Investment in Austria: a view from the WIFO Investitionstest

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Forecasting and nowcasting investment is notoriously difficult

It is crucial to have timely and reliable indicators of investment activity

The WIFO Investitionstest (investment survey) is a tool that provides timely and reliable indicators for Austria
A brief history

- The WIFO Investitionstest in manufacturing industries has been conducted biannually (spring and autumn) since 1964.
- Role Model: IFO Investitionstest (since 1955).

- It was introduced because information about the quantitative development of investment in manufacturing was missing.
- Needed for diagnosing and forecasting the Austrian economy.

- From the beginning the focus was on expectations and realizations.

- Since 1996 part of the “Joint Harmonised EU Programme of Business and Consumer Surveys” (DG ECFIN).
The survey is biannually

- Autumn:
  - Expectations (forecast & nowcast)
  - Investment structure (motives)
  - Factors influencing investment

- Spring
  - Realizations
  - Expectation (nowcast)

- The survey provides information on changes in plans and about realizations, that are helpful for diagnosing and forecasting business investment.
The WIFO Investitionstest

- Gross sample (panel): 660 firms, response rate ~48%
- Net sample covers approx. 18% of employment in manufacturing
- The quantitative nature of the survey puts burden on respondents.
- Policy at WIFO not to include firms that compile also the monthly WIFO Konjunkturtest, except if firms wish.
- Focus on larger firms.

Distribution of investment in manufacturing and construction, 2009

Source: Brunner und Schwarz (2012)
Some impressions
Investment dynamics

Gross investment in manufacturing

Source: WIFO Investitionstest

Growth rate of investment, real
Investment motives current year

Multiple answers possible, rescaled so that total is 100 in each year.

Source: WIFO Investitionstest
Factors influencing investment (Balances)

Source: WIFO Investitionstest
But what about tracking, reliability and consistency?
Correlation between BCS forecast and ex-post realisations

- Numbers provide timely (directional) indications about changes in investment

<table>
<thead>
<tr>
<th></th>
<th>Autumn 1</th>
<th>Spring 1</th>
<th>Autumn 2</th>
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<td>Sweden</td>
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<tr>
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<tr>
<td>Average</td>
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Source: DG ECFIN, European Business Cycle Indicators, 2014/4
Further results

- According to further evaluations the forecast accuracy and quality of the Austrian investment survey seems to be better than the European average.

- Econometric analysis confirm that at the European level changes in investment plans convey additional information to the economic projections.

- However, the values published cannot serve as replacement for published “official” values, even if they provide quantitative information.
A more sceptical perspective

- Brunner and Schwarz (2012) study the consistency at the firm level.

- How are investments expectations/plans revised? And are there stable and predictable changes across investment plans?

- The idea is to use the 5th plan as realization at the firm level and study whether there are systematic differences across time and firm size using quantile regression methods (allows to discriminate for investment size).

<table>
<thead>
<tr>
<th>forecast</th>
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<td>year t-2</td>
<td>5th plan</td>
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Results across years

Revision coefficients of the 1st investment plan for selected years

Blue lines mark the ideal revision coefficient of 1 (= no revision), the grey bands depict the 95% confidence intervals, green dots depict revision coefficients significantly lower than 1, black dots display revision coefficients not significantly different from 1, red dots indicate revision coefficients significantly larger than 1. Tau indicates the quantiles.

Source: Brunner und Schwarz (2012)
Firms with larger absolute investment (high tau) tend to underestimate their actual investment.

Firms with smaller absolute investment (low tau) tend to overestimate their actual investment.

This pattern of revisions itself fluctuates more or less erratically from year to year (largely following business cycle dynamics).

Source: Brunner und Schwarz (2012)
The WIFO Investitionstest is an important tool for forecasting and nowcasting investment in Austrian manufacturing.

It provides timely and relevant information about investment dynamics and structure of investment.

Goal for the future to reduce burden for enterprises while retaining quality of information and fulfilling the requirements of the Joint Harmonised EU Programme of Business and Consumer Surveys”