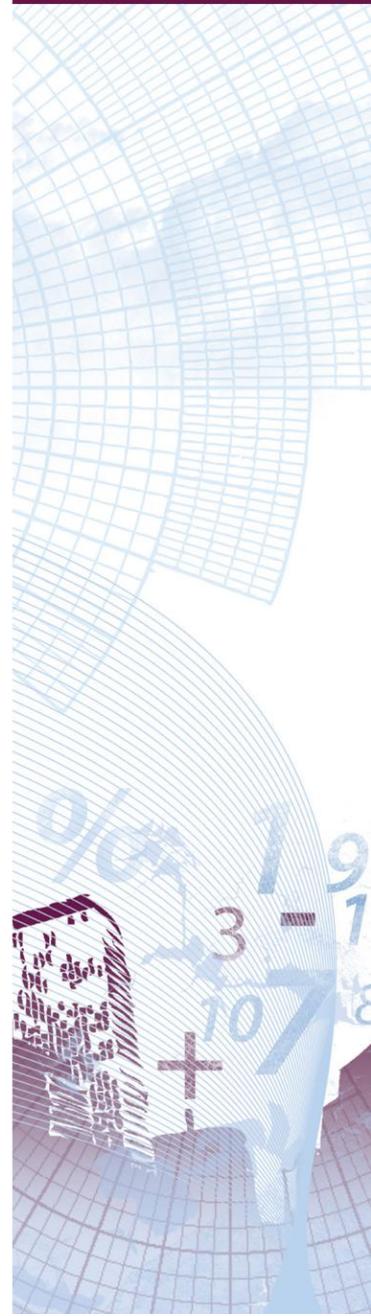
Local maximum, minimum and turning points for **Brussels office rents**



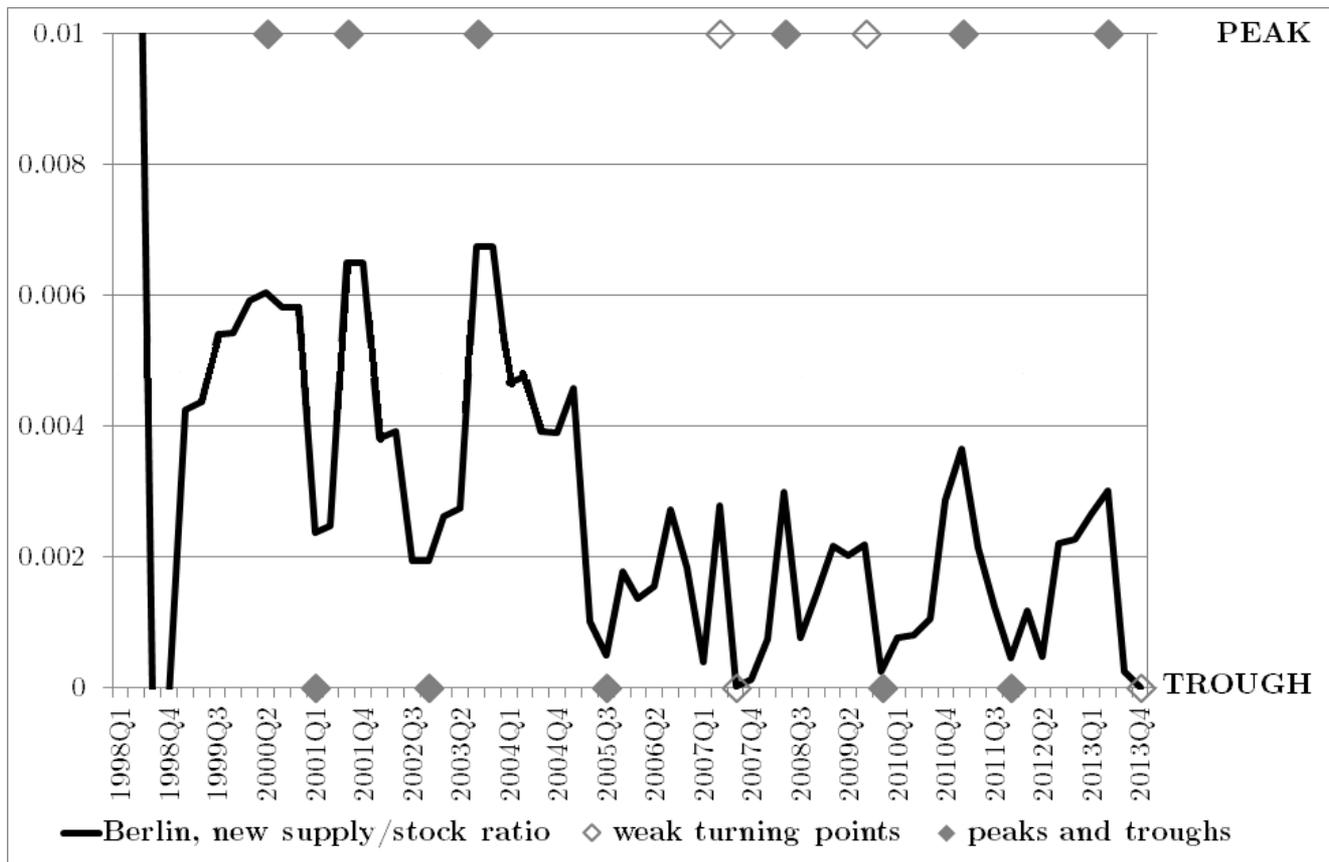
Turning point identification

- Data series of more than **80 cities** from Europe and Asia.
- Local maximum and minimum points were identified.
- Among local maximums and minimums, **turning points** are selected.
- The series were broken down to **upturns and downturns**.

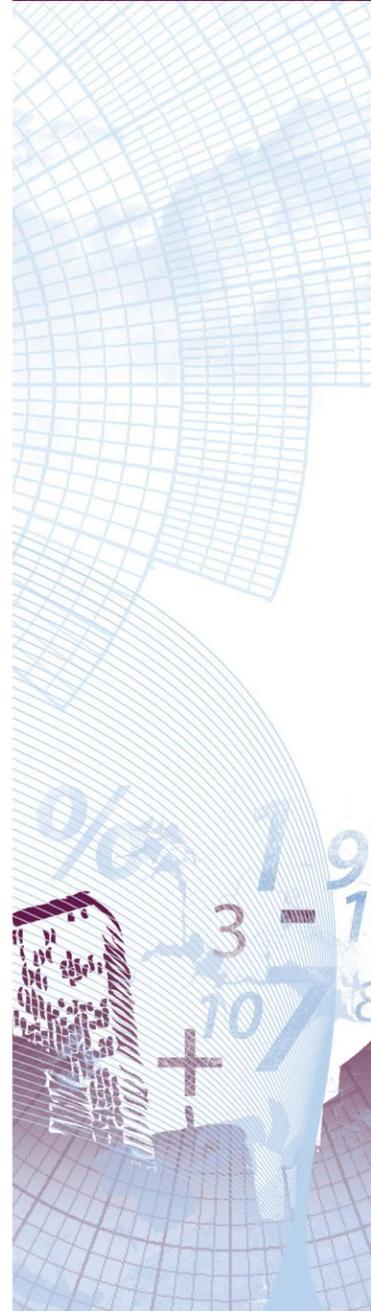
How many days on average do the turning points of indicators follow the turning point in yields during the **Great Financial Crisis**?



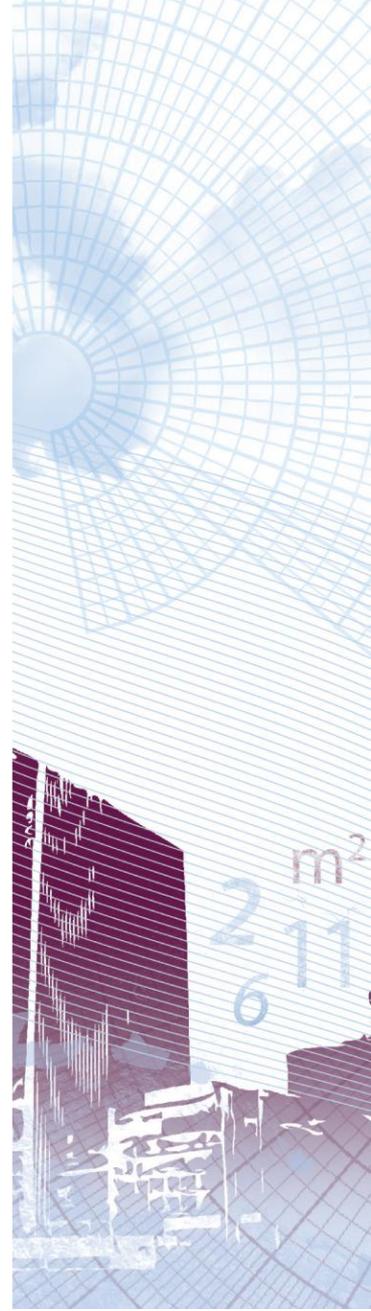
Turning point identification



Local maximum, minimum and turning points for **Berlin new supply / stock ratio**.



3. RESULTS



Reaction lags (in days)

	yield	take-up/ stock ratio	vacancy	rent	new supply/ stock ratio
beginning of the downturn	0	96	105	297	340
end of the downturn	0	42	145	213	304

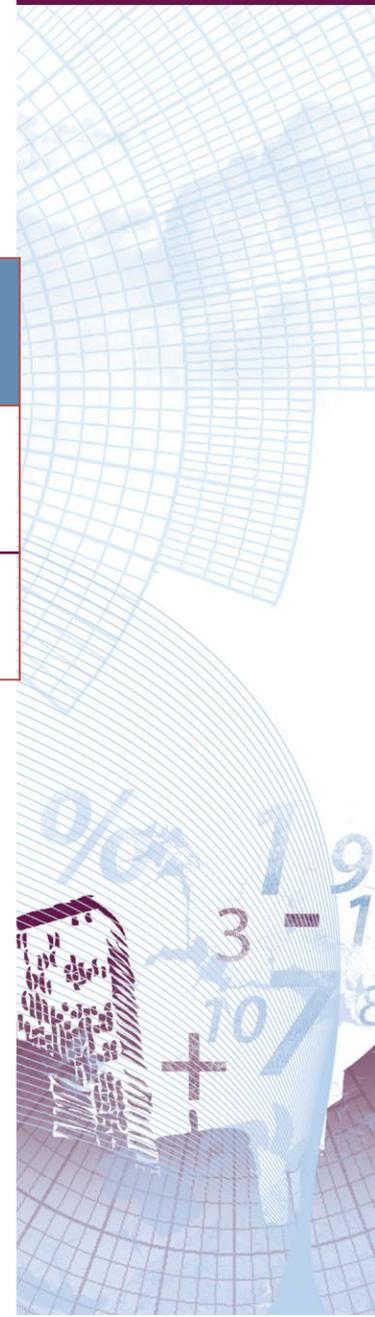
- An approximately **one-year lag** is calculated between office market yield and **new supply**.
- A somewhat **shorter distance of rents** and yields is revealed.
- According to the concluded calculations, **vacancy and take-up respond earliest**.



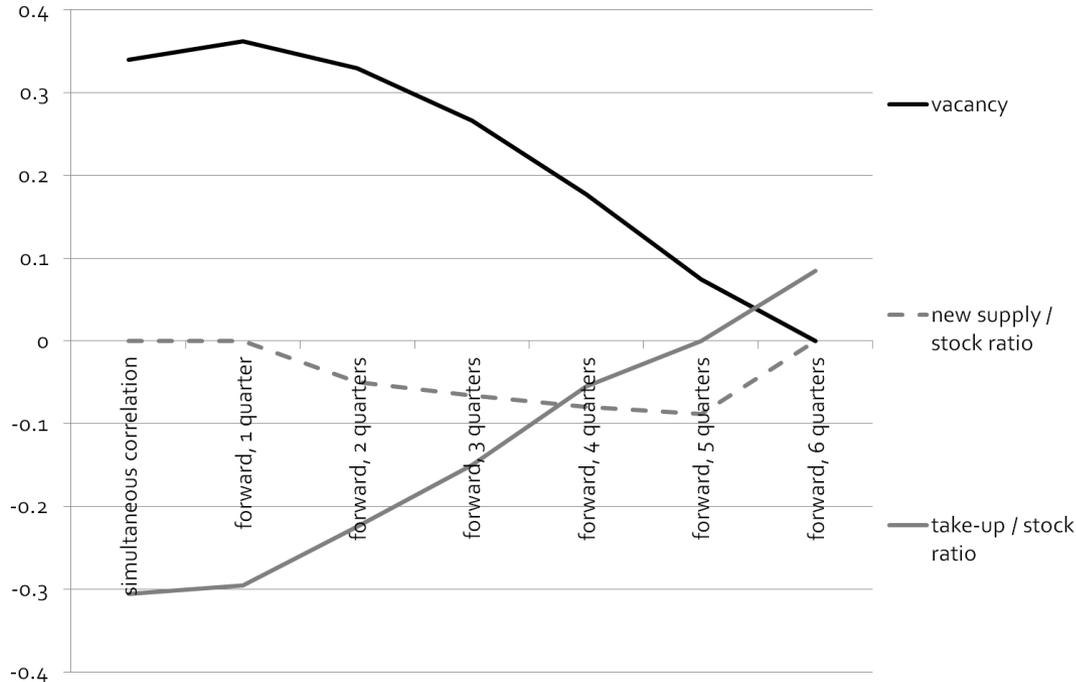
Reaction asymmetries

	yield	take-up/ stock ratio	vacancy	rent	new supply/ stock ratio
beginning of the downturn	0	96	105	297	340
end of the downturn	0	42	145	213	304

- At the **beginning of the crisis**, **take-ups** followed the downward movement of yield somewhat **later** than at the recovery.
- A **larger gap** can be seen **between take-ups and vacancies during the recovery**.
- The reaction of **Supply** is **shorter** to some extent during the upturn.



Serial correlations



- **Correlations of cyclical components with yields** supported the turning point method's results.
- **First take-ups react, than vacancy, and new supply in the end.**



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