

## THE RELATION BETWEEN INNOVATIVE POLICY INSTRUMENTS AND SMES RESILIENCE: CONCEPTUAL ANALYSIS

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**Abstract:** *In recent years, we have been witnessing a succession of economic, financial and health crises on a global scale, the most recent being the 2020 COVID-19 health crisis. Monetary and macroprudential stability policies have been implemented in order to address the harmful effects of these crises on both capital markets and the real economy. In addition, central banks have innovated and mobilized the arsenal of instruments at their disposal for the implementation of new "so-called unconventional" monetary policies in order to influence the economic and financial behaviour of private agents and strengthen resilience of SMEs. The aim of the paper is to study the efficiency of traditional monetary measures and emphasize the role of innovative tools in driving the economic growth. various "unconventional" monetary policy measures put in place by the monetary authorities to stimulate economic growth, absorb health and financial shocks and strengthen the resilience of SMEs are analyzed.*

**Keywords:** *Unconventional monetary policies, SMEs, monetary policies, central bank*

**JEL Code:** *E20, E50*

### Introduction

Central banks have been generally responsive and pragmatic to the COVID-19 financial and health crisis. They lowered their key interest rates on several occasions, some of them almost to the floor of 0%, and thus provided the banks and the economic system with abundant liquidity, thus assuming their role as "lender of last resort".

In order to fully assume their role of monetary regulation, central banks, especially the ECB and the FED, practiced "unconventional monetary policies" justified by the impossibility of further reducing their key rates. Central banks implement unconventional measures when circumstances justify them, particularly when traditional monetary policy is inadequate or when transmission channels no longer function satisfactorily: Appearance of a risk of deflation, stock market or bond crash, bankruptcy of a major credit institution,

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crisis of confidence in the financial sector. Each central bank has combined these different approaches as it sees fit, according to its own objectives, instruments and constraints.

Moreover, central banks have innovated and mobilized the arsenal of instruments at their disposal to implement new unconventional monetary policies in order to influence the economic and financial behaviour of private agents and strengthen the resilience of micro and small and medium enterprises (MSMEs).

Indeed, several studies have shown that unconventional central bank instruments have impacted the financing expectations of firms such as PEM (Public Expenditure Management). In this sense, the study published by Ferrando, Popov and Udell (2022) shows that the introduction of negative interest rates as well as the Corporate sector purchase programme (CSPP) by the Outright Monetary Transactions (OMT) is a program of the European Central Bank (ECB-OMT) have improved the expectations of future access to credit for SMEs. Similarly, German SMEs have responded significantly to the changes in the user cost of capital during the post-crisis period (Gerstenberger, 2020).

The objective of this paper is to see to what extent innovation in monetary instruments can have an impact on strengthening the resilience of SMEs and on stimulating economic growth. This paper will analyze a series of monetary policy instruments and study the role of traditional and innovative monetary measures in stimulating the economic growth. In our study we will focus on reporting and explaining various channels and instruments of monetary policy mobilized during episodes of economic crises.

The structure of this paper is as follows: The first section will be devoted to explaining the dysfunction of traditional monetary policy channels and instruments during episodes of banking and health crises (the interest rate channel and the credit channel); The second section will study and analyze the main monetary tools innovated and mobilized by the ECB, the FED and BAM (Moroccan central bank) and will explain how these new tools have contributed to mitigate the effects of these crises and the third section will study the different "non-conventional" monetary policy measures implemented by the Moroccan monetary authorities to stimulate economic growth, absorb health and financial shocks, and reinforce the resilience of SMEs.

## **1. Malfunctioning of monetary policy transmission mechanism during crisis times.**

Numerous theoretical and empirical analyzes (Borgy, Clerc, & Renne, 2009; Paul, 2010; Bernanke, Reinhart, & Sack, 2004; Sami, 2012; Eggertsson & Woodford, 2003) have studied the dysfunction of traditional monetary policy channels during banking crises. There are several factors that may be responsible for the alteration of the transmission channels of monetary decisions. Among these factors, we distinguish those that cause the blocking of the interest rate channel and those that render the credit channel inoperative. Both factors may slow down or block the transmission of monetary policy decisions. That said, the effectiveness of traditional monetary policy instruments diminishes when the banking system malfunctions.

### 1.1. Blocking the credit channel

The blocking of the credit channel occurs when the banking system no longer functions normally and the flow of credit to the economy slows down or stops. This can be the case if:

- Banks have experienced losses (e.g., related to the subprime crisis) that reduce their capital base and their ability to lend;
- Economic conditions are deteriorating sharply (e.g., the COVID-19 crisis), making credit riskier and lenders more reluctant;
- Economic uncertainty is increasing, raising risk premiums, increasing banks' cost of funds and deterring borrowers;
- The interbank market which is the main source of refinancing for banks is blocked due to a mutual loss of confidence among participants.

As a result, a sharp deterioration in economic activity makes lenders more reluctant to extend new credit because of increased risk aversion. As the economy deteriorates, loans become potentially riskier (Borgy, Clerc, & Renne, 2009). The blocking of the credit channel can also result from a generalized failure in the interbank market. This market is an essential link in the transmission chain of monetary policy shocks (Bernanke & Gertler, 1995). Indeed, when institutions in this market no longer trust each other, then liquidity needs are hardly ever properly met, which further cripples' transmission because most banks tend to hoard liquidity.

Many studies have shown that this situation is likely to persist as long as there are doubts about the creditworthiness of participants. However, given the increased reliance of credit institutions on money market funds, the prolonged paralysis of money market trading may significantly weaken liquidity management and bank intermediation activities. This weakening is likely to render the credit channel inoperative (Gambacorta, 2009).

### 1.2. Blocking the interest rate channel

While analyzes of the interest rate channel give a decisive role to the actions of the monetary authorities, it turns out that this power is likely to be weakened if the economy falls into a "liquidity trap" situation (Coupey-Soubeyran, 2012).

However, theoretical and empirical analyzes have revealed that the liquidity trap context occurs when the economy is shaken by a combination of three types of shocks (Krugman et al., 1998; Eggertsson & Woodford, 2003; Bernanke et al., 2004; Paul, 2010).

First of all, when the policy rate reaches a low level or close to zero. At this level, the central bank loses its traditional weapon. Moreover, when the policy rate is close to zero, the central bank's power over short-term rates begins to decline (Bouveret et al., 2009). The consequences of this situation are nevertheless very important. Banks will take advantage of low rates to stockpile more excess reserves.

On the other hand, the liquidity trap only appears when liquidity supply channels are destabilized, which induces strong fears among banking institutions that will prefer to hoard liquidity rather than transform it into credit. These fears, fuelled in part by the

climate of uncertainty, are likely to exacerbate tensions on the money market (Travers et al., 2009).

And finally, the formation of a liquidity trap is most often accompanied by deflation. Moreover, theoretical and empirical analyzes of the 1990 Japanese crisis have provided some valuable insights into the nature of deflation. This experience revealed that deflation occurs after a long period of financial stress (Duprat, 2013).

The duration and depth of the financial tensions eventually diminish the traditional lever of monetary policy (the interest rate). To get out of this situation, the monetary authorities first proceed with a massive drop in the cost of bank refinancing. At some point, they can hardly lower their rates again. Faced with this situation, central banks have had to resort to so-called "unconventional" instruments to maintain their power to influence interest rates.

## 2. Unconventional measures

Taking the main cases of transmission channel malfunctions mentioned below, we can distinguish three main categories of non-conventional measures, which can be combined.

These measures aim respectively at:

- Massively increase the amount of money in circulation in the economy. This is known as "quantitative easing";
- Acting on the slope of the term structure of interest rates by committing to the future path of key rates in order to guide agents' expectations;
- Unfreeze the credit markets by broadening the range of loans granted to the economy and by buying securities directly on the interest rate markets in order to influence risk premiums. This is known as "credit easing" (easing of credit conditions).

### 2.1. Quantitative Easing

Quantitative Easing (QE) is a policy whereby a central bank creates money by making massive purchases of financial assets (especially government bonds). The objective is to inject significant liquidity into the economy in order to stimulate activity and economic growth and to raise the inflation rate to prevent the economy from falling into deflation.

The massive creation of money aims to get around the obstacle of the blocking of the interest rate channel (Sami, 2012). The central bank tries to "saturate" the demand for money by economic agents, hoping that they will spend their surplus cash directly and thus stimulate investment and economic growth.

In a way, it is a matter of creating a new monetary policy transmission channel that does not depend on the interest rate. In ordinary times, this direct channel through the money supply cannot be used, because the demand for money is unstable in the short term: there is no predictable link between the quantity of money demanded and the economic situation. In exceptional times, this short-term instability is less of a problem if the central bank is willing to supply unlimited amounts of money.

It is not certain, however, that even an unlimited supply will be sufficient to stimulate spending if the demand for money is itself infinite. This is why, very often, the supply of money is channelled to the only agent that is certain to spend money: the government through its budget deficit. Thus, central banks' policies of purchasing government debt securities are one of the most widely used forms of quantitative easing (Loisel & Mésonnier, 2009).

## **2.2. Term structure of interest rates**

The aim of acting on the slope of the term structure of interest rates is to change the interest rate curve by influencing the expectations of agents on the capital markets. To do this, the central bank can explicitly commit to keeping its policy rate at a very low level (or even zero) for a significant period of time.

The central bank can also define the preconditions for a future increase in its policy rate: for example, guaranteeing that there will be no increase until inflation reaches a certain level. This strategy is even more effective if the central bank has a numerical definition of price stability in its general policy framework, which then serves as an explicit benchmark (inflation targeting). Extending the maturity of the refinancing granted at the key rate beyond the traditional few days also contributes to this policy.

## **2.3. Credit Easing (Assouplissement des Conditions de Cr dit)**

If the credit channel is blocked, the central bank can substitute itself for commercial banks and the capital market to finance the economy directly. In concrete terms, the central bank first broadens the range of loans to the economy that it refinances, and then can directly purchase securities representing loans to the economy: commercial paper, private bonds, mortgage bonds.

These "credit easing" operations have a double effect: on the one hand they reactivate the market for debt securities and on the other hand they provide financing directly to the economy. In return, however, the central bank must assume a credit and interest rate risk that is not part of its ordinary function. Indeed, monetary measures under the heading of "credit easing" have more scope in economies where companies are financed essentially by issuing commercial paper or bonds, where loans obtained by households - mortgages or consumer loans - are largely securitized and therefore financed primarily on the markets. Conversely, when bank intermediation covers the bulk of financing needs (as in the case of Morocco), quantitative easing measures or those that influence the interest rate curve are used (Gauvin, 2013). The table 1 presents the non-conventional measures (table 1).

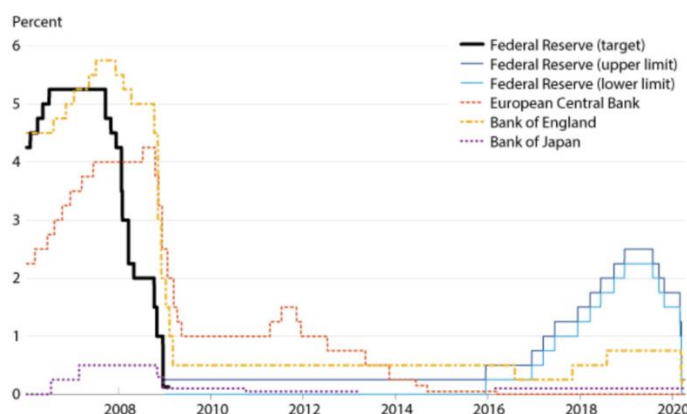
**Table 1: Unconventional monetary policy measures**

Objective \ Measure	Purchases of public securities	Achats de titres privés	Commitment to maintain rates
Increase the amount of money in the economy	Yes	Yes if not sterilized	No
Acting on inflation expectations and the interest rate curve	Yes	Yes through risk premiums	Yes
Unlocking the credit markets	No	yes	N

Source: *Borgy, Clerc & Renne (2009)*

#### 2.4. Main measures of unconventional monetary policies (case of the FED and the ECB)

In response to the economic crisis caused by COVID-19 health crisis, the major central banks of the advanced economies introduced several measures in order to meet their price stability and/or employment objectives. First, key interest rates were lowered considerably (as part of a conventional monetary policy).

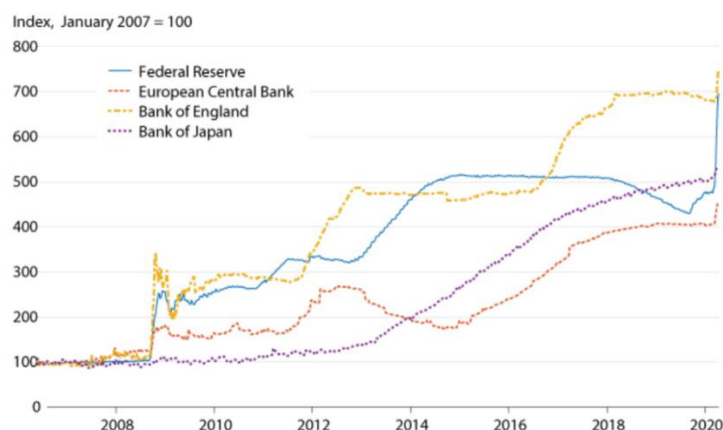


**Figure 1. Evolution of policy rates of the major central banks (FED, ECB, BoE and BJ)**

Source: © 2020, *Federal Reserve Bank of St. Louis*

In the United States, the Eurozone and the United Kingdom, they have been cut at unprecedented rates and levels, while in Japan they have been lowered again to close to their historical lows. Second, in response to the scale of the global crisis and the zero lower bound on nominal interest rates, the major central banks turned to so-called "unconventional" monetary policy instruments (Cheikh & Fettahi, 2017).





**Figure 2. Evolution of the major central banks' assets (FED, ECB, BoE and BJ)**

Source: © 2020, Federal Reserve Bank of St. Louis

While unconventional monetary policies have taken different forms in different countries, they have all led to a sharp increase in the size of central banks' balance sheets. In this section, we report on the main unconventional monetary policies pursued by the ECB and the FED in the aftermath of the COVID-19 global financial and health crisis.

#### 2.4.1. Unconventional monetary policy implemented by the FED

##### 2.4.1.1. Unconventional measures put in place by the FED to deal with the international financial crisis

In response to the onset of the financial crisis that shook the U.S. financial system, the FED initially lowered its key interest rate sharply from 5.25% in September 2007 to a range between 0% and 0.25% at the end of 2008, and has kept it unchanged since. In the absence of room for maneuver with this instrument and noting the persistent effects of the crisis (Cheikh & Fettahi, 2017), the FED decided to adopt unconventional measures through a policy of quantitative easing (QE) consisting of massive purchases of financial assets. This program was carried out in the following phases (Box 1.1).

#### **Box 1.1: Main unconventional monetary policy decisions taken by the FED**

##### A. Policy rate

Very quickly, between September 2007 and December 2008, the federal funds rate was reduced from 5.25% to a range between 0 and 0.25% (Cúrdia, V., & Ferrero, A. (2013). In January 2012, it was announced that this rate will remain at this level until the unemployment rate is back to about 6.5%.

##### B. Special devices:

###### 1. Refinancing Facility:

To facilitate short-term refinancing for banks and reduce upward pressure on the interest rates they pay, the Fed established the Term Auction Credit Facility (TAF) (closed in March 2010), the Primary Dealer Credit Facility (PDCF) and the Term Securitization Lending Facility (TSLF), both closed in February 2010 (Fleming et al., 2009). As such, it has dollar swap agreements with 14 foreign central banks to provide dollars in these jurisdictions.

###### 2. Liquidity grant:

*A second mechanism was set up to provide central bank money directly to investors and issuers in the main financial markets, notably the Commercial Paper Funding Facility and the Term Asset-Backed Securities Loan Facility. The beneficiaries bring commercial paper and securitized loans (car loans, student loans, etc.) to the FED's window. (Soubeyran, 2013).*

### *3. Market operations*

*The third mechanism consists of "quantitative easing" (QE) purchases of securities in the markets. To lower long-term interest rates permanently, the Fed buys US Treasury securities. In this way, it monetizes the US federal debt*

*- Quantitative Easing 1 (December 2008 - March 2010): Under QE1 the Fed bought 1720 billion in long-term securities (1250 billion in Mortgage Backed Securities (MBS), 300 billion in Treasuries and 170 billion in debt securities by federal agencies). The goal was to restore liquidity to the financial market, to make credit more fluid, to reduce its cost and to stimulate investment.*

*- Quantitative Easing 2 (November 2010 - June 2011): In response to the continued fragility of economic activity and financial tensions, the Fed decided to launch a new round of quantitative easing consisting of buying an additional \$600 billion in Treasury bonds at a monthly rate of \$75 billion. The main objective of this second round of monetary easing is to keep long-term real interest rates low by raising inflation expectations, which will encourage the purchase of equities and, through a wealth effect, restart consumption and thus avoid the highly counterproductive risks of deflation (Engen, E. M., Laubach, T., & Reifschneider, D. (2015).*

*- Operation Twist (September 2011 - December 2012): Consists of exchanging Treasury bills with maturities of less than three years for those with maturities of 6 to 30 years, in order to keep long-term rates low so as to support the economy.*

*- Operation Twist 2 (July 2012 to December 2012): Extension of the program to \$267 billion.*

*- "Quantitative Easing 3 (September 2012 - October 2014): As QE1 and QE2 were not as beneficial as hoped, the Fed initiated a third wave of monetary injections by announcing, in September 2012, monthly purchases of MBS securities for \$40 billion. In January 2013, these purchases were extended to Treasuries for an amount of \$45 billion, bringing them to a total of \$85 billion with the same objective: to weigh on rates and promote the economic recovery. In December 2013, the FED announced a gradual reduction in these asset purchases (Dupuy, M. (2012).*

*On October 29, 2014, the Fed decided to end its quantitative easing program, a decision motivated by a significantly improved outlook for the labour market and stronger economic activity.*

Finally, it should be noted that these monetary policy measures taken by the FED took the form of steering agents' expectations by announcing the maintenance of the key rate at a very low level for a long period, by easing credit conditions and finally by quantitative easing leading to an unprecedented swelling of the balance sheet of the US central bank. Its total assets having grown from \$877 billion at the end of 2006 to \$4,509 billion at the end of 2014.

#### **2.4.1.2. Unconventional measures put in place by the EDF to address the COVID –19 health crisis**

At the onset of the crisis, the FED held two special meetings in early March 2020, during which it reduced the target range for the federal funds rate by a total of 150 basis points (bps), bringing it to 0%-0.25%. At the same time, it announced the increase of its holdings of at least 500 billion in Treasury bills and 200 billion in mortgage securities, and



then decided, in the same month, to increase them as much as necessary to further promote the smooth functioning of the market and the transmission of monetary policy.

In addition, the FED implemented broad measures to support the financing of the economy more directly and prevent a tightening of financial conditions by launching several new facilities and reactivating others. Taken together, these actions provided nearly \$2 trillion in financing beginning in April to support businesses large and small, non-profit organizations, and state and local governments.

The FED also adjusted its forward guidance, indicating that it plans to keep rates at their current levels until it is confident that the economy is on track to achieve its goals of full employment and price stability. In addition, to improve the supply of U.S. dollar liquidity, the Bank, in consultation with several central banks, expanded and strengthened its standing swap arrangements.

## 2.4.2. Unconventional monetary policy implemented by the ECB

### 2.4.2.1. Non-conventional measures implemented by the ECB to deal with the international financial crisis

The ECB, for its part, has responded to the effects of the latest global financial crisis by implementing new unconventional measures. It reiterated that it would keep its key interest rate low for an extended period. At the same time, it announced a series of unconventional measures in the form of targeted longer-term refinancing operations (LTROs) and government securities and covered bond purchase programs targeting illiquid segments of the private sector and government bond markets. These measures are primarily aimed at improving the transmission of monetary policy and supporting the real economy.

#### **Box 1.2: Main unconventional monetary policy decisions taken by the ECB**

##### *A. Policy rate*

*After the July 2008 hike to 4.75%, the ECB's main rate is being gradually lowered to 0.75% in July 2012 to address deflationary risks, weak economic activity and the persistent credit crunch.*

##### *B. Special devices*

*- As of October 2008, the ECB is increasing the number and size of its long-term bank refinancing operations (up to 6 months). Banks can thus obtain all the liquidity they need. At the same time, the list of securities used as collateral was expanded and their rating was lowered.*

*- In May 2009, the ECB allows refinancing for up to 12 months on a quarterly basis.*

*- In October 2011, the eligibility criteria for securities that banks can bring to the ECB's window were further relaxed. Whether it is securitized claims or bank loans. The reserve requirement ratio of banks with the ECB is lowered to 1% (Brand, 2011).*

*- In December 2011 and February 2012, the ECB refinanced the banks at 3 years. In two steps, 489 billion euros, and then 529 billion were injected in total into the system.*

##### *1. Sovereign debt*

*- In May 2010, the ECB is implementing a Securities Market Programme (SMP). The ECB will mainly buy government securities from peripheral European countries. At the end of March, it held 205.9 billion euros of government bonds in its accounts. The objective is to avoid a rise in interest rates on government bonds from these countries, which would threaten their*

*fiscal consolidation strategy (Cordemans & Stefaan, 2014).*

- *In August 2011, in response to the rapid rise in yields on some sovereign bonds, the ECB reactivated purchases of government bonds under its Securities Markets Program (SMP);*
  - *At the end of May 2012, securities purchased outright under the MTP totalled €212 billion, and those purchased under the covered bond purchase programs (CBPP) were around €69 billion. The two 3-year refinancing operations have allocated a total of about €1,000 billion (Cordemans & Stefaan, 2014).*
  - *At the end of 2012, the ECB reactivated SMP purchases, with the program increasing from €74bn in mid-2011 to €211bn at the end of 2012.*
2. *Market operation*
- *In June 2009, the ECB is buying directly on the primary and secondary market 60 billion euros worth of covered bonds (PAOS). By acquiring bonds backed by public sector loans, the ECB will allow banks to sell them and benefit again from a market for these securities.*
  - *In 2011 in the context of an intensifying public debt crisis, the ECB took the following unconventional measures:*
    - ✓ *It reactivated the Covered Bond Purchase Program (CBPP);*
    - ✓ *It set up two 36-month Unlimited Liquidity Allocation Operations for banks (for amounts of €489 billion and €529 billion respectively);*
    - ✓ *It has halved the reserve requirements for banks, freeing up about €100 billion of liquidity for European banks;*
    - ✓ *It has expanded the range of collateral accepted in refinancing operations. (Bank for International Settlements, 2013).*
  - *In September 2012 the Covered Bond Purchase Program (CBPP) was discontinued after the announcement of the program opening the possibility of conducting Outright Monetary Transactions (OMT) in the secondary sovereign bond markets;*
  - *Since July 2013, the ECB has been moving towards a policy known as "Forward Guidance", which consists of announcing and committing to the future path of the key rate. Through this, the ECB wishes to increase the transparency of its action and anchor expectations. The objective is to specify its strategy as well as its forecasts for the evolution of the economy. This is a way for the ECB to affirm its intention not to raise interest rates in the near future. It hopes to influence private expectations of short-term rates, and therefore long-term rates, in order to support the economy (Kool & Thornton, 2015).*
  - *In June 2014, the ECB set up Targeted Longer-Term Refinancing Operations (TLTROs) to support bank lending to households and non-financial firms. It has also decided to intensify its preparatory work on outright purchases in the asset-backed securities market. (Bank for International Settlements, 2014, p.96).*
  - *Thanks to these unconventional measures, the size of the ECB's balance sheet increased from 1,000 billion euros to 2,600 billion euros between 2007 and 2014.*

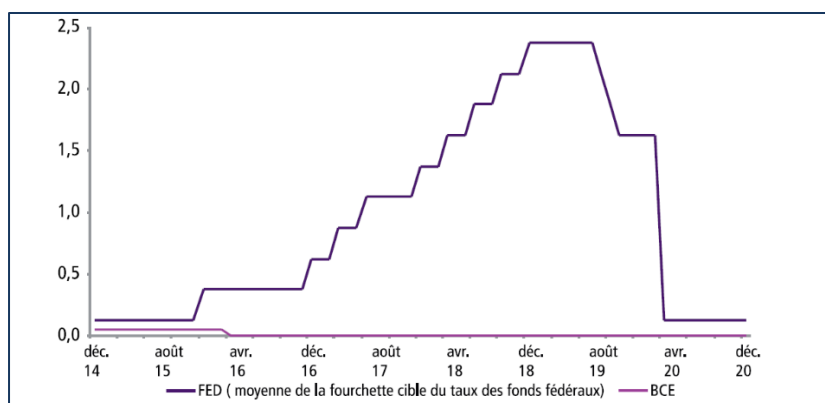
The various monetary actions undertaken have had a significant impact on the ECB's balance sheet, which has more than doubled in size, from €1,000 billion in 2007 to €2,600 billion in 2014. The expansion of the ECB's balance sheet is mainly due to the strong demand for liquidity from banks during the two three-year refinancing operations and the purchase of securities.

### 2.4.2.2. Unconventional measures implemented by the ECB to deal with the COVID – 19 health crises

Constrained by key interest rates close to zero, the ECB adopted a series of measures in March 2020 to strengthen its quantitative easing policy. It announced a temporary additional envelope of 120 billion euros in addition to the 20 billion euros of monthly purchases planned under its asset purchase program. It also launched a temporary Emergency Pandemic Purchasing Program (EPPP) with a high degree of flexibility over time, across asset classes and across countries. This program was initially endowed with an envelope of 750 billion, increased by 600 billion in June 2020 and by 500 billion in December 2020 to reach 1850 billion euros, with an extension of the horizon until at least the end of March 2022.

In addition, the ECB has relaxed, and gradually recalibrated, the conditions set for the third round of targeted longer-term refinancing operations (TLTRO III). The maximum total amount that banks will now be able to borrow has been increased to 50% and then to 55% of their stock of eligible loans, compared to 30% in the initial setting.

Also, during the period from June 2020 to June 2021, the rate applied to TLTRO III will be 50 bps below the average interest rate of the main refinancing operations in force (i.e. -0.5%) and 50 bps below the deposit facility rate (i.e. -1%) for banks that exceed the lending performance thresholds. In December 2020, it decided to extend the period of application of the significantly more favourable terms by 12 months to June 2022.



**Figure 3. ECB and FED key rates (in %)**

Source: Thomson Reuters in BAM, (2020), p. 23.

To cover the period before the start of the TLTRO III in June 2020, the ECB set up a series of weekly LTROs (bridge LTROs). In addition, it introduced a new type of non-targeted longer-term refinancing operation (PELTRO) to provide an effective liquidity safety net. Finally, in June 2020, the ECB introduced a Eurosystem repo facility (EUREP) to provide precautionary euro repo lines to non-euro area central banks in addition to bilateral and swap repo lines.

### 2.4.3. Comparison between the ECB's and the FED's unconventional measures

In terms of unconventional policies, it is clear that the measures taken by the two central banks differ. This can be explained by the fact that the objectives pursued were not the same, by the difference between the operational frameworks of the two central banks, but also by the specificities of external financing of the two economies.

The banking sector accounts for more than 70% of the external financing of households and companies in the euro zone, whereas in the United States, households and companies prefer to finance themselves in markets other than the banking sector, and consequently 80% of external financing comes from sources other than bank credit (Cordemans & Ide, 2012).

The ECB has therefore focused mainly on banks, while the US Federal Reserve has extended its actions to other players in the financial sector. The ECB has mainly tried to avoid a liquidity crisis in the banking system. It provided liquidity to the banking sector in order to avoid an increase in borrowing rates and to limit the risk of a credit crunch.

For its part, the Fed clearly announced that its objective was to make monetary conditions more accommodating in order to support the economy, and this, by lowering long term rates or by supporting the equity market. The Fed therefore sought to lower rates on the financial markets since this is where the US economy is mainly financed. To do this, it injected liquidity into the market by means of quantitative easing.

Finally, even if the tools used differ, the unconventional monetary policies conducted by the two central banks have the ultimate objective of improving the financing conditions of the economy.

### 2.4.4. Key policy decisions taken by BAM to strengthen the resilience of SMEs and MSEs

BAM has implemented two unconventional measures to address the international financial crisis, namely the “Key rate” and the “Reserve requirement rate”.

- **Key rate:** Against a backdrop of sluggish growth and weakening credit, BAM lowered its main policy rate in December 2014 by 0.25 basis points to 2.5% and has kept it unchanged since then. The previous cut was only in mid-September 2014. The objective of this monetary easing is to further support the recovery of economic activity and growth.

- **Reserve requirement rate.** In order to cope with the structural liquidity shortage, BAM has proceeded to the gradual reduction of the reserve requirement rate, bringing it down from 16.5% in 2007 to 4% in 2012 and then to 2% in March 2014. This last decision has allowed to release for the banking system an additional liquidity of about 8.1 billion dirhams. (BAM, 2014, p.135)

In summary, it can be said that BAM adopted an accommodative monetary policy during the period from 2008 to 2014. It reduced the policy rate and the reserve requirement rate to meet the liquidity needs of banks.

**Box 1.3: Key monetary policy decisions made by BAM***1. Market operation*

*BAM has adopted additional monetary policy measures aimed primarily at supporting the financing of MSMEs:*

- *In April 2011, BAM removed the book accounts from the calculation base of the mandatory reserve. These measures allowed to release a total amount of MAD 57.4 billion. (BAM, 2014, p.135)*
- *In September 2011, BAM introduced longer-term reverse repo operations, which will give banks better access to central bank money, ease bank liquidity pressures and provide more visibility in the money market.*
- *In March 2012, BAM decided to extend the collateral eligible for monetary policy operations to bills representing private claims of VSEs and SMEs. This decision aims to give SMEs easier access to additional credit and new equipment loans and cash facilities for amounts up to 15 million dirhams for SMEs and 2 million dirhams for VSEs.*
- *Between 2013 and 2014, with the persistence of a difficult economic situation and the continued deceleration of bank credit, BAM set up a new mechanism to refinance loans granted to SMEs, excluding real estate development and the liberal professions, for amounts less than or equal to MAD 50 million and for terms greater than or equal to 12 months.*

*This device allows banks to have each year advances of BAM for an amount equal to the volume of credit they intend to grant to SMEs and benefit from a refinancing equivalent to the volume of credit granted, in this case, to SMEs operating in the industry sector or whose production is intended for export. (Brookfield Asset Management, 2013, p.10-26). These advances are allocated quarterly in the form of guaranteed loans and/or repurchase agreements, for a period of one year.*

*Their collateral is extended to all loans distributed to SMEs, certificates of deposit and mortgage loans, meeting the criteria defined by BAM (BAM, 2014, p.135-138). This program has been strongly supported by banks and at the end of the year, the outstanding loans granted within this framework reached MAD 18.9 billion.*

In addition, BAM adopted additional monetary policy measures aimed mainly at supporting the financing of SMEs through: the removal of passbook accounts from the basis for calculating the reserve requirement; the introduction of longer-term refinancing operations; the expansion of collateral eligible for monetary policy operations to include bills representing private claims of SMEs; and the implementation of a refinancing program for SMEs operating outside real estate development and the professions.

**3. Unconventional Measures Implemented by BAM to stimulate SMEs resilience during the COVID -19 Health Crisis.**

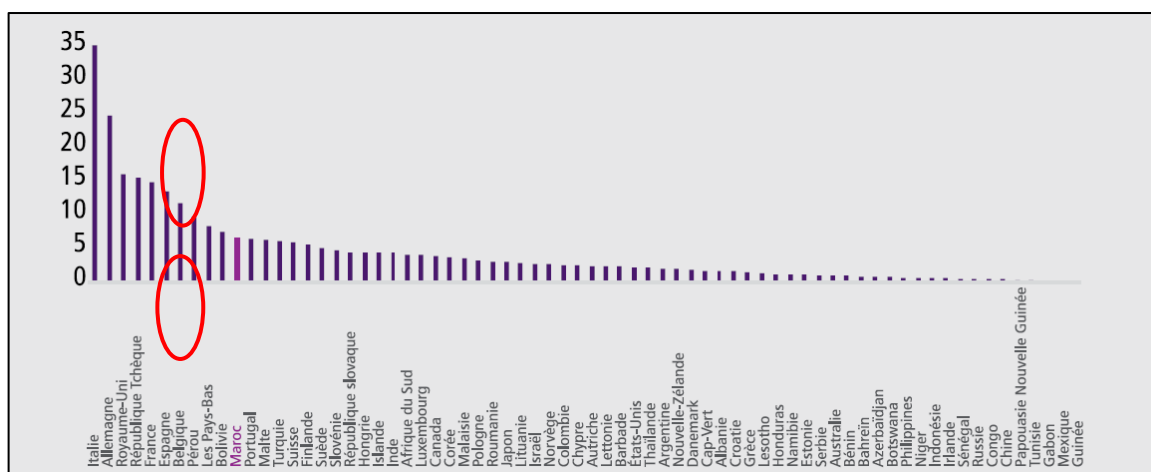
Faced with the COVID-19 crisis, and in order to mitigate its economic and social impact, public authorities around the world have had to activate several instruments, both fiscal and monetary. In particular, to support businesses and encourage the recovery of activity, large-scale credit guarantee programs were put in place to maintain access to financing, especially



for SMEs, a category that is particularly fragile in difficult economic times. According to the IMF, public credit guarantees reached, at the end of 2020, nearly 4,000 billion dollars, i.e. 30% of the total amount of public support granted in the context of the crisis.

In Morocco, several credit guarantee lines have been set up by the Comité de Veille Economique as part of the authorities' response to the crisis. Thus, on March 26, 2020, less than a month after the detection of the first case of COVID-19 at the national level, a guarantee mechanism "Damane Oxygène" was set up with the Caisse Centrale de Garantie. Its objective is to facilitate access to financing for companies whose cash flow has deteriorated due to the drop-in activity, by granting a guarantee that covers 95% of the operating credits contracted.

By the end of 2020, 49,489 "Damane Oxygen" loans had been granted for a total disbursed amount of MAD 17.7 billion. After the confinement and with the gradual recovery of the activity, two new guarantee mechanisms "Relance TPE" and "Damane Relance" have been deployed on June 15, 2020 to promote the financing of working capital needs and accompany the economic recovery.



**Figure 4: Public guarantee program for business loans set up in response to the COVID-19 crisis (Size as % of GDP)**

Source: BAM, (2020), p. 140

The loans covered are for a period of 7 years, with a 2-year grace period and rates capped at the key rate plus 200 basis points. The product "Relance TPE" targets very small businesses with a turnover of less than 10 million dirhams, by providing a guarantee for 95% of the loans capped at 10% of the turnover.

The product "Damane Relance" is intended for companies with a turnover of more than 10 million dirhams. It provides a guarantee of 80% to 90% of loans, with a ceiling of 1.5 months' turnover for companies in the industrial sector and 1 month's turnover for companies in other sectors.

At the end of 2020, disbursed loans benefiting from these "Recovery" guarantees totalled MAD 35.3 billion. The deadline for the Relance programs, initially set at the end of 2020, was extended to March 31, 2021, then to June 30, 2021, and some relaxations



were made, in particular an increase in the amount of the loan, the easing of the guarantee conditions for certain sectors, as well as the extension of the coverage to insurance brokers, foreign exchange offices and money transfer companies. 54% of the "Oxygène" and "Relance" guarantee schemes benefited SMEs, 18% benefited very small companies and 28% benefited intermediate-sized companies (ETI) and large companies (GE). By sector of activity, 29% of the volume of loans went to the trade and distribution sector, 28.5% to industry, 15% to construction and 8% to services.

While credit guarantee programs have been an important instrument in mitigating the economic impact of the pandemic, exiting from these policies is a major challenge, especially since the survival of many businesses depends on them. These programs can continue to contribute to the post COVID recovery provided they are adjusted for greater efficiency in the use of public resources and better performance. In this regard, the World Bank suggests three possible directions:

1. Dealing with defaults by maximizing the recovery of funds provided to enterprises that have proven unviable and, for those that are viable, converting the guaranteed loans into equity instruments and transferring these exposures to other public institutions (such as development banks) or to a specialized investment vehicle;
2. Targeting enterprises by revising eligibility criteria to limit the benefit to specific target groups (such as viable enterprises with little debt) and reducing guarantee thresholds to normal levels.
3. Supporting a green recovery by redirecting financial flows to low-carbon activities.

## Conclusion

Unconventional monetary policies highlight the variety of innovative and modernized instruments available to central banks to conduct their monetary policy. Even when they have already sharply reduced their key interest rates and even when the markets no longer function or banking intermediation is blocked, they still have powerful means of action to influence the cost of financing the economy and, in turn, strengthen the resilience of SMEs.

Unconventional measures can take several forms: (i) Steering agents' expectations by announcing that monetary policy rates will be kept low for a long period, (ii) Outright purchase of long-term financial assets, (iii) Easing of credit conditions, via, in particular, the expansion of accepted collateral, (iv) and finally quantitative easing through massive liquidity injections.

The unconventional monetary policies conducted by the FED and the ECB have had a direct impact on the structure and shape of the interest rate curve. They have led to a flattening of the American and European interest rate curves, causing a fall in long-term rates and a slight rise in short-term rates. The actions of the FED and the ECB have contributed to the easing of financing conditions for small and large companies, non-profit organizations, federal states and local governments.

At BAM, all conventional and unconventional instruments were used in all areas of intervention, including monetary policy, micro and macro-prudential supervision, foreign exchange reserve management, and the supply of cash and access to financial services. These measures have enabled companies in particular to benefit, on very favourable terms, from the financing needed to cope with the crisis and ensure the continuity of their activities.

Finally, it must be said that our paper has some limitations, namely money cycle index in times of crisis has not been analyzed in depth, encompassing all the factors that can mediate the relationship between innovative monetary policy instruments and SMEs resilience. A theoretical and empirical comparison (Challoumis, 2022) could help future researchers to study to what extent the money cycle contributes to SMEs resilience.

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