



REVISITING LIMITS AND PITFALLS OF QE IN THE EMERGING MARKETS¹

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Abstract

The pandemic caused by COVID-19 is another huge blow to the world economy after the financial crisis that erupted in 2008. A health crisis has been interweaving with severe economic and social strain following a necessary lockdown for several months during 2020. Although most economies seem to have climbed out of the deep hole caused by The Shutdown, with a current strong economic rebound underway in large parts of the world economy, a longer-term recovery is likely to be difficult as it is surrounded by significant uncertainties and contradictory effects. This paper relies on the line of reasoning presented in Daianu (2020). It highlights the forceful and coordinated policy response in advanced economies in order to deal with the multiple shocks represented by COVID-19. Its main focus is on policy responses in the emerging economies, which have tried to replicate measures adopted in the advanced economies. The paper highlights significant differences between the advanced economies and the emerging economies, which must be considered when trying to adopt QE in the latter. The main inference is that there are limits and pitfalls for the emerging economies when it comes to practice the policy responses of the advanced economies.

Keywords: currency substitution, debt monetization, emerging economies, external debt, financial crisis, fiscal policy, inflation, monetary policy, pandemic shock, Quantitative Easing (QE), reserve currency

JEL Classification: E52, F34, E58, G12, G15, P51

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1. The Policy Response to the Pandemic Crisis in the Advanced Economies

A distinct feature of the current COVID-19 crisis is that, compared to other crises in the past, it has caused simultaneous shocks on both the supply and demand sides of the economy. In this way, the fiscal response to mitigate the immediate impact of shocks was vital. A series of effects with a strong negative impact on the financial system as well as the real side of the economy would have taken place in the absence of the adopted fiscal packages.

From a policy perspective, given the low interest rate environment experienced by the advanced economies at the onset of the COVID-19 crisis, unconventional policies implemented through balance sheet expansions seem to be an adequate monetary instrument to tackle the unique economic impact of the pandemic. Asset purchases generally lead to a decline in interest rate spreads, while also contributing to market stability in case of disruptions caused by high uncertainty and risk aversion, with a positive impact on private and public sector financing costs. The unique context of the pandemic crisis has triggered the need for extraordinary public spending to manage the public health crisis and to support various economic sectors through direct and indirect fiscal transfers. Compared to previous crisis episodes, an expansionary fiscal policy has been inevitable within the macroeconomic policy mix due to the intrinsic nature of the COVID-19 shock.

Compared to previous quantitative easing (QE) programs implemented after the GFC or even earlier, in the case of Japan, navigating the pandemic crisis seems to have brought about a common denominator among monetary authorities regarding the efficiency of unconventional instruments. This is illustrated by the synchronized increase in central bank balance sheets after March 2020 (Figure 1). Conversely, the previous QE programs highlighted various strategies, from a winding behavior on the part of the ECB during 2011-2017 with successive expansions and contractions, to a systematic approach implemented by the FED (Orphanides, 2020), or a gradual expansion undertaken by the Bank of Japan.

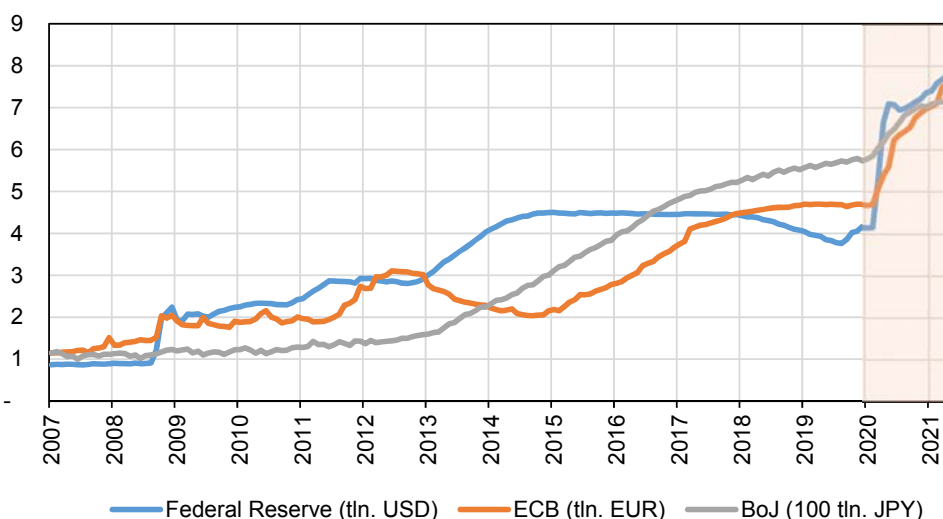
In the advanced economies (AEs), governments and central banks have unleashed massive support programs. In the US, for instance, the fiscal and monetary support goes beyond that seen during the Great Recession. The Fed's intervention in markets is stunning in its depth and breadth, with its balance sheet jumping from over 4 trillion to over 7 trillion USD in 2020; even junk assets, fallen angels, were liable for acquisition. Orphanides⁵ provides a striking statistic to highlight the actual dimension of the Fed's intervention: "In three months, the Fed 'printed' as much high-powered money as it did over the first 100 years of its history, from 1913 to 2013". In Europe, the ECB has extended its non-conventional operations, through the launch of the Pandemic Emergency Purchase Programme (PEPP) in March 2020, with a total volume of purchases amounting to 1.85 trillion euro⁶. In the current framework, the program is expected to end, at the earliest, in March 2022, being contingent upon a scenario where the ECB Governing Council is confident that the Covid crisis is over. Further sovereign distress exhibited by certain euro area members was mitigated through the ECB's announcement related to extended eligibility requirements for sovereign debt instruments

⁵ *The year the power of central bank balance sheets was unleashed, Monetary Policy and Central Banking in the COVID Era, Centre for Economic Policy Research (CEPR), 2021.*

⁶ *The initial limit of the PEPP (750 billion euro) was increasing by 600 billion in June 2020 and an additional 500 billion euro in December 2020.*

under the PEPP⁷, a strong commitment to preserving the stability of the monetary union and avoiding potential disruptions on certain sovereign debt market segments. In July this year, the ECB indicated that it would continue its accommodative stance in order to bolster the economic recovery in the euro area, in the EU in general (this stance is to be judged in conjunction with the reexamination of its monetary policy framework)

Figure 1. Central Banks' Balance Sheet Dynamics (2007-2021)



Source: Federal Reserve Economic Data (FRED), ECB Statistical Data Warehouse (SDW) and BoJ.

On the fiscal side, a European recovery plan that amounts to 750 billion euro, will supplement the EU budget for the period that starts in 2021. As a novelty, the Plan will be funded by the issuance of collective EU bonds, which may be a precursor to a form of *safe asset* for the euro area (so much asked for by those who think that a joint monetary policy requires adequate fiscal underpinnings). All in all, budget deficits have skyrocketed worldwide (Figure 2), like in war times (a *war economy* syndrome) and public debt has also made a significant jump in emerging and developed economies alike (Figure 3).

⁷ "All asset categories eligible under the existing asset purchase programme (APP) are also eligible under the PEPP, as well as a waiver of the eligibility requirements has been granted for securities issued by the Greek Government".

Figure 2. Public Budget Deficit to GDP Ratio (%)

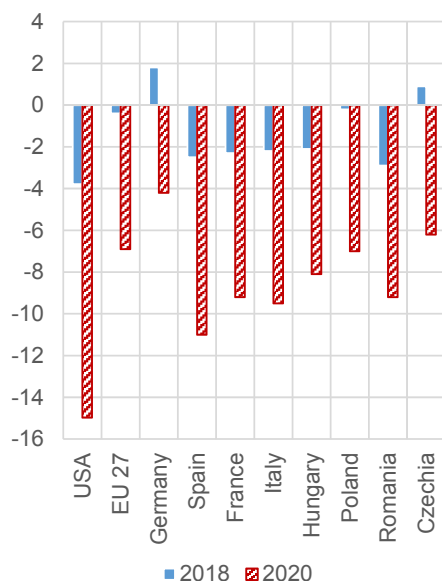
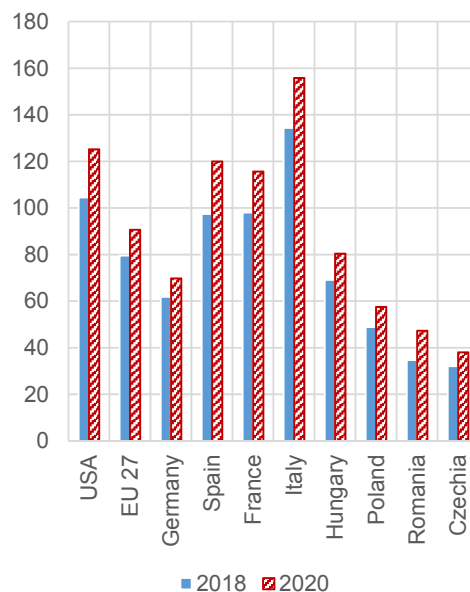


Figure 3. Public Debt to GDP Ratio (%)



Source: Eurostat, Federal Reserve Economic Data (FRED).

An Enabling Intellectual Context

Apart from the dire conditions entailed by the pandemic and the economic crisis, an intellectual context has favored rising fiscal support. The apparent decline in the natural interest rates in recent decades⁸ and very low inflation after the financial crisis seem to prompt governments to rethink allegedly dangerous thresholds for public indebtedness. Kenneth Rogoff and Carmen Reinhart's upper level of 90%⁹ may no longer be seen as a discouraging barrier. Olivier Blanchard talked of a new normal (a *new regime*) for monetary policy by considering lower debt servicing costs when interest rates are inferior to economic

⁸ Please see King and Low (2014) and Holston, Laubach and Williams (2017). By using the model in Laubach and Williams (2003), they show that the rate seems to have fallen close to zero in the US during the financial crisis and stayed there since 2016; See also Lukasz and Smith (2015) and Teulings and Baldwin (2014).

⁹ Kenneth Rogoff and Carmen Reinhart, "This Time is Different. Eight Centuries of Financial Follies", Princeton University Press

growth rates¹⁰, a view that was echoed by Paul Krugman¹¹ and others. Ironically, Blanchard, among others (Larry Summers included) is increasingly concerned by the continuation and size of large fiscal stimulus¹².

Kenneth Rogoff argued in favor of deeply negative policy rates as an alternative to large scale QE, which itself is a form of financial repression; he says that such a policy would be a huge blessing to EMs that are plagued by falling commodity prices, fleeing capital, high debt and weak exchange rates¹³. Proponents of the New Monetary Theory openly argue for monetizing fiscal deficits provided inflation is under control¹⁴; their line of reasoning can be bolstered by the desire to reverse very low (or declining) inflation expectations (the threat of debt deflation) and the extraordinary nature (once in a lifetime) of the coronavirus shock and the related economic and social crisis. It would be interesting to see how NMT proponents judge the current rise in inflation in advanced economies, whether they, too, cling to the argument that this is a temporary spike.

English, Forbes and Ubide¹⁵ look at central bank responses to the Covid-19 crisis in advanced as well as emerging economies and find certain similarities, but also notable differences, mostly due to constraints related to volatile capital flows and surges in risk premia. Interest rate cuts have been implemented by a large majority of emerging economies, in spite of severe disruptions in capital flows observed in March 2020, while asset purchase programs and other liquidity support measures were launched in order to preserve the smooth functioning of financial markets. The authors highlight that heterogeneous responses in the emerging markets, wherever these responses meet some success, are a consequence of the soundness of macroeconomic fundamentals and overall policy credibility, in the main. But clearly, the overall environment created by policy responses in AEs was a key factor as well.

2. Are QE Feasible in the Emerging Economies (EMs)?

This is the context which made some analysts examine the feasibility of QE, the injection of base money against financial assets, even monetization of budget deficits in the emerging economies/markets (EMs). As a matter of fact, elements of QE are practiced in a series of emerging economies. In Colombia, Indonesia, Poland, Hungary, Thailand, among others, central banks do it. But the size of their programs is significantly smaller than what the Fed, BoE, the ECB and BoJ, etc. have undertaken. While central banks in developed countries

¹⁰ Basically, the argument is that when economic growth rates are higher than interest rates, governments can run primary deficits without endangering the state of public finance and welfare as long as public debt as a share of GDP stabilizes; this can be summed up as $(r - g)$ being negative, where (r) is the interest rate and (g) is the economic growth rate (both rates can be in nominal, or real terms). See also Blanchard, Leandro and Zettelmeyer (2020) and, for a much less sanguine view on this scenario, see Wiplosz (2020).

¹¹ Paul Krugman, "The Case for Permanent Stimulus", VoxEu, 10 May 2020.

¹² Please see Urwin (2021).

¹³ Kenneth Rogoff, "The Case for Deeply Negative Interest Rates", Project Syndicate, 4 May, 2020.

¹⁴ Please see Mitchell, Wray and Watts (2019) and Mankiw (2020).

¹⁵ Monetary Policy and Central Banking in the COVID Era, Centre for Economic Policy Research (CEPR), 2021.

expanded their balance sheets at rates reaching double digits (10 – 20% of GDP), central banks in emerging markets hardly went above a few percentage points, in the rare occasions where they announced the targeted size of asset purchase programs. Why is it so? The crux of the matter is that QE in the emerging economies can be pretty tricky and littered with pitfalls. The view that a “silent monetary policy revolution” is taking place in the emerging economies, in the sense of undertaking QE as in the advanced economies is an overblown assertion. Where QE is done in EMs, it takes place as a sort of “free riding” on the wave of QE in AEs, but not without limits and risks.

A quick overview of the macroeconomic context in the emerging economies implementing asset purchase programs (Table 1) highlights the fact that, in most cases, interest rates are still well above the Zero Lower Bound (ZLB), which is one of the main arguments for implementing QE in the advanced economies. This should not come as a surprise, as a recent IMF paper argues, because additional monetary stimulus through lowering interest rates could cause a deterioration in macroeconomic equilibria in the emerging economies. Countries with higher interest rate levels are prone to greater volatility of capital flows and exchange rate dynamics, translated into increased fragility and fluctuating sovereign risk perception. Furthermore, disruptions and uncertainty can lead to significant financial market strains – most emerging market central banks cite reestablishing financial market stability as one of the main reasons behind implementing QE decisions. Of course, the previous statements should take into account whether the interest rates are high in the long-run and reflect the state of the economy, or if they reach this level for stabilization reasons. Other objectives related to the yield curve control, especially towards the long-end, can be viewed as secondary due to their less important role for emerging market economies, where capital markets are pretty thin (Hofman and Kamber, 2020).

Table 1

Initial Asset Purchase Programmes in Emerging Markets Launched in March-April 2020

Country	Objective	Size (% GDP)	Market	Policy rate (%)	Infl. rate (%)
Chile	To contain the effects of high-volatility events in the fixed income market	2.8	Bank	0.5	3.4
Colombia	To inject permanent liquidity in order to ensure the proper operation of financial markets	0.8	Gov.	3.75	3.5
Hungary	To restore the stable liquidity position of the government securities market and to improve the long-term supply of funding to the banking sector	-	Gov., Mortg.	0.9	2.4
India	To ensure that all market segments remain liquid and stable, function normally with adequate turnover	0.2	Gov.	4.4	5.8
Indonesia	To assist the government to finance the handling of the COVID-19 impact on financial system stability if the market is unable to fully absorb the SBN issued by the Government	-	Gov.	4.5	2.8
Korea	To stabilise the bond market, and to improve the supply and demand of KTBs by expanding the bond buying capacity of financial companies	0.1	Gov.	0.75	0.1

Country	Objective	Size (% GDP)	Market	Policy rate (%)	Infl. rate (%)
Mexico	To promote the proper functioning of the government debt market	-	Gov.	6	2.2
Poland	To change the long-term liquidity structure in the banking sector, ensure liquidity in the secondary securities market and strengthen the monetary policy transmission mechanism	-	Gov.	0.5	3.4
Romania	To consolidate structural liquidity in the banking system that should contribute to the smooth financing of real economy and the public sector	-	Gov.	2	2.7
Philippines	To reassure market participants for demand for Government Securities should they need to liquidate their holdings, thus encouraging participation in the GS auctions	-	Gov.	2.75	2.2
South Africa	To add liquidity to the market, to promote the smooth functioning of domestic financial markets, to enhance its Monetary Policy Portfolio	-	Gov.	4.25	4.1
Thailand	To provide liquidity to and ensure normal functioning of government and corporate bond markets	0.6	Gov., Corp.	0.75	-3
Turkey	To strengthen the monetary transmission mechanism by boosting the liquidity of the government bond market	-	Gov.	8.75	10.9

Source: Arslan et al. (2020).

Benigno (2020) advocates QE programs in emerging markets with solid fundamentals and stable inflation expectations in order to diminish financial stress in the short-run, while allowing for additional fiscal space and reducing the risk of economic stagnation. However, depending on the importance of the exchange rate channel, less credible asset purchase programs can potentially lead to bouts of inflation and de-anchoring of inflation expectations, eliminating thus potential benefits associated with QE in the long-run.

Turkey's policy mix provides an interesting case study, where overstimulating economic growth led to overshooting the inflation target and required policy tightening to avoid a currency crisis in 2021 (Kara, 2021). Relying solely on stimulus based on rapid credit expansion, while overlooking other macroeconomic policy measures, proves to generate only short-lived gains, at the expense of deteriorating macroeconomic equilibria and de-anchoring of inflation expectations. Arguably, in unprecedented times of uncertainty, credibility is the most valuable asset a central bank can have, which can be easily eroded due to erroneous policy decisions, and which is difficult to build up again, especially on a short-term horizon. In such periods, especially in countries with fragile macroeconomic balances, international investors are very strict about the credibility of the central bank. In this regard, their perception is reflected in risk premia, especially for exchange rates. Once the credibility of a central bank is deeply hit, the FX premium increases and the central bank faces a painful trade-off between letting its currency depreciate and raising the interest rates

in the interbank market. Severe depreciation can fuel inflation even more and can even lead to a flight from the domestic currency.

The bottom line is that there are basic differences between emerging and advanced economies, which warrant caution in judging QE in the former:

- Emerging economies do not issue reserve currencies. This dents the efficacy and autonomy of monetary policy in dealing with severe shocks;
- For not a few EMs there is an issue of institutional credibility and track record in subduing inflation and deficits;
- Monetary policy, as a plus in a policy-mix framework, can be weakened by the exchange rate risk, by insufficient trust in the local currency. Moreover, monetary policy transmission can be substantially affected by crisis episodes, through changes in the amplitude of shocks caused by temporary volatility spikes or structural shifts induced by severe crises, such as the 2008 episode (for a quantitative approach to quantifying the changes in monetary policy transmission in Romania during normal and crisis times, see the Annex);
- The volatility of exchange rates in emerging economies does matter, the more so where dollarization/euroization is high. A flexible exchange rate can help in correcting imbalances, but it can also do harm when a massive depreciation entails substantial wealth and balance-sheet effects, intensifies currency substitution, and may cause inflation to spiral out of control. A brutal drop in the value of the local currency value can cripple financial stability;
- Local financial markets are frequently quite thin and cannot absorb large issuances of sovereign debt. The exposure limits of commercial banks to local government debt are to be considered as well;
- Although issuing debt in local currencies is preferable, a small size of local financial markets can force the issuance of bonds on external markets, and this creates a major vulnerability related to exchange rate dynamics. In addition, unless deficits are not perceived by financial markets as reasonable, their funding can be drastically limited and sudden stops can ensue;
- For the EU weaker economies, the free movement of capital can be a headache in moments of market panic. This has been glaringly shown by substantial flow reversals during the euro area crisis, when money took a flight from South to North; or outside the euro area, when capital sought to flee New Member States, which was a reason for the Vienna Initiative to be enacted in 2009;
- Sudden stops can take place in emerging markets even when global financial conditions are relatively benign;
- QE in advanced economies can induce EMs to borrow too much as hot money is searching for higher yields. When conditions change, larger debts may find their servicing jump quite highly and turn very costly;
- It is not clear whether macroprudential policies to deal with large capital inflows and outflows can be effective enough. As a matter of fact, a paradox operates here: QE in AEs may foster a temporary more benign global environment that helps ease monetary conditions in EM, too. But this can easily turn out to be a nuisance in disguise to the extent there is much over-borrowing (like after the Great Recession) and capital flows reversals harm weaker EMs;

- The pandemic has made more visible some of the features highlighted above, has deepened cleavages between AEs and EEs.

The features highlighted above indicate constraints for monetary and exchange rate policies in EMs and, consequently, for QE programs. Emerging economies that have been quite successful in reducing dollarization/euroization of their domestic transactions, where internal and external deficits are under control, with considerable sovereign bonds issued in local currency and plentiful foreign exchange reserves, can be more daring in practicing QE. They could also benefit on back-ups, such as swap and repo lines arranged with reserve currency issuers, like the Fed and the ECB. This room of maneuver concerns the flow of liquidity on domestic markets and preventing excessive yields demanded by foreign lenders/investors (via asset purchases by local central banks on secondary markets), the easing of policy rates and of overall monetary conditions when interest rates fall in the global economy.

But QE and monetization of deficits are fraught with major risks wherever deficits are large, external debts are considerable, and trust in the local currency is not sufficient.

Fiscal Dominance in EMs: A Counterfactual Exercise

In the following counterfactual exercise, the objective is to emphasize the link between the evolution of the fiscal balance in conjunction with inflation and monetary conditions, in the context of the current Covid-19 pandemic and taking the case of an emerging EU member state. Specifically, fiscal support has been the main weapon that many emerging economies have resorted to for mitigating the negative effects of the current pandemic. This situation is typical for what is recognized as fiscal dominance.

This situation of fiscal dominance occurs in the context in which many emerging economies have resorted to QE approaches although their governments do not have the privilege of issuing safe assets. There are some similarities between QE policies and debt monetization, but also some major differences. Among similarities is the fact that both reduce the burden on the government in the short term. To capture the interactions described above, we resort to the framework described by Uribe (2020), which uses a monetarist model (Sargent and Wallace, 1981).

Unlike Uribe (2020), in the current setting we intend to investigate how fiscal conduct in the post Covid-19 era could affect price stability and monetary conditions. The focus is on an emerging economy where fiscal dominance is present and QE operations are conducted. Basically, the central bank's decision not to fully monetize government debt is a proxy for the current policies which imply that the government issues interest-bearing debt, simultaneously with the implementation of QE operations. Therefore, the focus is solely on maximizing a welfare function, without interest in comparisons with solutions such as fully monetizing debt (in the spirit of Sargent and Wallace).

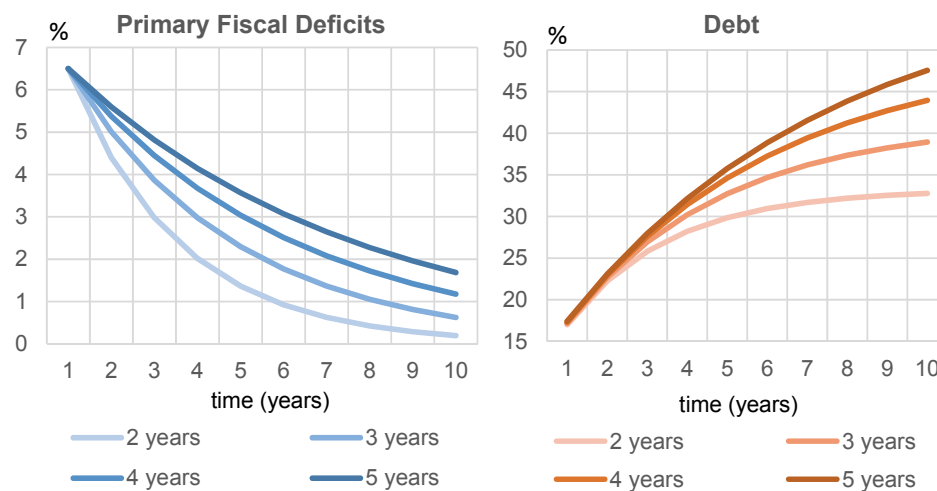
The case of a prototype economy from Central and Eastern Europe (CEE) is considered. This economy uses fiscal measures to combat the effects of the current pandemic through lock-down measures and other restrictions that have followed, leading to a public budget deficit of a hypothetical 6.5% of GDP. This is taken as the initial moment from which the analysis starts. In line with Uribe (2020), a gradual fiscal consolidation process takes place, through which the deficit is reduced to 3% of GDP, the maximum limit provided by the Maastricht Treaty. In this sense, four successive scenarios regarding fiscal correction gradualism are hypothesized, according to which the deficit is reduced to the level of 3% in an interval of 2, 3, 4 or 5 years. The aim is to ascertain the dynamics of optimal inflation and nominal interest rates, as well as of public debt, in each of the four scenarios. The analysis

assumes that no matter how disciplined the fiscal policy was in the period before the pandemic, the Covid-19 crisis brought about a situation of fiscal dominance. In this counterfactual exercise, the accumulated deficits are considered temporary and, similar to Uribe (2020), they are expected to decrease over time. Furthermore, the four scenarios *de facto* describe different types of fiscal policy conduct. In line with Uribe (2020), the evolution of deficits is considered exogenous to the model.

The calibration of the model was done in the spirit of Uribe (2020) for a prototype economy from the CEE region. The long-term growth rate was set at 2% (though some may see it too low for emerging economies which have the potential to catch up), the subjective discount rate at 3%, while the opportunity cost of money was calibrated at 5% and the interest-rate elasticity of demand for money was set at 0.1. The ratio of the monetary base to the GDP was calibrated at 8%, while the initial level of government debt to households was set at 25% of GDP.

Figure 4

Optimal Debt Dynamics under the Four Scenarios for Fiscal Correction Gradualism



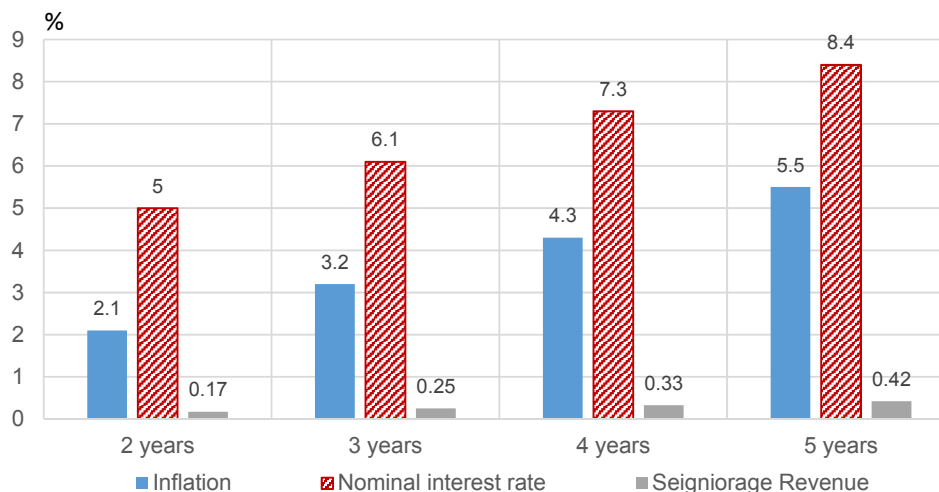
Source: Own estimation.

Figure 4 illustrates the optimal debt dynamics (corresponding to an optimal Ramsey equilibrium) in each of the four scenarios considered. Firstly, it is worth mentioning that, notwithstanding that our analysis refers to a benchmark economy, the results focus solely on showing how different variables could evolve given the economic framework described. The left-hand side figure exhibits the evolution of primary fiscal deficits over a time horizon of 10 years. In fact, we are interested in seeing how optimal debt evolves also beyond the assumed deadline to achieve fiscal adjustment, by which the primary deficit is reduced to the maximum limit allowed by the Maastricht Treaty. From the simulations, we may observe a non-linear behavior of the debt levels over a ten years horizon. An important remark at this point is related to the levels of fiscal deficit, identical for the four scenarios, while in the case of debt, the values differ by wide margins. Moreover, the right-hand side figure highlights

that the existing difference between the levels of debt reached at the end of the interval decreases as the time horizon for the fiscal correction increases.

Figure 5

Optimal Quantities under the Four Scenarios for Fiscal Correction



Source: Own estimation.

The optimal Ramsey policy, under which the results were obtained in this simulation, assumes that the financing of deficit is achieved through the issuance of debt instruments in the context of determining optimal values for money supply, inflation and interest rates. These optimal quantities are reported in Figure 5 for each of the four scenarios considered. The main result of the simulations underlines that in a macroeconomic environment where fiscal policy is dominant, delaying deficit reduction leads to higher inflation and higher interest rates in the long-run. Consequently, the level of long-term monetization is higher, and implicitly the income from seigniorage (expressed as a share of GDP). The obtained results also emphasize the presence of non-linearity between the four scenarios regarding fiscal adjustment. Thus, the optimal level of inflation tends to increase the longer the fiscal consolidation period is. Nonetheless, rising inflation can easily bring about a confidence crisis in the local currency and destabilize the economy, even if high nominal interest rates would give a semblance of positive real interest rates.

The approach used in the counterfactual simulations can be extended to understand the various interactions that exist in the context of the fiscal impact of pandemic, namely the use of unorthodox monetary instruments in the case of emerging economies. The conclusions mentioned above are valid only within the (optimal) described model and this is why we stated that the reported results have to be interpreted from a normative perspective. In real life, the evolution of inflation must be seen in conjunction with monetary and financial conditions in a broad sense. For example, a very low level of interest rates on deposits, along with a high rate of inflation can lead to exchange rate pressures, with implications for financial stability. In the case of emerging economies, a strong non-linear relationship between the level of inflation and the effects on the macro-financial framework was observed empirically.

Thus, over a so-called tipping point, the negative effects of inflation can be significantly amplified.

The real world is much more complex than the model employed in this approach, so there are several more factors that have a counterbalancing or amplifying effect. Notably, at the edge of inflation and nominal interest rates are the exchange rate and the current account.

Why Net Foreign Asset (NFA) Accumulation is not QE

Some professional colleagues suggested informally that the accumulation of net foreign assets (NFA) in emerging economies (EMs) could be seen as a form of QE. But NFA accumulation should not be viewed as a form of QE. Why is this so?

- A Question of Purpose

Amassing NFA by central banks (CBs) of emerging economies (EMs) can very much reflect the need to bolster resilience in the face of extreme shocks. This is a stark lesson of the Asian crisis of more than twenty years ago, when not public borrowing was the problem, but private borrowing.

Likewise, NFA accumulation can reflect also a strategy of enhancing competitiveness by maintaining undervalued exchange rates (import controls can also be used to this end). Undervalued exchange rates fostered sound trade balances in several Asian economies and higher NFA did not end up in dangerous overexpansion of base money. It may be that sterilization operations helped control the money supply. Instead, QE in the US, in Europe, has been an attempt to deal with malfunctioning financial markets and, in the case of the euro area, to save it!

- A Question of “Hard Counterpart”

NFA are a “hard” counterpart to the rise in base money and can be used to withdraw base money should it be needed. When NFA go up, for various reasons, including due to massive capital inflows, CBs can sterilize, or use macro-prudential policies to stem a massive rise in corresponding base money (the classical Tosowski dilemma) and, consequently, fuel inflation. CBs can sell NFA to absorb base money if needed.

- A Question of Judgement: What Is a Normal Expansion of Base Money and M2?

Whenever NFA accumulation illustrates sound economic growth and a corresponding expansion of base money and, relatedly, of the money supply, it does make sense – and it is clearly not QE.

- A Question of Definition

QE means injecting base money in exchange for all sorts of assets, including junk (fallen angels). It is a sort of an extreme move on the part of some CBs, but feasible for those who can afford it on a large scale. It can also imply monetization of debt, which is also possible for CBs in AE –and as the new monetary theory advocates.

Can an analogy be made with the operations of the Swiss National Bank, which purchased a large volume of foreign assets in order to stem the appreciation of the Swiss franc? Yet, the SNB does not enter the classification/cluster examined here, namely EMs. SNB is very much like the Fed, ECB, BoJ, BoE. Besides, it caused great havoc in EU EMs when it suspended its *de facto* fixed exchange rate with the euro, which had enticed many citizens and firms in those countries to borrow in Swiss francs as interest rates were much lower. The attempt to defend Swiss economy from a massive appreciation of its currency, as many individuals and firms were fleeing the euro at the time (which made Mario Draghi to have his

famous statement in 2012) explains what could be, wrongly, seen as QE on the part of the SNB. But it should rather be viewed as a clear example of getting into competitive devaluation in the case of a safe haven currency. As Japan has been doing for decades now by injecting enormous quantities of base money in the Japanese economy (and monetizing government debt, practically).

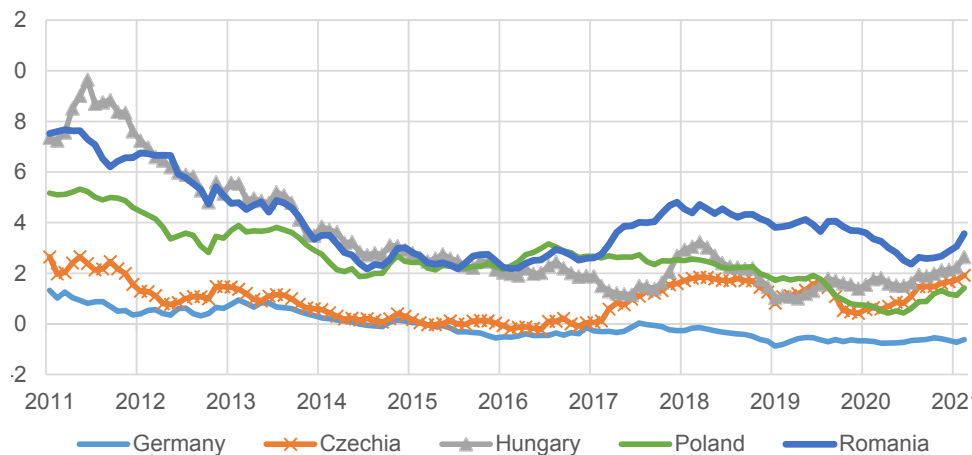
There is, however, a very interesting case, analogous to SNB: the Czech National Bank (CNB). It did almost exactly like SNB when it started to defend a certain level of its exchange rate, the crown, in order to protect the Czech economy from its currency considerable over-appreciation; to this end it bought massive amounts of foreign exchange reserves (euros) and, thereby, base money was injected in the Czech economy. Sterilization operations were likely quite muted, for the CNB wanted to defend a level of the crown. The CNB also entered, therefore, in the realm of competitive devaluation and managed floating was put on the shelf. Could the absorption of EU funds in NMS be seen as a form of QE to the extent it implies accumulation of NFA and the creation of base money? When this is accompanied by sound economic growth there is no reason to consider it a form of QE, as it does not fit several of the criteria mentioned above: purpose, definition and judgement. For all the reasons mentioned above, NFA accumulation can hardly be seen as a form of QE in emerging market economies.

3. More on the EU Emerging Markets

The case of EMs in the EU deserves attention for some of them have undertaken elements of QE. Among the New Member States which joined the EU in 2004 and 2007, Poland has announced a QE program that went to 140 bln. PLN or roughly 6% of GDP in July 2021, while the budget deficit stood at 7% of GDP in 2020 (after July, the volume of acquisitions has diminished, amounting to around 3.5 bln. PLN in October 2021). Hungary has a smaller QE program for Treasury Securities amounting to around 5% of GDP (in June 2021), but it also purchases private securities unlike the other CEE peers (approximately 2% of GDP, according to the IMF, see [1] for more details); the budget support for its economy relies extensively on guarantees: 6.4% of GDP in March 2021. Both these countries have started the war against the Covid-19 pandemic with much smaller domestic and external imbalances and significantly lower euroization of the financial systems than Romania.

Sovereign ratings illustrate macroeconomic situations, while the cost of issuing debt is indicative of national economic circumstances. Thus, Romania pays almost double for issuing debt in local and external markets, as compared to Hungary and Poland, not to mention Czechia (Figure 6); 5-year CDS quotes are also telling in this regard: 5-year CDS spreads for Romania (90 bp) are roughly twice the size of peer countries such as Hungary (55 bp) or Bulgaria (45 bp).

Figure 6. Benchmark Government Bond Yields (5-year Maturity) in the CEE Region and Germany



Source: Monthly averages based on daily data from Reuters.

Hungary and Romania have repo arrangements with the ECB, whereas Bulgaria and Croatia benefit on swap lines with the ECB as they entered ERM2 in June 2020. These arrangements are a plus in dealing with possible liquidity squeezes in financial markets. The EU budget funds, together with the European recovery plan, help considerably the fight against Covid-19 and economic reconstruction plus reforms. These programs are meant to deal with existential threat posed by climate change and the need to enhance economic and social resilience, competitiveness in a global context. By the way, climate change could put enormous pressure on public budgets, especially where fiscal revenues are pretty low.

Yield differentials for sovereign bonds and CDS premia show that markets discriminate among EM, despite the easing of monetary and financial conditions worldwide. Therefore, caution must operate when contemplating dealing with the pandemic and the economic crisis by resorting to large fiscal stimuli and aggressive easing of monetary policy, to QE and monetization of deficits. The countries that have fiscal space can be more daring in this regard, but not without caution. In the EU, fiscal rules are temporarily waived, but markets do discriminate and judge economies according to their robustness, the capacity to absorb shocks, whether back-ups (as safety nets) are available. In the euro area, the debt servicing costs for more fragile economies basically hinge on the ECB support, which has saved the single currency via its unconventional operations, including QE. In the global economy, instead, there is no automatic support, in spite of massive operations undertaken by the IMF to support emerging and poor economies.

The Case of Romania

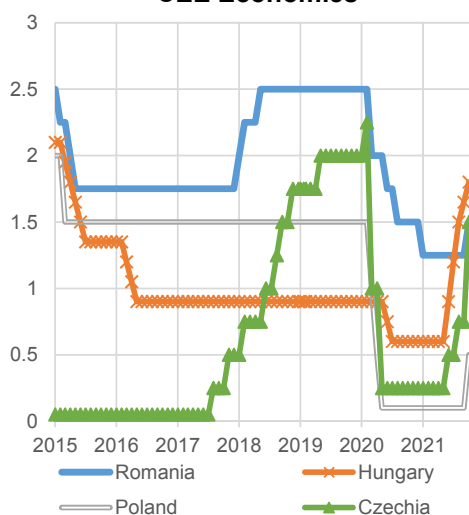
For Romania, the issue is not the stock of public debt, which was around 35% of GDP at the end of 2019. It is a flow problem, that is rooted in a large structural deficit (around 5% of GDP at the start of 2020) and significant pressures to increase permanent public budget expenditure while fiscal revenues are pathetically low (around 26-27% of GDP in recent years); there is also a twin deficit problem involved here, that is quite singular in the region.

This creates a big policy conundrum since, on one hand, the room of maneuver to combat the pandemic has been severely curtailed and, on the other hand, there can be considerable depreciation pressures on the exchange rate which enhance inflationary expectations (as the pass-through effect is non-trivial). A significant rise in permanent budget expenditure would worsen the structural budget deficit even more, it would imperil Romania's investment grade rating and entail a significant rise in the cost of debt service, in the public debt. This would invalidate a key assumption of the new normal for monetary policy in the Blanchard logic, namely a low interest rate (r) level. If the economic growth rate (g) falls significantly, apart from an allegedly temporary impact of pandemic, and in conjunction with a sizeable primary (and structural) budget deficit, one ends up with a reinforced invalidation: while (g) comes down, (r) goes up when the primary deficit is considerable and on the rise.

Romania's economy withstood the terrible Covid-19 blow relatively well, with the GDP decline of 3.9% in 2020, and a quick rebound in 2021, when the GDP growth is forecast to exceed 7% of GDP (IMF and EC forecasts, of the Romanian Fiscal Council). But the strong rebound and external events, especially the powerful energy price shock, have raised inflation quickly; the external deficits have also been on the rise with the current account deficit expected to exceed 6% this year. Public debt stands currently at around 50% of GDP and is a further signal that budget consolidation is a must.

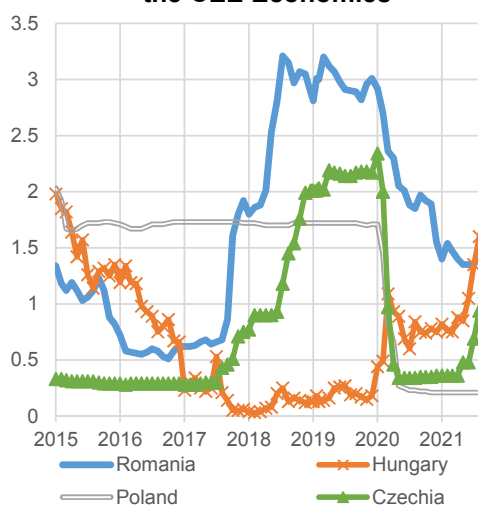
A correction of macroeconomic imbalances has to be undertaken in Romania over the next few years, which will be a pretty tough operation in view of the impact of the health and economic crisis, of the energy price shock. This situation explains why the Romanian central bank could not be as aggressive in reducing its policy rate as its peers in the region during the height of the pandemic crisis, (Figure 7) and why it could not embark on a QE program *per se*.

Figure 7. Reference Rates (%) in the CEE Economies



Source: Central bank websites.

Figure 8. Money Market Rates (3M, %) in the CEE Economies



Source: Eurostat.

For it may have undermined the trust in and trigger a run on the local currency, ultimately damaging financial stability. Nevertheless, in the second half of 2021, NBR started to tighten its stance and raised its policy rate to 1.50 in October. A new cycle of policy tightening has started, like in the peer countries in the region.

The correction of the large structural budget deficit, be it done gradually (so that it does not cripple an economic recovery after the lockdown) has, therefore, to play a critical role in reducing macroeconomic imbalances. This correction can be much facilitated by EU funds that can bolster public expenditure and help fund external deficits.

Romania is keen to adopt the euro as this goal can discipline policy, foster structural change and economic reforms. It goes without saying that entering the ERM2 (as a precursor to the euro area) and the Banking Union ask for a fundamental correction of the budget deficit and reduction in the external imbalances.

To summarize the policy dilemma Romania is facing, a revisit of the classical concept of the Impossible Trinity of monetary policy is valuable. In the context of free movement of capital and a fixed exchange rate, as is the case in the euro area, one can bet on a risk premium that could lead to steady increases in welfare, especially in highly uncertain economic circumstances. The euro area can be seen as a shelter vis-à-vis powerful adverse shocks, though one can argue that it does away with monetary policy as a policy tool when economic discrepancies are still pretty large among member states. A managed float exchange rate regime has its own benefits when the euro area's architecture is still incomplete. By the way, the IMF has revised its stance on recommending pretty wide flexibility of exchange rates in the emerging economies (for a brief explanation, please see [20]) – together with implementing macroprudential policies aimed at “smoothing” volatile capital flows. On the other hand, large capital flows can easily overwhelm the effectiveness of an autonomous monetary policy (The Trilemma is rather a Dilemma, as Helene Rey put it). As mentioned above, joining the euro area hinges fundamentally on reducing imbalances.

4. Does the Inflation Spike Change the Picture?

To add further complexity to policymakers' optimization problem, the looming threat of inflation is being discussed more frequently (Figure 9 plots the public interest, measured by individual search engine queries of the term “inflation” worldwide), as a direct consequence of the extraordinary stimulus measures implemented worldwide. Compared to the GFC episode, fiscal measures have been used extensively, through indirect and direct subsidies to companies and households, reigniting fears of rising inflation amid a stronger-than-expected economic rebound in most developed and emerging economies.

Figure 9. Google Trends Search History for the Term “Inflation” Worldwide

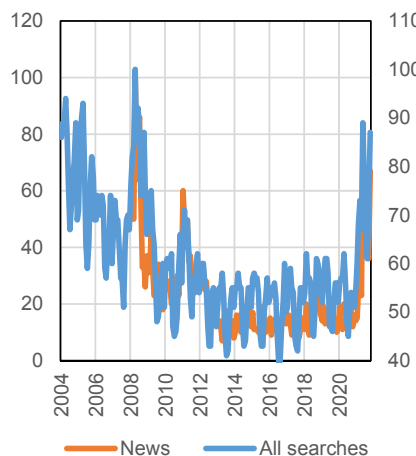


Table 2 Interest Rate Hikes in 2021 (Worldwide)

Country	Reference rate (Oct. 2021)	Increase	Inflation rate (Sep. 2021)	Target
Czechia	1.50%	+1.25%	4.90%	2.00%
Hungary	1.80%	+1.20%	5.50%	3.00%
Romania	1.50%	0.25%	6.30%	2.50%
Poland	0.50%	0.50%	5.90%	2.50%
Iceland	1.50%	+0.75%	4.40%	2.50%
Russia	6.75%	+1.75%	7.40%	4.00%
Brazil	6.25%	+4.25%	10.25%	3.75%

Note: The index is relative to the highest search volume during the observed time frame (=100). Source: Central banks' websites.

Source: Google Trends.

In this context, most countries from the CEE region have decided to hike policy rates when inflation is already above target levels (Table 2). The question here is whether policy makers believe that the current inflationary bout may last longer and if core inflation will be on the rise. As a matter of fact, this is the big question across the Atlantic and in Europe: to what extent current inflation resurgence is temporary (a spike) and whether policy tightening is written on the wall; having said that, the most recent decision of the ECB indicates that its accommodating stance will continue in 2022.

Looking at the current monetary policy stance in the US, the FOMC has revised its timeline for interest rate hike to 2023, on the backdrop of increased (temporary) inflationary pressures and upward revisions to economic growth for 2021. Financial markets seem to have already incorporated future tightening conditions, potentially expecting decisions related to the scaling back (tapering) of the Fed's QE programme, a similar announcement causing significant market volatility in 2013 (the Taper Tantrum episode). In this context, it will be interesting to see whether central banks will follow or lead market sentiment in times where the credibility of the monetary policy authorities is being put to the test – the most notable example is the meteoric rise of cryptocurrencies, as potential challengers to the current monetary system.

5. Some Final Thoughts

Is financial repression the exit out of the current situation with rapidly growing public debt worldwide as Carmen Reinhart and Ben Sbrancia suggested by referring to the second

world war period and its aftermath in the US and Europe?¹⁶ *Prima facie*, this seems to be the case in view of the staggering rise in public and private debts following the financial crisis and, currently, because of the pandemic. QE is a form of financial repression as governments try to control the yield curve by purchasing sovereign bonds (and, thereby, by reducing the cost of budget funding) and other financial assets, by going beyond what can be seen as market-making (repair) in periods of distress. But even in AEs financial repression may be difficult to achieve when inflation is very low, which would imply negative nominal interest rates. This said, however, if Goodhart and Pradhab's thesis that inflation will stage a comeback in the foreseeable future due to aging and other factors, the logic of financial repression will have to be reexamined. Moreover, the current spike in inflation, due to economic recovery, supply chains bottlenecks and the energy price shock, adds to concerns that this spike may not be a short affair. Longer persistence of high inflation might change inflationary expectations, and geopolitics, with its impact on global supply chains, may reinforce the current inflation dynamic.

The existential threat posed by climate change is also to be factored in, as it could have enormous impact on public budgets, ripple them and bring about very serious fiscal sustainability problems; clearly, countries with fragile economies and public budgets would be worst hit. A carbon tax would also raise energy prices and entail a massive change in relative prices.

How sustainable are negative interest rates over the longer term is an open question, although Japan provides food for thought in this respect (as well as to the secular stagnation thesis, the Japanization syndrome). In some New Member States, which have experienced labor markets strains for years now (due to massive labor emigration), where the Balassa-Samuelson effect may be larger than some suspect, and where exchange rate dynamics have probably also played a role, inflation is quite considerable – between 4 and 6% or even higher lately in Hungary, Poland, Romania, etc. When inflation is substantial and currency substitution is an issue, capping interest rates may be risky. The bottom line is that rapidly increasing public debts should not leave us unnerved, be natural interest rates much lower than a few decades ago¹⁷.

QE may have merits as a means to avoid a lasting depression and, in the euro area having helped to save it, but it is questionable that it can be the final solution to debt sustainability. Some may argue that nothing seems to be like before, that economics enters a new “stage” and that old tools are no longer reliable, that emerging economies should do whatever advanced economies do policy-making-wise. But this is hardly a convincing argument. The size of public and private debts, of structural deficits do matter yet, as do economic fundamentals, degrees of wealth and robustness (vs. fragility), policy track records, availability of backups and “friendly” neighbors, or membership in clubs such as the EU and the euro area.

Balance of payments crises will not disappear, and defaults will continue to take place, especially among EMs. Sudden stops might also occur. This is why caution is warranted in EMs in trying to mimic QE as practiced by AEs. For the emerging economies, there are limits and pitfalls in undertaking QE¹⁸. As Agustin Carstens put it, “fiscal sustainability should be

¹⁶ Please see Reinhart and Sbrancia (2015).

¹⁷ See also Krueger (2020).

¹⁸ “QE appears to be a viable macroeconomic policy response to COVID-19 for countries with a credible institutional framework in which the central bank operates a floating exchange rate regime and the sovereign issues debt in its own currency” (please see Benigno et al. (2020)).

assured, otherwise perceptions may arise that debt can be inflated away” ...and “crossing the traditional boundaries between fiscal and monetary policies, are only feasible for central banks in advanced economies with high credibility stemming from a long track record of stability-oriented policies”¹⁹.

A final thought on QE: QE may be useful, indispensable, wherever avoiding a collapse of economies (of financial sectors) is aimed at. It can also be seen as an instrument in a more diversified toolkit of central banks. But to claim that this is the way to remake the toolbox of central banks radically, for the long haul, is a heroic statement. As a matter of fact, QE is more like “kicking the can down the road”, and it reflects, arguably, an inability to tackle fundamental issues related to resource allocation²⁰, taming the global financial cycle, over financialization of economies and feeble restructuring (zombification of many parts of economies), increasing income inequality, etc. If this is the case, QE in EMs cannot be but a pale side of this state of affairs and can, in no way be an actual breakthrough in policy making.

Moreover, QE, as sort of prolonged crisis management component of monetary policy, has to be examined in a deeper sense: how economies can be remade in order to become more robust/resilient, more inclusive and fair, with an overhauled financial sector that should cater more to the needs of the real economy (the regulation of crypto assets is a must), antitrust laws that impede abusive concentration of market power, effective fight against tax evasion and avoidance, revamped tax systems that are more equitable, reinstating a sense of genuine ethical conduct in the corporate world, combating climate change which has become an existential threat to mankind, and avoiding a complete collapse of multilateral arrangements in the global economy (a sort of new Bretton Woods arrangements would be an option).

But this assertion has to be qualified when structural deficits are large and currency substitution is significant (the issue of trust in the local currency). “When hit by a crisis, economies with less credible monetary frameworks and weaker fundamentals may find themselves between a rock and a hard place. Capital outflows can put heavy pressure on the exchange rate, with the twin risks of a disorderly adjustment (currency crisis) and a persistent upsurge in prices (if inflation expectations are poorly anchored and pass through from the exchange rate is high” (please see Gelos et al. (2020)).

¹⁹ Please see Carstens (2020).

²⁰ As BIS experts stress, The Great Moderation years hid huge resource misallocation (please see Caruana (2014). Overburdened monetary policies during the past decade can be compared with monetary policies in post-command economies. Following the collapse of the command system and a dramatic change in relative prices, many enterprises became unprofitable. Massive and rapid resource reallocation was impossible. Thence the need to subsidize firms and even sectors involving monetization of quasi-fiscal deficits. Firms themselves created an own pseudo-money via inter-enterprise arrears (see Dăianu (1994) and Dăianu (1997)). The quasi-fiscal task of central banks during the initial stage of post-command transition is to be compared with QE practiced by major central banks in advanced economies – where a similar fiscal dominance takes center stage. But inflation is very low in AEs, whereas money printing after price liberalization in post-command economies created high inflation (after years of suppressed inflation and considerable money balances). This is due to an overwhelming liquidity trap and low inflation expectations.

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