Methodology

BVL International The Global Supply Chain Network

- The Logistics Indicator is computed by the ifo Institute for the World Economy on behalf of the German Logistics Association (BVL). It is based on the monthly ifo business survey for the period from 2005 onwards. There are used more than 4,000 answers from logistics service providers (60% Freight transport (excluding air freight); 40% Warehousing and support activities for transportation) or industrial companies (66%) and trade companies (Wholesale: 17%; Retail: 17%) as users of logistics services. The composite indicator is computed in equal shares by the providers and the users of logistics services.
- For all questions, three alternative answers apply: positive/expansionary, normal/neutral, and negative/contractionary. In a first step, the balance is computed by subtracting the shares of the negative answers from shares of the positive ones. The balances can fluctuate between extreme values of -100 (i.e., all responding firms appraise their situation as poor or expect business to become worse) and +100 (i.e., all responding firms assessed their situation as good or expect an improvement in their business). A value of 0 indicates that positive and negative answers are equally represented.
- All questions on quarterly developments are designed to induce respondents to express seasonally adjusted assessments of the current situation. A standard method for seasonal adjustment (X13-ARIMA-SEATS) is additionally applied to all numbers and indicator values reported in this document in order to filter out the remaining seasonal pattern.

Methodology



 The business climate is a mean of the balances of the current business situation and the expectations for the next six months:

Business Climate =
$$\sqrt{(\text{situation} + 200)(\text{expectations} + 200)} - 200$$

 For calculating the index values of the business climate and its components - situation and expectation - the balances are all increased by 200 and normalized to the average of a base year (currently 2005):

Index value = $\frac{\text{balance in the current month} + 200}{\text{average balance in the base year} + 200} \times 100$

Logistics service – Questionnaire

Current business situation

 "We evaluate our business situation as …" (good, satisfactory (normal for the time of year), unsatisfactory)

Business situation development:

- "Our business situation in the last 3 months has ..." (improved, remained unchanged, got worse)
- Demand development:
 - "The demand for our services resp. our turnover in the last 3 months has..." (improved, remained unchanged, got worse)

Demand compared to previous year:

"The demand resp. our turnover in the last month compared to previous year has..." (improved, remained unchanged, got worse)

Backlog of orders:

 "Our backlog of orders is (if usual) …" (relatively high, sufficient (normal for the time of year), too small)

Employment development:

"The number of employees in the last 3 months has …" (increased, remained unchanged, declined)

Logistics service – Questionnaire

Demand expectations:

- "The demand for our services resp. Our turnover in the next 3 months will …" (increase, remain unchanged, decline)
- Employment plans:
 - "The number of employees for the coming 3 months will …" (increase, remain unchanged, decline)

Business expectations:

 "Our business situation in the coming 6 months will …" (improve, remain unchanged, develop unfavourable)

Price setting plans:

"The prices of our services in the coming 3 months will …" (increase, remain unchanged, decline)

Industry and trade-Questionnaire



Current business situation:

- Trade: "We evaluate our business situation (most current trend) as..."(good, satisfactory, poor)
- Industry: "We evaluate our business situation with respect to XY as..." (good, satisfactory, unsatisfactory)

Business expectations (coming 6 months):

- Trade : "Excluding seasonal fluctuations, our business development will be ..."(more favourable, about the same, more unfavourable)
- Industry : "Our business situation with respect to XY will in a cyclical view ..." (improve, remain about the same, develop unfavourably)

Price development:

- Trade : "In the past month our prices have..."(increased, remained the same, fallen)
- Industry : "Taking into account changes in the condition of selling transactions, our net domestic sales prices for XY have ..." (increased, remained about the same, gone down)

Stock:

- Trade : "We asses our current inventory stocks as...?" (too small, satisfactory, too large)
- Industry : "We feel at present our stocks of unsold finished goods of XY are ..." (too small, adequate (normal for the time of year), too large, we do not normally maintain stocks)

Industry and trade-Questionnaire



• Prices setting plans:

- Trade: "Our prices will probably ..." (rise, stay about the same, fall)
- Industry: "Taking into account changes in the conditions agreed upon selling transactions, our net domestic sales prices will probably..." (increase, remain about the same, decline)

Employment plans:

- Trade: "Excluding seasonal fluctuations, the number of our employees will ..." (increase, stay about the same, decrease)
- Industry : "Employment related to the production of XY in domestic production unit(s) will probably ..." (increase, remain about the same, go down)