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An Employment Barometer for Uzbekistan

by Klaus Wohlrabe

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About the German Economic Team

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1 Background

- Main goal of the employment barometer: Tracking the employment situation in real-time. Furthermore, how will the number of employees evolve in the near future (depending on the forecast horizon)?
- The survey is a qualitative survey and not quantitative, i.e. firms are not asked for concrete numbers.
- The two employment questions refer to a tendency (up/stay the same/down). This makes the life for firms easier. A drawback of this approach is that it is unknown how large the change in employment is or was.
- The new questions can either be part of an already existing survey or implemented separately.
- A representative sample is important and necessary to draw valid conclusions from the survey.
- The survey can either be set up as a panel, i.e. registered firms answer every month. This can ensure a high response rate due to a higher commitment of the firms.
- The alternative is that one draws a random sample from the firm register and the participating firms change over time.

2 Structure of the survey¹

- One should define the main sectors of the economy (in Germany: industry, trade, construction and services).
- Depending on the number of participating firms, one can define branches to have more specific information for other parts of the economy.
- The declaration of sectors and branches is important for the weighting procedure. Furthermore, it allows the description of individual developments.
- The required number of firms should be at least 1,000 and representative for each sector (in Germany we have 9,000 answers). The more firms the better. It allows for the interpretation of the business cycle development for more branches. Additionally, it increases the trust in the survey.
- The survey should be implemented only as an online survey in order to minimize organizational burden. There are professional survey programmes as Qualtris, Survey Monkey or Lime Survey available.

¹ The following notes assume that there will be a separate survey. Some issues are obsolete if the employment questions will be part of an existing business survey.

3 Questionnaire

- There are two potential questions:
 1. "Compared to the previous month, our workforce (number of employees) has increased/remained roughly the same/decreased"
 2. "We expect our workforce (number of employees) to increase/remain roughly the same/decrease in the next three months".
- Forecast horizon could also be six months, but no more further ahead.
- The first question refers to the current development and the second one to the expectations for the upcoming development.
- Only the second question defines the "ifo employment barometer".
- The first question is somewhat optional. It depends on how fast the official statistics are released. If the delay is substantial, then I would recommend implementing it. With respect to business cycle analysis which uses also micro data it is also a good idea to have the first question. It allows to compare employment plans with corresponding realisations.
- There is one crucial issue: How to define the number of employees? What is included or counted? I would count the number of heads and not full-time equivalents. Furthermore, it must be decided whether interns, freelancer, family members, trainees etc. are counted or not. This depends on the importance of these groups for the labor market in Uzbekistan.

4 Weighting

- There is a two-step procedure for the weighting process.
- Each answer gets an individual weight depending on the size of the firm. The size is determined by the number of employees. These numbers are then transformed into weighting points which follow a logarithmic curve. This prevents large firms from getting too much weight.
- The second weight refers to the sector or branch of the firms. It is based on the employment shares and indicates the importance of the branch for the economy with respect to employment.
- This stands in contrast to the aggregation in standard business surveys where gross value added is used for the weighting scheme.

5 Aggregation

- The answers are aggregated using the balance statistics.
- The balance statistic is the difference of the percentage shares of the “increase” and “decrease” answers. The middle category is skipped and only indirectly considered. The percentage shares are calculated based on the weighted (firm weights) answers.
- The balance statistic ranges from -100 and +100. In case of the former value all firms have chosen the negative answer and vice versa.
- Example

Firm	Answer	Weight	Distribution		
			+	=	-
A	Remain the same	5		5	
B	Increase	2	2		
C	Increase	4	4		
D	Decrease	2			2
E	Remain the same	5		5	
F	Increase	2	2		
Sum of Weights		20	8	10	2
Percentage Share		100%	40%	50%	10%

- **Balance Statistic** = (Share „increase“) – (Share „decrease“) = **40% - 10% = +30%**
- For each defined branch, a balance statistic is calculated.
- The branches are aggregated to sectors using branch weights based on gross value added.
- The sectors are then aggregated into the main index for Uzbekistan.
- The “ifo employment barometer” is defined only by the expectation question. I would recommend the same for Uzbekistan.
- In Germany we transform the balance statistic into an index. The base year is currently 2015. I would recommend not forming an index, as it has no natural interpretation at the first sight. The level of an index has always to be interpreted in comparison to the base year. In contrast the balance statistic has a very natural interpretation.

6 Important note

- As the name indicates, the employment barometer gives information about the development of the workforce. The impact on the number of unemployed people is not straightforward.
- An increase of the employment barometer does not necessarily imply a decrease of the unemployment rate. It depends on the specific labour market dynamics in Uzbekistan.
- New employees can also come from the “silent labour market reserve”, i.e. they do not have to be unemployed before.