

The prognostic validity of student enrolment prognoses in times of increasing heterogeneity of student populations

FREREF workshop: Expansion of Higher Education. New students, more problems?

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1. Research questions
2. Comparison of prognoses and actual student enrolment
3. Comparison of survey-based prognoses and actual transition rates
4. Causes of differences between prognoses and actual student enrolment
5. Consequences for future student enrolment?

Research questions:

- How good was the prognostic validity of student enrolment prognoses for Germany and for Saxony in the past?
- What are the influencing factors for student enrolment?
- How good can enrolment prognoses be in times of increasing heterogeneity of student populations?

2. Comparison of prognoses and actual student enrolment

The approach of the comparison of prognoses and actual student enrolment is as follows:

1.) to analyse the differences between the forecasted absolute numbers and the actual absolute numbers of first-year students

a) for Germany and

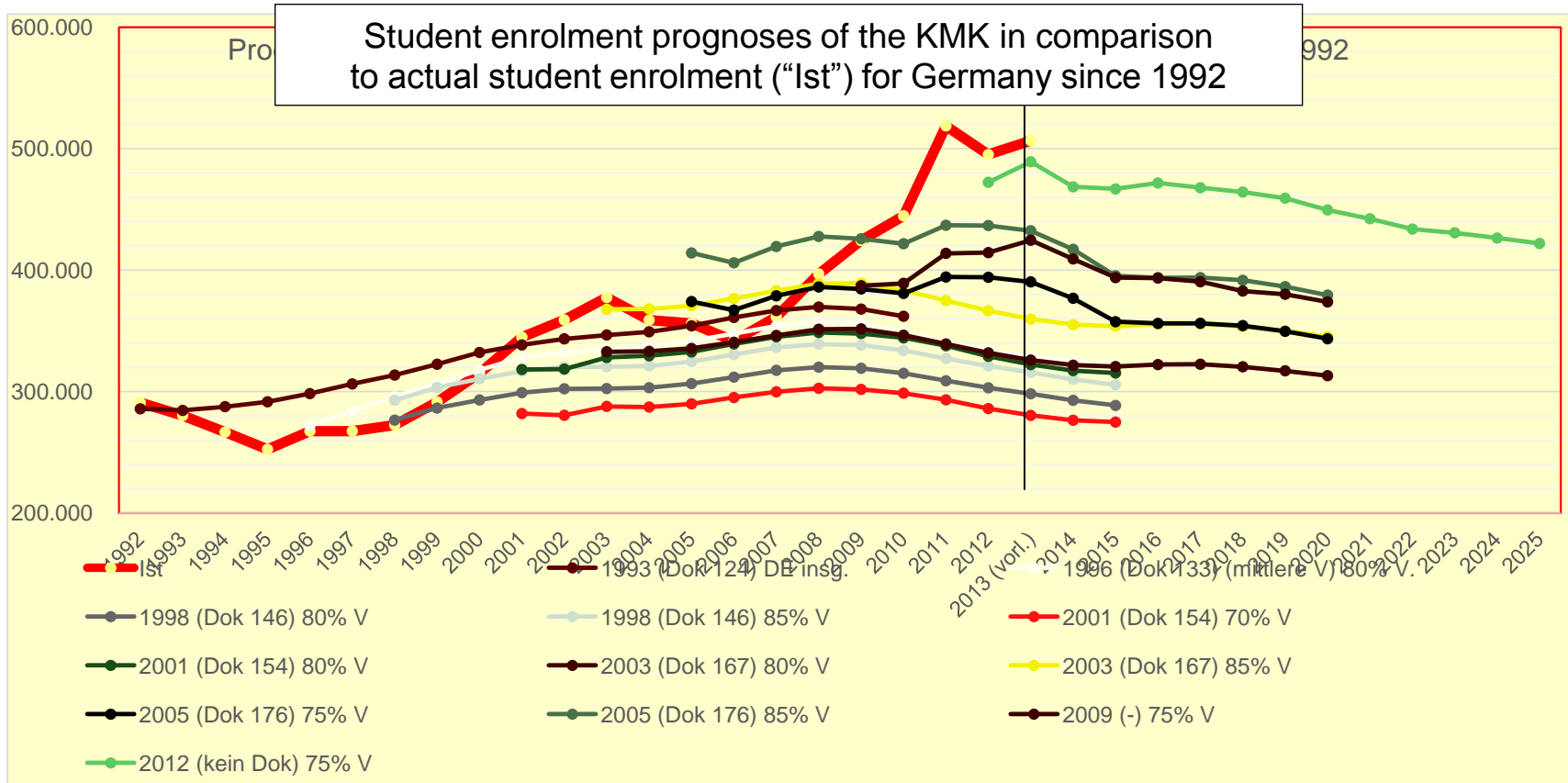
b) for Saxony (as an example of a German federal state)

2.) to analyse the differences between the forecasted transition rates and the actual transition rates from the “Gymnasium” (grammar school) to universities and universities of applied sciences

a) for Germany and

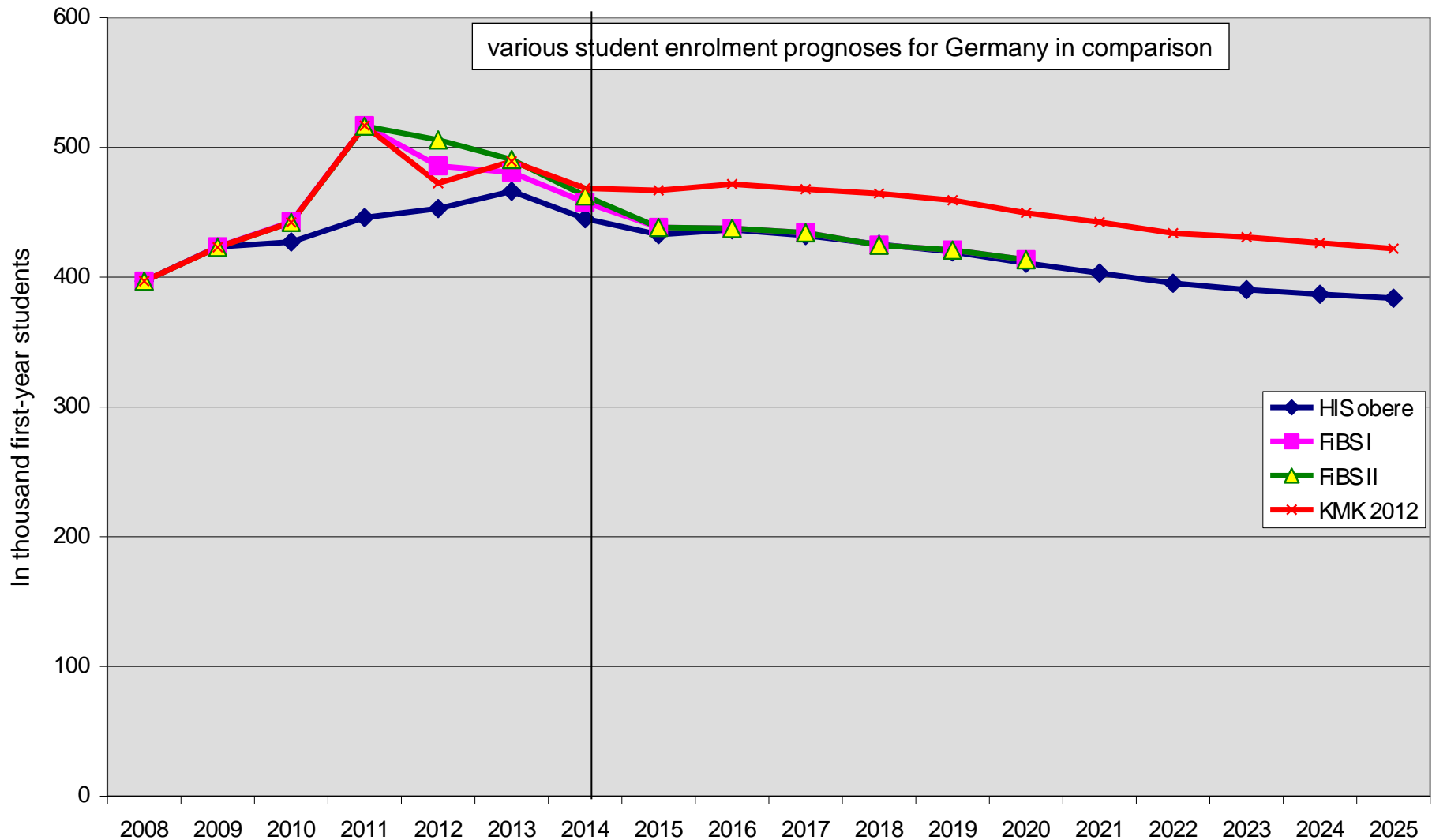
b) for Saxony (as an example of a German federal state)

2. Comparison of prognoses and actual student enrolment



The KMK prognoses (Conference of the Federal Ministers of Education) and the actual student enrolment in Germany in the last years differ far more than in the years before.

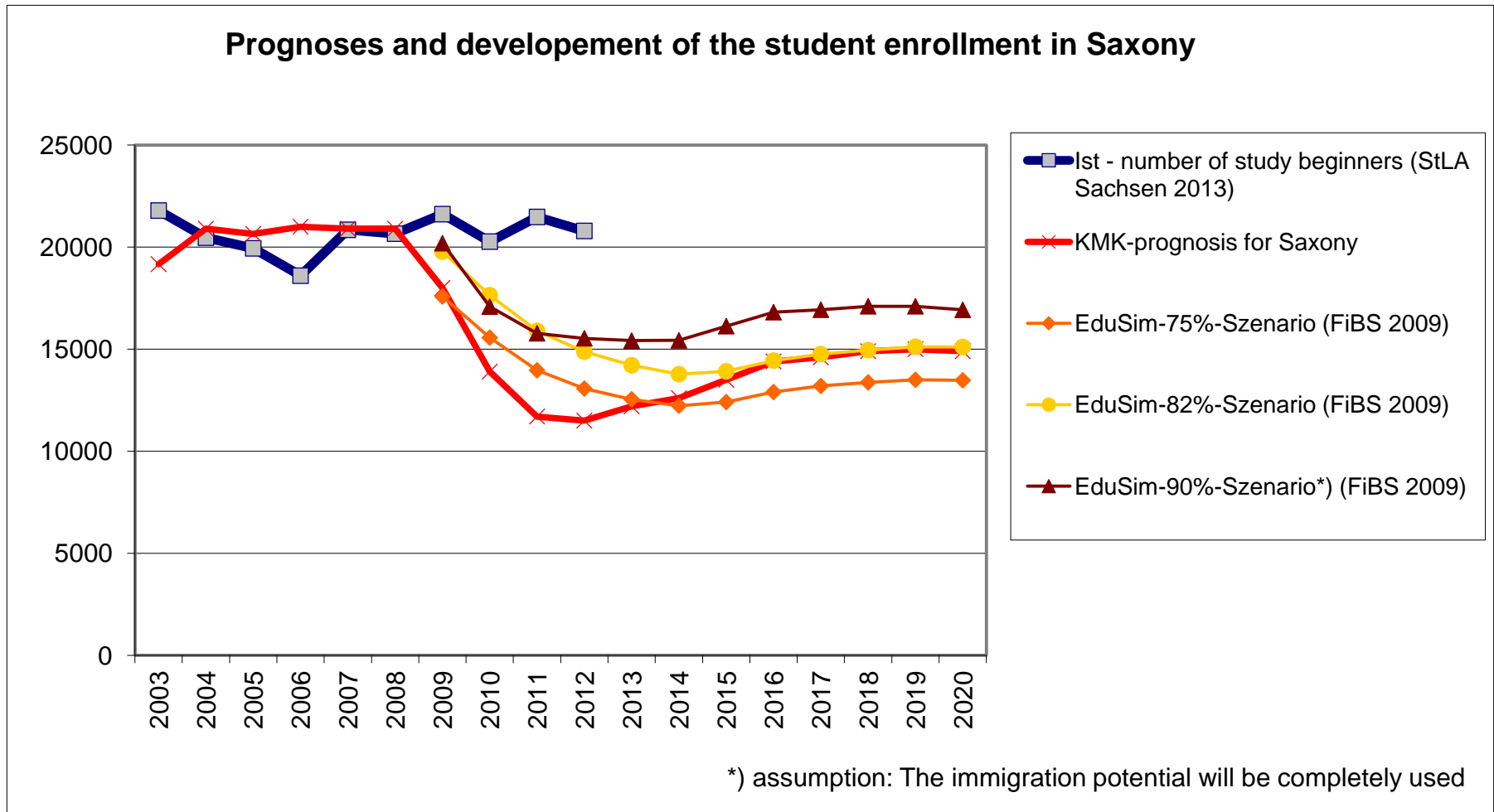
Comparison of prognoses for the future



FiBS I without the suspension of the military services; FiBS II with the suspension of the military services.

2. Comparison of prognoses and actual student enrolment

KMK prognoses, FiBS prognoses and student enrolment in Saxony

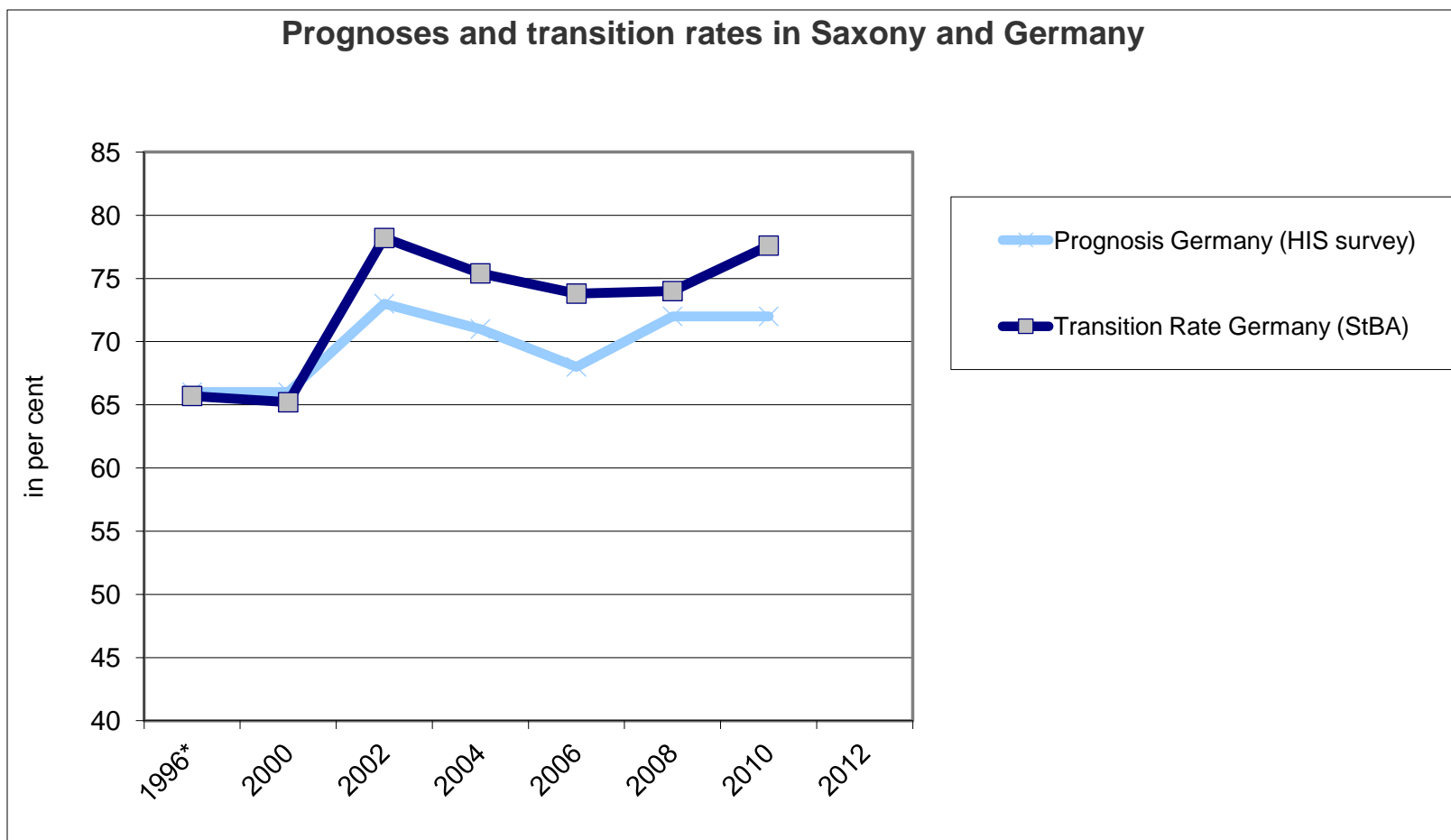


2. Comparison of prognoses and actual student enrolment

Interim conclusion to the comparison of prognoses and actual student enrolment:

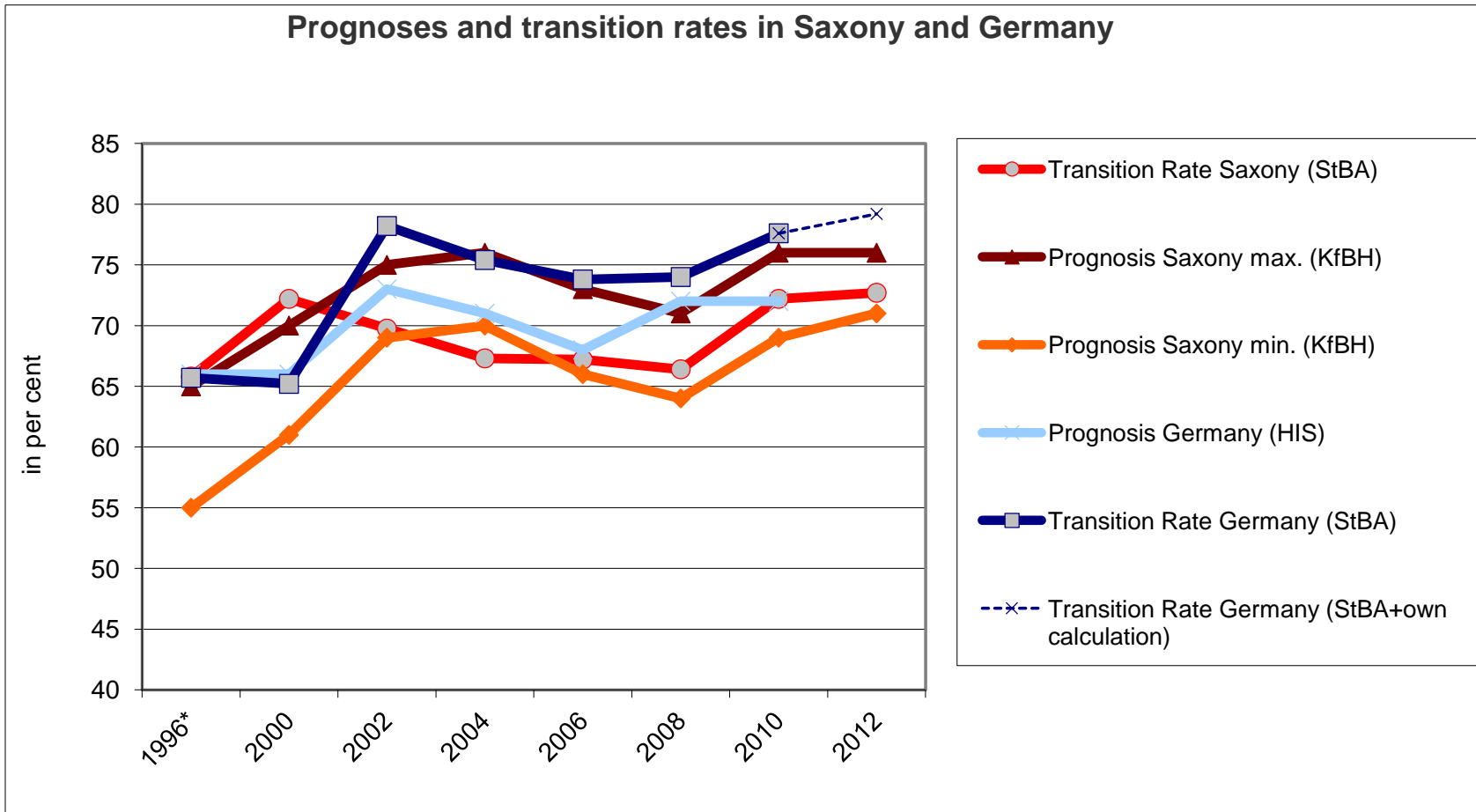
- KMK- and alternative prognoses are quite acceptable in forecasting long-term trends, ...
- yet, they are less precise in forecasting short-term developments because of various reasons
- With regard to short-term forecasts/prognoses: can surveys be used for improvement?

3. Comparison of survey-based prognoses and actual transition rates



This graph shows the prognosis of the transition rate (HIS 2012: as per cent of grammar-school graduates ½ year after graduation who planned or started their course of studies) and the actual transition rate for Germany (StBA 2013: as per cent of grammar-school graduates who started their course of studies by the 3rd year after graduation).

3. Comparison of survey-based prognoses and actual transition rates



In addition to the previous graph this graph shows the prognoses of the transition rate for Saxony as maximum and minimum scenarios (KfBH 2012: as per cent of grammar-school graduates ½ year before graduation who planned to study at a university) and the actual transition rate for Saxony (StBA 2013: as per cent of grammar-school graduates who started their course of studies by the 3rd year after graduation).

3. Comparison of prognoses and actual transition rates



Interim conclusion of the comparison of prognoses and actual transition rates:

- In most cases, survey-based prognoses correctly predicted the tendency, i.e. a fall or a rise in student numbers, although they did not incorporate foreign students (about 10%).
- Yet, survey-based prognoses are better suited for short-term periods, while KMK or alternative prognoses are more appropriate for longer periods (mainly based on demographical statistics and on assumptions for transition rates).
- Nevertheless, survey-based prognoses and multivariate analyses of study plans can be useful to explain the causes of differences between prognoses and actual student enrolment, and to predict to some extent the tendency of the study plans to fall or rise in relation to the circumstances.

Causes for increasing or decreasing rates of study plans (and their realisation) are, particularly, due to institutional and individual conditions, (cf. Wolter 2014):

- Special items in the last few years: military service was abandoned (2011), and double cohorts of grammar school graduates because of the reduction of time for the „Gymnasium“ from 9 to 8 years („G8-effect“) for most states in Germany resulting in higher numbers of 1st year students
- Admission restrictions (relevant for major parts of study beginners in Germany) is cutting off in contrast the student enrolment for a lot of subjects and universities
- Attractiveness of secondary school types (Gymnasium), school marks, social background (e.g. academic parents) are affecting study intentions
- Multi-variate analyses of survey data (HIS 2012, KfBH 2012) show, furthermore, that the perceived labour market situation for academics is another relevant factor for study intentions – additional to school type, school marks, gender, parents with academic backgrounds, migration background and regional background (West Germany)

5. What does it mean for future student enrolment and prognoses?

The increasing heterogeneity of (potential) populations of first-year students leads to a lower prognostic validity of student enrolment prognoses.

Yet - as a positive outlook - we can estimate to some extent the tendency of future student enrolment from the development of circumstances (and the support/ encouragement by politics) of subgroups of potential first-year students, e.g.:

- the development of admission restrictions
- opening-up of the universities for students with work experience (without formal higher education entrance examinations)
- the development of part-time study programmes
- the development of the percentage of grammar-school graduates in the “Gymnasium” vs. vocational training
- the development of the share of grammar-school graduates with parents without a university degree, with a migration background, females, ...

Thank you for the attention!
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