

LOW INTEREST RATE AND NEGATIVE INTEREST RATE POLICY: REASONS AND CONSEQUENCES FOR THE BANKS

OLIVIER KLEIN*

Very low short-term and long-term rates, and even negative rates across a range of maturities, are not solely due to monetary policy. This level of rates is also explained by basic macroeconomic and macrofinancial forces. Weak global demand, due to high savings, is accompanied by an absence of dynamic supply. This absence is the consequence of declining productivity growth, low investment and demographic decline. Taken together, these facts result in very modest growth. The consequence is a neutral nominal rate of interest which neither stimulates nor curbs growth and is itself very low. As low as the level of inflation in fact.

This being so, the central banks have logically pushed the yield curve below neutral rates, which were naturally already very low, in an endeavour to revive growth and push up the level of inflation to the target which they had set. They accordingly accentuate the phenomenon of very low interest rates during the course of their work, but they are not creating the phenomenon.

The negative interest rate policy implemented by some central banks is also explained by the zero lower bound which, if it were not removed on interest rates, at least for the deposits of bank

* Chief Executive Office, BRED; Professor of Economics and Finance, HEC. Contact: kleino@hec.fr.

LOW INTEREST RATE AND NEGATIVE INTEREST RATE POLICY: REASONS AND CONSEQUENCES FOR THE BANKS

with the central bank, would not permit real interest rates in areas that are sufficiently low to have a stimulating effect on growth as inflation is also close to zero.

The aim of this proposition is to provide a brief explanation of the reasons why, in a situation that could lead to secular stagnation, and at all events very low growth following a serious crisis of over-indebtedness, monetary policy is seeking to keep interest rates very low, and even in negative territory. The consequences of this policy for the banks, as far as France is concerned for example, will be examined in more detail below. The limitations of such a policy will then be determined.

There are thus many reasons for driving down interest rates to such low levels. It is a question of sustaining demand through asset evaluation (real estate, stocks and shares, etc.), thereby creating a wealth effect that spurs consumption and investment. The aim of interest rates that are below the neutral rate is also to encourage households and companies to save less and to consume and invest more, possibly through borrowing.

However, it is also necessary to view these actions in the context of the exit from the 2007-2009 crisis as its consequence was a steady increase in household and corporate debt to unsustainable levels in the majority of developed countries. Its corollary was notably a very bullish housing market. Unlike other crises of the same type, this characteristic over-indebtedness crisis, which erupted in summer 2007, can only be resolved by a long period of deleveraging by private agents. It should be added that since the crisis caused Governments to accrue very high levels of debt, the onus is on all public and private agents to adopt debt reduction policies, year after year. The long phase in turn leads to a prolonged period of weak growth as it necessitates more austerity and less consumption and investment. Central banks are playing a part in facilitating this deleveraging phase through their endeavours to prevent it from penalising growth too severely. In order to do this, they are able to push down the exchange rate, thereby sustaining growth. The quantitative easing policy adopted by the Central European Bank (CEB) and the expected rise in interest rates in the United States have enabled the euro to return to a more reasonable exchange rate against the dollar.

LOW INTEREST RATE AND NEGATIVE INTEREST RATE POLICY: REASONS AND CONSEQUENCES FOR THE BANKS

Central banks are also seeking to establish a nominal interest rate that is below the nominal growth rate or, in the worst case scenario, at the same level. It is obviously easier to deleverage when interest rates are below growth rates. At the same, it is necessary to avoid the snowball effect of very high private and public debt which would soar to dangerous levels in some cases if interest rates were above the growth rate, despite very high levels of leverage. It was for this reason that Mario Draghi, President of the ECB, decided to cut long-term rates in order to prevent an explosion of public debt in Greece and Italy, for example. Fortunately, by pegging long-term rates as closely as possible, and even below, growth rates, the ECB succeeded in stopping the vicious circle, which had been created by an attitude of infectious defiance adopted by these countries towards their public debt and which in turn increased their public deficit and hence their debt.

Negative interest rates on deposits by banks with the central bank ultimately encourage them to use any surplus liquidity they hold to lend more, while competition between banks pushes down rates even further and hence the demand for credit. This mechanism applies, for example, to mortgages which are currently reaching record levels in France. The negative effect on the balance sheets of banks would sooner or later give cause for concern if this phenomenon were to persist.

The natural brake on these desired movements is first and foremost the demand for credit itself. If there is no confidence in the future, the demand for credit is always likely to remain weak, despite very low rates. In 2014, the demand for credit by companies was not very strong in France, whereas the banks were expecting to have more projects to finance. The loss of appetite of companies and households for credit may thus constitute a real brake on quantitative easing policies. At the end of 2014 / beginning of 2015, companies in France regained their appetite for investment with a stronger demand for credit and, consequently, further debt accumulation. And mortgages have been largely sustained by historically low rates.

However, very low rates are likely to lead to an effect on savings that is the opposite of the effect that was expected by encouraging higher levels of savings. Households thus ultimately seek to obtain the same level of savings, despite the fact that they are scarcely helped to achieve this aim by the interest on their investments. The effect that has been ascertained on savings nowadays varies according to the country. The demand for credit may also be curbed precisely

LOW INTEREST RATE AND NEGATIVE INTEREST RATE POLICY: REASONS AND CONSEQUENCES FOR THE BANKS

because the level of debt accumulated by some private agents remains high and their priority is to deleverage. Moreover, the wealth effects on the economy, related to declining rates, are strong in the United States, but weak in the eurozone.

Last but not least, interest rates at this level are driving down profitability in the banking sector. However, declining profitability in the banking sector and the simultaneous demand to improve solvency rates are not likely to contribute to an increase in the credit supply. This is also a brake that should not be ignored.

From a practical perspective, the factors that have a strong impact on the level of profitability of a commercial bank, in addition to the commission that it takes for the services it provides, are its margin rates, namely the difference between the rate received on its loans and the rate that it pays on clients' deposits. The earnings of commercial banks may thus also feel the effects of a rotation or homothetic shift in the interest rate curve.

The majority of loans in France are fixed rate. In some circles there are calls for France to introduce more variable rate loans, but this would be tantamount to transferring the rate risk to the customer. It should be noted that the countries with the most variable rates have been most severely affected by the housing crises. Let us not forget that the purpose of a commercial bank is to take rate risks, liquidity risks and credit risks on behalf of economic players. This is its economic role. Banks are moreover regulated for this purpose and are hence *a priori* better able to manage these risks than are households and small and medium-sized enterprises (SMEs), and are also better able to manage such risks than shadow banking, which is either unregulated or is poorly regulated and rarely has the level of professionalism of banks in this area.

Nevertheless, anyone who accepts fixed rates must accept heavy reliance on banks with regard to long-term rates on the assets in stock. Liabilities, on the other hand, are more dependent on short-term rates. In the event of a rate rotation, in particular for example, a fall in long-term rates and a rise in short-term rates, the margins of banks will be severely affected. However, a fall or a homothetic rise in rates should ultimately protect the bank margin by keeping the margin rate itself unchanged, regardless of the level of the rate curve. In France, remuneration of deposits largely depends on the regulated interest rates, which have a simple function: to move less quickly than market rates in order to soften their impact. Historically, they have in fact changed less quickly and less steeply, upwards as well as downwards. However, it is

LOW INTEREST RATE AND NEGATIVE INTEREST RATE POLICY: REASONS AND CONSEQUENCES FOR THE BANKS

the change in the pace of the downward movement between long-term interest rates and short-term interest rates, in particular the downward movement of the regulated rate which moves more slowly, which may present a problem. When interest rates rise, banks benefit temporarily. However, when they fall, this downward movement affects assets more quickly than liabilities and the net margin rate of the banks suffers, particularly as customers do not renegotiate their loan rates very rationally unless interest rates decline.

In general, a balance is struck over time, once the temporary movement has taken place and the margin rate has been re-established. However, the margin rate is affected during the downward movement. It improves during the upward movement.

In the current context, this is no longer the case as the short-term rate which represents the cost of deposits for the commercial bank, is close to zero and is therefore unable to fall any further (this is the zero lower bound), whereas the long-term rate, which represents most of the rates of the stock of loans, will continue to fall. The margin rate thus declines continuously, until the stock rate gradually reaches the very low rates of the new loans granted. And this deflected margin rate will persist until long-term rates rise again if short-term rates do not rise again at the same pace. Unless a decision is made to remunerate deposits at a negative rate, which is not the case in France, with the exception of the situation of institutional investors, banks will see a steep fall in their margin rate.

Even so, has that driven down the net interest margin of French banks to dangerously low levels in recent years? It should be borne in mind that the net interest margin accounts for around 50% to 60% of their net banking income ($\text{NBI} = \text{net interest margin} + \text{commission}$). The net interest margin is equivalent to the interest received on stocks of loans minus the interest paid on the deposits, as we have seen. It may be analysed quite simply as the growth between the volume of loans and deposits to which the margin rate and the actual margin rate are applied. If the margin rate declines, the earnings generated by the banks decline, all other factors being equal. However, there is the possibility of offsetting this loss caused by the effect of the declining margin rate with the effect of positive volumes. This is the challenge that faces banks nowadays. If aggregate demand for loans increases, in particular due to the declining rates, all banks may benefit; otherwise it is a zero sum game and banks will have to capture market shares from their competitors but the banks will generally lose. The CEB states that monetary policy has enabled

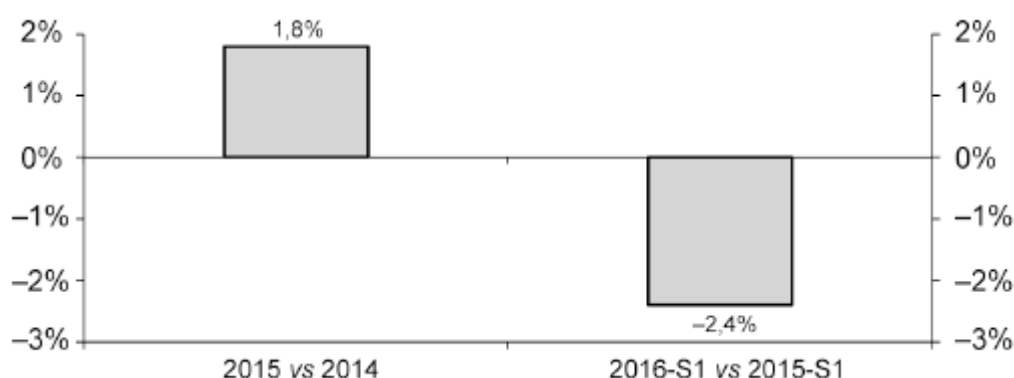
LOW INTEREST RATE AND NEGATIVE INTEREST RATE POLICY: REASONS AND CONSEQUENCES FOR THE BANKS

the aggregate volume of loans to increase sufficiently with effect from 2015 to more than offset the effect of negative rates. This statement is corroborated by the calculations below. But this volume effect has ceased to suffice since the first half of 2016¹.

Another factor linked to declining rates, also proposed by the CEB, comes into play as well in an attempt to offset the effect of negative rates. If the banks hold securities such as bonds, the decrease in rates and spreads enables them to make capital gains in the capital account or the profit and loss account, depending on their accounting method, in accordance with the management intentions of each bank.

Lastly, the decline in rates supports the economy, thereby driving down the cost of credit risk. The latter actually fell in 2015 and 2016, which contributed to the earnings growth of the commercial banks in the first half of 2016, despite a decline in their NBI.

Chart 1
Development of NBI in French Retail Banking
Aggregate banks (based on a very representative sample²)

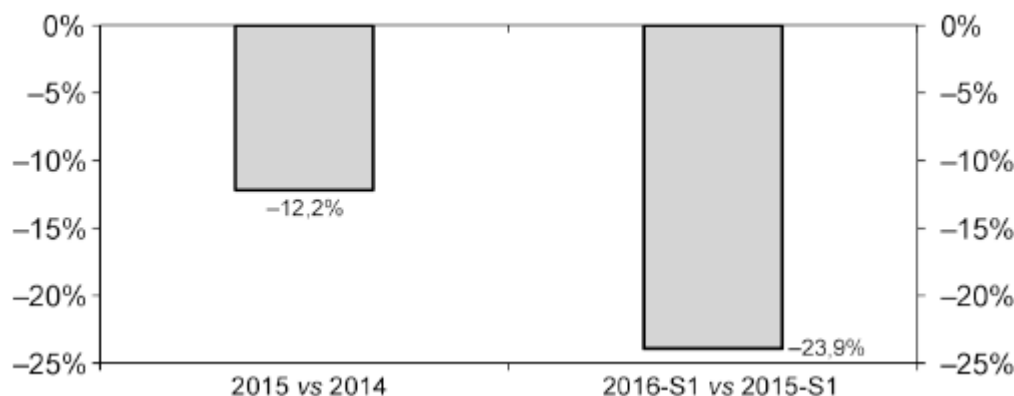


Source: calculations by BRED

The NBI generated by French retail banking grew in 2015: + 1.8%. But it displayed a negative trend in the first half of 2016: -2.4%. The volume effect more than offset the rate effect in 2015, but not in 2016.

LOW INTEREST RATE AND NEGATIVE INTEREST RATE POLICY:
REASONS AND CONSEQUENCES FOR THE BANKS

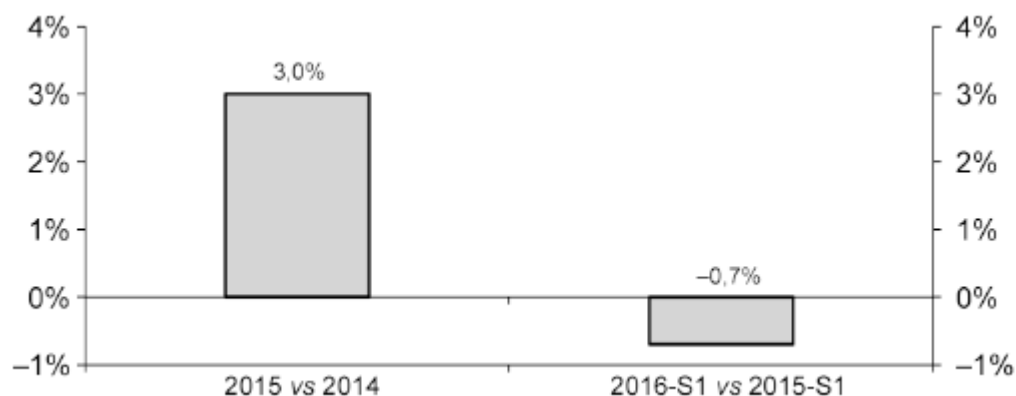
Chart 2
Development of the Cost of Risk in French Retail Banking
Aggregate banks (based on a very representative sample²)



Source: calculations by BRED

The cost of risk in 2015 declined in comparison to 2014 for all French banks in their commercial banking activity on French territory, with an acceleration of this decline in 2016. This decline helped to maintain earnings at a virtually stable level in the first half of 2016, despite an insufficiently positive volume effect to offset the effect of negative rates (cf. chart 3 below). However, if the effect were to persist, the cost of risk would not be able to fall indefinitely. Moreover, if the economic cycle were to go into reverse, the cost of risk would automatically increase, whereas rates could not then be driven upwards.

Chart 3
Development of Net Operating Income in French Retail Banking
Aggregate banks (based on a very representative sample²)



Source: calculations by BRED

LOW INTEREST RATE AND NEGATIVE INTEREST RATE POLICY: REASONS AND CONSEQUENCES FOR THE BANKS

Hence, if rates remained at their current level, the NBI would considerably accelerate its decline and net operating income would decline strongly, while we would see low levels of cost risk which would logically not continue declining.

In short, the monetary policy that has been implemented has enabled banks as well as the economy to revive growth, even weakly, by sustaining consumption and investment as well as by stimulating demand for credit by economic agents who were able to do so. Monetary policy has also prevented, first and foremost, catastrophic systemic risk and a deflation risk. However, it would not be possible to maintain these interest rates at such low levels for a prolonged period as they likely to trigger a housing bubble, and an equity bubble in fact, even if a bubble is not clearly detectable in the eurozone today, for example. Moreover, by substantially reducing the profitability of the banks over the long term in the future, such a policy, if were maintained for another few years, would ultimately restrict the supply of credit, and even jeopardise the banking system, and would in the end be very unfavourable for growth.

We should lastly add that very low rates will weaken many life insurers such as retirement funds and pension schemes in the long term.

It is thus not a question here of the usefulness or legitimacy of monetary policies, even if they are unconventional, implemented by the major central banks of developed countries, including the CEB. Quite the reverse, we have recalled why they were necessary.

However, these policies of maintaining very low rates, and even negative rates across a range of maturities, evidently also have their own limitations. In particular, they entail the risk of recreating equity bubbles, weakening life insurers and pension schemes and jeopardising the earnings of the banks and, sooner or later their financial health, which would then affect their ability to lend (at the very moment when capital requirements that are able to take the risks into account are growing rapidly), hence the growth target, particularly in Europe where the majority of funding of the economy is done through the commercial banks. We note a very gradual increase in long-term interest rates, recreating a normal rate curve, which could enable banks to increase their earnings while keeping rates fairly low.

Lastly, we conclude that it would be quite difficult, even *ex post*, to determine which monetary policy would have been better in the eurozone than the monetary policy that has been implemented since 2012.

LOW INTEREST RATE AND NEGATIVE INTEREST RATE POLICY: REASONS AND CONSEQUENCES FOR THE BANKS

The CEB has bought time to enable agents to deleverage more easily, but also to facilitate the implementation of structural reforms by the governments for which this proves to be necessary and are essential to increase potential growth rates, which not all governments have done to date.

Lastly, this policy adopted by the CEB should enable the eurozone to complete its institutional arrangements, as their incompleteness cost it so dearly during the systemic crisis that it went through in 2010-2012, namely until the famous “whatever it takes” by Mario Draghi. The essential additional institutional arrangements are well known, from genuine coordination of economic policies (stimulus here, decline in public expenditure there) to some elements of mutualisation of the public debt.

The CEB itself constantly explains that monetary policy per se is unable to do everything and emphasises the essential work that governments are expected to undertake. However, whatever happens or does not happen in this area, the risks inherent in very low interest rate policies, and even negative rate policies, which until then were below earnings, could if these policies had been implemented even longer, have started generating effects that would have exacerbated the crisis that was being combated.

NOTES

1. This phenomenon appears to prevail throughout 2016.

2. Credit union banks, savings banks, BNP Paribas – French retail banking -, Société Générale – French retail banking -, regional branches of Crédit Agricole, Réseau Crédit Mutuel (CM11), Réseau Crédit Mutuel, Crédit Mutuel Arkea, LCL

R E V U E D'ECONOMIE FINANCIERE

COMITÉ DE RÉDACTION

Présidents d'honneur

Jacques Delmas-Marsalet

Hélène Ploix

**

Thierry Walrafen, *Directeur de la publication*

Olivier Pastré, *Conseiller scientifique*

Xavier Mahieux, *Responsable éditorial*

Patrick Artus, *Directeur de la recherche et des études, NATIXIS*

Raphaëlle Bellando, *Professeur, Université d'Orléans*

Jean-Baptiste Bellon, *Président, Société française des analystes financiers*

Hans Blommestein, *Responsable de la direction de la dette publique et du marché obligataire, OCDE*

Christian de Boissieu, *Professeur, Université Paris I*

Jean Boissinot, *Direction générale du Trésor*

Pierre Bollon, *Délégué général, Association française de la gestion financière*

Arnaud de Bresson, *Délégué général, Paris Europlace*

Jean-Bernard Chatelain, *Professeur, Université Paris I, GdRE « Monnaie Banque et Finance »*

Jézabel Couppey-Soubeyran, *Maître de conférences, Université Paris 1 Panthéon Sorbonne*

Claude Diebolt, *Directeur de recherche au CNRS, Université de Strasbourg*

Sylvain de Forges, *Directeur général délégué, AG2R La Mondiale*

Jean-Louis Fort, *Avocat à la Cour*

Stéphane Gallon, *Directeur de la division études, stratégie et risques, AMF*

Ulrich Hege, *Professeur, Toulouse School of Economics (TSE)*

Pierre Jaillet, *Directeur général, Banque de France*

Frédéric Lobez, *Professeur, Université de Lille II, SKEMA*

Catherine Lubochinsky, *Professeur, Université Paris II – Assas*

Jean-Paul Pollin, *Professeur, Université d'Orléans*

Philippe Trainar, *Chef économiste, SCOR*

Natacha Valla, *Banque européenne d'investissement*

Gilles Vayssat, *Directeur général des activités fiduciaires et de place, Banque de France*

Rédaction : Sylvie Geinguenaud, *Secrétaire de rédaction*

16, rue Berthollet – Arcueil 3 – 94113 Arcueil Cedex

Tél. : 01 58 50 95 12

Télécopie : 01 58 50 05 17

Courriel : REF@aef.asso.fr

Site Internet : www.aef.asso.fr

L'Europe après 60 ans

Introduction

Traités de Rome et de Maastricht,
deux anniversaires à célébrer

HANS-HELMUT KOTZ

JEAN-FRANÇOIS PONS

De Rome à Maastricht et au-delà,
des principes pour consolider et faire
progresser le projet européen
FRANÇOIS VILLEROY DE GALHAU

Une réaction morale et intellectuelle est
indispensable pour préserver et amplifier
les acquis européens
MARIO MONTI

L'Europe doit s'attaquer de front au défi
anthro-politique
PASCAL LAMY

Le marché intérieur : du traité de Rome à aujourd'hui

Prudentes et courageuses : les tentatives
de l'Europe en faveur de l'intégration
HANS-HELMUT KOTZ
CHARLES S. MAIER

Un marché, une monnaie : un argument
erroné (*post factum*) ?
DANIEL GROS

De la première directive bancaire à l'Union
bancaire : l'Europe bancaire en construction
PIERRE-HENRI CASSOU

Les défis de l'Europe financière

Les banques européennes se retirent-elles
de la scène internationale ?
DIRK SCHOENMAKER

L'Europe de l'assurance et ses challenges
DENIS KESSLER

L'Union des marchés de capitaux : progrès
réalisés et prochaines étapes
OLIVIER GUERSENT

Le Brexit et le secteur financier en Europe :
bye bye London ?
JEAN-FRANÇOIS PONS

La finance, un enjeu stratégique pour l'Union
européenne dans le monde
SYLVIE GOULARD

L'Europe 60 ans après Rome : inachevée, à reconstruire, des nouveaux champs pour rebondir

Les conséquences économiques de *Mrs May*
et *Mr Trump*
JACQUES MISTRAL

Le défi des migrations : quelles options
pour l'Europe ?
AMELIE F. CONSTANT
KLAUS F. ZIMMERMANN

La zone euro en quête de coordination
AGNÈS BÉNASSY-QUÉRÉ

Rendre la mondialisation viable : les leçons
de l'Europe
BENOÎT CŒURÉ

Vers un marché unique numérique : faire
de la révolution numérique une opportunité
pour l'Europe
OLIVIER BRINGER
ROBERTO VIOLA

Chronique d'histoire financière

La Grèce dans une union monétaire : les leçons
à tirer de cent ans de régime de taux de change
MATTHIAS MORYS

Articles divers

Finance et politique : la bourse préfère-t-elle
la gauche ?
GÉRARD CHARREAUX

La politique de taux bas et de taux négatifs :
raisons et conséquences pour les banques
OLIVIER KLEIN

Les banques islamiques sont-elles
si islamiques que cela ?
Conséquences en matière de fonds
propres réglementaires
MOHAMMAD BITAR
PHILIPPE MADIÈS

ISBN 978-2-37647-006-9

ISSN 0987-3368

Prix : 32,00 €



