REVIEW

1. General information

Reviewer: ***Assoc. Prof. Dr. Stela Stoyanova Raleva***
Sofia University „St. Kliment Ohridski"
professional field 3.8. „Economics"
scientific speciality „Political Economy"

Grounds for the submission of the review: Participation in the scientific panel for the public defence of a doctoral thesis for acquiring an educational and scientific degree „Doctor" in the scientific speciality „Political Economy (General Economic Theory)" at the University of Economics – Varna, in accordance with Order No. RD 06-97/02 June 2026 of the Rector of the UE and the decision of the first meeting of the scientific panel, held on 8 June 2026.

Author of the dissertation: ***Vanya Vasileva Hristova***

Dissertation topic: ***Behavioural approach to inflation expectations of households***

Scientific supervisor: ***Assoc. Prof. Dr. Kaloyan Kolev***

The review is prepared in accordance with the Law on the Development of Academic Staff in the Republic of Bulgaria, the Regulations for its implementation, and the Regulations on the Development of Academic Staff at the University of Economics – Varna.

2. Information about the author of the dissertation

Vanya Hristova completed her bachelor's degree in "Marketing and Strategic Planning (taught in English)" at the University of National and World Economy in 2016. She subsequently enrolled in a master's program in "Advertising Management and Visual Branding" at the New Bulgarian University. In 2022, she obtained a master's degree in "International Business and Management (taught in English)" from the University of Economics - Varna. From October 2015 to May 2017 and from September 2017 to October 2018, she worked as a specialist in Corporate Communications, Brand Management, and Change Management at "Societe Generale Expressbank" in Sofia and Varna. From May 2017 to September 2017, she was head of Marketing and Sales at "Prointegra" Ltd. in Varna. From October 2018 to December 2018, she was a Product Marketing specialist at "SATA Services" in Varna. Since May 2019, she has successively held the positions of Project Manager, Head of the Project Management department, and Chief Operating Director at "SEPA Cyber Technologies" Ltd, where she also served as a member of the Management Board for a two-year period. She is fluent in English, French, and German.

Vanya Hristova was admitted to the full-time doctoral program in the Department of General Economic Theory at the UE – Varna in July 2022. During her doctoral studies, she passed with excellence all exams in her individual study plan. She completed her doctoral program, with the right to defend her dissertation, in October 2025. The procedure for the defense of her dissertation was opened by a decision of the Faculty Council of the Faculty of Finance and Accounting at the University of Economics (Protocol No. 36 of May 28, 2026).

3. General presentation of the dissertation

The dissertation is 201 pages in total, 179 of which constitute its main body. It is structured into an introduction, three chapters, a conclusion, two appendices, and a list of references. It is devoted to an interesting and complex issue, which has not yet been explored in Bulgarian economic literature. At the same time, it is highly *significant* given the limitations of standard models in explaining inflation expectations in the real world, as well as because of the impact of these expectations on decision-making and, consequently, on the behavior of all key macroeconomic indicators, the macroeconomic policies pursued, and their effectiveness. The problem has become particularly *topical* in recent years, which have been characterized by increased and volatile inflation reflecting the impact of diverse and, to a large extent, shock factors. In such an environment, households become particularly sensitive to price fluctuations and project this onto their expectations for the future, which are far from the systematically formed forecasts postulated in theoretical models. Therefore, the explanation of households' inflation expectations sought in this dissertation within the field of behavioral economics is important and timely and should be appreciated accordingly. Its relevance to Bulgaria has increased significantly since the decision taken in mid-2025 for the country to join the Euro Area and the subsequent acceleration of inflation.

The introduction contains all the traditional elements of the introductory section of a dissertation. It sets out in detail the significance and relevance of the topic and explains the motivation behind its selection. The object and subject of the study are outlined, and its main aim is defined, which is broken down into six more specific tasks. The dissertation thesis and the main research hypothesis are clearly formulated. A summary of the applied methodology is provided, the scope of the study is outlined, and the content of the individual structural units is briefly described.

The first chapter examines key views on inflation and inflation expectations in macroeconomic theory. It discusses the fundamental characteristics of the inflationary process and its impact on economic decision-making. The focus is on the persistence of inflation and its distinction from price dynamics, as well as on its structural characteristics and the ways in which it is measured and perceived. Three stages have been identified in the theoretical framework of inflation expectations – their treatment as a backdrop, as a mechanism and as a process – and their correspondence with key concepts of inflation has been revealed. The transmission of expectations to household consumption has been characterised using the "channels – choice feasibility – adjustment of responses" framework. Their manifestation is outlined in terms of intertemporal choice and the structure of expenditure; the dependence of their realisation on liquidity, income, wealth and access to credit is explained; and the signalling environment – the labour market, fiscal and interest rate conditions, and the distribution of price pressures – is characterised. Expectations are defined as a measurable object, their modelling is describedand their most important empirical properties are identified. The shortcomings of standard macroeconomic approaches to expectations have been highlighted, and their interpretation within a behavioural context – as the result of a process of perception, interpretation and adaptation – has been justified.

The second chapter presents the integrative framework developed for the formation of inflation expectations as a sequence of interrelated mechanisms. It defines the choice architecture, discusses its dual nature, and examines its specific tools. The nature of cognitive translation, carried out through a sequence of classical heuristics - availability, anchoring and representativeness, has been analysed. The characteristics of affective translation, affective statistics and the updating of expectations have been clarified. The social trajectory of inflation expectations has been outlined, with landmarks introduced that narrow the range of interpretation and lead to stabilisation. The relationship between expectations and individual consumption structure and the degree of economic vulnerability has been described. The influence of financial literacy as a practical manifestation of education and of the cultural context as an affective framework for assessment has been outlined. The effects of social moderators such as institutional trust, the media environment, social interactions and the close circle have been examined. The individual mechanisms of the integrative framework have been combined into a sequential and recursive analytical model, and its operationalisation has been proposed. At the end of the chapter, the behavioural approach is subjected to a critical review, and its acceptance as an extension of, rather than an alternative to, macroeconomic analysis is justified.

In *the third chapter*, the conceptual framework for the formation of inflation expectations is applied to data from a households' survey in Bulgaria. It examines whether the proposed mechanisms are recognisably manifested in the specific economic and institutional context. It presents the methodological design of the study and describes the general population and the sample. The use of an associative approach and non-parametric methods is justified in it, given the ordinal nature of the data. The limitations of the empirical study, which restrict the scope of generalisation and do not allow causal relationships to be identified, are discussed. The signalling environment has been analysed through the exposure to price signals and the structuring of inflation assessments. The key components of the environment and their variables have been defined, and hypotheses have been formulated regarding their relationships with the availability of price episodes and sensitivity to the specified reference value. The same logical scheme has been applied to the analysis of the translation operations and the stabilisation of inflation estimates. In the first case, the method of converting the content covered into a score and a numerical value through interpretation, reduction and the inclusion of a frequency-based assessment is demonstrated. In the second case, the conditions for the stabilisation of assessments relating to cognitive and material resources, economic vulnerability and the institutional framework are examined. At the end of the chapter, the importance of public communication in the process of recognising and interpreting inflation-related information is discussed, and the key features of the obtained results are highlighted.

The conclusion summarises the most important findings from the theoretical and empirical analyses. It notes that the main thesis has been substantiated and sums up the research contributions. The remaining open questions are identified and the practical significance of the results obtained is described.

The appendices include an official questionnaire from the European Commission for a consumer survey in Bulgaria and an additional set of questions describing a behavioural approach to households' inflation expectations.

The list of references contains 169 sources – 7 in Bulgarian and 162 in English.

4. Structure and content of the dissertation

The chosen *structure* of the dissertation is appropriate and fully corresponds to the stated aim and specific tasks of the study. The different structural units are conceptually interconnected and follow a general logic. The first chapter presents the main perspectives on inflation expectations in macroeconomic theory and bridges the gap to the behavioural approach. The second chapter conceptualises the behavioural analytical framework of the study, bringing together ideas from behavioural economics and social psychology. The third chapter comprises an empirical analysis of households' inflation expectations in Bulgaria, based on the use of selected statistical methods.

It is clear from *the content* that the author possesses in-depth theoretical knowledge of the subject matter of the dissertation and knows how to skilfully apply contemporary scientific methods. She displays proven abilities in conducting independent scientific research and achieves indisputable scientific and applied results.

The dissertation is notable for its excellent technical execution, its concise and clear style, and its precise use of terminology.

The abstract of the dissertation is 35 pages long. It gives a general description of the dissertation, presents its structure and provides a synthesized chapter-by-chapter overview of its contents. A summary of the main contributions of the dissertation is included, along with a list of the author's publications related to it. My overall assessment of the dissertation abstract is that it presents the main points of the research work accurately, precisely and with the necessary scope and depth.

5. Scientific and scientifically-applied contributions

The dissertation is characterised by precisely defined initial premises, an in-depth theoretical analysis, a well-chosen and competently applied research methodology, a wealth of information, and a clearly expressed analyticity. As a results of all the above, the dissertation achieves interesting and well-founded scientific and scientifically-applied contributions, the most important of which are:

1. Placing the issue of households' inflation expectations in Bulgaria at the centre of a comprehensive research study and examining it within the context of behavioural economics.
2. The shift of the analysis from examining the significance of expectations in standard macroeconomic theory to their formation from a behavioural perspective, and the recognition of the two approaches as complementary in forming a more comprehensive understanding of expectations.
3. Developed by the author, an integrative behavioural framework "environment – translation – stabilization", which presents the formation of households' inflation expectations as a sequential behavioural process comprising three cognitive operations: the selection of price signals, interpretation, and the stabilisation of the assessment.
4. The empirically proven distinction between the perception of inflation and inflation expectations as two distinct cognitive mechanisms, resulting respectively from the availability heuristic, which aggregates directly experienced price episodes, and the anchoring effect, which structures uncertainty through a numerical reference point and translates inflationary perception into a specific range of estimates.

5. The highlighted heterogeneous pattern of expectations, based on the evidence that the discrepancy between perceptions of inflation and measured inflation stems from the interaction between information design and social context
6. Considering the "choice architecture" as a tool for public communication, and the well-founded understanding that the primary aim of this communication is not to directly alter expectations, but to create the conditions for macroeconomic information to be recognised as a relevant point of reference for households.

6. Publications and participation in scientific forums

In her dissertation abstract and the report on compliance with the minimum national requirements for the award of the academic degree of Doctor in Scientific Field 3.8. Economics, Vanya Hristova mentioned 4 individual publications, which are all in English. 2 of these - "Macro and micro pessimism as behavioural precursors of price anxiety and inflation expectations: Evidence from Bulgaria's pre-euro period" and "Availability heuristic and inflation perceptions in pre-euro Bulgaria: Micro-evidence on price-change salience among Bulgarian households", are articles published in non-indexed peer-reviewed journals. The remaining 2 publications – "Evolution of expectations models in economic thought" and "Households' inflation expectations: A behavioural lens for measurement and policy communication", are papers presented at international academic conferences and published in edited collective volumes. The total number of points from these publications is 40, thereby ensuring full compliance with the requirements of Article 57(4) of the Regulations on the Development of the Academic Staff at the University of Economics and with Article 2b(2) and (3) of the Law on the Development of the Academic Staff in Bulgaria. As can be seen from the content of the publications, presented in full text, they include significant parts of the dissertation and, therefore, it can be regarded as having been *sufficiently validated.*

7. Detected or not detected plagiarism in the dissertation and the dissertation abstract

There is no evidence of plagiarism in the dissertation and the dissertation abstract. The text is coherent and consistent, and the conclusions drawn follow directly from the analysis carried out. Its scientific correctness is also confirmed by the presented brief and full reports from the StrikePlagiarism system. As part of the procedure, the candidate has also submitted a declaration of originality of the dissertation.

8. Critical remarks and recommendations

Alongside the merits of the dissertation outlined above, some *critical remarks* may also be made. In the empirical part, there are certain results that should be interpreted with caution due to the specific timing of the study and the content of some of its questions. Since it was in precisely June 2025 that the public receive - albeit still unofficial, information about the upcoming accession to the Euro Area, this certainly influenced the respondents' perceptions, In addition, the conflicting views on the expected effects were discussed on television, radio and social media, etc. Therefore, it is more appropriate to evaluate trust not in the channels themselves, but in the sources of information within them. The hypothesis about the expected relationship with unemployment expectations, as formulated in Table 3.12, is not indisputable, given the comments on pages 34–35 in the first chapter. I also think that traditional Keynesianism should not be regarded as a primary paradigm for explaining inflation, alongside the quantity theory (pp. 19–20), Models mentioned in the text are derived assuming a constant price level, and Keynes's own views on inflation outside of "The General Theory" bring him closer to the classical explanation.

The mention remarks do not change the overall very positive impression of the dissertation.
I recommend that Vanya Hristova continue her scientific research on the inflation expectations, focusing on finding answers to the open questions she has raised. I also recommend that she publish her dissertation as a book to make it accessible to a wider range of readers.

9. Questions to the doctoral candidate

I suggest that, during the defence, the PhD candidate answers the following questions:

1. If the consumers' survey in Bulgaria had been carried out in mid-2026, would it have led to any changes to the content of the supplementary set of questions, and if so, what would those changes have been and what would have been the motivation for them?

2. What is the dissertation author's opinion on the government's communication policy regarding inflation and measures for its containment, prior to and following the introduction of the euro, and what is its likely effect on households' inflation expectations?

10. Conclusion

The submitted dissertation represents a topical, significant, original and in-depth scientific study. It has a solid theoretical foundation, is based on the use of appropriate methodological approaches, and is characterised by a highly analytical nature. It contains substantial scientific results which fill a certain gap in Bulgarian economic research and expand existing knowledge on inflation, expectations and household behaviour. The dissertation fully complies with the requirements of the Law on Academic Staff in the Republic of Bulgaria, the Regulations for its implementation and the Regulations on the Development of Academic Staff at the University of Economics – Varna.

Based on all of the above, I give my categorical positive assessment of the dissertation "Behavioural approach to inflation expectations of households" and, with full conviction, I recommend that the members of the esteemed scientific panel vote to award Vanya Vasileva Hristova the educational and scientific degree "Doctor" in professional field 3.8. "Economics", scientific speciality „Political Economy (General Economic Theory)".

07.08.2026

Sofia

Signature: ... [redacted]

/Assoc. prof. Dr. Stela Raleva/

REVIEW

of a dissertation submitted for the award of the educational and scientific degree of Doctor

Author:	Vanya Vasileva Hristova
Topic:	'A Behavioural Approach to Household Inflation Expectations'
Scientific supervisor:	Assoc. Prof. Kaloyan Kolev, PhD
Institution:	University of Economics - Varna, Faculty of Finance and Accounting, Department of General Economic Theory
Field of higher education	3. Social, Economic and Legal Sciences
Professional field	3.8. Economics
Doctoral programme:	Political Economy (General Economic Theory)
Reviewer:	Prof. D.Sc. (Econ.) Dimitar Kanev, Varna Free University 'Chernorizets Hrabar'
Reason for writing the review:	Order of the Rector of the University of Economics No. RD 06-97/ 02.06.2026

1. Relevance and significance of the researched scientific problem

The topic of the reviewed dissertation, developed by doctoral candidate Vanya Vasileva Hristova, is relevant and has theoretical and practical significance in the context of contemporary macroeconomic processes. Inflation has traditionally occupied a central place in economic theory and policy, as it has a direct impact on the purchasing power of the population, income distribution, the real value of savings, and investment activity. Over the past decade, the global and Bulgarian economies have gone through a series of unprecedented shocks - pandemic restrictions, disruptions to supply chains, energy crises, and geopolitical conflicts - which catalysed substantial price fluctuations and brought the issue of inflation to the forefront.

A particularly critical and insufficiently studied element in this context is the mechanism through which inflation expectations are formed, especially among households as a specific group of economic agents. Standard macroeconomic approaches - ranging from models of adaptive expectations to the concept of rational expectations - long dominated the academic and analytical field. These classical and neoclassical models, however, are based on highly restrictive assumptions regarding perfect information permeability and individuals' ability to process complex statistical arrays without difficulty. Empirical reality consistently refutes these assumptions: household inflation expectations demonstrate systematic deviations from official measures, such as the Consumer Price Index, expressed in a persistent tendency towards overestimation, inertia, and substantial internal heterogeneity.

Developing a behavioural perspective on this problem, as the doctoral candidate does, makes it possible to overcome the limitations of the traditional optimisation approach. Vanya Hristova correctly focuses her attention on the cognitive filters, psychological heuristics, and social moderators that govern the way households actually 'translate' price signals from their everyday environment into subjective quantitative reference points. The significance of this scientific and applied problem is amplified many times over in the specific context of the Republic of Bulgaria. The study was conducted within a specific 'window of opportunity' - in June 2025, immediately before the introduction of the euro. This institutional and communication context makes behavioural mechanisms, especially anchoring and the comparison of currency reference points, more visible and analytically significant, which gives the dissertation high empirical value. Preparation for full membership in the euro area and the related transition generate natural psychological vulnerability and heightened sensitivity to price dynamics among Bulgarian citizens. In such periods of institutional transformation, subjective factors and cognitive distortions manifest themselves with maximum intensity. For this reason, the present dissertation research is timely and has unquestionable potential to support the design of effective public and communication strategies by state institutions.

2. General characteristics, structure, and scope of the dissertation

The dissertation has been prepared in accordance with the established academic standards in the Republic of Bulgaria and the requirements of the Development of Academic Staff in the Republic of Bulgaria Act. The total length of the work is 201 pages, structured into an introduction, three logically connected chapters, a conclusion, a bibliography, and two specialised appendices.

The structure of the dissertation is logically subordinated to the clearly formulated subject, object, aim, and research hypothesis. The sequence from theoretical analysis, through the construction of an integrative framework, to empirical verification allows the thesis of inflation expectations as a behavioural construct to be developed not declaratively, but through a consistent transition from conceptual argumentation to operationalisation and statistical testing.

The exposition demonstrates balance, with each chapter performing a specific and necessary role in substantiating the main thesis and accomplishing the research tasks.

The text integrates an appropriate number of figures, tables, and analytical diagrams which do not merely illustrate the exposition, but also serve to present visually the complex logical, analytical, and empirical relationships within the author's theoretical model and the results of the statistical analysis. The bibliography is broad in scope and includes 169 sources. There are no random titles among them; the list is dominated by fundamental and contemporary scholarly publications from leading international peer-reviewed journals in behavioural economics, macroeconomic theory, cognitive psychology, and empirical finance. This demonstrates the doctoral candidate's excellent theoretical preparation, high level of scholarly awareness, and ability to conduct academic dialogue.

3. Analysis of the content of the dissertation

Chapter One: Evolution and deficits of the macroeconomic approach

The first chapter of the dissertation serves as a theoretical foundation. It provides a critical evolutionary retrospective of the place and role of inflation expectations in the major macroeconomic schools. Chronologically and conceptually, it traces the stages from Fisher's quantity theory, early Keynesian understanding, Milton Friedman's monetarist revolution and the concept of adaptive expectations, to the radical restructuring of the analytical paradigm through the rational expectations hypothesis (Robert Lucas, Thomas Sargent, Neil Wallace). Special attention is paid to more contemporary modifications within the New Keynesian Phillips Curve, as well as to theoretical attempts to introduce information constraints.

The doctoral candidate subjects the models of 'sticky information' (Mankiw & Reis) and the concept of 'rational inattention' (Christopher Sims) to precise analysis. Vanya Hristova convincingly points to the conclusion that, although these models represent serious progress through the recognition of information deficits and the costs of acquiring knowledge, they nevertheless remain conceptually confined within the neoclassical optimisation paradigm. They assume that individuals perfectly calculate the marginal costs and benefits of information, which is psychologically unrealistic for households. This critical review logically leads to the conclusion that rational models have serious explanatory deficits with regard to the microeconomic behaviour of real consumers. In this way, the author successfully motivates and substantiates the transition towards behavioural modelling, where decision-making is linked to cognitive limitations, inertia, and subjective interpretation of the surrounding environment.

Chapter Two: Choice architecture and the construction of the author's integrative framework

The second chapter reveals the doctoral candidate's substantive theoretical contribution. Here Vanya Hristova develops an integrative behavioural analytical framework organised around the originally derived logical triad: 'environment - translation - stabilisation'. This conceptual model views the formation of inflation perceptions as a dynamic processual construct.

The doctoral candidate examines in detail how individuals operate under the conditions of a specific 'choice architecture' and how information design influences signal selection. Central attention is given to the classical cognitive heuristics of Tversky and Kahneman - the availability heuristic, anchoring, and representativeness. A contribution of the doctoral candidate is the introduction of the phenomenon of 'affective translation', in which emotional filters and the subjective sense of economic vulnerability directly participate in the updating of expectations. The stage of 'stabilisation' of the subjective reference point is examined through the prism of complex social and structural moderators - the structure of the personal consumption basket, individual financial competence, the influence of the close social circle, the media environment, and the level of institutional trust in regulators. The author successfully integrates these psychological phenomena, traditionally fragmented in the literature, into a unified, logically homogeneous system that is operationalised and prepared for direct empirical measurement. This empirical operationalisation is most strongly developed with regard to the mechanisms of availability and anchoring, while the representativeness heuristic remains more conceptually integrated into the framework and outlines an opportunity for future expansion of the research toolkit.

Chapter Three: Empirical testing and applied aspects in the Bulgarian context

The third chapter presents the practical and statistical implementation of the dissertation research. The author transfers the developed theoretical framework to the specific empirical context of the contemporary Bulgarian economy. The choice of Bulgaria is scientifically justified through an analysis of the price environment and the country's historically conditioned high institutional dynamics. This chapter carries out detailed testing of a series of research hypotheses that decompose the main research hypothesis of the dissertation.

The empirical findings are presented systematically. The author analyses exposure to price signals, the subjective structuring of assessments of current inflation, and numerical positioning in relation to external reference points. Particularly valuable from a scientific and applied perspective is the final section of the chapter, devoted to public communication under conditions of bounded rationality. On the basis of the statistical results obtained, the doctoral candidate proposes specific guidelines for optimising information design and structuring the messages of the central bank. The need is argued for a transition from the traditional passive publication of macroeconomic indicators towards active behavioural nudging, aligned with the actual cognitive filters of households.

Especially valuable is the empirical confirmation of the counterintuitive hypothesis that distrust of mass media correlates with a higher subjective frequency of noticing price increases, which shows that, in the absence of a legitimate external filter, households rely entirely on fragmented personal experience.

4. Methodological design of the study and statistical processing

The methodological design, developed and implemented by Vanya Hristova, is distinguished by scientific quality, rigour, and precision. The empirical study was conducted through a quantitative nationally representative survey of the omnibus type, covering a nationally representative sample of 1,008 Bulgarian households. The sample is structured in a way that guarantees representativeness according to key demographic and socio-economic characteristics, which allows the conclusions drawn to be generalised with a high degree of statistical reliability. The author has demonstrated scholarly honesty and maturity by explicitly indicating in the dissertation itself (section 3.2.4) the limitations of the cross-sectional design and the absence of experimental data.

A serious methodological achievement of the doctoral candidate is the development of a specialised additional behavioural block of questions. This author-designed module has been successfully incorporated and integrated within the framework of the official European Commission questionnaire for the Consumer Survey in Bulgaria. This enhancement makes it possible to capture and quantitatively measure subtle latent subjective variables, such as the intensity of everyday price exposure, emotional perception of prices, trust in the Bulgarian National Bank, and subjective vulnerability, which standard statistical surveys traditionally miss.

A correct, rich, and data-appropriate statistical apparatus has been applied for the processing, analysis, and interpretation of the collected primary data. It includes:

- Descriptive statistics for detailed profiling of the sample and initial structuring of the subjective assessments obtained;

- Non-parametric procedures, more specifically the Pearson chi-square test, for establishing the presence of statistically significant associations between categorical variables;
- Analysis using the phi correlation coefficient, employed as an indicator of the presence and direction of relationships, without claiming to provide an independent assessment of their strength;
- t-tests for independent samples to test differences in mean numerical inflation expectations among different behavioural, social, and demographic groups.

The application of these methods enables the doctoral candidate to make a scientifically justified transition from theoretical abstraction to quantitative verification of the stated hypotheses. The statistical results provide convincing empirical support for the main hypothesis of the dissertation, showing that the perception of current inflation and the formation of future inflation expectations are structured by different behavioural mechanisms. The subjective perception of current inflation, associated with the availability mechanism, is linked primarily to the intensity of personal price experience and the frequency of shopping for everyday goods. In turn, the quantitative formation of future inflation expectations, associated with the mechanism of anchoring, is moderated by the level of institutional trust and the degree of subjective financial vulnerability of households. These results should be interpreted as strong associative dependencies rather than as proven causal relationships, which does not reduce their scientific value but correctly outlines the limits of the empirical design used.

5. Scientific and applied contributions of the dissertation

The reviewed dissertation has clearly expressed scientific and applied value. The results achieved by Vanya Hristova constitute an original authorial contribution to economic science. The following five areas may be identified as the more important contributions:

1. Theoretical and epistemological positioning of the behavioural approach in relation to the classical rational paradigm.

The thesis is successfully defended that the behavioural perspective does not reject rational choice, but describes its preceding cognitive stage - signal selection, filtering of an uncertain information environment, and construction of a subjective representation of price dynamics. Rational optimisation is correctly presented as a mechanism for internally consistent behaviour once a subjective representation has already been constructed, thereby overcoming the mechanical opposition between the rational and behavioural paradigms and protecting the analysis from a superficial declaration of households as 'irrational agents'.

2. Conceptualisation of the specific micro-macro transition in the formation of household inflation expectations.

A significant contribution of the dissertation is the substantiation of the problem of the absence of 'direct perceptual accessibility' of macroeconomic aggregates. Households do not encounter inflation as a homogeneous statistical quantity measured by the Consumer Price Index, but through fragmented, local, and heterogeneous price changes in their everyday consumption. This theoretically legitimises the need to introduce the processes of cognitive 'translation' and to study the heuristics through which fragmented price signals are transformed into a working nominal assessment. In this context, the author conceptualises inflation expectations as the result of a triad of cognitive operations: reduction, compression, and stabilisation. In this way, behavioural processes are integrated as a preceding and driving stage of rational optimisation in an environment with positive information costs.

3. Development of an integrative behavioural framework of inflation expectations.

The author constructs a complex conceptual model that combines cognitive heuristics, affective filters, and social and structural moderators. Particularly important is the conceptualisation of the phenomenon of 'affective translation' as an independent calibrating mechanism in the formation of consumers' nominal reference points. By integrating the 'risk as feelings' paradigm into macroeconomic analysis, the dissertation convincingly shows that the subjective experience of budgetary unpredictability may function as a stable filter through which subsequent market signals are interpreted. The framework also includes socio-structural moderators such as the structure of the consumption basket, financial competence, institutional trust, the media environment, and interpersonal networks. Thus, it demonstrates how individual cognitive distortions can transform into persistent macroeconomic heterogeneity and segmented group narratives.

4. Methodological enhancement and empirical operationalisation of behavioural factors.

A significant contribution of the dissertation is the development of an author-designed behavioural module of questions, integrated into a nationally representative survey. This allows abstract psychological categories such as 'subjective availability', 'price anchor', 'financial vulnerability', and 'institutional trust' to be transformed into measurable and quantitatively assessable statistical variables. On this basis, the author empirically substantiates the dual cognitive mechanism among households, establishing that the assessment of current inflation and expectations of future price dynamics are driven by different psychological and structural factors. This result is important both for behavioural economics and for macroeconomic modelling, insofar as it calls into question some of the conventional linear assumptions about the formation of inflation expectations.

5. Scientific and applied contribution to public communication and information design in economic policy.

The dissertation has a distinct applied significance through its analysis of institutional trust, information diffusion, and public communication as coordination mechanisms of nominal reference points. It is substantiated that, under conditions of bounded rationality and structural uncertainty, the effectiveness of monetary policy depends not only on the publication of official statistics, but also on the ability of institutions to stabilise the interpretative frameworks of economic agents. Particularly relevant is the analysis of the introduction of the euro and the subsequent adaptation of households to the new nominal environment, in which choice architecture and information design acquire key importance for limiting cognitive fragmentation and competing local inflation narratives. On this basis, practically applicable recommendations are formulated for the communication policy of the Bulgarian National Bank through information design and behavioural nudges.

6. Evaluation of the publications and the abstract

In connection with the dissertation, the required number of scholarly publications in specialised journals has been presented; these publications correctly and fully reflect the main results, theoretical conclusions, and empirical findings of the study. The submitted publications are thematically related to the main problem fields of the dissertation - inflation expectations, behavioural mechanisms, institutional trust, and public communication. They reflect both the theoretical framework and part of the empirical results of the study and meet the minimum national requirements for the award of the educational and scientific degree of Doctor in professional field 3.8. Economics.

The submitted dissertation abstract has been prepared precisely and with technical competence. It fully corresponds to the structure, content, and logic of the dissertation, presenting in synthesised form the most important points of the exposition, the proposed analytical framework, the empirical studies, and the formulated scientific contributions.

I have not found any plagiarism in the dissertation and abstract.

7. Critical remarks, recommendations, and discussion questions

The high quality and unquestionable merits of the reviewed scholarly work provide grounds not only for a positive assessment, but also for the development of an in-depth academic discussion. With the aim of supporting the author's future research activity, the following critical remarks and recommendations may be made:

1. The positioning of the dissertation in relation to the Bulgarian scholarly literature on behavioural economics is insufficiently developed. It is noteworthy that, while the macroeconomic context of inflation in Bulgaria is duly linked to the studies of Bulgarian authors such as N. Nenovsky, S. Raleva, and N. Velichkov, the core behavioural and cognitive issues are developed almost entirely on the basis of foreign sources. The author builds her model around key concepts such as choice architecture, dual thinking (System 1 and System 2), and cognitive distortions such as anchoring, availability, and representativeness. In Bulgarian academic literature in recent years, a substantial scholarly body has already accumulated, including specialised monographic studies and textbooks in behavioural economics and the psychology of decision-making, which work with a similar conceptual apparatus in Bulgarian. A clearer search for points of contact and parallels with these works would allow the dissertation to be more fully situated within the existing research debate in Bulgaria and to build upon the terminology already established in Bulgarian science.

2. In the theoretical part of the dissertation, especially in Chapter One, it would be useful to introduce a clearer operational distinction between short-term and long-term household inflation expectations. Behavioural heuristics and affective filters may manifest different degrees of intensity and persistence depending on the time horizon within which consumers plan their expenditures and intertemporal choices.

3. The text convincingly argues that economic agents may choose among alternative interpretations of the inflation environment, but it leaves somewhat open the question of the criterion by which the average household chooses its dominant narrative when the official informational anchor weakens. Here it would be appropriate to establish a clearer link with the availability heuristic: the household is inclined to choose the interpretation that corresponds to the most salient signals in its personal environment, for example a sharp increase in fuel, bread, or other frequently purchased goods. Such a link would serve as a logical transition to the behavioural framework developed in Chapter Two.

4. The author examines irreversibility primarily through its physical, financial, and

contractual constraints - transaction costs, renegotiation clauses, financial commitments, and so forth. To make the behavioural framework even more complete, it could be noted that irreversibility also has a psychological dimension. Phenomena such as the sunk cost fallacy and confirmation bias can explain why, after a household has already undertaken a major intertemporal action - for example, purchasing a property with a loan under a particular inflation narrative - it is cognitively predisposed to filter new information in a way that justifies its previous decision.

5. In some places, explanations of the formal notation and equations used are missing. For example, when presenting Fisher's equation MV = PT, it is advisable to explicitly clarify the meaning of the individual symbols: M - money supply, V - velocity of money circulation, P - price level, and T - volume of transactions or real output. Such an explanation would make it easier for the reader, especially when formulas are used not as an independent mathematical apparatus, but as part of the historical and theoretical argumentation of the dissertation.

6. The text contains a substantial and confusing inaccuracy in the bibliographic reference. The doctoral candidate states that '...the channel through which the default operates through inertia and adherence to the status quo, as established by Richard Zeckhauser and Matthew Rabin Samuelson (1988).' The fundamental article on the status quo effect from 1988 - 'Status Quo Bias in Decision Making' - was written by William Samuelson and Richard Zeckhauser. In the text under review, the names of Samuelson and Matthew Rabin are incorrectly conflated, thereby creating the fictitious author 'Matthew Rabin Samuelson'. This inaccuracy should be corrected by presenting the reference in its correct form: William Samuelson and Richard Zeckhauser (1988).

7. With regard to the statistical methodology applied in Chapter Three, the non-parametric procedures and t-tests used are correct and appropriate for establishing statistically significant associations between categorised variables. As a possibility for future development or as an additional robustness check, ordinal logistic regression models could be applied, especially when the dependent variable has an ordered categorical nature. This would make it possible to assess the independent contribution of the individual behavioural factors while simultaneously controlling for the socio-demographic characteristics of the respondents.

8. Despite the convincing logic of the empirical analysis, the cross-sectional design used does not allow the dynamics of inflation expectations over time to be traced and limits the possibility of causal interpretations. This does not reduce the value of the results, but it does require some caution in formulating conclusions regarding the mechanism of interaction among the individual behavioural

factors.

9. The results are highly relevant to the Bulgarian context, but their transferability to other economic environments should be treated as a subject for future comparative studies. Bulgaria is used as an analytically amplifying environment rather than as a universal context for the formation of inflation expectations.

10. I recommend that, in future studies, the author expand the scope of the developed behavioural module by transforming it into a regular longitudinal and, where possible, panel research procedure. This would allow the dynamics of the identified behavioural dependencies to be traced over time and would make it possible to assess how the period after the physical introduction of the euro in Bulgaria affects the formation, stabilisation, or weakening of the identified cognitive filters.

11. In the dissertation, the author correctly notes as a limitation that the representativeness heuristic remains theoretically embedded but is not directly empirically tested due to the absence of suitable variables in the survey design. For future research, the development of specific experimental scenarios (vignette studies) may be recommended, as they would allow direct measurement of the extent to which short series of price changes are perceived by households as a persistent trend.

Questions to the doctoral candidate:

Question 1: In your model, financial competence acts as a moderator of stabilisation. According to your data, can high financial literacy completely neutralise 'affective translation' (fear, a sense of vulnerability), or does it merely change the choice of the cognitive anchor to which the individual adheres?

Question 2: You find that, under conditions of low institutional trust, official figures lose their role as a stabilising reference point. What specific change in the 'choice architecture' of the Bulgarian National Bank's communication would you propose in order to prevent a mass perception of inflation through the availability heuristic rather than through official data?

Question 3: Your study reveals that inflation expectations are not homogeneous. From the point of view of monetary policy, does this heterogeneity represent an obstacle to the effectiveness of interest-rate instruments, or does it require the creation of segmented communication strategies for different groups of households?

Question 4: If the synchronisation of households' subjective interpretations is dictated mainly by the shared media signal environment and diffusion through interpersonal networks, how can economic policy effectively desynchronise, or break apart, an already established and persistent pessimistic macroeconomic narrative without causing a collapse of institutional trust in official statistics?

8. Conclusion and final assessment

The dissertation of Vanya Vasileva Hristova on the topic 'A Behavioural Approach to Household Inflation Expectations' constitutes a fully completed, independent, original, and high-quality scholarly study. It demonstrates the author's profound and mature theoretical knowledge, high statistical and methodological competence, and excellent ability to successfully solve complex scientific and applied tasks in the field of economic theory.

The work fills an existing theoretical gap and provides the Bulgarian academic and institutional community with a comprehensive, empirically grounded behavioural model for analysing inflation expectations under the conditions of a currency board and an impending nominal transition related to the introduction of the euro.

The submitted materials, publications, and dissertation abstract fully and in all respects meet the requirements of the Development of Academic Staff in the Republic of Bulgaria Act and the Regulations for its implementation. The theoretical and empirical results achieved provide full grounds for a categorical positive assessment.

For all these reasons, I have full grounds to vote convincingly IN FAVOUR and to propose that the esteemed Scientific Jury award Vanya Vasileva Hristova the educational and scientific degree of Doctor in Political Economy (General Economic Theory).

Date: 15 June 2026
Varna

Reviewer: [redacted] ....
(Prof. D.Sc. (Econ.) Dimitar Kanev)