

Heading Towards the New Great Recession? A Confidence Research Perspective

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ABSTRACT

This paper's objective is to further stimulate economists' motivation to carefully consider a class of economic sentiment indices which measure people's beliefs, perceptions and expectations regarding the economy. As the acknowledged leading indicators of economic activity, they have the potential to timely point to the upcoming economic distress. However, given their potential, they are still relatively underused. The from-scratch empirical analysis in this paper detects the recent unfavourable developments in the key sentiment indices, particularly the ones measuring the confidence of consumers. Considering consumer sentiment indicators, the situation in the US and the European countries now seems even worse than during the Great Recession while the perceived uncertainty is building up. As the origin of the new crisis might lie in the sector of consumers – the drivers of final aggregate consumption – policymakers should take their sudden confidence drop seriously and accordingly develop near-future strategies to timely overturn these adverse trends.

Keywords: *Business and Consumer Survey, economic sentiment, Consumer Confidence Indicator, recession*

1. INTRODUCTION

A common practice among economists is to announce a recession when they detect a slowdown in economic activity for at least two consecutive fiscal quarters. Defined in that manner, the most recent recessionary episode was globally experienced due to the Covid-19 pandemic, but it was rather transient in nature. After the negative growth rates in the first half of 2020, GDP in the US and Europe soon got back on track, indicating a fast, sometimes popularly called 'V-shaped recovery'. However, just as the economies took a break from the mentioned short-lived recession, they started to show new signs of weakening. The speedy US economic recovery in the third quarter of 2020 subsided quickly, with GDP now falling by 1,6% in the first quarter of 2022. In line with the standard business cycle theory, a periodical downturn is not necessarily a red flag, unless it is accompanied by some other unusual and troubling signals. And currently, the most worrying fact is that the US inflation in June 2022 took the value of even 9,1%, the highest since late 1981. Persistent inflation in the first several months of 2022 represents a problem for the Eurozone too, where it is also approaching a double-digit figure, mainly due to the rising prices for food, energy, fuels and transport. In addition to these unfavourable inflationary trends, bothersome news comes from the world stock markets. As the US stock market in the first half of 2022 performed the worst in over fifty years (Barba and Vaughn, 2022), the world anxiously awaits the data for the second quarter US GDP, expected to be officially published in late September. European Union's slight current slowdown, on the other hand, has not manifested in a negative GDP growth rate yet. Even though the final consumption of households has started to decline in the first quarter of 2022, other favourable GDP components (primarily investments and trade balance) are still strong enough to keep the EU GDP above water. Moreover, Europe's unemployment levels are also relatively low, creating the impression that rising

inflation is the only momentary economic problem. Still, history has recently shown that, in today's globalised world, the shocks of the crisis erupting in one country could abruptly spill over to other previously well-functioning economies. Although economists typically turn to official statistics for an objective assessment of the state of the economy and prospects for the future, it is probably not enough. The Great Recession clearly demonstrated that the mainstream economic models, relying solely on standard economic indicators, fail at their primary purpose – to explain and anticipate economic developments. They have especially failed at foreseeing the discrete turning points in the business cycle. However, a potential solution came into sight when a group of economists started more actively incorporating the psychological elements in their models. The advantage of behavioural economic models lies in accounting for variables that regard real individuals without making strict assumptions about made-up economic agents. In many cases, it was just the right thing to do to create a more realistic economic framework. The main aim of this paper is to contribute to boosting economists' motivation to more carefully consider a class of economic indicators which measure sentiment – people's beliefs, perceptions, attitudes and expectations regarding the economy. Namely, these indicators had been sending warning signs before 2008, suggesting that an atmosphere of caution and discouragement was present among economic agents beyond the good-looking macroeconomic outlook. Moreover, there are claims that sentiment is even more critical determinant of future economic trends than objective factors (Silvia and Iqbal, 2011). Paying close attention to these subjective indicators could, therefore, point to the potentially atrocious upcoming economic events, which is especially important in times like today. The remainder of the paper is structured as follows. The second part provides an overview of the contemporary research on the class of economic sentiment indicators and tries to motivate the greater usage of tendency surveys results. The third part brings the empirical analysis of the recent trends in confidence indicators, while the fourth chapter discusses the obtained results. The final chapter concludes the story.

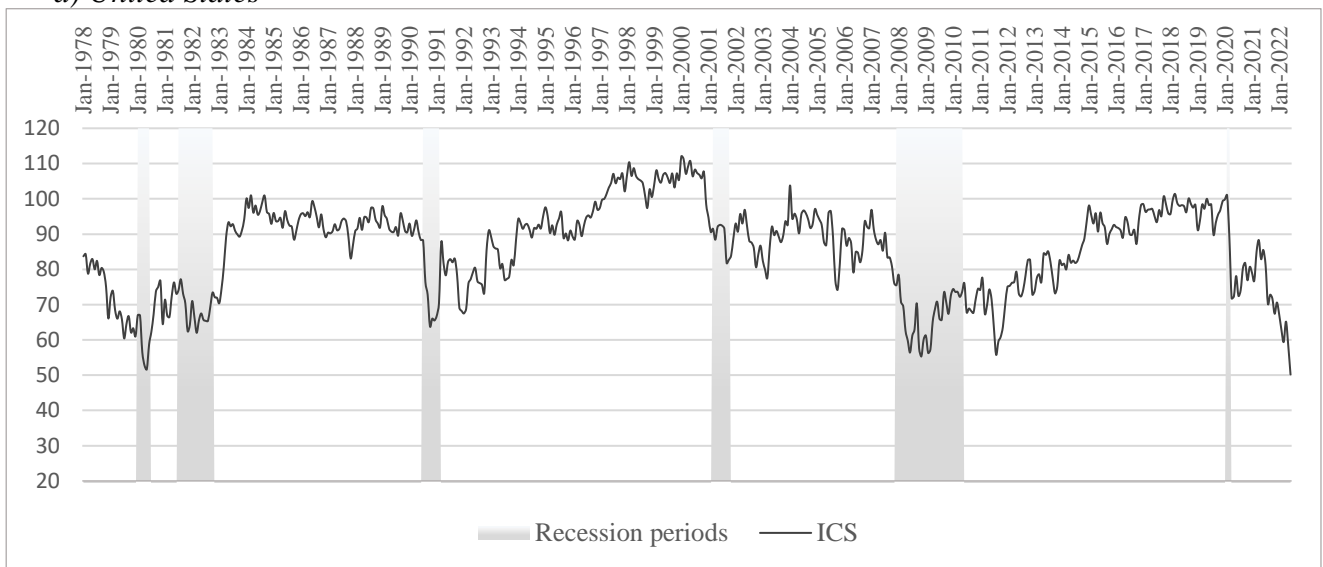
2. CONTEMPORARY CONFIDENCE RESEARCH REVIEW: WHY SHOULD ECONOMISTS CLOSELY OBSERVE ECONOMIC SENTIMENT INDICATORS?

More than 70 years ago, scientists from the US University of Michigan gathered around professor George Katona, who is today considered the originator of the confidence surveys concept. They started carefully observing consumers' opinions via household surveys to finally realise these data could do much more than just describe the consumption attitudes of a handful of people – when adequately collected, they could announce future macroeconomic trends. More specifically, consumer surveys tend to inquire a representative sample of consumers about their assessment of their financial situation, expectations about future economic prospects, and own buying intentions. Economists figured that consumers' current state of mind is likely to reflect in their upcoming financial decisions, and measuring economic sentiment in this way enabled a solid starting point to create credible survey-based leading indicators of economic activity. Later on, this idea spread globally and resulted in monitoring consumers' habits in almost every part of the world. In the 1960s, Europe launched the Joint Harmonized EU Program of Business and Consumer Surveys (BCS) to closely watch the sentiment of economic agents in the most vital sectors of national economies. Ever since, BCS have been conducted in all the EU Member States and from 2016 in the EU accession candidates (Albania, Montenegro, Macedonia, Serbia and Turkey). Besides surveillance, the BCS program nonetheless has a higher purpose. It is also one of the steps toward the general integration of the EU countries (Čižmešija, 2008). Confidence surveys have experienced growing popularity due to their many advantages. The data stemming from these surveys are publicly available and highly frequent (as they are collected monthly and quarterly), allowing scientists to specify qualitative information quantitatively. However, the main advantage lies in something else. As official statistical data on key economic indicators, such as GDP or final consumption, is usually available with a considerable delay, analysts are regularly faced with a few months of uncertainty and guessing until the figures are finally published. On the other hand, considering the nature of survey-based research, sentiment indicators data are declared in the same period (month or quarter) to which the data refer. This means that confidence surveys provide almost the same piece of information on macroeconomic

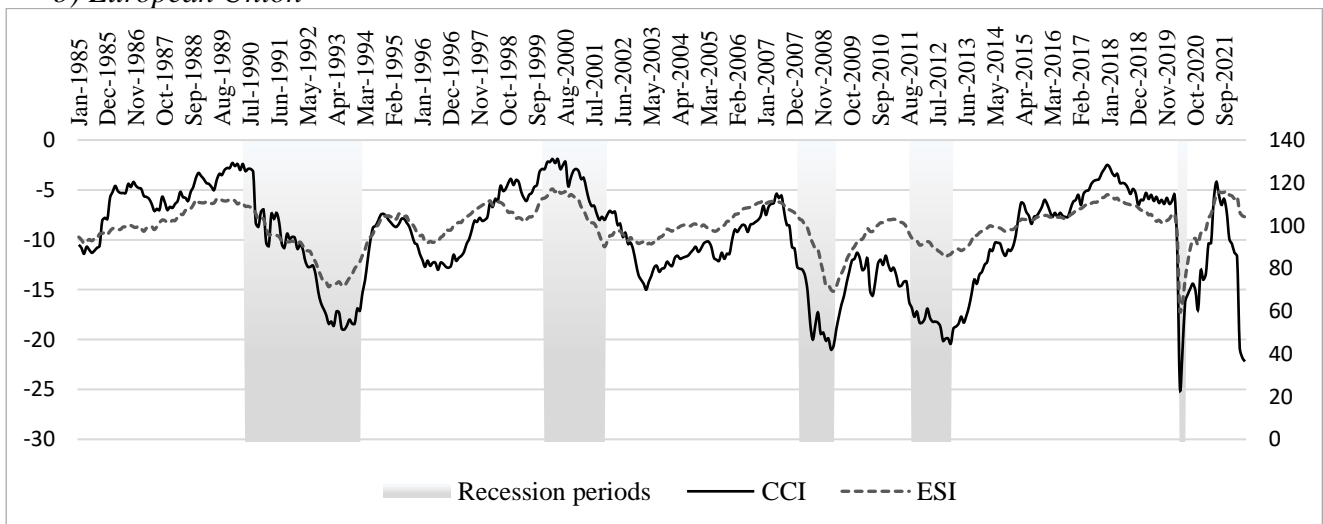
developments but much earlier, which is why they have been used for short-term economic forecasting. Survey-based indicators are specifically designed to track and foreshadow corresponding economic time series. For example, the US Index of Consumer Confidence (ICS) tracks final consumption, and the same job across the Atlantic has its European counterpart, Consumer Confidence Indicator (CCI). Another relevant and heavily used BCS indicator is the European Sentiment Indicator (ESI), pursuing the GDP series. Since the timely publishing of confidence data looked highly promising from the beginning, much scholarly literature has been devoted to examining the forecasting ability of the related indicators and determining if they could announce significant changes in the business cycle. Before turning to essential scholarly findings, Figure 1 should provide just the initial look at the performance of these indicators during the past several decades.

Figure 1. Confidence indicators and significant recessions in the US and the EU

a) United States



b) European Union



Note: CCI is measured in points (left scale), while ESI is measured in index points (right scale)

Source: Author

To graphically detect if there is a correlation between waves of sentiment and general economic activity, Figure 1 thus depicts the ICS, CCI, and ESI developments along with recession episodes in the US and Europe. Only the severe and lingering recessions have been singled out here to highlight how consumers' optimism/pessimism has coincided with the most important economic and political events in recent world history.

For example, the turbulent early 1990s marked the end of the Cold War, the Soviet Union's disintegration and an oil shock due to the Gulf War. At the same time, with the slowdown of large industrial economies such as Japan, the US, the United Kingdom, France and Italy, central banks in Europe began to tighten monetary policy for preventive reasons (Hutchison, 1991), while the recession in Europe culminated between 1992 and 1993 with the crisis of the European Exchange Rate Mechanism (Jonung and Hagberg, 2005). The recession in the early 2000s resulted from the terrorist attacks in the United States, triggering Western fear of Islamic extremism, in addition to the Enron scandal and the introduction of the common currency in the EU. However, the most severe world economic crisis in recent history happened after the 2007 US financial collapse, and the second wave of the Great Recession erupted in the EU between 2012 and 2013, manifesting as the sovereign debt crisis. 2020 brought the latest economic downturn related to the Covid-19 world pandemic. The graphic representation in Figure 1 shows that every decline in aggregated confidence coincides with recessionary episodes, confirming similar earlier findings in Matsusaka and Sbordone (1995). And not just that, in most cases, it even precedes the decline in economic activity, indicating that each sudden and unpredictable economic downturn was foreshadowed by a milder or stronger decline in peoples' optimism. The explanation is straightforward: if economic agents are optimistic about economic prospects, it increases their propensity to consume and in turn determines aggregate consumption, production and unemployment levels (Westerhoff and Hohnisch, 2007; Bachmann and Sims, 2012). Vice versa, economic agents start to pull back in times of excess anxiety and rising uncertainty. However, the determinants of economic sentiment do not have to be purely economic. For example, Doms and Morin (2004) argue that economic sentiment indicators have come under scrutiny due to war events, terrorist attacks, and accounting scandals. Scholars have therefore had a strong enough argument to thoroughly inspect the predictive properties of confidence indicators in all the different settings. For example, Carroll et al. (1994), Matsusaka and Sbordone (1995) and Bram and Ludvigson (1998) made noteworthy studies for the US, all confirming that Michigan ICS has the power to predict changes in personal consumption and helps to reduce forecasting errors in prediction models. Similar findings are associated with multi-country research, usually observing more European or several world economies (e.g. Nahuis, 2000; Cotsomitis and Kwan, 2006; Taylor and McNabb, 2007). Moreover, some studies further confirmed that consumer confidence not only summarises the information already contained in standard economic indicators but has autonomous predictive power (e.g. Golinelli and Parigi, 2004). As the literature increasingly began to provide evidence of the close connection between sentiment and economic trends, even despite the lack of complete scholarly agreement, Sorić (2018) argues that the impact of economic sentiment on the GDP trends today is a stylised fact of modern macroeconomics. Adamowicz and Walczyk (2013) analysed the main quantitative indicators of the state of aggregate economic activity (GDP, private consumption, industrial production, construction and retail) and then aligned them with corresponding qualitative (confidence) indices such as ESI or CCI. The results show that the crisis is deeply embedded in the minds of economic agents, and an intense fear of the future is expressed in their pessimistic sentiment. In a complementary manner, Erjavec et al. (2016) additionally include the variable of economic sentiment in their model to assess the possibility of predicting Croatian recession episodes. Again, ESI significantly contributed to the model's accuracy, which made it clear that psychological factors largely govern economic cycles. Their importance is even greater in times of economic distress, speaking in favour of the popular premise that recessions are (at least to some extent) psychologically conditioned. Recent evidence of some ex-post studies explicitly showed that confidence indicators could predict the 2008 recession in the G-7 countries at a relatively early stage, although they were somewhat less successful in determining the intensity of future economic losses (Astolfi et al., 2016). Furthermore, van Aarle and Moons (2017) emphasise that economic sentiment and uncertainty had a vital role in explaining and forecasting economic changes in the euro area during the world financial crisis, as well as in the crisis in the 1930s. The arising question is, why are the economists still somewhat reluctant to use confidence indicators in their prediction models?

Although the academic community has not yet reached a consensus on all the specifics of confidence indicators, the up-to-date scholarly research provides credible reasoning to carefully read the signs written in sentiment data. This is precisely the goal of this paper.

3. EMPIRICAL ANALYSIS OF THE MAIN CONFIDENCE INDICATORS' LATEST TRENDS

The recent spread of media headlines speculating about the new crisis prospects has mainly been supported by the recent GDP, unemployment and consumption figures. However, we should be aware that officially published key macroeconomic series are always a step behind. For example, as we are approaching the third quarter of 2022, we still wait for Eurostat to announce the definitive first-quarter data, as it is still in for many European countries proclaimed provisional. In this manner, we cannot be timely informed about the developments in the economic environment and provide credible enough analysis. Delayed information is something we can (and must) live with in good times, but it nonetheless represents a serious obstacle during difficult times when it is crucial to react promptly to annul as many consequences as possible. With that in mind, a set of different leading economic indicators at hand can do nothing but help. Let us first have a look at the US and EU confidence indicators which are broadest in scope.

Table 1. The latest data on the US and EU broadest confidence indicators, June 2021 – June 2022

	June 2021	May 2022	June 2022	Yearly change (%)	Monthly change (%)
University of Michigan Index of Consumer Sentiment (ICS)	85,5	58,4	50,2	-41,3%	-14,0%
The Conference Board Consumer Confidence Index (CB-CCI)	128,9	103,2	98,7	-23,4%	-4,4%
Economic Sentiment Indicator (ESI)	114,5	104,2	102,5	-10,5%	-1,6%
Employment Expectations Indicator (EEI)	111,6	112,2	110,6	-0,9%	-1,4%
Economic Uncertainty Indicator (EUI)	13,1	22,6	23,9	82,4%	5,8%

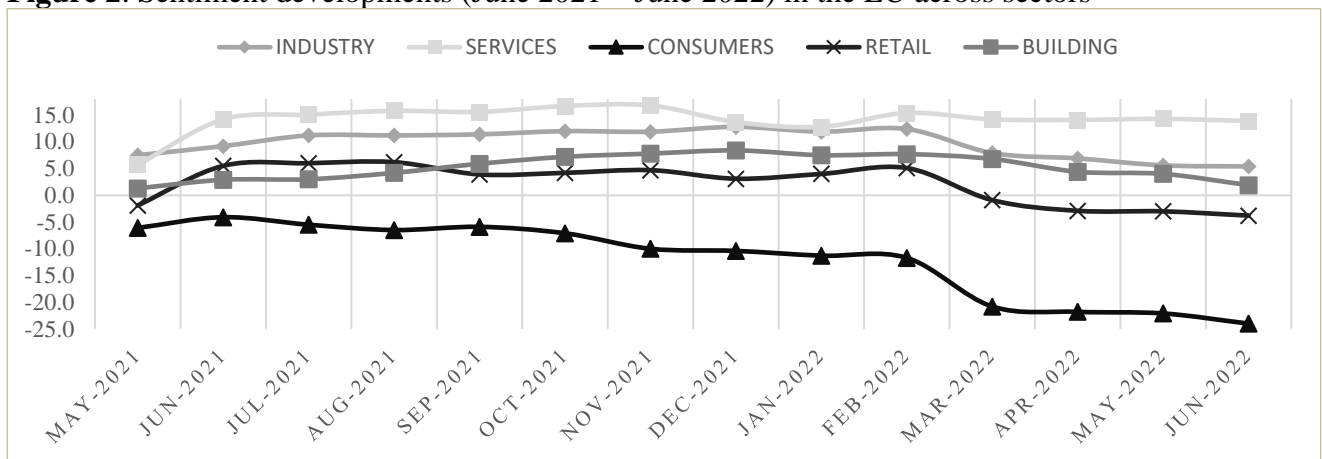
Note: ESI, EEI and EUI data refer to aggregated EU Member States data

Source: author's calculation

Even the first glance at the numbers in Table 1 reveals a lot about agents' perceptions of their economic environment. Respondents have lately especially been pessimistic in the US: according to the two most closely watched sentiment measures, consumers' sentiment has been on a steep downward path since last year, and their negative perceptions and expectations have intensified in the last few months of 2022. This is especially true for the University of Michigan ICS, which fell by more than 40% compared to the same period in 2021, reaching the all-time-lowest value in June 2022. Although severe drops have happened before, such a low value of ICS has not been recorded in times of any US recession, including the Great Recession. Moreover, this dramatic month-to-month decline of even eight percentage points surprised even the professionals, as a Bloomberg survey of economists expected ICS to fall slightly since May. Negative trends did not bypass Europe either. Although ESI's year-to-year decrease is not as dramatic, it reveals the decaying overall sentiment. Furthermore, the Employment Expectations Indicator (EEI), which sums up managers' employment plans in surveyed business sectors (European Commission, 2022) indicates the possibility of negative total employment changes in the near future. These annual changes are not necessarily a cause for concern; what is undoubtedly worrisome are the changes that have occurred over the two consecutive months. Just for example, April to May percentage decline was more than three times smaller than the drop from May to June. The third observed European sentiment indicator, Economic Uncertainty Indicator (EUI), measures business managers' and consumers' subjectively perceived difficulty in

making predictions about their future business or financial situation (European Commission, 2022). On top of the observed negative sentiment trends, the feeling of uncertainty is also on the rise, especially compared to last year. The data for the US are taken here mainly as a reference point because of the multiple cases of recessions with an ‘American origin’, later spilling over to the rest of the world. This research primarily aims to observe the European countries in this context, so let us now focus more intensely on European conditions. Even though ESI is a convenient leading indicator containing unique information, it is still an aggregate composite index summing consumers' and managers' perceptions and expectations in different business sectors. The more disaggregated picture might point to certain specifics when it comes to detangling people’s rising negative attitudes. Therefore, Figure 2 reveals the monthly development of sentiment in all five sectors that comprise the aggregated ESI.

Figure 2. Sentiment developments (June 2021 – June 2022) in the EU across sectors

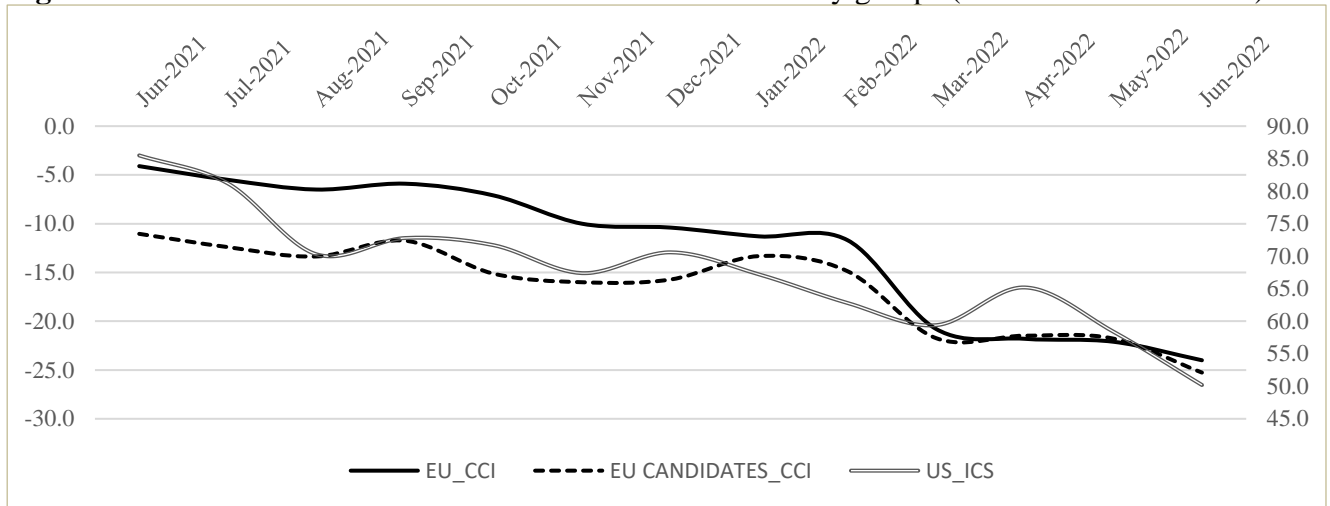


Source: Author

As presented in Figure 2, one might notice that agents’ confidence in the four EU business sectors (manufacturing industry, services, retail and construction sector) was mainly constant during the last twelve months, facing a slight downturn since April 2022. On the other hand, the consumer sector noticeably deviates from the other presented sectors with an increasing gap over the previous 12 months. The numbers are alarming. From June 2021 to June 2022, EU consumer confidence (measured by CCI) decreased by as much as 264% and the steepest monthly decline in this period happened in April, when it fell by 78%. CCI’s latest published value of -24 points from June 2022 is even lower than all its values during the Great Recession period, including the first strike of the crisis (2008-2009) and the second wave (2012-2013), which manifested in the form of the sovereign debt crisis. According to the presented figures, consumer confidence is severely declining, which is especially dangerous for the upcoming trends of final consumption, the largest GDP component in most economies. Acknowledging that the origin of the potential new large-scale recession might lie in the consumer sector, it would be worthwhile to compare consumer sentiment among the different country groups. Figure 3 demonstrates recent developments of the US ICS, EU CCI, and the average CCI for the EU candidate countries.

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Figure 3. Consumer sentiment indicators across different country groups (June 2021 – June 2022)



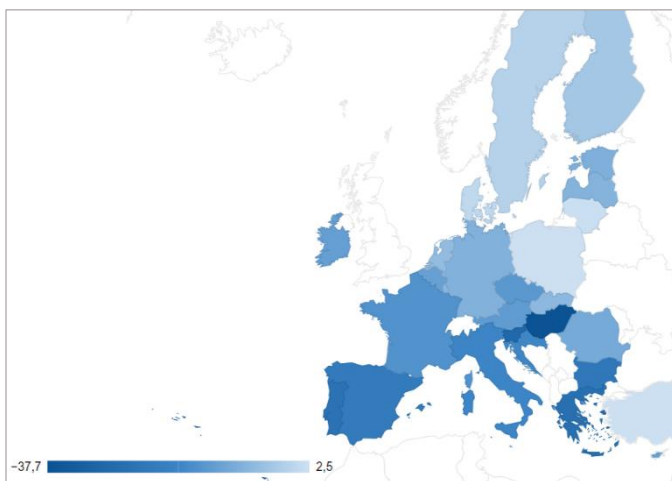
Source: Author

Generally, the presented consumer sentiment indicators' trends in Figure 3 are alike, following a downward path with a more substantial drop in the first half of 2022. When comparing the two European country groups, one might observe their analogue volatility, but the EU candidates experienced tower CCI values throughout almost the entire period. Although it is to expect that less developed countries with a more unstable political scene have an overall lower consumer sensibility, it is nonetheless interesting that the gap between the EU average and EU candidates has almost disappeared in 2022. It seems that the premonition of the soon-to-come economic distress suddenly made consumers from the EU group quite pessimistic. Figure 3 also demonstrates the correspondence between American and European consumer confidence. Looking closely, it is somewhat more challenging to find a matching behaviour pattern of both series, but one thing is particularly worrying at this point. If the commonly used saying 'when the US sneezes, the world catches a cold' is true in this case too, the rest of the (Western) world should be on guard considering the latest American data.

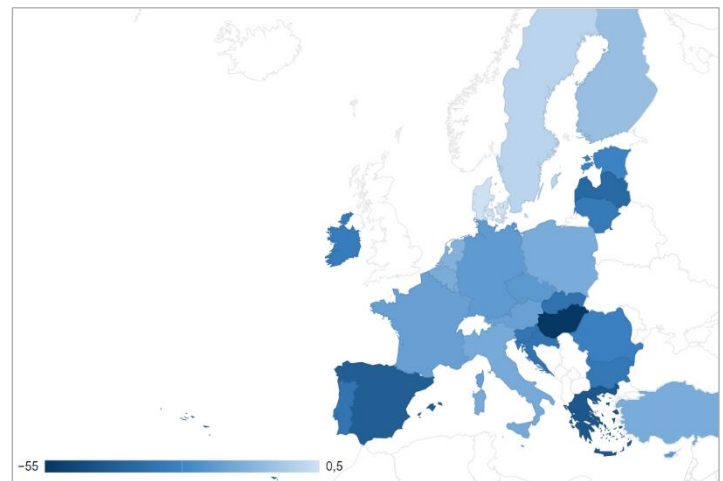
Figure 4. CCI in European countries (Member States and Candidate Countries)

a) January 2008 – the beginning of the Great Recession

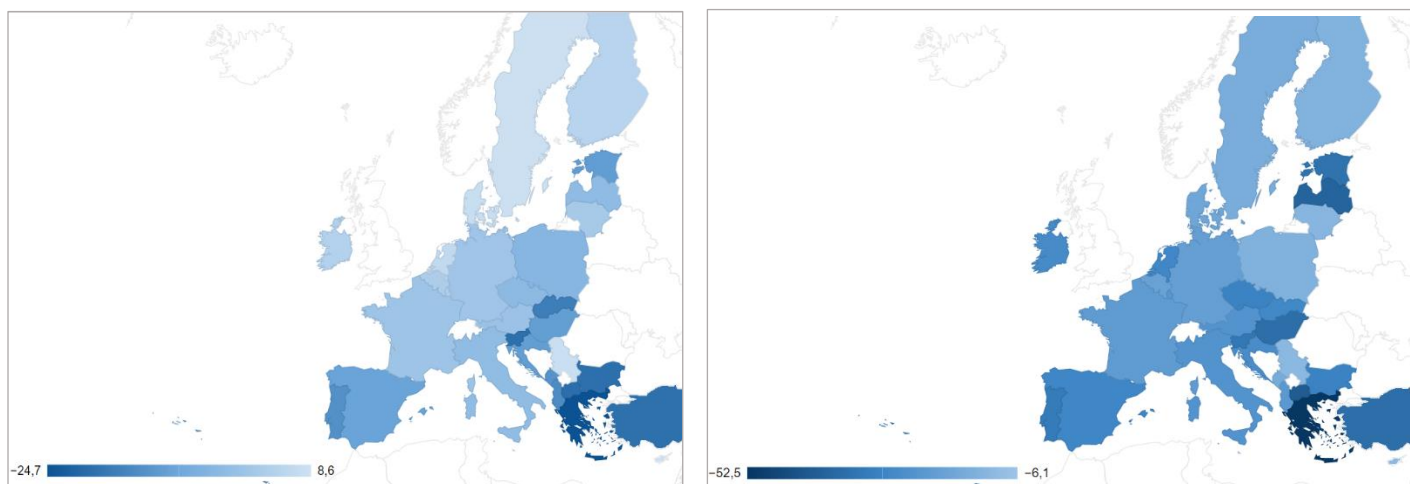
b) February 2009 – the lowest CCI figures during the Great Recession



c) June 2021



d) June 2022



Source: author (adopting the European Commission BCS data)

Lastly, to further assess the particularities of the diminishing European consumer sentiment, Figure 4 offers a country-level overview. The geographical figures present the confidence of European consumers in the four selected points in recent history, where the darker country colour denotes higher pessimism and lighter colour lower pessimism. In this manner, it is possible to compare CCI both across countries (space) and time to provide additional inferences. The four observed periods are: a) January 2008 to visualise CCI in European countries just before the crisis effects spilled over from the US (this period can be seen as the recession prelude and is directly comparable to the present times); b) February 2009 as the period with the highest average EU pessimism in the EU during the entire Great Recession (serves as the ‘most depressed’ figure in the last few decades); c) June 2021 and d) June 2022 are the two recent time points helping to envision the CCI developments in 2022. After the subprime mortgage market collapse in the US in late 2007, which is usually considered the official beginning of the Great Recession, the world soon absorbed the initial crisis effects. However, a whole year had to pass for Europe to experience the economic hardship fully. Figures 4 a)-b) capture that very well. With consumer confidence plunging for a while before 2008, hinting at the imminent turn in the business cycle, the lowest CCI value throughout the recession was recorded a little later, in February 2009. As expected, states that proved to be most vulnerable in economic terms (especially the so-called PIIGS countries) experienced the fastest-growing pessimism. Over time Europe has recovered both in economic and confidence terms, which brings us to the much more bright-shaded situation in Figure 4 c). Unfortunately, the bright shades did not last long, and Figure 4 d) is here to announce the return of the darker times. Several important insights are coming from these four figures. First, the situation in Figure 4 d) is more reminiscent of February 2009, when the previous crisis was in full swing than the situation from the crisis beginning in January 2008. Furthermore, the lowest recorded CCI in June 2022 is in Malta (-6,1 points), meaning that the most confident nation in June 2022 still takes negative CCI values. And lastly, Figures 4 a)-c) demonstrate that over a reasonably long period in the recent past, the lowest sentiment was present in the Mediterranean and other peripheral European countries, while stable and relatively low pessimism remained in central and northern Europe. Figure 4 d) indicates the changing conditions, confirming the inference from Figure 3 – the gap in confidence between the European core and less developed countries is recently closing. It seems that uncertain present times unified Europeans in their collective pessimism and fear of the near future.

4. DISCUSSION AND POLICY IMPLICATIONS

Empirical analysis from the previous chapter clearly outlined one thing. Economic sentiment measures, especially consumer sentiment indices, are all in red, signalling we are potentially about to reach the turn in the business cycle. With severely weakened supply chains, rising geopolitical uncertainty and inflation kicking in, consumers have started to pull back. Nevertheless, what can we further infer from the fact that consumer pessimism now is almost record high and tenaciously

increasing from month to month? Considering what we know about sentiment measures from scholarly literature, it certainly holds that these indicators reflect the current macroeconomic conditions. Hence it is no surprise that they take lower or negative values in times of economic distress as opposed to boom and prosperity. In addition, confidence indicators are also commonly considered to foreshadow macroeconomic trends. According to Matsusaka and Sbordone (1995), almost all recessions were preceded by a decline in confidence, and almost all declines in confidence went ahead of a recession. Knowing how economic agents feel about the economy and how their attitudes change monthly to altering economic conditions might provide plenty of helpful information for economic analysts and policymakers. First of all, confidence indicators improve short-term forecasts. Not only do they help predict the actual levels of their reference macroeconomic series, but reading between the lines could enable economists to get an explanation (cause) of the current state of the economic environment. For example, the European Construction Confidence Indicator (which measures business managers' sentiment in the construction sector) was subject to a massive decline between early 2007 and mid-2009, which was in fact much steeper compared with the consumer sentiment decline. It suggested something was out of the ordinary in the building sector before the crisis erupted. On the other hand, as the recent sentiment data point out, the origin of the new crisis might lie in the consumer sector and this sudden consumer confidence drop should be taken seriously. The rationale behind the economic mechanism at hand is straightforward. Consumers with weakened confidence have diminished willingness to buy and are likely to reduce their overall spending, especially on durable goods such as cars (Hymans, 1970; Mishkin, 1978). They are also likely to lose the initiative to buy a house. Moreover, consumer confidence is closely related to their investment, crediting and saving ambitions. As optimism is reflected in higher consumption and lending, pessimism is associated with greater savings and avoiding crediting in times of uncertainty (Van Raaij and Gianotten, 1990). All of the above has near-future implications for the durable goods markets, real estate markets, stock markets and banking, also indicating that specific policy measures will potentially need to be applied concerning these markets. Therefore, economic analysts could extract essential signals from the recent confidence figures, better predict the upcoming trends in final consumption and even reveal future patterns in economic activity. On the other hand, policymakers could be better prepared to react in an adequate and timely manner. A prompt reaction of governments is crucial in every recession to annul as many adverse effects as possible. Understanding the prevailing consumer sentiment is also important from another aspect. Namely, consumers are the drivers of final consumption and are inherently subject to form opinions and attitudes by what they hear in the media and from the authorities. A good communication strategy is therefore crucial. Government should disclose to the citizens the policies it intends to implement shortly, and assure the public that the authorities are doing their best. Such practices scale down uncertainty among consumers and reduce their discouragement when making financial decisions – which is extremely important at the aggregate level.

5. CONCLUSION

The current state of world affairs includes inflation, war and political uncertainty, bearish symptoms in all the major world stock markets and the still present Covid-19 pandemic. At this point, the new global recession seems inevitable. The question is whether it will be as severe as the 2008 recession and rapidly spill over from the US to the rest of the world. Will the recovery be prolonged like 15 years ago and take the U- or even L-letter shape, or will it be transient and (hopefully) imitate the V-letter shape? Nobody, not even the professional economic forecasters and esteemed academics, has the crystal ball to predict the exact parameters of the next recession. Economics is not a discipline in which we can predict and plan anything with certainty. Still, we can sharpen our senses and listen carefully to all the signals the economy sends. On that note, apart from relying solely on standard macroeconomic data (like GDP, unemployment and consumption series), economists should also embrace the benefits of 'soft' variables. These variables, derived from regularly conducted consumer and business surveys, form sentiment indicators and communicate economic agents' momentary perceptions and expectations regarding their economic environment. Moreover, as the commonly

acknowledged leading indicators of economic activity, they carry important information on economic developments much before the standard macroeconomic indicators reveal the same. Thus we have enough reasons to observe confidence indicators very closely. The empirical analysis in this paper showed that sentiment indices in the US and Europe are all in decline (both compared to the previous year and month), indicating that the confidence of economic agents is plunging while their sense of uncertainty heightens. This is especially true for the consumer sector as their lack of confidence has broken records in the past few months. In fact, in June 2022, the European CCI was lower than throughout the entire Great Recession, even in the utmost months. Additionally, looking at how consumer confidence takes value at the European country-level, the situation now resembles a lot of February 2009. Not just that, the discrepancy between the so-far intensely pessimistic peripheral countries and less pessimistic European core almost vanishes. Consumers in Europe and the world, unfortunately, seem to be entirely united in their negative economic perceptions and expectations. These signals should be considered when properly assessing the current conditions and predicting the near-future trends. More accurate forecasts, even several months in advance, can provide policymakers with valuable time to carefully go through possible scenarios and specifically design the policy mix as a response to each scenario. If the essence of the upcoming economic troubles lies in the consumer sector, authorities should accordingly devise strategies to reduce consumers' fear and delaying consumption as much as possible. The Great Recession pointed to examples of countries whose success in overcoming the recession, in addition to well-implemented measures, was also a product of good government communication with the general public. Informing the public about all future government activities in a decisive, comprehensive and transparent manner and regularly reporting progress can reduce uncertainty, panic and inertia among consumers. The main aim of this paper was to contribute to boosting economists' motivation to consider all the aspects of tendency surveys and make use of all their benefits. Further research should, however, employ more advanced econometric and/or machine learning techniques with the help of confidence indicators to reliably predict economic conditions ahead of us.

LITERATURE:

1. Adamowicz, E. and Walczyk, K. (2013). New EU countries after the great recession. *Transformations in business & economics*, 12(2B), pp. 255–265.
2. Astolfi, R., Gamba, M., Guidetti, E. and Pionnier, P. A. (2016). The use of short-term indicators and survey data for predicting turning points in economic activity: A performance analysis of the OECD system of CLIS during the great recession. *OECD Statistics Working Papers* 2016/08.
3. Bachmann, R. and Sims, E. R. (2012). Confidence and the transmission of government spending shocks. *Journal of Monetary Economics*, 59, pp. 235–249.
4. Barba, M. and Vaughn, H. (2022, July 1). The Stock Market Finished Its Worst First Half Since the '70s, but There's Good News Investors Should Keep in Mind. *Time*, Retrieved 5 July, 2022, from <https://time.com/nextadvisor/investing/latest-stock-market-news/>.
5. Bram, J. and Ludvigson, S. (1998). Does Consumer Confidence Forecast Household Expenditure? A Sentiment Index Horse Race. *FRBNY Economic Policy Review*, pp. 59–78.
6. Carroll, C. D., Fuhner, J. C. and Wilcox, D. W. (1994). Does Consumer Sentiment Forecast Household Spending? If So, Why? *The American Economic Review*, 84(5), pp. 1397–1408.
7. Cotsomitis, J. A. and Kwan, A. C. C. (2006). Can Consumer Confidence Forecast Household Spending? Evidence from the European Commission Business and Consumer Surveys. *Southern Economic Journal*, 72(3), pp. 597–610.
8. Čizmešija, M. (2008). *Konjunkturni testovi Europske Unije i Hrvatske*. Zagreb: Privredni vjesnik.
9. Doms, M. E. and Morin, N. J. (2004). *Consumer Sentiment, the Economy, and the News Media*. FRB of San Francisco Working Paper 2004-51.
10. Erjavec, N., Sorić, P. and Čizmešija, M. (2016). Predicting the probability of recession in Croatia: Is economic sentiment the missing link? *Zbornik Radova Ekonomskog Fakulteta u Rijeci: Časopis Za Ekonomsku Teoriju i Praksu/Proceedings of Rijeka Faculty of Economics: Journal of Economics and Business*, 34(2), pp. 555–579.

11. European Commission (2022). The Joint Harmonized EU Programme of Business and Consumer Surveys, User Guide. Retrieved 10 June, 2022, from https://ec.europa.eu/info/files/user-guide-joint-harmonised-eu-programme-business-and-consumer-surveys_en.
12. Golinelli, R. and Parigi, G. (2004). Consumer sentiment and economic activity: A cross country comparison. *Journal of Business Cycle Measurement and Analysis*, 1(2), pp. 147–170.
13. Hutchison, M. M. (1991). Aggregate demand, uncertainty and oil prices: The 1990 oil shock in comparative perspective. *Bank for International Settlements Economic Papers No 31*.
14. Hymans, S. H. (1970). Consumer Durable Spending: Explanation and Prediction. *Brookings Papers on Economic Activity*, 2, pp. 173–199.
15. Jonung, L. and Hagberg, T. (2005). How costly was the crisis of the 1990s? A comparative analysis of the deepest crises in Finland and Sweden over the last 130 years. *European Economy - Economic Papers 2008 - 2015* 224.
16. Matsusaka, J. G. and Sbordone, A. M. (1995). Consumer confidence and economic fluctuations. *Economic Inquiry*, 33(2), pp. 296–318.
17. Mishkin, F. S. (1978). Consumer Sentiment and Spending on Durable Goods. *Brookings Papers on Economic Activity*, 1, pp. 217–232.
18. Nahuis, N. J. (2000). Are Survey Indicators Useful for Monitoring Consumption Growth: Evidence from European Countries. *Netherlands Central Bank, Monetary and Economic Policy Department, Working paper 2000-08*.
19. Silvia, J. and Iqbal, A. (2011). Monetary Policy, Fiscal Policy, and Confidence. *International Journal of Economics and Finance*, 3(4), pp. 22–35.
20. Sorić, P. (2018). Consumer confidence as a GDP determinant in New EU Member States: A view from a time-varying perspective. *Empirica*, 45(2), pp. 261–282.
21. Taylor, K. and McNabb, R. (2007). Business Cycles and the Role of Confidence: Evidence for Europe. *Oxford Bulletin of Economics and Statistics*, 69(2), pp. 185–208.
22. van Aarle, B. and Moons, C. (2017). Sentiment and uncertainty fluctuations and their effects on the Euro Area business cycle. *Journal of Business Cycle Research*, 13(2), pp. 225–251.
23. Van Raaij, W. F. and Gianotten, H. J. (1990). Consumer confidence, expenditure, saving, and credit. *Journal of Economic Psychology*, 11(2), pp. 269–290.
24. Westerhoff, F. and Hohnisch, M. (2007). A note on interactions-driven business cycles. *Journal of Economic Interaction and Coordination*, 2, pp. 85–91.