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MONETARY POLICY No Final Victories

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ABBREVIATIONS

$\frac{M}{M} \equiv \left(\frac{M}{M}\right)$) ^d – real demand for money
$P = \langle P \rangle$	/ – real demand for money
	enunge
AD	– agregate demand
bp	– basis point
b`	 rate of expected return on bonds
BL	– bank lending
bn	– billion
С	– consumption
	D – currency coefficient
a	– consumer durables
СМ	 currency in circulation
D	- transaction deposits in the banking system
ECB	– European Central Bank
EMBI	 Emerging Market Bond Index
ER	– exchange rate
ERM	 exchange-rate mechanism
er=ExR	.es/D – excess reserve coefficient (rate)
	– excess reserves
FDI	 foreign direct investment
Fed	– Federal Reserve System
FG	– forward guidance
GDP	 gross domestic product
Ι	– investment
i	 nominal interest rate
i`	 expected money return (interest rate)
i _{cb}	 central bank key policy rate
IFEM	– Interbank foreign exchange market
$\mathbf{i}_{_{\mathrm{mm}}}$	– nominal interest rate in the money market

i _r – real interest rate	
L – employment	
LC – lending to clients	
LCR ratio – liquidity coverage ratio	
LTD ratio – loans-to-deposit ratio	
LTI ratio – debt-to-income ratio	
LTV ratio – loan-to-value ratio	
m – monetary multiplier	
M1 – narrow money supply	
M3 – broad monetary aggregate	
M0 – reserve money	
MB – monetary base	
MC – degree of monetary policy expansion	
mn – million	
MS – money supply	
NBS – National Bank of Serbia	
NPL – non-performing loans	
NRR – neutral real rate	
NSFR – net stable funding ratio	
NW – net worth of firms	
NWb – net worth of (capital) of banks	
P – price level	
P ^e – expected price level	
pp – percentage points	
P _s – equity prices	
Q – output level	
Q ^p – potential output level	
QT – real income used for approximation of the volume of transactions	
r – reserve requirement ratio	
R – total bank reserves	
r* – equilibrium real interest rate	
RR – required reserve	
RS – Republic of Serbia	
S – savings	
s' – rate of expected return on shares	
SDS – Special Diagnostic Studies	
t – time	
T – quantity of goods and services	
TLTRO – Targeted Longer-Term Refinancing Operations	

TLTRO – Targeted Longer-Term Refinancing Operations

- u unemployment
- u* natural unemployment rate
- V velocity of money circulation
- W financial wealth
- w nominal wage
- Y agregate demand, income, gross domestic product
- Y* potential Y

y-o-y – year-on-year

- zt (unnoticed) aggregate supply side shocks
- Λ function of loss (a trade-off between unemployment and inflation)
- λ productivity
- ξ_t investor desire for safe assets
- π , p inflation rate
- π^{e} expected inflation
- ψ_t labour force growth rate
- ω ratio of financial and real assets
- e real exchange rate
- ε other variables

SUMMARY

The technology of life is becoming increasingly more complex, and the world "deceptive" – possibilities are multiplying, but so are the challenges, which is why the preservation of stability and predictability of the environment is an indispensable precondition of economic efficiency. It is precisely because of this that the monograph, though lengthy, also bears a mark of remembrance of the past and an encouragement to contemplate the future.

We started from the thesis that turned out to be the conclusion as well – namely, that there are no final victories, but that there will always be people determined to comprehend the events and ready to implement ideas for the progress of society to which we belong. We analysed the monetary policy by taking into account theoretical knowledge, all the while focused on trying to come up with ways to achieve stability which has been associated with the progress of humanity since the beginning of time. The monograph is our attempt to leave a written trace of history, economic theory and contemporary experiences of central banks in the pursuit of price and financial stability, and is intentionally projected onto the conditions in and the needs of Serbia. In our analysis we looked back into the past, but remained focused on the present and on the future of monetary policy, aware that the many questions that have been raised mostly do not have definitive answers, yet a result can be accomplished and left to the future generations.

Guided by this idea, we conceived the monograph as comprising 10 mutually related sections.

Section one of the monograph – "A Look Back into Economic History", is a reminder of how changing circumstances impacted the macroeconomic thought, the emergence and development of central banking and the monitoring of price movements, which is certain to continue in the future.

Section two includes "Theoretical Tenets of Monetary Policy Impact" both in general terms, within the economic theory, as well as from the aspect of the monetary policy transmission mechanism, and particularly the perception of the "channel" of its influence. The link between monetary and real flows, which is the key issue of this section and has traditionally been in the focus of economic theory and practice, is supplemented by an analysis and scope of the Phillips curve, with an appreciation of the different approaches to its interpretation.

Section three "Goals and Strategies of Monetary Policy" starts from the evolution of goals and their corresponding and adequate monetary policy regimes, and offers a brief overview of the conditions in which the policies were implemented and results achieved. A special emphasis is placed on the inflation targeting regime which brings a "democratisation" of a kind, since this regime is accompanied by a high degree of monetary policy transparency.

Section four "Financial Markets – a Central Bank's Perspective" explores the role and function of financial markets, their structure and, in particular, the role that a central bank plays in these markets, the yield curve, as well as the nominal and real interest rates.

Section five "Formulating and Conducting Monetary Policy" looks into the approaches to the decision-making process regarding monetary policy measures. The relation between discretionary and rule-based decision-making, which is the focus of this section, has been expanded by an analysis of the neutral interest rate. A special segment covers the analysis of the creation of reserve money and the monetary multiplier, their definitions, as well as changes in the level and structure of monetary aggregates in the post-crisis period.

Section six, exploring the "Impact of a Central Bank on the Money Market", considers the scope of individual central bank instruments and their impact on liquidity and interest rates in the money market. A particular emphasis has been placed on the possibility of central banks to have a new role in the money market, owing to their market intelligence and forward guidance functions, and thereby boost their impact on expectations, thus contributing further to monetary policy efficiency.

Sections seven and eight are entirely devoted to Serbia. Section "Strategic and Policy Framework: the Case of Serbia" analyses the specific features of our monetary and inflation conditions, the adequacy of inflation targeting regime for achieving low and predictable inflation and the adequacy of the framework in which instruments of monetary regulation

SUMMARY

are applied. Special attention is also devoted to macroprudential policy principles and framework. Section eight "Central Bank Policy: the Case of Serbia" analyses recent economic history of Serbia, external and internal macroeconomic conditions for monetary policy implementation before and after the crisis, measures taken as well as their impact on achieving low inflation, anchoring inflation expectations, rise in lending activity, extension of the dinar yield curve, decrease in the risk premium and upgrade of the country's credit rating.

Section nine "Strategies for Addressing Inherited Problems" analyses two segments relevant for monetary policy efficiency and financial stability: the share of non-performing loans in total loans and the degree of dinarisation. We examined the roots and repercussions, as well as strategic options and undertaken activities, the range of central bank measures and the results yielded by the implementation of the adopted strategies, particularly acknowledging the fact that the results were achieved on sustainable grounds despite the scale of the inherited problem.

The last section, *section ten* "Domestic and Global Environment: Overview by Year", gives a comprehensive analysis of the National Bank of Serbia's effectiveness in the past six years. Domestic and external conditions are analysed, as well as the implementation of structural reforms, monetary policy measures, and the second-round effect of the achieved results in terms of preserving price and financial stability on the strengthening of the central bank's credibility and anchoring of inflation expectations. Particular attention is paid to the analysis of the impact of monetary policy relaxation, in conditions of predictable inflation and relative exchange rate stability, on the overall economic ambience through lower interest rates and financing costs of corporates and households, stepped-up lending, increased investment and exports and, most importantly, sustainable economic growth and improved living standards.

We hope that in this way, too, we have clearly pointed out the results of monetary policy in the previous period which cannot be belittled or overlooked as they show that we, both as individuals and society as a whole, are prepared for the global match. However, not for a single moment should we let our guard down. We have to remain committed to strengthening our resilience to the challenges that will always be there, so as to readily avert any negative consequences in the future and preserve what has been achieved. The monograph shows that the choice of monetary strategy, policy and measures must be tailored to domestic conditions, though in full consideration of external circumstances, and supported by successful coordination with other macroeconomic policies and open communication with other economic stakeholders. At the same time, these are also the preconditions for monetary policy results, i.e. price and financial stability, to yield their full effect in terms of making our lives and business operations easier.

All the details of this complex topic were impossible to capture, the river of life is constantly filling the ocean of information and at some point writing has to stop and serve its purpose, i.e. it has to become available for reading. Even though this was not our intention, but since it is August already, we decided that the timeline we are following should end with 6 August 2018, which marks the end of the first and the beginning of the second term in office of one of the authors as the governor of the central bank.

Belgrade, summer of 2018

Authors