Jan Frait: Monetary policy analysis at the crossroads - insights from central banks' reviews

Speech by Mr Jan Frait, Deputy Governor of the Czech National Bank, at the Czech National Bank Workshop "Monetary policy: inflation targeting frameworks under review", Prague, 1 April 2025.

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Introductory remarks for the Panel Discussion

It is a great honour for me to chair the second panel today, in which we move further towards research and academic thinking. In particular, we will focus on the analytical and modelling frameworks used by central banks to support monetary policy decision-making.

Before we do so, I'd like to start by introducing myself as a monetary policymaker with some personal statistics. I have attended more than 200 monetary policy meetings in one capacity or another. As a board member, I have voted 93 times – 31 times for a cut and only twice for a hike. That looks pretty dovish, for sure. On the other hand, for 87% of the time I've been voting on interest rates, the relevant monetary policy rate has been higher than headline inflation. This appears more hawkish. Well, things are really state-dependent.

No matter how long or how many times I've done this, I still consider myself a young apprentice, caught between Scylla and Charybdis – to borrow a lyric from one of my favourite bands, The Police. I approach decision-making with plenty of humility. In other words, even after all these years, much of what goes on in the economy remains to some extent a mystery to me. I don't feel I understand macroeconomic dynamics much better than I did 20 years ago.

When I was a student, macroeconomics and monetary theory textbooks described monetary policy as more of an art than a science. By the time I joined the Czech National Bank at the beginning of the century, it was a different story. Monetary policy had been operating under the then-new inflation-targeting regime for two years. Decision-making was increasingly based on a modelling framework derived from New Keynesian macroeconomics, which had gained the status of a fully-fledged science. Whether or not it actually deserved it was never discussed at the time.

One of the key aspects of this new paradigm was the belief that vague monetary policy objectives such as "sound money", "monetary stability", and "macroeconomic stability" should be replaced by the more concrete objective of price stability – ideally in the form of a specific numerical inflation target expressed as growth in the consumer price index.

After more than a quarter of a century of experience with this approach, I'm inclined to think that, as usual, we romantically overestimated its capacity. The primary monetary policy objective started to be viewed too narrowly. The focus on a specific number was

opportunistically misused to maintain extremely low interest rates and highly supportive monetary policy in times of positive supply shocks, even when there weren't always strong macroeconomic grounds for doing so.

In many countries, monetary policy became rather asymmetric. A regime designed to prevent time inconsistency in monetary policy often ended up fostering it. I constantly heard the argument, "It doesn't matter that inflation is currently above the target. It'll soon return to it thanks to anchored expectations." Yet as soon as inflation dropped below the target, the rhetoric changed to, "There's a threat of deflation. We need to have extremely low rates or use other instruments to ease monetary and financial conditions."

This was despite – or maybe even because of – the fact that monetary policy in developed countries had become a very powerful tool of economic policy. A tool on which hopes are pinned whenever sentiment worsens and economic activity slows. The models we use to assess and forecast macroeconomic developments undoubtedly encourage such hopes.

In the summer of 2002, the Czech National Bank introduced a small-scale, semi-structural, gap-based model called the Quarterly Projection Model (QPM) for forecasting and analysis. QPM was a big step forward. It taught experts and board members to apply a model-consistent approach to macroeconomic policy. In a converging economy with a nominally appreciating currency and a rapidly developing financial sector, it was, of course, difficult for the model to explain everything that was happening. Frustration with the model outcomes began to mount when global macroeconomic volatility surged in 2007 amid large financial imbalances.

I was no longer at the monetary policy coalface at that time, as between 2007 and 2022, I worked in financial stability and macroprudential policy. My only monetary policy-related legacy from this period can be seen on the webpage about "the mandate of the Czech National Bank", which states: "Through the joint action of monetary policy and macroprudential policy, we contribute to maintaining confidence in the value of the Czech koruna and safeguarding the stability of the macroeconomic environment." We keep doing so.

Frustration with predictions probably drove the decision to switch hastily to a New Keynesian DSGE model in the summer of 2008. Maybe there were other reasons, but the Czech National Bank's representatives did not expand on them at the time. Then the Global Financial Crisis erupted, and there was no longer any time for such discussions.

It's no secret that I never considered it beneficial to replace the semi-structural model with the DSGE model as the sole approach for macroeconomic forecasting. Not because I dislike one theory or model over another, but because theories and models are valuable to a central bank only to the extent that they facilitate an informed and sufficiently comprehensive debate – one that helps us understand the evolving economic story in the short, medium, and long run.

Basing monetary policy decision-making solely on the microeconomically consistent but economically limited New Keynesian DSGE model ultimately narrowed the debate. The

process became more automatic, and the decision-making appeared easier. The dilemmas that board members typically face became less visible. They were obscured by the standard linearization around the inflation target, which is typical of New Keynesian models. We tended to overestimate the impact of short-term interest rate changes while underestimating the effects of our powerful communication on long-term interest rates and asset markets. Paradoxically, this more "scientific" approach resulted in greater discretion in decision-making – and in sizeable unintended effects.

Today, in 2025, we are a little more enlightened. The recent wave of inflation was a kind of blessing in disguise. It reminded us that monetary policy is still an art as well as a science. It taught us that the primary purpose of macroeconomic analysis is to distinguish fundamental trends from temporary fluctuations, local peculiarities from global phenomena, and supply shocks from demand shifts. It helps monetary policymakers be principled yet flexible in challenging times, especially during geopolitical and economic turbulence.

In this context, it's only natural that many inflation-targeting central banks are considering changes to their monetary policy frameworks. More than a year ago, the CNB also decided to undertake an external review of its monetary policy analytical and modelling framework – the first such review in its history. We commissioned three independent reviews to gain a comprehensive perspective. And we got it. Two of the three reviewers accepted our invitation to join this panel.

Before I introduce the panellists, I'd like to make another musical analogy. I belong to a generation where many were briefly fascinated by jazz-rock – virtuoso musicians playing a lot of notes very fast. Amazing at first listen, still entertaining at the third, but for most of us, boring by the tenth – because the music lacked variation in mood, timbre, and rhythm. Then bands like The Police came along – jazz-trained musicians playing simple yet original songs in a technically brilliant yet energetic way, capturing the zeitgeist. With stops and double stops. Leaving plenty of space for the imagination.

I'd be glad if this approach became more widespread in the modelling we do to support monetary policy decision-making. We need analyses that are technically rigorous yet responsive to economic, social, and political dynamics – driven by emotion and belief, scepticism and conviction, avarice and altruism. To achieve this, we must diversify our thinking, remain open to adjusting our mindsets when major shifts occur, and invest in people who can develop alternative models and implement fresh ideas from academic research. We should be open to semi-structural, DSGE, agent-based, and other sorts of models, and use them in a way that improves our understanding of sometimes enigmatic developments in the economy.

Now I will truly hand over the mic to the power trio here today, who – except for one member – also happened to fly in from Britain. They all pay great attention to similar issues while differing in their methodological approaches.

John Muellbauer is a Senior Research Fellow at Nuffield College, Professor of Economics, and a Senior Fellow at the Institute for New Economic Thinking at the Oxford Martin School, University of Oxford.

He earned his undergraduate degree from Cambridge University and his doctorate from the University of California. John has collaborated with legendary macroeconomists and econometrists such as Charles Goodhart, David Hendry, Peter Sinclair, and Adrian Pagan. He has also served as a consultant for the Bank of England, HM Treasury, the South African Reserve Bank, and, more recently, the Czech National Bank. In 2024, he conducted a review of the Czech National Bank's analytical framework for policy analysis and forecasting, assessing its core and satellite models as part of an integrated approach to monetary policymaking.

Roman Šustek is a Reader in Economics at Queen Mary University of London and a Research Associate at the Centre for Macroeconomics at the London School of Economics. His research focuses on housing, mortgage finance, monetary policy, and the term structure of interest rates. He transitioned to academia after five years as an economist in the Monetary Assessment and Strategy Division of the Bank of England. He earned his PhD from the Tepper School of Business at Carnegie Mellon University, following an earlier role as an economist at the Czech National Bank in Prague. As part of the 2024 Czech National Bank monetary policy review, Roman contributed to the assessment of macroeconomic forecasting models and processes used in policy analysis. In his research and writings, Roman often focuses on the same topics as John, in particular on the links between household consumption, house prices, and mortgage regulation. These are ultimately the topics that were viewed as rather important by the BIS economists under our keynote speaker-Claudio Borio.

Jakub Matj is the Deputy Executive Director of the Monetary Department at the Czech National Bank and the Acting Director of the department's Macroeconomic Forecasting Division. He is also temporarily heading the Monetary Department. His research and policy work focuses on macroeconomic forecasting and monetary policy. Before his current role, he worked as an economist in the CNB's Monetary Department. He later joined the European Central Bank and served as a senior economist in the analytical team of Komerní banka. In 2019, he returned to the CNB as an adviser to the Bank Board and has been the Deputy Executive Director of the Monetary Department since 2023. Jakub has received several Czech Economic Society Young Economist awards and the CNB's Economic Research Award for his research. He earned his PhD in Economics from CERGE-EI, following his studies at the Institute of Economic Studies, Faculty of Social Sciences, Charles University.