

Foreword by the editor of the monetary policy volume of the “140th Anniversary” NBR project

This volume on monetary policy is part of the series of papers dedicated to the 140th anniversary of the National Bank of Romania and brings together studies written over the years by the following authors (in alphabetical order): Dorina Antohi, Horia Braun, Adrian Ionuț Codirlaşu, Lucian Croitoru, Daniel Dăianu, Raluca Enache, Elena Iorga, Bogdan Murarașu, Cristian Popa, Răzvan Radu, Surica Rosentuler, Wilhelm Salater, Daniela Ruxandra Sasu, Anca Stoian, Ioana Udrea, Liviu Voinea.

Dorina Antohi

The views expressed in this volume are those of the authors alone and do not necessarily reflect the views of the National Bank of Romania.

Preface

This book is a collection of studies written from 1993 to 2019 by economists who worked or are still working at the National Bank of Romania. Specifically, the book contains nine such studies, of which eight make up the bulk of another book published in Romanian. I had the honour of being asked to write the prefaces for both works. For this reason, the preface to this book is vastly similar to the one worded for the book published in Romanian. The two prefaces are different in that this one makes reference to the two papers that this book contains aside from the one in Romanian and, obviously, does not refer to the studies contained in the book published in Romanian but not included in this book, with three exceptions, about which I will warn the reader right before I refer to them. The reason why I will refer to those three studies, although they are not included in this book, is that they treat similar issues and are more recent. I will make the reader aware of the references to these three papers at the right moment.

In terms of the subjects they tackle, the two books are not different. Both contain studies on a common set of issues: (i) inter-enterprise arrears at the start of transition; (ii) monetary developments, multiplication of money and its impact on inflation; (iii) exchange rate pass-through to inflation and the interbank money market rate pass-through to deposit and lending rates applied to non-bank clients; (iv) direct inflation targeting and, last but not least, (v) unconventional monetary policies pursued mainly by central banks in advanced economies after the 2008 financial crisis (except the Bank of Japan, which had developed them as early as the 1990s).

It is probably useful to start presenting this book by referring to inter-enterprise arrears, even though the study entitled “Inter-enterprise arrears in a post-command economy”, originally published in 1993, would not have been the first chapter of the book. This topic offers me the

opportunity to evoke some features of Romania's economy that monetary policy had to take into consideration for many years. Inter-company arrears are a form of trade credit (distinct from bank credit), i.e. a trade credit that was not repaid in due course. Trade credit is normal in a market economy. On the supply side, trade credit reflects some goods market imperfections, being extended to increase sales, to overtake competition and/or to build customer loyalty. On the demand side, trade credit is a choice when, owing to some credit markets imperfections, it is less costly for doing business compared to bank credit or other forms of credit.

In some economies, trade credit even exceeds bank loans. For example, in the US, where capital market holds a much larger share than the banking market, trade credit significantly surpasses bank credit.

Inter-enterprise arrears relating to this trade credit are a feature of market economies as well. However, the overdue period is relatively small, and some studies show that it generally hovers around 30 days on average. Nevertheless, in Romania there were much larger delays and the magnitude of inter-company arrears was relatively large compared to some developed market economies to countries such as Poland, Czechia and Hungary in the first half of the 1990s, when our economy was far from being a market economy. On the supply side, the trade credit reflects some goods market imperfections, being extended to increase sales, to overtake competition and to make clientage more loyal. On the demand side, trade credit is a choice when, owing to some credit markets imperfections, it is less costly for doing business compared to the bank credit or other forms of credit.

Behind this peculiarity stood several factors (of which some were common to transition economies widely referred to in the international literature on arrears during the 1990s), which acted simultaneously, namely: a comparatively more severe central planning and an almost absent role for prices in resource allocations before 1989 and, as a consequence, managers' acute lack of experience in operating in a market system in which free prices inform correctly the decision making process; slow, unprincipled institutional reforms, which distorted incentives and created uncertainty regarding future privatizations and inter-enterprise payment discipline for a long time the necessary price liberalisation and the uncertainties surrounding macroeconomic policies right after abandoning central planning, including the net arrears offsetting policy; keeping soft budget constraints (as defined by János Kornai) to secure employment in unviable state-owned enterprises. All this had an impact on monetary policy, eroding its efficacy in curbing inflation because inter-company arrears were also seen as a form of money outside central bank control. In Romania, issues related to the impact of inter-enterprise arrears on money received attention in a limited number

of papers, among which those authored by Daniel Dăianu (the above-mentioned study, included in this book, 1993), Emilian Dobrescu (“Viteza de circulație a banilor într-o economie în tranziție: cazul României” [“Money velocity in a transition economy: the case of Romania”], presented at the Institute of Industry Economics, 17 June 1994), Croitoru (“Politica de stabilizare și impunerea restricțiilor financiare tari într-o economie în tranziție” [“The stabilisation policy and the imposition of hard financial constraints in a transition economy”], *Oeconomica*, No. 1, 1994) and Cristian Popa (“Dynamics of Inter Enterprise Arrears In Romania’s Transition: A Microeconomic Approach”, *Romanian Economic Review*, No.1/1997). While allowing some companies to survive, arrears artificially changed the asset/liability structure of their balance sheets for the aforesaid reasons, altering the market value of viable enterprises. In the book, some of these issues are dwelled upon in the study devoted to this subject.

Romania started its transition to the market economy in 1990. At that time, the central banks’ monetary policies in advanced economies were beginning the shift to a new monetary policy strategy, i.e. inflation targeting. New Zealand was the first country to adopt the new strategy, by relinquishing the targeting of monetary aggregates as an indirect means of controlling inflation. However, many countries continued to control monetary aggregates. For Romania, even this practice posed a challenge at that time, as the price system was only beginning to be gradually liberalised, and the forced savings created during the communist era had led to the build-up of a money stock that was not covered by goods and services. For the Romanian monetary policy, the challenge was to move to monetary base control while the price liberalisation eroded the money stock in real terms.

Hence, monetary policy was conducted, until August 2005, mainly in light of the monetarist philosophy of controlling money supply. In many agreements signed with the IMF, the monetary programme played a major part. Even though they gradually shifted to the new strategy, central banks have never, or at least not to a large extent, given up monetary analysis, which is capable of providing key information to monetary policy makers. Thus, there was an ongoing concern within the NBR, and not at all separate from other central banks’ practices, for an in-depth understanding of issues related to monetary policy capability to stabilise prices via the control over monetary aggregates.

I think this research focused on three lines of work: (i) to comprehend monetary transmission by examining the pass-through of monetary impulses to financial variables and, further, by analysing the connection of the financial sector with the corporate sector (real economy); (ii) to use econometric methods to measure the correlation between developments

in broad money and its various components, on the one hand, and inflation and economic activity, on the other hand; and, finally, (iii) to isolate monetary influences on inflation stemming from the monetary base (monetary policy) and from the banking and real sectors.

With regard to the first line of research, the book contains a study entitled “Monetary policy transmission in Romania” (Dorina Antohi, Ioana Udrea, Horia Braun), originally published in 2002. It shows that during the period under review (until 2002), monetary policy directly influenced banks’ deposit rates via interest rates on sterilisation operations, but did not directly influence lending rates, which depended on deposit rates. These conclusions were drawn from a regression using an error-correction mechanism for a relatively short period of time, which the reader must be aware of.

At the same time, the qualitative analysis in the study shows that the traditional transmission channels represented by interest rates and credit were only in a fledgling stage due to weak financial intermediation, but appeared to recover after 2000 and to begin being accompanied by a budding balance sheet effect. Therefore, the key channels whereby the monetary authority influenced behaviours were the exchange rate and forex market interventions. I will discuss later on the role currently played by interest rate and credit channels.

Another line of research I mentioned above concerns, I say it again, the use of econometric techniques to measure the correlation between developments in broad money, inflation and economic activity. The book in Romanian features a broad-based study entitled “Evoluții monetare în economia românească: determinanți și implicații” [“Monetary developments in the Romanian economy: determinants and implications” (Dorina Antohi, Tatiana Stere, Ioana Udrea, Gabriel Bistriceanu, Andreea Botezatu)], originally published in July 2007, covering the period from 2000 to 2006. Although not included in this book, the study still deserves to be presented in this preface, because it is more recent and, as far as I know, is the last of such a magnitude and appears to have also been made with the unstated goal to mark the end of a stage (call it monetarist) in the conduct of monetary policy and the transition to inflation targeting, which is essentially neo-Keynesian, a name that could well have been “the new-neoclassical” (as suggested in 1997 by Marvin Goodfriend and Robert King), where monetarism rightfully belongs. The study concludes that structural and institutional changes during the transition and the EU pre-accession periods and a global pick-up in lending boosted money demand in Romania. The reader will find credit in Romania analysed by various breakdowns, i.e. loans denominated in leu or foreign currency, granted to companies or households, and the explanations for these

developments as well as the surprising result that financial intermediation measured as private credit-to-GDP ratio was stuck at relatively low levels.

My point here is that, despite the sizeable increase in money demand, the study produces a somewhat predictable result: monetary aggregates are not a good predictor for inflation. As was the case in many countries ever since the 1980s, the link between inflation and nominal variables broke in Romania as well, owing to the progress made in financial instruments and institutions, and in IT. Nonetheless, a conclusion of the study is that monetary aggregates (M1, M1 plus foreign currency-denominated demand deposits, M2) “could” be leading indicators for GDP, with a lead of 2 to 7 quarters. What I want to make clear is that no indicator can be a good predictor. This is because there is no identifiable causality between aggregates. As Hayek points out, these aggregates conceal many processes. Ultimately, no indicator is a good predictor, because, on the one hand, the economy is kaleidic, and, on the other hand, the effect of changing the significance (the observer effect) emerges, which makes an indicator once observed to no longer reflect agents’ behaviours, but be influenced by the fact that agents adjust their behaviours to its developments.

I conclude the reference to this study by recalling that in the period under review (2000-2006) Romania witnessed massive foreign capital inflows, which persisted into 2007 and the first part of 2008. Capital inflows fuelled both inflation expectations, especially 2006 through 2007, and the appreciation of the leu. That period showed us that in such circumstances monetary policy may *de facto* lose its key instrument, namely the interest rate. Rising inflation expectations call for a rate hike, whereas a rate cut is needed to slow down capital inflows so as to reduce the positive domestic interest rate differential against the interest rates in the countries where the capital originates from.

Finally, to conclude the reference to the stage ahead of the adoption of inflation targeting, I will discuss the third line of research: isolating the monetary influences on inflation stemming from the monetary base (monetary policy) and from the banking sector. Once again, it should be pointed out there is a study that dwells on this topic in the book in Romanian, which is not included in this book. But, the same as in the previous case, I will refer to it because it helps the reader understand better the concerns of the time. The study is titled “Cauzele inflației în România, iunie 1997 – august 2001: Analiză bazată pe vectorul autoregresiv structural” [“Causes of inflation in Romania, June 1997 – August 2001: Analysis based on structural vector autoregression” (Cezar Boțel)], initially published in July 2002. This analysis makes reference to the money multiplier, which is supposed – with sufficient grounds – to

reflect the behaviours of banks and non-banks, although it also has as a determining factor the minimum reserve requirement ratio, set by the central bank at relatively long time spans, so that its influence is stable in between the moments of change. Specifically, in the aforementioned paper, the multiplier is calculated as a ratio of the M2 aggregate to the monetary base. However, anyone interested in understanding how other central bank actions (such as forex market interventions) influence the change in the multiplier can look for these details in the study “Evoluții monetare în economia românească: determinanți și implicații” [“Monetary developments in the Romanian economy: determinants and implications”], which I have already referred to.

The conclusions regarding how much influence exerted the current monetary policy actions on inflation (monetary base innovations) compared with banking system behaviours in relation to the real sector (multiplier changes) are as follows: over the long term, the two factors jointly exerted the strongest influence on inflation during the period under review (from June 1997 to August 2001), as compared to inflation expectations, exchange rate and changes in administered prices and various supply-side shocks. The influences exerted by monetary factors on prices, exchange rate and wages came almost entirely from changes in the multiplier, namely from money created by commercial banks. This finding is interesting if we consider that the reported period consisted of three years of recession and only two of very moderate, below-potential expansion. Nevertheless, in my opinion, the finding supports the conclusion that the banking system can make up for monetary policy tightening with a larger or smaller intensity, depending on the risk perceptions identified in the interaction with customers.

I will now refer to a series of seven other papers included in this book. All but one have in common that they were prepared after the NBR had shifted to inflation targeting. The only exception is “Direct inflation targeting: a new monetary policy strategy for Romania” (Cristian Popa, Surica Rosentuler, Elena Iorga, Wilhelm Salater, Daniela Ruxandra Sasu, Adrian Ionuț Codirlaşu), published in April 2002. However, the topic was revisited in the study “Țintirea directă a inflației în România” [“Direct inflation targeting in Romania”] (Cristian Popa, Cezar Boțel, Dorina Antohi, Ioana Udrea, Tudor Grosu, Mihai Copaciu, Anca Gălățescu), published in April 2009, almost four years into this strategy, which is not included in this book, but which I will refer to in connection with the first study.

The other six studies also dwell on very important topics from two perspectives. One is that of a monetary policy based on an inflation targeting regime in general, in a context where globalisation undergoes quantitative and qualitative changes, but which enables major central banks, the Fed in particular, to exert influences on the other central

banks worldwide. The other perspective is the particular one of Romania, where inflation targeting operates with a managed float exchange rate regime (so-called ‘inflation targeting light’). Monetary policy is therefore concerned not only with inflation, but also with potential episodes of forex market volatility, which can influence the achievement of the inflation target via the pass-through of exchange rate changes into prices or the impairment of financial stability.

Against this background, the main topics of the studies published after the adoption of inflation targeting refer to: (i) the prerequisites for adopting the inflation targeting strategy, its features in Romania and the effectiveness of its functioning; (ii) the pass-through of changes in inter-bank money market rates to lending and deposit rates on new business; (iii) pass-through magnitude and asymmetries; (iv) identifying a possible indirect influence of the Fed’s monetary policies on the domestic monetary policy via the link between risk premia on government securities issued by the US and Romania respectively; (v) the connection between the unemployment rate and the inflation rate; and, finally, (vi) monetary policy developments after the 2008 crisis. Following the crisis, the need for independent central banks was questioned; central banks, especially in advanced economies, adopted unconventional measures such as quantitative easing, forward guidance, negative monetary policy rates and/or yield curve control; some central banks, such as the Fed and the ECB, adjusted their inflation targeting strategies. I will briefly refer to each of these topics in turn.

The study on inflation targeting, published in 2002, describes the main reasons why Romania was not prepared to shift to this strategy in 2002 and underlines the efforts that would have been required for the successful achievement of the goal. The presence of fiscal dominance is listed among those reasons.

However, the study published in 2009 (included only in the book in Romanian, but which deserves mention here), aiming to describe in detail the inflation targeting framework and its success during that almost four-year period of implementation, states that “a major contribution to increasing the *de facto* independence of monetary policy also had the gradual narrowing of fiscal dominance amid the unfolding of a fiscal consolidation process and the higher coherence of the macroeconomic policy mix in the years leading up to the adoption of the new strategy. They materialised in the reduction of both the general government deficit and public debt, as well as in the improvement of domestic and external financing and refinancing conditions thereof”. The 2009 study is tantamount to a proud account by the authors of the paper. And, indeed, the NBR and in particular those involved in optimising and implementing inflation targeting had good reasons to be proud. In this way, our

central bank had embraced the most modern inflation-taming technique and had joined an exclusive club from this perspective as well, considering that major central banks around the world quite successfully targeted inflation explicitly or implicitly.

In retrospect, I can say that some of the characteristics that Romania did not fulfil back in 2002 seem to be an issue to this day. Fiscal dominance is still present, if we accept that it takes different shapes. Nowadays as well, fiscal policy exerts inflationary pressures and its steering without principle guidance has made it difficult for this policy to meet the conditions implied by inflation targeting. The intertemporal government budget constraint is not necessarily complied with sometimes. Hence, to the extent that expectations are rational, fiscal policy produces inflation if the nominal level of public debt is not offset by an equal value of the sum of present values of real primary surpluses.

In hindsight, something strikes me again as a naivety regarding the 2009 assertion that fiscal policy had made progress. The authors' enthusiasm is obvious here, for they did not take the precaution to mention that, probably, the decreasing fiscal dominance was rather promoted *à contrecœur*, at a time when the authorities had to fulfil the requirements for Romania to become a member of the European Union. The periods when the effectiveness of monetary policy implementation was lowered via the fiscal channel were frequent, and at the time of writing this preface (June 2022) we are again in such a period. While justifiable to a certain extent by the Covid-19 pandemic, the magnitude of budget deficits should also be seen in terms of the fact that, prior to the pandemic, Romania was the only country against which the EU had launched the excessive deficit procedure – the outcome of several years of implementing wage-led growth policies.

I have already mentioned that the authors of the paper “Monetary policy transmission in Romania” had identified, through a qualitative analysis, a positive trend regarding monetary policy transmission via the interest rate and credit channels, which seemed to become relevant after 2000. This transmission process was again analysed in a study entitled “Interest rate pass-through in Romania. Recent empirical evidence and regional comparisons” (Raluca Enache, Răzvan Radu), published in July 2015, which also examines potential asymmetries of the pass-through – over the long term, in terms of the characteristics of deviations from the equilibrium relationship between variables, or in the short run, depending on the direction of change in the interbank money market rate. The findings are interesting: changes in the money market interest rate are fully passed on in the long run to interest rates on new loans and new time deposits. The pass-through is symmetric, both over the long term and in the short run, in the case of new lending rates to non-financial

corporations, and asymmetric in the short run in the case of households. Both lending and deposit rates react more sluggishly to an increase in interbank market rates than to a decrease. As regards Romania, the paper concludes that “in the short term, the interest rate pass-through exhibits some rigidity and displays significant differences across bank products and clients, being in general faster in the case of firms’ loans and deposits and slower for households.” Readers can also compare the findings for Czechia, Poland and Hungary in the same study.

The pass-through of exchange rate changes into different measures of price indices was examined in the study “On the exchange rate pass-through in Romania” (Anca Stoian, Bogdan Murarușu), published in September 2015. Similarly to the interest rate pass-through, the findings are quite useful: exchange rate changes are fully passed on to prices in the long run via import prices; over the short term, the process is incomplete; across time, the magnitude of the exchange rate pass-through into inflation has abated, probably under pressure from international competition, the business cycle and the overall level of inflation; however, this process is not irreversible. The latter insight is very useful, especially at the current juncture, when inflation has picked up in almost all countries. High inflation could fuel itself via a higher pass-through of exchange rate changes into prices.

The correlation between inflation and the unemployment rate provides some of the most important insights for monetary policy, as the decisions to tighten monetary policy are not without costs in terms of employment. Specifically, after the 2008 crisis, in many emerging economies, the unemployment rate was stuck to relatively high levels, while inflation remained relatively elevated, with the models having underestimated inflation developments. This was not the case of developed economies. There are plenty of studies documenting that the relationship has flattened over the past two decades or so, probably owing to downward wage rigidity, the influences of globalisation on firms’ pricing policies (e.g. from changes in value chains or the offshoring of production to cheap labour countries, which has changed the influence of output gap on inflation) and, at least in the case of Romania, owing to structural unemployment, ascribable to the skill mismatch on the labour market.

The literature also mentions another variety of factors that explain the flattening of the Phillips curve, including the decline in the natural rate of unemployment, the changes in the formation of price and wage expectations, especially in difficult times, coming from labour migration. In the paper entitled “The post-crisis Phillips Curve and its policy implications: cumulative wage gap matters for inflation” (Liviú Voinea), published in May 2019, the author deems that all these factors may have a certain impact, yet they fail to provide a convincing explanation as

to why inflation was so far below the target levels after the 2008 crisis. The paper presents an interesting assumption: the Phillips curve, which describes the link between inflation and unemployment, would function more properly if unobservable variables, such as the non-accelerating inflation rate of unemployment (NAIRU), were replaced with observable variables. The baseline assumption is that people would not consume more until their wages, which fell in the aftermath of a crisis, reached again the peak seen prior to the shock. Thus, according to this paper, short/medium-term assessments could be performed based on the cumulative inflation-adjusted wage gap instead of the unemployment gap. The current consumption would depend not only on current income and the related expectations, but also on the current wage gap from the peak seen before the shock. The paper shows, based on a sample of 35 countries, that the cumulative wage gap explains well the inflation gap. The paper concludes that inflation does not rise close to or above the target level until the cumulative real wage gap closes. Although it seems to provide an efficient and convenient tool for macroeconomic policies, this conclusion should be treated with caution, because unlike the neo-Keynesian Phillips curve, it lacks microeconomic foundations. In other words, it is not certain that a given change in policies could have always the same effects in practice. Unlike the neo-Keynesian Phillips curve, the curve proposed in the paper is rather a correlation between macroeconomic aggregates, which may cease to exist. As Hayek demonstrated, aggregates conceal many processes that are driven by very diverse actions, means and individual ends, which explains why not only correlations, but also causalities between macroeconomic aggregates, such as those inferred from optimising representative agents, are unlikely to last.

Finally, I conclude this preface by referring to the papers addressing issues related to unconventional monetary policies and the adjustment of inflation targeting strategies.

In this book, the issues related to unconventional monetary policies are discussed in two chapters, published by the NBR in May 2013. One of these chapters, initially published in 2010, is entitled “Liquidity, the October 2008 speculative attack and the reputation of the central bank” (Lucian Croitoru). That paper was much discussed in the press because it tried to explain the excessive volatility of interest rates in October 2008 in light of a speculative attack on the leu – in the form of a massive sale of the leu by households and other economic agents.

However, from this book’s perspective – related to unconventional monetary policies – the paper explained the unconventionality of the policy pursued under those exceptional circumstances by the NBR. Unlike central banks in developed countries, which grappled with the need to inject massive liquidity to unlock the money market, in Romania,

during the events in October 2008, the central bank faced the need to massively withdraw liquidity from the market in order to prevent a financial crisis owing to the depreciation of the leu. The way it did this was relatively unconventional, since, on the one hand, it managed to sell a large amount of foreign currency, while important counterparties needed lei to honour their swaps in lei, and on the other hand, it stopped the liquidity provision through open market operations.

The other chapter, which analyses the need for unconventional monetary policies in developed countries, is entitled “What good is higher inflation? To avoid or escape the liquidity trap” (Lucian Croitoru). Initially published in 2013, the paper shows that once the economies have entered the liquidity trap (the natural real interest rate is lower than the level real monetary policy rate can reach) and inflation is too low, then the most prolific way to increase inflation is to raise public debt by widening budget deficits. However, if governments are over-indebted and do not fulfil the conditions to increase their borrowings to adequate levels, then central banks may proceed to quantitative easing and other unconventional measures. The paper aims to analyse the idea of shifting from targeting low and stable inflation to targeting moderate and stable inflation, in order to reduce the likelihood for natural interest rates to fall again to levels below which monetary policy rates could not decrease in order to support output to return to its potential.

I have deliberately chosen to conclude this preface by mentioning the paper entitled “A central bank’s dilemmas in highly uncertain times – a Romanian view” (Daniel Dăianu), published in March 2015. As early as 2014, annual inflation had started to decline in developed countries, while in 2015 it neared zero percent in the US and even stayed in negative territory for many months in the euro area. The cited paper was written exactly at that time. Its relevance for this book is very high considering its ambivalence: it can be placed at the very beginning of the book or at the end, as the last chapter that looks, in an integrative manner, at the dilemmas facing the NBR over the last 32 years, in the global context of various periods.

One interesting idea is that at the beginning of the transition to the market economy, the NBR’s monetary policy fulfilled some quasi-fiscal tasks, thereby resembling the quantitative easing pursued by central banks in developed countries. However, the paper mentions that there are notable differences in the two policies. In developed countries, these policies were implemented in the context of relatively free markets and failed to produce the desired inflation after the 2008 financial crisis. By contrast, at the beginning of the transition period, market mechanisms were almost non-existent, and money printing after the liberalisation of prices actually created inflation.

I am not going into details about any other of the many dilemmas discussed in the paper, for I would spoil too much the readers' pleasure of discovering for themselves how these dilemmas, challenges and potential conflicts between different objectives are treated. I will mention only that the paper discusses dilemmas whose resolution enriched the theoretical framework and the experience of the NBR's monetary policy: (i) the conflict arising in the context of large capital inflows concurrently with relatively high inflation expectations; (ii) various types of inflation targeting, with a focus on the conditions that define them and the adequacy of these conditions to the realities of the Romanian economy, in particular the *de facto* exchange rate regime; (iii) the dilemma and potential conflict between price stability and financial stability and the role that macroprudential regulation can play in addressing such a dilemma; (iv) the challenges posed by the proliferation of conventional and unconventional shocks; (v) the conflict between the rising complexity of the reality of the financial system and the need to have simpler, more transparent and more robust financial systems; and, finally, without being limited to this list, (vi) the complexity of central banks' tasks derived from the existence of multiple and different objectives (price stability, redistribution issues, climate changes, etc.).

In the hope that I have managed to raise interest in this book and that I have been able to give an overview of the chronology of the papers herein included, I invite the reader to start this book with any chapter, as they were compiled as independent papers.

Lucian Croitoru
Bucharest, June 2022