Developing a new Commercial Property Statistical System (CPSS) for Ireland

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Session 5: Commercial property prices
Structure of the Presentation

• Introduction and aims of the project
• Recent Irish history with commercial property
• Current published data
• Scope and potential statistical outputs
• Methodology for data matching
• Data sources and results of data matching
• Lessons and next steps
Introduction

- High user demand for commercial property statistics – particularly from financial stability viewpoint
- Recent success in CSO with residential property provided the required impetus
- Central Bank and National Asset Management Agency (NAMA) provided funding – steering group provides support
- Aim is to develop a Commercial Property Statistical System (CPSS)
Three strands to the project

Transactions

Pipeline

Stock
Key aims of the project

- Complete an inventory of data sources and maximize their use
- Influence external owners of commercial property data – problem of fragmented data sources
- Close knowledge gap on subject matter in CSO
- Ultimate aim is a price index but strong demand also found for pipeline and stock data
- Project is cognizant of problem of low frequency of transactions for a price index
Recent Irish history with commercial property

• Ireland experienced a particularly difficult time post-2006

Peak to Trough Falls in Property Prices (2007-2010 approx.)

<table>
<thead>
<tr>
<th>Residential property</th>
<th>54.4%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial Property</td>
<td>67.4%</td>
</tr>
</tbody>
</table>
Figure 1: Residential Property Prices and Total Returns on Commercial Property (annual % changes)

- Commercial Property (MCSI/IPD Total Returns Index)
- Commercial Property (Jones Lang LaSalle Capital Value Index)
- Residential Property Price Index (RPPI)
Figure 2: Domestic banks’ non-performing loans as a share of loans to sector

- Commercial Property
- Small, Medium Corporates
- Mortgages
Current published data

• No official statistics (except limited planning permissions)
• Only private data sources such as IPD index and JLL index
• Myriad of other sources publish analysis of the market in a fragmented and incoherent way
• Clear role here for official statistics
Scope and potential statistical outputs

- Recommendation C from European Systemic Risk Board details the required indicators on the physical property market:
  - Price index
  - Rental Index
  - Rental yield index
  - Vacancy rates
  - Construction starts
Initial planned statistical outputs

• Pipeline – planning permissions, commencements, completions (number and area) by type and location
• Stock – buildings and units (number and area) by vacancy, type and location
• Transactions – Sales and leases (number, area, price) by type location and age
Methodology for data matching

- Data matching key to project
- Ideally postcodes would be available for properties to allow direct matching across data sets – postcodes not yet well developed in Ireland
- Therefore reliant on matching of postal address strings using the Jaro-Winkler Distance (score between 0 and 1)
TRANSACTIONS - results of data matching

- **Data sources**: stamp duty data from tax authorities and building energy ratings data
- Data matching was **not successful**

**Why?**
- Postcodes not mandatory and poorly completed
- Lack of detail in postal addresses
- Unit of measurement in data sets fundamentally different
- Not matching like-for-like on occasion (e.g. cinema in shopping centre)
What are the alternatives for sourcing information on transactions?

1. New survey of market participants – may be difficult to get responses

2. Development of new administrative data sources i.e. legislating for new data collection by public body for additional variables on commercial property sales

3. Exploring collaborative projects with private data sources such as IPD
PIPELINE - results of data matching

• Data sources: planning permissions and building control notices i.e. commencements and completions
• Unique identifier is common across datasets (planning permission reference number)
• Technically there are no constraints to data matching in order to track a property from planning stage to completion
• Improvements required in the compliance with the building control notices (local government are responsible)
STOCK - results of data matching

• **Data sources:** Geodirectory (national register of buildings) and Valuation Office data (for business rates)

• Using a test location, matching was shown to be possible with some considerable effort

• Addition of floor area and type

<table>
<thead>
<tr>
<th>Matching Method</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct match using XY or postal address</td>
<td>45%</td>
</tr>
<tr>
<td>Jaro Winkler Distance</td>
<td>30%</td>
</tr>
<tr>
<td>Manual matching</td>
<td>10%</td>
</tr>
<tr>
<td>Total</td>
<td><strong>85%</strong></td>
</tr>
</tbody>
</table>
Conclusions

• Transactions - new data sources are required
• Pipeline – potential for robust statistics on new commercial property coming to market – some obstacles to overcome
• Stock – data matching shown to be possible – very resource intensive – user demand potentially not as strong as transactions and pipeline
Any questions?

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