

Forecasting

Patricio Cordero, 2011-03-30

Introduction

Forecasting

Forecasting is the process of making statements about events whose actual outcomes (typically) have not yet been observed. A commonplace example might be estimation for a variable of interest at some specified future date.

Prediction is a similar, but more general term.

Both might refer to formal statistical methods employing time series, cross-sectional or longitudinal data, or alternatively to less formal judgmental methods.

Simplified we can say that we look at the outcome at a given time and compare this against the budget. If the deviation is abnormal we take this in to our forecast.

The procedure of forecasting in Region North Sweden is made three time a year.

The forecast is made in a excel sheet and is filled in by the asset managers together with the city managers.

After that, a meeting is set up with the controller function and we together go through the forecast before it is sent to the group controller.

The incomes

The revenues consist of apartment's incomes, commercial incomes, parking and garages incomes and other incomes.

When we forecast the revenues for the apartment we look at the result of the annual rental negotiations compared with what we estimated in the budget.

We also look at the rental losses, how much did we loose in vacancies and if we have left any discounts.

Did we convert any areas, this is another thing we look at.

The same thing applies to the income on our commercial areas.

| | 9/30-2010 | 9/30-2010 | | 31/12-2010 |
|----------------------|---------------|---------------|------------|---------------|
| | Outcome | Budget | Deviation | Forecast 2010 |
| Apartments | 32 000 | 32 000 | 0 | |
| Commercial | 1 000 | 1 060 | -60 | |
| Parkering och Garage | 150 | 150 | 0 | |
| Rental income | 33 150 | 33 210 | -60 | 0 |

Costs

On the cost side, we have firstly the usage bond costs. A deviation between the outcome and budget is either due to a higher price or / and a higher consumption.

To forecasting the water cost we know through historical data that the water is distributed at 25% per quarter of the total annual cost.

For the heating cost we generally use a curve that is distributed as follow, Q1 38%, Q2 18%, Q3 12% and for Q4 32% of the total annual cost.

Waste disposal costs are distributed evenly over the year. Even those costs are reviewed to see if there is something abnormal that has happened.

| | Outcome | Budget | Deviation | Forecast 2010 |
|-------------------|---------------|---------------|-----------|---------------|
| Water | -1 400 | -1 450 | 50 | |
| Heat | -3 000 | -3 050 | 50 | |
| Electricity | -1 300 | -1 350 | 50 | |
| Waste disposal | -1 300 | -1 200 | -100 | |
| Usage bond | -7 000 | -7 050 | 50 | 0 |

For the operating cost, we look at the outcome against the budget to see any major deviations.

Running maintenance is difficult to predict because it often requires immediate actions that is not planned.

In the case of planned maintenance you look at what you have put in your budget and what you have done during the year and what is still left to do. You also ask yourself if I will do all these things this year or will I wait until the next year.

Costs for modification depends on the turnover rate of movements among our residential tenants and the condition of

the apartment. The rate of turnover movement does not usually fluctuate over time.

| | Outcome | Budget | Deviation | Forecast 2010 |
|--------------------------------------|----------------|---------------|------------------|----------------------|
| Operating cost | -3 000 | -3 000 | 0 | |
| Running maintenance | -750 | -1 000 | 250 | |
| Planned maintenance | -1 400 | -1 800 | 400 | |
| Costs for modificaton in apartments | -700 | -900 | 200 | |
| Costs for modificaton in commercials | 0 | 0 | 0 | |
| Total Maintenance | -2 850 | -3 700 | 850 | 0 |

Leasehold fees are known and the cost could only change when the lease agreement expires.

Property tax is often known when we do the budget.

Local administration is the staffs that are working directly towards the tenants and/or with the properties. Major discrepancy may be because we have more staff than we budgeted for.

Regional administration consists of a Regional Manager and the controller function.

Collective administration is for example, accounting, HR, purchasing, marketing, IT etcetera.

| | Outcome | Budget | Deviation | Forecast 2010 |
|---------------------------|----------------|---------------|------------------|----------------------|
| Leasehold fees | 0 | 0 | 0 | |
| Property tax | -615 | -820 | 205 | |
| | 0 | 0 | 0 | |
| Local administration | -836 | -1 114 | 279 | |
| Regional administration | 0 | 0 | 0 | |
| Collective administration | -679 | -905 | 226 | |
| Administration | -1 514 | -2 019 | 505 | 0 |