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PREFACE

Business tendency surveys provide information which is valuable to the respondents themselves as well as to economic policy makers and analysts. This is the area of special interest for economists working in governments, national banks, statistical offices and for scientists.

CIRET international conferences are the meeting place for top scientists from all over the world and they successfully integrate academic and business community involved in business survey and business cycles. The conferences are held every other year, the academics from Poland have been involved in these events for more than 30 years. Year 2021 was special for two reasons: the conference was held in Poland, and it was the first online conference in CIRET history.

The book contains a selection of topics that have been discussed at 35th CIRET Conference titled **Economic Tendency Surveys And Economic Policy: Measuring Output Gaps and Growth Potentials**, which took place from 15 to 17 September 2021 in Poznań, Poland.[1]

The conference had 72 participants from 23 countries. It was organized together by KOF/CIRET (Switzerland) and Poznań University of Economics and Business (Poland). Part of the event was the Pre-Conference Workshop "Globalization and Economic Statistics: Challenges and Opportunities" organized by the United Nations Statistics Division (UNSD—USA), Poznań University of Economics and Business (Poland), and the KOF Swiss Economic Institute (Switzerland).

The CIRET organization committee:

- Jan-Egbert Sturm (KOF),
- Vagner Ardeo (FGV),
- Klaus Abberger (KOF),
- Katharina Bloch (KOF),
- Simone Egloff (KOF).

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[1] Conference websites: https://www.ciret.org/conferences/, https://ue.poznan.pl/en/news,c16/konferencje,c14271/35th-ciret-conference-2021,c14270/ (local).

The PUEB local organization committee:

- Sylwester Białowąs,
- Jacek Jankiewicz,
- Robert Skikiewicz,
- Zuzanna Urbanowicz.

The Pre-Conference Workshop organization committee:

- Jan-Egbert Sturm (KOF/CIRET),
- Klaus Abberger (KOF/CIRET),
- Katharina Bloch (KOF/CIRET),
- Simone Egloff (KOF/CIRET),
- Herman Smith (United Nations),
- Ilaria di Matteo (United Nations),
- Sylwester Białowąs (PUEB),
- Jacek Jankiewicz (PUEB),
- Robert Skikiewicz (PUEB),
- Zuzanna Urbanowicz (PUEB).

The research area of all papers is the economic tendency surveys. The selection is driven around two goals. The first is to develop and improve research methods used in business tendency research, while the second is the assessment of the current situation. These goals are reflected in the structure of the book. The first part contains articles on the method in the articles, both trends related to the research of methods are presented, as well as the use regarding a broad range of methods applied in assessing the market economic situation. The second part of the book is focused on the use of methods and situation assessment.

The methodological part starts with the paper *Determinants of sample selection in business climate survey within the sector of banking and financial institutions*. The authors focus their attention on the methodology of research in the banking sector, its changes, and the possibilities to seamlessly match the results before and after the changes. The authors participated in the Institute for Economic Development (IRG) research, carried out for several years. After 20 years of conducting the research, the method needed to be refreshed. Thus, they describe expected changes in methodology and highlight challenges: maintaining continuity and comparability of historical data with that new; change of question wording or even meaning; and finally, unification of the survey to cover specifics of a number of individual market segments while, at the same time, obtaining comparable market data. Another two issues are mentioned and analysed in the text: the decreasing number of banks in the sector (influencing representativeness of the study), and the rising importance of other, non-bank institutions in the financial sector. Based on this analysis, the authors recommend some modifications of the business climate

surveys in the banking sector as part of the research palette regarding the SGH Institute of Economic Development. Those most important are: extending the sample, maintaining comparability of variables, including a testing period for new solutions and generating parallel results.

The next paper is titled *Use of Business Tendency Survey data in output gap estimation*, in which the results of an empirical study on the commonly-used macroeconomic indicators of business cycles in output gap estimation are examined. The authors focus their attention on principal component analysis (PCA). The obtained empirical evidence allows to confirm the usefulness of qualitative indices in modelling the output gap and, at the same time, to support the conclusions that inflation and current account balance are not adequate indicators of the cycle in Poland. The cyclical component achieved using PCA is highly correlated with the cyclical component of the RIED barometer and real GDP change. In this study, the correlation was confirmed between output gap, estimated via principal components based on selected macroeconomic indicators and business tendency surveys data, and the output gap measured by the real GDP growth rate. The authors prove that the traditional business cycle indicators (consumer price index and current account balance) generate ambiguous signals and, hence, are not suitable for output gap estimation. It turns out, however, that they can be successfully substituted for business tendency survey data, which contains valuable information about the current and anticipated state of an economy.

In the paper titled *Automatic turning point identification with the HMM-based indicator*, its author deals with the construction of early warning indicators and the detection of business cycle turning points. A proposal for a new, highly parametrisable method regarding quantitative representation of the business cycle is presented. The author investigates a combination the recognised asymmetric Christiano-Fitzgerald filter and the Bry-Boschan routine of cyclical turning point selection as a simplification of the previously proposed procedure. The basic idea of the remaining part of the HMM Signature Indicator procedure lies in the definition of the signature, which captures the pattern in the considered time series just before the peak or during. An integral part of the research was validation of the presented approach by designing two different HMM Signature Indicators (based on RIED SGH research).

In the article *Monetary policy under continuous market sentiment regimes*, a novel econometric method is prosed for analysing monetary policy under regimes that include the economic sentiments of unobserved agents.

The results indicate differences in the effectiveness of the monetary policy between the high and low economic sentiment regimes, both countries reacting in a similar way to the sentiment. In general, the low level of economic sentiment conducting monetary policy can become more challenging, as the reaction time for the economy increases and the changes in monetary policy need to be more vital to take effect.

The presented results are preliminary but very promising. Developing and confirming the method should lead to better policies and recession recovery programmes.

The paper titled *Do survey responses in manufacturing fluctuate along with business cycle? Evidence from Poland* opens the part of the book devoted to evaluations of business climate. The author investigates contraction and expansion phases in Poland, finding that during the contraction phases, absolute values of balance statistics are both lower, as measured by mean and median, and less volatile than during expansion phases. Her finding suggests that in hard times, enterprises are less likely to form opinions or expectations much different from the consensus. As far as the depth of the downturns is concerned, the contractions associated with the financial crisis appear worse, both with respect to observed and expected changes than in the case of the 2000–2002 slowdown. The author confirms excessive volatility in expansion phases, more often for observed changes than for forecasts. Lower uncertainty is visible in contraction phases, especially at times of financial crisis.

In the paper *Anti-inflation policy in Poland's economy during the period of transformation and integration*, the authors decided to have closer look at the inflation and scope of operation regarding the monetary and fiscal policy instruments applied by the anti-inflation policy in Poland, and went further to empirically evaluate the effectiveness of the policy for Poland's economy. At the beginning, the authors discuss the origin of inflation processes, and the National Bank and fiscal bodies policies to combat price increases. The second part contains the results of econometric analysis concerning the anti-inflation impact of the monetary and fiscal policy tools applied in Poland's economy in the recent twenty years. The authors explain the inflation processes in Poland both from the point of view of monetarist and Keynesian economics. They emphasize the high volatility of Polish anti-inflation policy and its historical changes. This empirical analysis allows to show that among the applied tools of monetary and fiscal policies, an anti-inflation nature of the relationship was found between both of the monetary policy instruments and prices, and also linked budget expenditures to the price level. Another conclusion is that variation of budget incomes did not facilitate price stabilisation in the Polish economy.

In the paper *Relationships between cyclical fluctuations in the banking and the services sectors in Poland*, the relationship is explored between cyclical fluctuations in the banking sector and the sections as well as divisions of the services sector in Poland.

The results of analyses conducted on the basis of data from business tendency surveys are presented. Results are given for cross-correlation analysis, in which the maximum length of lags and leads equal to four quarters was adopted.

The results of the analyses presented in the paper allow to conclude that synthetic the PIKBANK indicator from the business tendency survey conducted in the

banking sector can be classified as a leading or coincident indicator in relation to the general business confidence indicator (GBCI) for most of the services sectors. The length of PIKBANK lead or lag in relation to the general business confidence indicator (GBCI) is similar, regardless of the formula used to calculate quarterly values.

Household financial behaviour reflects preferences concerning intertemporal choice and strongly influences the whole economy. Allocating consumption in time, households balance their exposure to liquidity risk and modify their ability to withstand financial shocks. Consumer sentiment is the main factor shaping the decision-making processes of households.

The paper *Financial behaviours of households in European union countries—similarities and differences within the 2004–2016 period* concerns estimations of the relationship between economic sentiment (Economic Sentiment Indicator) and the shaping of household saving rates, as well as and household debt-to-income ratios. The results allowed the authors to describe similarities and differences in the financial behaviours of European Union households. The analyses cover 19 European countries between 2004-2020. The analyses conducted in the paper prove a significant relationship between Economic Sentiment Index and variables describing the financial behaviour of households, such as household saving rate and debt-to-income ratio. The countries form groups of similar indices, and the analysis of similarities conducted at three time points did not show significant changes in the structure of the groups.

In the closing paper titled *The propensity of Polish households to consume and save within the context of the COVID-19 pandemic*, consumer confidence indicators are used to examine changes in the propensity to consume and save among Polish households faced by the abnormal and dramatic situation bringing multifarious uncertainty into people's lives: the global COVID-19 pandemic. The calculations presented and the comparison of selected indicators show that changes in consumer sentiment, particularly in the propensity to consume and save, were largely very similar at the time of the pandemic to those occurring in response to the Great Recession. Uncertainty related to a deteriorating situation, regardless of its causes, contributes to a marked increase in the propensity to save. Furthermore, it can be assumed that during the pandemic, the degree of uncertainty, and thus, the level of anxiety about the future, was probably even greater than usual. After all, the situation that developed was unprecedented in the world.

In the nine papers presented, the variety within the scientific area of business tendency is shown. The works allow to prove the strong position of Polish science in this area as well. The publication was possible thanks to the project 20031P0DE62F financed by Narodowy Bank Polski.

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