

# UNCONVENTIONAL MONETARY POLICY: CHANGING EUROPEAN CENTRAL BANK'S PERSPECTIVE ON FINANCIAL GOVERNANCE

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## **Abstract**

The paper aims to look at the European Central Bank governance in terms of decisions taken to deploy a new kit of unconventional monetary policy measures, in order to respond to a new economic paradigm characterized by dynamic change in evolution, high volatility and enhanced financial risks. As an institution, the European Central Bank is led by the Governing Council and the decisions taken on how to use monetary policy impact an entire financial system. European Central Banking governance is about safeguarding the common currency and ensuring a future for the economic and monetary area to emerge stronger. For this purpose, when conventional monetary policies reach limits in their effects, it is time for the European Central Bank governance to analyse and assume the decision to deploy the arsenal of unconventional monetary policies. The experience of recent years showed a positive effect of the European Central Bank's unconventional monetary measures, but costs could rise in case of extensive use of such measures. When these measures are used in combination, the effect is amplified and the European Central Bank needs to assess when it is time to withdraw the support, how to communicate and what exit strategy should use, what the costs are and impact can expect.

**Keywords**

European Central Bank governance, economic growth, inflation, negative interest rates, quantitative easing, transmission channels for monetary policy, unconventional monetary policy

*“Economic change – like all change – is a process and the carriers of that particular process are the institutions of the society. Institutions are created by humans to structure human interaction in order to reduce uncertainty in pursuit of their goals (of those making the rules) in social, political, and economic exchange. I define institutions as the formal rules (constitutions, statute and common law, regulations, etc.), the informal constraints (norms of behaviour, conventions, and internally imposed codes of conduct), and the enforcement characteristics of each. Because they make up the incentive structure of a society they define the way the game is played and the way they evolve determines the way the game is played through time”*

Douglass C. North (Washington University, St. Louis),

*“Economic Performance through Time: the Limits to Knowledge”, (1993)*

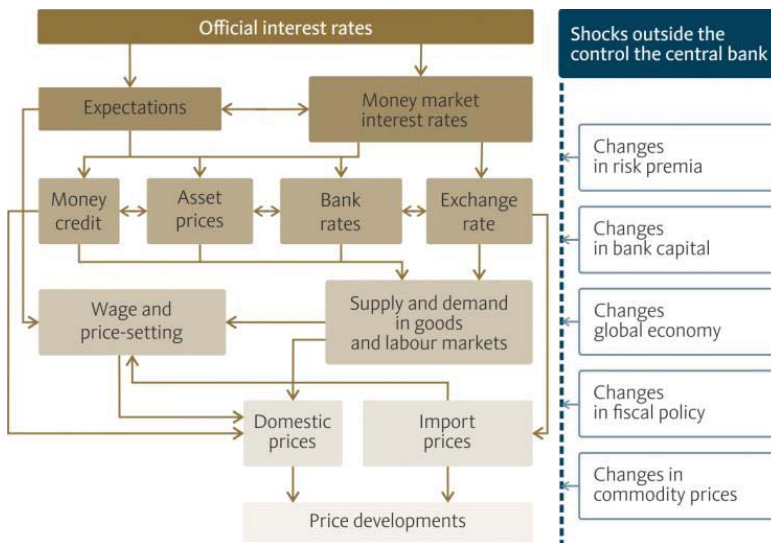
## **1. THE ECONOMIC CONTEXT REQUIRES AN ADEQUATE GOVERNANCE FROM ECB**

The quote comes from the lecture that Mr. Douglass C. North gave in Stockholm, on Dec. 9, 1993 when he received the Nobel Prize in Economics. Keeping in mind Mr. North’s words about institutions, I chose to explore how a central institution in the European Union is making the financial and banking governance facing a new paradigm of economic evolution, as the conditions in Eurozone are characterized by a series of attributes that make a complex institutional approach imperative.

The aim of this rationale is to provide a wide view upon the governing strategic choices faced by the European Central Bank and to explain how and why it resorted to complex measures in order to respond according to the extent of the economic and financial challenges.

The hypothesis of this paper is that new thinking and new measures are required from central banks and from the European Central Bank in particular, to address uncommon consequences of complex factors in the present economic context, characterized by divergence and asymmetry of information, volatility and changes in the paradigm of monetary governance. This new paradigm means that the European Central Bank (ECB), as core institution, is facing the need to support financial stability by maintaining the purchase power parity of prices in order to achieve economic growth and development. The methodology used is analysis and synthesis, costs-benefits analysis and description of concepts and actions.

Figure 1: The process of monetary policy decisions targeting prices stability



Source: <https://www.bportugal.pt/en/page/monpol-what-is-it>

The aspects that need interventional measures to be applied according to strategic governance decisions are the following: the interest rates for the euro-currency (the price of money) are at record-low levels in economic history, when the differential in what economies can produce and distribute is highly

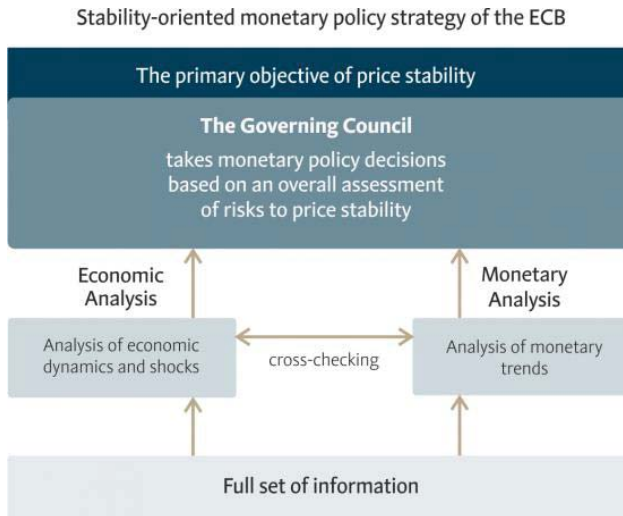
interlinked in the global markets (the open economies grow more by foreign trade, than by increment in domestic demand) leading to devalued currencies to support exports, when fiscal policies are crippled by the actual collection of taxes and budgetary deficits make public investments difficult to be implemented and achieved.

The European economic governance needs to address complex lines of guidance: fiscal policies execution, economic supervision, clear channels of policies transmission, a complex reform in economic laws, judicial system and financial regulations, enforcement of implementation and control of actions plus accountability. In this overall general framework of governance, ECB stands as one strong pillar changing the way of thinking about classic banking governance and adopting new regulations and actions, such as unconventional monetary policies.

Quality governance relies on transparency, accountability, predictability and participation to impact economic growth (Ahrens 2006, 8 and also Carothers and Brechenmacher 2014). Regarding the ECB, this means that it took a new approach in governance, transmitting it via unconventional monetary policies to address new risks and challenges. The unconventional monetary policy measures need to be transparently explained to public and private sectors, to population, the ECB giving accountability for its decisions and ensuring a stable perspective on economic evolution by predictability of future actions (“forward guidance”), while involving all stakeholder participants to support and disseminate the measures (participative collaboration on the financial chains of monetary policy transmission mechanism – the European System of Central Banks, commercial banks, Finance Ministries, etc.).

The ECB’s governance is about a new approach towards the usage of complex new measures that are transposed in financial regulations and leading to the change in understanding economic risks and financial intervention to support expansion of economies, in order to equip subordinated and cooperative bodies at national level with a new monetary policy toolkit, to better respond to systemic vulnerabilities in Eurozone and to reflect a new strategy in financial risks management.

Figure 2: Components of the ECB's 'monetary policy strategy



Source: <https://www.bportugal.pt/en/page/monpol-what-is-it>

The economic governance of the ECB involves deploying the full power of classic and new instruments with the aim to restore and safeguard Eurozone's stability and to see that Eurozone maintains a solid and fully-functional financial system to support economic recovery, by monetary measures and actions designed to address the causes and enhance the results. The economic context today made imperative for the ECB to resort to using an unconventional approach to better respond to the economic environment. These instruments and measures of monetary policy are the formal and informal tools of the ECB. They are backed by laws and regulations in prudential supervision, while the unconventional measures come from the economic experiences, economic history and innovation in practice.

After the financial crisis of 2008 and its later financial turmoil up to present times, a new economic model emerged for developed countries' economies – "managed markets" (Sants 2016) characterized by some degree of control

through interventional actions enforced by institutions, new rules, laws and regulations and a volatile and dynamic private sector: *“Managed markets are characterised by strong government intervention, sustained rule-making, strong enforcement, and a defensive private sector.”* (Sants 2016).

The financial crisis revealed core weaknesses and internal imbalances in European economies and their macro-economic convergence. That is why the EU strengthened the regulatory framework for financial services with the European System of Financial Supervisors, the creation of three European Supervisory Authorities - European Banking Authority (EBA) European Securities and Markets Authority (ESMA) and European Insurance and Occupational Pensions Authority (EIOPA) plus an independent EU body responsible for the macro-prudential oversight - European Systemic Risk Board (ESRB).

The former president of the ECB, speaking about the global economic governance and, in particular, about the Eurozone’s economic governance, said at the World Policy Conference: *“In my view, international interdependencies are too large for purely national or regional rules to be optimal and there is a clear need to strengthen global governance, in particular in the financial field.”* (Trichet 2010).

For Eurozone, the main evidence of applied economic governance for boosting economic growth is the monetary policy conducted by ECB. This, alongside other central banks worldwide, took a new approach in policy formulation and industry supervision, as the economies of Eurozone countries depend on the financial system as main growth driver. The ECB’s monetary policy is a funding source for investments, liquidity, channel for efficient financial resources allocation, affects wealth building and valuation, the credibility and trustworthiness of euro-currency and it is purchase power being at stake for citizens and for the economic growth perspective.

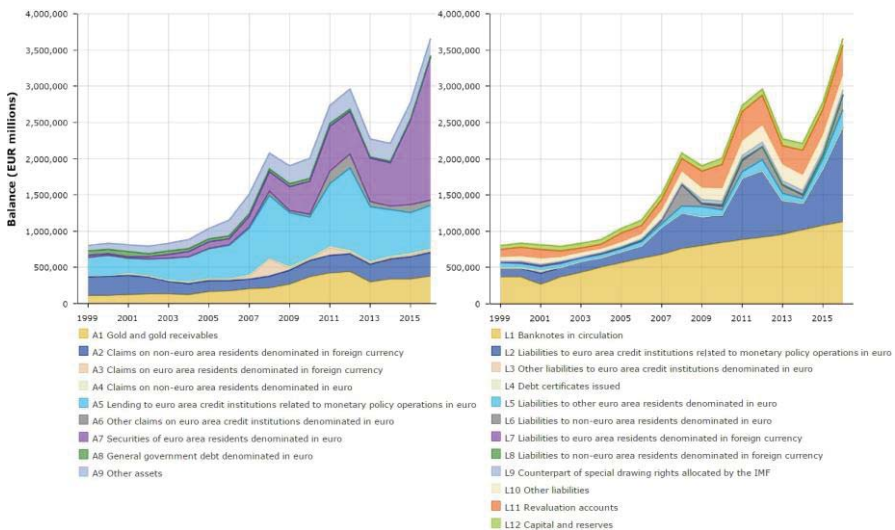
## 2. THE NEW GOVERNANCE FROM ECB IS A CALL FOR ACTION DEPLOYING UNCONVENTIONAL MONETARY POLICIES

At the conference "Brexit and the implications for financial services" jointly organised by SUERF and hosted by Ernst & Young in London, a member of the Executive Board of the ECB discussed about "Creating stability in an uncertain world" (Praet 2017) and made the following statement: *"Our monetary policy measures have been a key contributor to these positive economic developments. The comprehensive set of measures introduced since June 2014 has worked its way through the financial system, leading to a significant easing of financing conditions for consumers and firms"* (Praet 2017). Analysing this statement, we will notice that after three years of unconventional monetary policy, the ECB successfully transmitted the monetary measures into the economies of the Eurozone, reaching the 15<sup>th</sup> quarter of growth. In 2016Q4, a preliminary flash estimate on GDP Growth for Eurozone shows an increase of 0.5%, mildly up from +0.4% in previous quarter. At the end of 2016, the unemployment rate in Eurozone was at 9.6% and the GDP growth was 1.8% compared to last year. The target of ECB - inflation at 2% - seems closer than ever: in January 2017 the flash estimate of inflation rate is 1.8%, significantly higher than in December 2016 when it was 1.1%; however seasonality of spending and consumer behaviour needs to be accounted for when looking at index of prices. The reference interest rate was kept unchanged by ECB at 0% while 3M EURIBOR rate is still in negative territory at -0.3% while long term interest rates (yields for 10Y government bonds) are at 1% (Eurostat 2017). That means that the real interest rates on short and long terms are negative (3M = -1.5% i.e.  $[1.003/1.018]-1$ , 10Y= -1% i.e.  $[1.01/1.02]-1$ ) and lending and financial borrowings as well as consumption for spending are further encouraged to consolidate the rate of inflation on long run at 2% (ECB Feb. 2017). In the same discussion, Praet (2017) justified why "forceful" i.e. strong governance measures via monetary policy resorted to unconventional monetary measures (to be further presented) to combat the unconventional economic situation, namely the deflationary process within the economies of Eurozone:

*“Institutions contribute to stability, especially in times of uncertainty, and help anchor expectations. In times of political gridlock, effective institutions are vital since they can deliver their mandates decisively and outside of the push-and-pull of the political process. [...] Independent central banks with a clear mandate to maintain price stability have been successful in anchoring inflation expectations. Having an explicit inflation objective provides its own stabilising narrative – people can trust the central bank to deliver inflation, and can base their economic decisions on that expected inflation rate. In recent years, the ECB has been an anchor of stability, creating an effective bulwark against deflationary narratives when they appeared in the euro area. By acting forcefully, the ECB has prevented deflationary dynamics from materialising”.*

The news (ECB 2016) that the ECB’s current monetary policy measures could be changed in the near future sent shivers to the financial environment and to economies depending on its financial resources to achieve economic recovery (see all media economic news on Dec. 8, 2016, CNBC, Financial Times, Bloomberg, Reuters, The Wall Street Journal).

Chart 1: ECB Balance Sheet – Assets (A) and Liabilities (L) from 1999 to 2016



Source: <https://www.ecb.europa.eu/pub/annual/balance/html/index.en.html>



President Mario Draghi stated in a press conference that:

*“... as regards non-standard monetary policy measures, we will continue to make purchases under the asset purchase programme (APP) at the current monthly pace of €80 billion until the end of March 2017. From April 2017, our net asset purchases are intended to continue at a monthly pace of €60 billion until the end of December 2017, or beyond, if necessary, and in any case until the Governing Council sees a sustained adjustment in the path of inflation consistent with its inflation aim. If, in the meantime, the outlook becomes less favourable, or if financial conditions become inconsistent with further progress towards a sustained adjustment of the path of inflation, the Governing Council intends to increase the programme in terms of size and/or duration. The net purchases will be made alongside reinvestments of the principal payments from maturing securities purchased under the APP. To ensure the continued smooth implementation of the Eurosystem’s asset purchases, the Governing Council decided to adjust the parameters of the APP as of January 2017 as follows. First, the maturity range of the public sector purchase programme will be broadened by decreasing the minimum remaining maturity for eligible securities from two years to one year. Second, purchases of securities under the APP with a yield to maturity below the interest rate on the ECB’s deposit facility will be permitted to the extent necessary” (ECB 2016).*

Draghi talks about “non-standard” monetary policy measures, naming the Asset Purchase Program of the ECB, largely known worldwide as Quantitative Easing (QE) and regarded by majority of economists as “unconventional” monetary policy measure in a general consensus.

The ECB aims to make acquisitions under the public sector purchase programme (PSPP), in a progressive and large-scale manner in order not to interfere with the market price formation mechanism keeping market neutrality. The buying of nominal marketable debt instruments at a negative yield to maturity is allowed. On 19 January 2017, the Governing Council of the ECB decided on acquiring securities on primary and secondary markets under the Asset Purchase Program with a yield to maturity below the interest rate on the ECB’s deposit facility (ECB 2017).

Table 1: Eurosystem holdings under the expanded asset purchase programme

Changes of holdings (last two months)	ABSPP	CBPP3	CSPP	PSPP	APP
Holdings* February 2017	23,471	212,579	67,337	1,394,205	1,697,592
Monthly net purchases	724	2,434	8,314	68,814	80,286
Quarter-end amortisation adjustment	-5	-567	-195	-5,367	-6,134
Holdings* March 2017	24,190	214,446	75,455	1,457,652	1,771,743

Note of ECB: \*At amortized cost, in euro million, at month end. Figures may not add up due to rounding. Figures are preliminary and may be subject to revision. Amortisation adjustments are made at the end of each quarter. The amortisation emerges from an accounting principle that implies that securities purchased at prices below face value have to be revalued upwards over time towards maturity, and revalued downwards over time, if purchased at prices above face value.

Source: <https://www.ecb.europa.eu/mopo/implement/omt/html/index.en.html>

The ECB states that under PSPP, substitute acquisitions can be made if buying of tradable debt instruments issued by the central governments and agencies are complementary to implement the relevant National Central Banks' share of purchases until the end of the Asset Purchase Program (extended till December 2017). Three national central banks (Banque de France, De Nederlandsche Bank and Lietuvos Bankas) did reverse auctions on a trial basis under PSPP in 2015Q4, aiming at a small part of the overall monthly purchases and took place alongside regular bilateral purchases, generating adequate participation and leading to competitive pricing. The ECB considered reverse auctions as complementary purchase method in less liquid market segments. Therefore, the Governing Council endorsed a regular use of reverse auctions by some national central banks under the PSPP (ECB 2017).

Table 2: Breakdown of debt securities under the PSPP

as of 31 March 2017	Monthly net purchases*	Cumulative monthly net purchases*	Remaining Weighted Average Maturity (WAM) in years
Austria	1,958	39,014	9.31
Belgium	2,398	49,092	10.14
Cyprus	0	248	4.59
Germany	16,977	355,594	7.65
Estonia	0	65	1.29
Spain	8,459	175,947	8.82
Finland	730	23,526	7.26
France	13,707	282,373	7.64
Ireland	565	20,231	8.92
Italy	11,890	245,582	8.72
Lithuania	75	2,473	6.79
Luxembourg	67	1,893	5.54
Latvia	65	1,474	7.66
Malta	30	915	11.30

as of 31 March 2017	Monthly net purchases*	Cumulative monthly net purchases*	Remaining Weighted Average Maturity (WAM) in years
The Netherlands	3,869	79,540	7.83
Portugal	663	26,617	9.19
Slovenia	150	5,397	9.20
Slovakia	294	9,084	8.09
Supranationals	6,919	162,150	7.36
<b>Total</b>	<b>68,814</b>	<b>1,481,216</b>	<b>8.11</b>

Note of ECB: \* Book value in euro million. Figures may not add up due to rounding. When assessing the remaining WAM of Eurosystem holdings relative to a market measure, deviations could reflect inter alia the 1 to 30 year maturity range of purchases, the issue share limits taking into account holdings in other Eurosystem portfolios as well as the availability and liquidity conditions in the market during the implementation period. Principal payments on securities purchased under the PSPP are reinvested by the Eurosystem in a flexible and timely manner. The monthly purchase volumes are reported net of reinvestments. The first principal payments occurred in March 2017.

Source: <https://www.ecb.europa.eu/mopo/implement/omt/html/index.en.html>

As of January, the APP balance sheet reflected more than 1.6 Billion EUR (ECB 2017). Maintaining easy financing conditions is crucial to achieve long term inflation at 2%. Higher oil prices and predictions for more US budget spending point that forecasts for 2019 may show price growth in Eurozone reaching ECB's target of 2% for the first time since 2013. Pushing liquidity into the financial system and mainly commercial banks will also help to strengthen financial sector, as it repeatedly indicated weak banks as key obstacle in transmission

mechanism for the stimulus via QE program – one of the main measures of monetary policy.

However, the extraordinary factors in the present economic context require alternative financial governance measures and a new perspective on the necessity of unconventional monetary policy. The first factor, past decline in oil prices to 40 USD/barrel supported inflation increase almost completely by itself. If this effect is taken out, considering that Petroleum Exporting Countries Organization targets a price around 60 USD/barrel (Xinhua 2016), it is an increase of 50% and consumption, a key driver of growth will be affected, so that the monetary policy will be the main driver to push consumption. Consumption has not been supported by strong wage growth, mainly in the private sector. And last, governments need to reform fiscal policies and implement painful macro-economic adjustments, giving rise to political extremist parties and social movements, affecting the benefits of monetary policy. Although all Eurozone countries had a highly correlated inflation due to the euro-currency, some countries like Greece, Spain, Italy, Portugal and Ireland paid for their lower competitiveness through higher unemployment or higher deficits of current account and budget deficit when the financial crisis of 2008 revealed it.

### **3. THE MAIN MEASURES OF UNCONVENTIONAL MONETARY POLICY**

Because of exceptional economic events that affected significantly the European economic environment, to which mounting dissatisfaction added in regards of the austerity of fiscal measures taken all over the EU, the ECB shifted the monetary policy, this policy being regarded as defender of the last resort for economic recovery. Starting from 2014, the Governing Council of ECB decided to launch the “unconventional monetary policy” such as QE and more recently, negative interest rate policy. The complex economic context today requires a new approach from the monetary policy and these measures are part of modern central banking management toolkit. A synthesis of such policies can be found in

literature (Reza, Santor and Suchanek 2015) and all of them have been deployed to respond to specific economic conditions of the markets.

Getting out of economic downturn is possible by two ways: by debt growth, supplying to present times cheaply money from the future via monetary policy (this is quantitative easing, or negative interest rates, all giving immediate access to cash), or by accumulation, restructuring the economies to emerge without structural imbalances via fiscal policy (taking austerity fiscal measures). For instance, The Federal Reserve System (FED, the central bank) in the United States of America under president's Ben Bernanke guidance supported (starting from 2008) and acted by using the monetary policy measures to recapitalize banks and transmit the measures into the financial system (Bernanke 2015 as per Smith's review 2016).

Europe had a different approach at the debut of the financial crisis in 2008, strengthening the fiscal discipline at the cost of implementing austerity measures (see IMF WP/17/18, Bloomberg articles, Euractiv study, Global Research Canada opinion, NBER Working Paper No. 14722, OECD presentation – all sources indicated in the “References” section of the paper). The Federal Reserve System in United States of America chose the monetary policy as main driver to restart economic growth and started QE in 2009 (FOMC 2009). When macroeconomic indicators, mainly unemployment proved stable at targeted level, FED maintained its balance sheet level started to withdraw QE and gradually increase the policy interest rate.

By contrast, the Bank of Japan, the ECB and other European central banks (e.g. Sweden's central bank) expanded their asset purchase programs. A few central banks lowered policy rates in negative zone (Bank of Canada 2015): as of March 2017, Japan (-0.1%), Denmark (-0.65%), Switzerland (-0.75%) and Sweden (-0.5%). ECB has deposit facility rate set at -0.4%. Practical evidence from these central banks suggests that there is limited efficiency of negative interest rates, provided that the range is kept within the Effective Lower Bound (between -0.25% and -1%) which means that wealth can be created by higher asset prices, however accumulation of capital is not propagated in significant investments (ECB 2016 and IMF WP/16/172).

Regarding the transmission mechanism of monetary policy, QE affects the price and yields of bonds (raises the price and diminished the yields), so that on the long run the yields curve tends to flatten at low level, so that the bonds are expensive (overvalued) and no longer attractive for investors. The ECB is committed to supply quantities of money to markets by buying bonds, regardless of the price. The low-rates environment can improve the financial and economic conditions through a lot of channels for transmission. At low rates, the private sector is enticed to borrow more at a less expensive price. Also, the low interest rates on bonds and bank deposits discourage placement in such products, investors seeking positive or higher returns, shifting focus to other asset classes (taking on supplementary risk). In such environment, rising prices in riskier assets creates wealth effect that should encourage confidence in future incomes and stimulate spending on consumption. The interest rate differential on maturities and other assets than the ones acquired by the central bank are impacted by the financial flows released via QE and negative interest rates (on the long run, yields tend to equalize interest levels on short run) pushing furthermore the consumption and investments (IMF 2013).

Another foreseeable effect is that foreign exchange rates for the currency at abundance will depreciate boosting exports and competitiveness of domestic production due to FX rate, supporting an increase in production, economic boost and structural economic adjustments due to favourable effects in foreign trade balance and balance of payments.

Taking into account the challenges posed to the ECB governance regarding alternative measures on unconventional monetary policy, the following consequences (Draghi 2015) can be mentioned: a) a distressed market functionality - interest rate as “price of money availability over time” is incorrectly reflected on short-run and long-run; b) low interest rates and available money in excess can lead investors to assume excessive risks in higher yields assets (Hannoun 2015), as risk premium does not reflect a correct assessment over exposure; c) a devaluing currency such as EUR due to increasing monetary mass and the ECB balance sheet size forces other countries to issue their own currency more, in order to keep the direct quotation value of currencies. That leads to a currency war of who is devaluing currency faster and

increases significantly the volatility of FX trade; d) decisions of financial governance of central banks such as the ECB are regarded as institutional involvement in functional markets. The “invisible hand” of free markets is no longer functional, and the increased turbulences on financial markets (capital markets, FX markets, interest rate markets, bond markets, derivatives of all kinds, etc.) are related more to political decisions and institutional policies which means that policy measures are the appropriate response by taking corrective actions; e) QE decreases the quantity of safe assets on the markets, as they are purchased by ECB (bonds) in exchange for the money.

For such QE measure, these bonds are regarded by the financial environment and the private sector as guarantee for eligible financing terms because they have money-like characteristics: liquidity (can be easily sold or bought on secondary markets), guarantee (can be collateralized and bear coupon similar to interest rate) and safety (ensuring a stable future cash flow for holder). They can be sequentially collateralized multiple times, having a multiplication effect of monetary mass and of liquidity funds. It is a shortage of high quality safe collateral and impacts implementation of Basel III requirements for capital adequacy in core tier I and can lead to changing business model of banks (CGFS 2013). For example, the Basel Agreements (in all forms, I, II and III – Basel Committee, Bank of International Settlements) treat the bonds issued by governments as “risk-free” for the banks holding them in their portfolios, enticing banks to hold more to secure liquidity, as they can be used against the central bank as collateral for borrowing money (e.g. repo operations, etc) (BIS 2011).

A key point is about the effects the ECB can have using QE and negative interest rates at the same time. There is little evidence in the literature and it is hard to separate the effects when multiple measures are deployed. Large-scale asset purchase programs extend the duration and size of ECB portfolio. When interest rates will increase, prices of those assets in balance sheet will decrease and the mark-to-market methodology will require the reflection of portfolio value at market prices, leading to building up accounting provisions for losses (De Graeve and Linde 2015). That is why markets expect “forward guidance” from



ECB in planned future interest rate increases, taking into consideration that the ECB is directly interested in avoiding significant losses.

The ECB's decision to expand APP at the end of 2015 has been accompanied by a cut in deposit facility interest rate to -0.3%. According to its rules, bonds having yields below deposit rate facility are not eligible for APP. Now the rate stands at -0.4%. The combination of APP and the negative interest rate on deposit facility was important because it feeds access to a tranche of desirable and eligible bonds such as German ones (regarded as "safe-heaven" assets and investors willing to pay a premium to secure medium term capital, instead of looking to gain coupons) (ECB 2016).

In USA, FED transmits the monetary policy via mortgage-backed securities (FED 2017), in Europe such assets are not used as multiplier of monetary mass. Instead, t-bills (governmental bonds) are used as collateral for access to lending and securing cash. Up until June 2014, the ECB's regular monetary policy measures eased banks' access to funds but proved ineffective for lowering costs of borrowing (by companies and population). The credit-easing package and QE improved the transmission of monetary policies and had a contamination effect outside Eurozone to other countries in EU (ECB 2005, 2007 and IMF WP/16/76)

In 2016 APP has been expanded by the ECB, to include corporate bonds, to ease direct financing conditions of the real economy. A pertinent explanation for this fact: ECB's APP leads banks to hold excess reserves with ECB and pay interest on these reserves at -0.4% per annum, a condition which is discomfoting for banks which are enticed rather to lend the money or buy assets generating positive yields (ECB 2016). But this extra liquidity that banks provide via lending or buying assets means the receiver of money will eventually deposit the amount back to banks.

Banks see their profit margins tightened so they are forced to transfer at least partly, the costs of the negative interest rates. If banks increase the cost of lending to absorb the loss, they will make the unconventional monetary measures ineffective in transmitting the boost for economy (it is a barrier to lending). If banks take on the loss into their balance sheets, it will weaken the financial system, imposing tighter monetary policy measures and banking prudential

supervision from ECB. In both cases, ECB's unconventional monetary measures meet a resistance in the transmission mechanism.

The negative interest rates lead to another effect: preference for cash storage of currency, to avoid erosion of capital. If rates remain negative for long term, investors will look for alternatives to bypass the costs of money in the banks, which means that they will look for any investment that could generate positive yields or keep the physical money outside the banking system. Furthermore, they could substitute bank accounts with investing in money market funds, in search for better returns.

Regarding the exit options the ECB can adopt, to stop APP, a possible choice is to allow bonds to reach maturity and be redeemed at nominal value plus the last coupon. This strategy evens the balance sheet over years, reaching a normal state when the portfolio of bonds is redeemed naturally. For the reserves held by the commercial banks with ECB, the European Central Bank could also pay interest rate from the excess liquidity resulted from bonds portfolio due to price increases (lower yields mean higher price value). The exit strategy from negative interest rates can be done normally, raising the interest rates gradually, in combination with "forward guidance" from ECB officials, in order to avoid shocks in financial markets and financial assets price volatility (ECB 2016).

#### **4. UNCONVENTIONAL MONETARY POLICY AND FINANCIAL STABILITY IN ROMANIA**

Although not a member of Eurozone, Romania's experience with out-of-the-box monetary policy measures can prove beneficial for future ECB decisions. Due to its particularities in economic development in the 1990s and 2000s, National Bank of Romania (NBR) chose to implement "Managed Floating Plus" model (Goldstein 2002) to better control currency mismatches, Romania being an emerging frontier market. According to NBR website: *"The exchange rate regime of the leu currently in place is that of a managed float, in line with using inflation targets as*

*a nominal anchor for monetary policy and allowing for a flexible policy response to unpredicted shocks likely to affect the economy” (NBR 2017).*

The model “Managed Floating Plus” examines currency regime choices for emerging economies that are heavily involved with private capital markets, while the term “plus” refers to a framework that includes inflation targeting and aggressive measures to discourage currency mismatching. The model proves why “managed floating plus is superior” to other currency-regime systems (adjustable peg, basket & band & crawl, currency board, dollarization). (Goldstein 2002). In author’s own explanation, each currency regime is assessed by implications upon the economies and, as a leverage of monetary policy, the exchange rate choices are compared to the new model, concluding to be the adequate option:

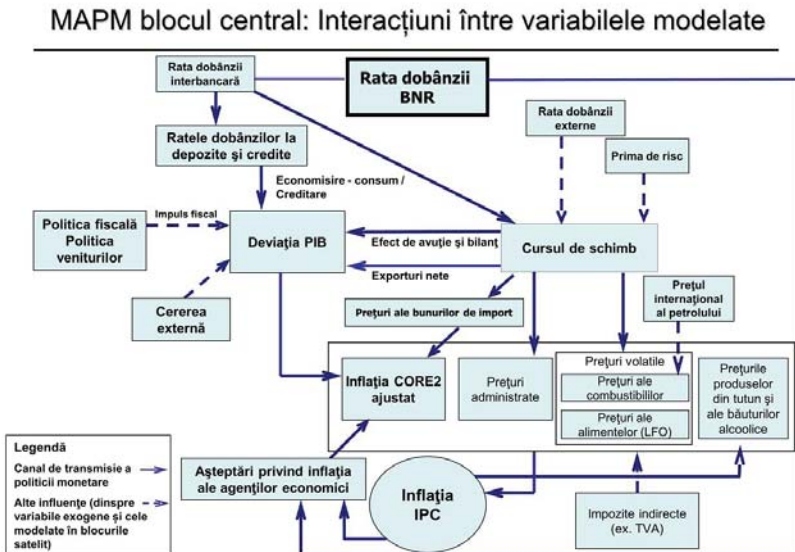
*“Adjustable peg and crawling band regimes are just too fragile for a world of large and sudden shifts in private capital flows and of sometime serious slippages in economic policy reform. Currency boards and dollarization solve some problems, but are impotent in dealing with Argentina-type crises, characterized by recession, an overvalued real exchange, limited flexibility of domestic costs and prices and too much public debt to permit countercyclical fiscal policy. And plain vanilla floating has limited appeal to many emerging countries because of their balance sheet vulnerability to large exchange rate changes and because of their dissatisfaction with monetary targeting as a nominal anchor. The best of the currency regime options is managed floating plus.” (Goldstein 2002, 67).*

In a conference note of the National Bank of Romania (NBR), at Oliver Wyman CIGI seminar in Rome, the Governor discussed about the measures adopted as monetary policy in 1990s and early 2000s (Isarescu 2015). The economic context required “unorthodox” measures of monetary policy, because foreign banking capital brought “strong corporate governance and modern banking practices” (Isarescu 2015) rising credit volumes in foreign currency, pressuring the financial stability. High inflation and the high interest rates differential in combination with foreign capital inflows led to a fast-track appreciation of national currency. This increased the appetite for lending in foreign currency, appreciated more the FX rate and decreased inflation to an unsustainable level reflected by the deficit of the current account in the National Balance of Payments. The fiscal policy

played a pro-cyclical role for the economic growth during this period of social prosperity, instead of having an anti-cyclical approach to the markets' expansion. A normal measure of monetary policy – interest rate increase – would have not been recommended because it would have generated other foreign currency inflows. NBR resorted to direct FX interventions on forex market in combination with administrative measures to limit credit expansion.

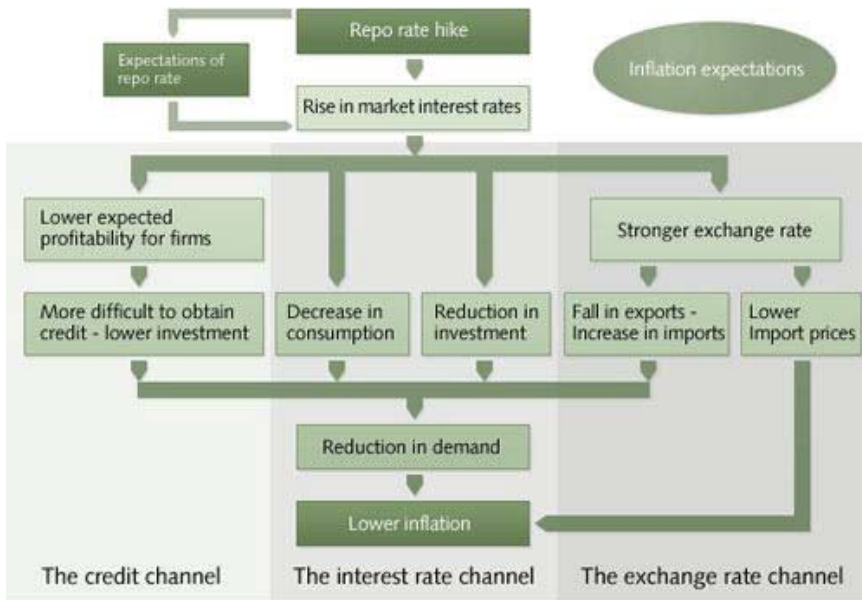
In addition, NBR increased the minimum reserve requirements to 20% RON and 40% EUR, a high level in Europe. It also issued regulations regarding specific indicators for loans (loan to value ratio, debt to income ratio), limiting lending with forex exposure for borrowers not naturally covered against FX risk. Such combination of measures is not a typical classic approach in the governance of a central bank deciding to execute the monetary policy, but rather, an unconventional monetary policy approach from NBR. ECB could find the Romanian experiences useful, further measures could complement the present actions developed by ECB, such as the sustainability of lending (Isarescu 2015).

Figure 3: NBR's diagram of the monetary policy transmission mechanism



Source: <http://www.bnro.ro/Mecanismul-de-transmisie-a-politicii-monetare--712.aspx>

Figure 4: Central banks' usual diagram of the monetary policy transmission mechanism



Source: <http://www.riksbank.se/en/Monetary-policy/Forecasts-and-interest-rate-decisions/How-changes-in-the-repo-rate-affect-inflation/>

In my opinion, one cannot link the ECB's decisions of monetary policy to NBR's decisions (although there is the functional mechanism of coordination through the System of European Central Banks where NBR is member), because the approach and the measures are divergent, even if the objective for both central banks is numerical and well defined: to ensure prices stability in the economy by a specific goal: to target inflation at the level of (below) 2% (ECB) and 2.5% (NBR).

The actions deployed by these two central banks are complementary; one's measures can equally be an inspiration (for the future) for the other. While ECB uses tools such as interest rates and monetary mass quantity (QE in all forms – EAPP including covered bond purchase programme CBPP3, asset-backed

securities purchase programme ABSPP, public sector purchase programme PSPP, corporate sector purchase programme CSPP), NBR (by statutory regulation) is allowed to perform market operations with a limited range of debt instruments (Romanian Government bonds, Romanian Eurobonds, treasury certificates and deposit certificates, or bonds issued by international financial institutions – European Investment Bank, European Bank for Reconstruction and Development, International Bank for Reconstruction and Development, International Finance Corporation or even issued by NBR itself) and uses mainly FX rates, reserves requirements and lending regulation. The effect of these measures is that in the first quarter of 2017, the inflation rate is 1.8% (January 2017), 2% (February 2017) and 1.5% (March 2017), averaging 1.77% according to ECB website, while in Romania the quarterly average is 0.2% according to NBR website. Central banks aim the inflation as main objective (through prices) to ensure financial stability, and all monetary policy measures (regardless of their labels “conventional” or “unconventional”) have a common purpose: to maintain inflation level at around 2%.

The inflation is GDP’s deflator (serves to reflect the value of nominal GDP in purchase power parity terms – the real GDP) and the non-accelerating inflation rate for unemployment (NAIRU) allows full employment in an economy, that is generating the highest achievement of GDP (reflected in minimum gap to potential GDP and highest growth rate of GDP). Furthermore, inflation supports and links the phases of economic growth in business cycles. That is one strong reason for central banks to cooperate and coordinate monetary policy actions and measures, to support concerted economic growth. The two charts show the synchronicity between the economic cycle phases in Eurozone and Romania.

Chart 2: Eurozone GDP growth rate, 2007-2007



Source: <http://www.tradingeconomics.com/euro-area/gdp-growth-annual>

Chart 3: Romania's GDP growth rate, 2007-2007



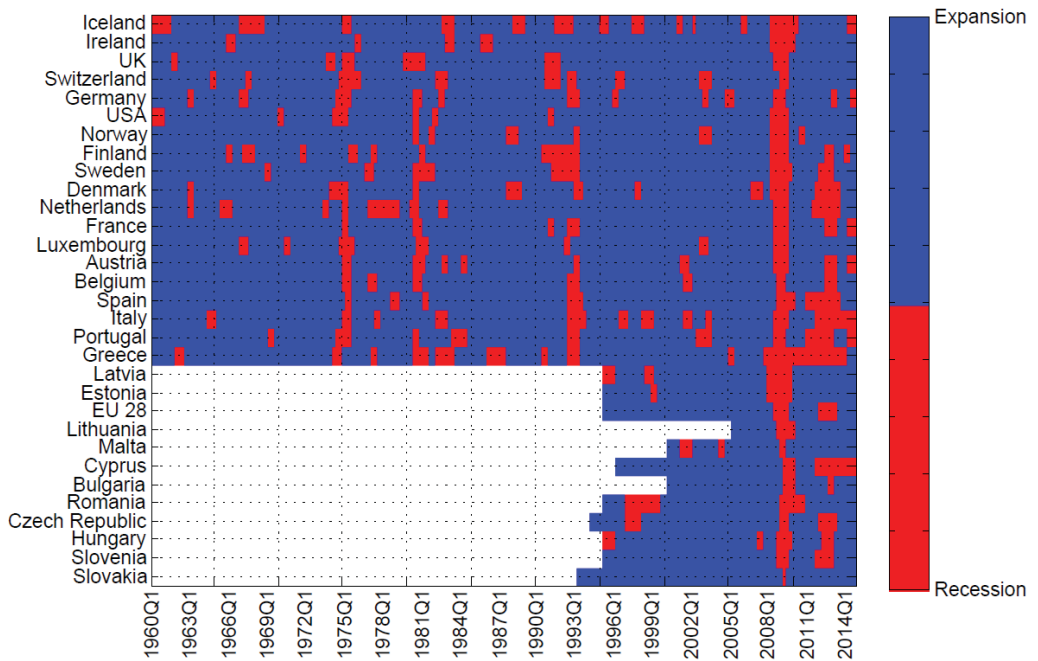
Source: <http://www.tradingeconomics.com/romania/gdp-growth-annual>

In a study regarding the correlation of economic cycles (Grigoras and Stanciu 2015) which considered quarterly seasonally adjusted GDP data (1960 – 2014) for



most European countries and for the USA, a “heat map” of the economies reveal that over time, economies grow “together”:

Figure 5: Heat Map of the business cycles



Source: Grigoras and Stanciu, 2015, p.12

The main findings of the study point to the fact that recessions do not start at exactly the same time in all countries, as it takes time for a downturn happening in one country to be propagated to other countries, even if the starting points of major recessions appear to be concentrated over very short periods of time, reflecting the “evidence of the existence and further strengthening of the European business cycle, being reinforced by both formal (EU, EMU) and informal agreements (traditional trade and financial links)” (Grigoras and Stanciu 2015, 27).

## 5. CONCLUSIONS

In the present context of economic sluggish recovery, the ECB has been pushed to adopt a new line of approach – unconventional monetary policy measures. Open market operations in the classic arsenal of measures have been insufficient and inconsistent in driving interest rates down. Thus, zero-interest rate policy has been targeted and yet, effects were still expected to be seen in improving the economic context. Therefore, the ECB is now using QE as APP (later called “extended APP”) to buy long term government bonds and then set the negative interest rate for deposit facility at -0.4% to buy more bonds with yields above this value (ECB 2017).

The next step for the ECB could be to move into buying covered bonds, real estate funds and assets like mortgage backed securities to permit credit easing in the balance sheet of banks. Forward guidance can support a long term perspective on interest rate changes on long run, so investors will move to other higher yield asset classes. Also, the ECB could use direct forex market interventions to depreciate the euro-currency to support exports, but this measure, however, can have a differentiated impact on the economies in the Eurozone, because there are differences in productivity and exports’ competitiveness, so the same level of currency depreciation could favour some exporters and some countries more, leading to adverse effects for those categories who are more in need of such supportive measures.

Aside from the unconventional monetary policy of the ECB, structural policies and better economic governance from executive authorities are expected to complement the ECB’s endeavours. A private sector debt restructuring is required to allow monetary resources to go into consumption instead of repaying debt back to banks. As for the ECB, if negative interest rates favour cash keeping, could impose a tax on cash. Furthermore, the ECB’s tools did not fade out. Next level of APP is “helicopter money” under the form of financing fiscal deficits of Eurozone countries to distribute it to population via national governments or, a more direct approach – crediting citizens’ bank accounts with a fixed amount of money over a determined period of time. Also, ECB could attempt to buy other assets, such as shares in companies listed on stock exchanges, junk corporate

bonds or even toxic loans from “bad banks”. So far, this seems to be a remote zone for the monetary policy measures, as APP in conjunction with negative interest rate on deposit facility seems to have paid off the expected result. Communicated inflation by ECB in February 2017 is around 2%. ECB evaluates the effects of the monetary policy measures and the opportunity to be further used, aiming to keep annual average inflation rate at 2% (briefly achieved in February 2017 as monthly rate).

The financial systems are becoming more and more integrated, the business cycles are becoming more and more synchronised and the monetary transmission mechanisms are more and more correlated. The need for cooperation and coordination between central banks as policy makers revising governing strategies and monetary policy measures has become evident and the purpose is to promote financial stability to lead towards economic growth.

An old saying affirms about travelling and trips that “it is all about the journey, not about the destination”. For the central banking domain, the economic conditions today change this saying: both the journey and the destination have significance and importance. The monetary policy measures (the journey) lead to the objective – the financial stability of prices aiming 2% inflation rate (the destination) and the types of monetary measures implemented (conventional or unconventional) can make a difference in the speed to which the objective is achieved. All monetary measures are alternatives for the policy makers to facilitate the achievement of central banks’ goals over time. All these measures finally aim at ensuring economic growth in all phases of the business cycles.

## NOTES

1. The purpose of this article is to analyse public data and information. All this information is available from public sources in a complete form and according to specified methodology and can be accessed and seen in the sources indicated for reference. Therefore, it is not in the scope of the article to reproduce tables and charts, but to use the relevant data to answer to questions about causes, effects, time, locations, impacts, costs, responsibilities, actions, benefits.

2. This article focuses on a very specific subject (ECB's unconventional monetary policies) and takes into account a multi-disciplinary approach (financial, economic, political as in policies, etc). Being a broad topic, it needs future observation, analysis and in-depth survey on all coordinates. It remains open for further development.

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