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Low Rates are Here to Stay

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Sovereign bond yields have fallen again since the beginning of 2019 to all-time lows in the euro zone, with a 30-year rate in Germany returning below 0 percent. It is thus nearly 25 percent of the European sovereign debt that offers a negative return but also 15 percent of the private company euro zone debt. Are these interest rate levels the result of a bubble on financial assets created and supported by the central banks? Or are they instead a reflection of a new balance that is likely to continue?

In the face of these very low returns, several voices, particularly among bank economists, have come forward to denounce their negative impact on the economy and the cost associated to banks and the ones with savings or fixed income. The theory goes like this—since rates were below nominal growth, financing conditions were very (if not too) accommodating and the maintenance of negative rates in Europe weakened European banks.

INTEREST RATE AT EQUILIBRIUM

The underlying question is whether a real interest rate equilibrium can remain negative in the long run. For some, if the real interest rate represents the rate of return on capital, negative interest rate is impossible by nature. Indeed, no company would accept to invest at a loss.

The theory explains that, under perfect competition and at equilibrium, the interest rate is the long-term growth rate. According to Solow's definition, a balanced growth is one in which the investment rate equals the savings rate with full employment of the factors of production. According to the economic literature, there would be an interest rate that would



balance supply and demand for loanable funds and keep the economy at full employment without generating inflationary pressures: this is the “natural” or “equilibrium” interest rate. In theory, this natural interest rate is closely linked to the trend growth rate of the economy (Cecchetti and Schoenholtz, 2015). The underlying idea is that an increase in growth leads to higher real returns on investment.

According to Ramsey's rule, the natural interest rate is equal to the sum of population growth and technical progress. The rate will thus depend on the incentive to save today to consume tomorrow in order to maximize its social welfare. The neutral rate can be defined as the rate at which growth is neither stimulated nor restricted by monetary policy. Thus, in the context of a balanced long-term growth model, the market rate should oscillate around the neutral rate over the cycle. The variation around the target would depend on the difference between the level of activity from its potential and inflation from its target.

However, the existence of a natural rate exists only in neo-classical growth models. Several economists, from K. Wicksell in the 19th century to researchers like Hamilton & Harris (2014), question the idea of a long-term value towards which the real interest rate should converge. They also reject the hypothesis of a stable relationship between the level of growth and the interest

Table 1
Average Real Interest Rates and Inflation by Century

Century	13th	14th	15th	16th	17th	18th	19th	20th
Nominal rate (%)	7.3%	11.2%	7.8%	5.4%	4.1%	3.5%	5.0%	3.5%
Inflation	2.2%	2.1%	1.7%	0.8%	0.6%	0.0%	3.1%	2.2%
Real rate	5.1%	9.1%	6.1%	4.6%	3.5%	3.5%	1.9%	1.3%

Source: P.Schmelzing (2018)

rate level, pointing out the impact of demographics, inflation trends, budgetary policy, asset price variation, but also technical progress and distortions in the income distribution.

Several studies suggest that the recent rate decline is not cyclical but is the consequence of the secular stagnation regime. According to a recent article by Summers and Rachel, over the past 30 years, real interest rates have declined by 300 basis points, reflecting a change in the balance between savings and investment, as a result of private sector transformations and rising public debt. While the rise in public debt, the rise in the cost of pensions and social security apply an upward pressure on interest rates, the decline in the need for investment in a regime of secular stagnation applied a higher downward pressure.

Noteworthy, the debates in the 1980s was on the historically high level of rates compared to the 1950–1970 era of great moderation, which had increased simultaneously in all developed countries. The rise in yields was then justified by the crowding out of private capital by the public debt, which would have discouraged private savings. The rise in interest rates would also have resulted from a drift in inflationary expectations (OFCE, 1986). At the time, Blanchard and Summers¹ rejected the explanation for the rise in U.S. budget deficits, considering that at the world level there was compensation for the expansionist policy of the United States by a tax contraction of their partners. However, they pointed to the upward revision of the profit forecasts of the companies to explain the concomitant rise in shares and rates.

LONG-TERM TREND TO LOWER RATES

In fact, rates have been raised only temporarily. Long-term historical analyses such as that of P. Schmelzing show that the fall in interest rates is not a characteristic of the post-crisis era, but instead is a secular trend. One of the explanations is the increasing integration of money markets with a lowering of the cost of liquidity. (See Table 1)

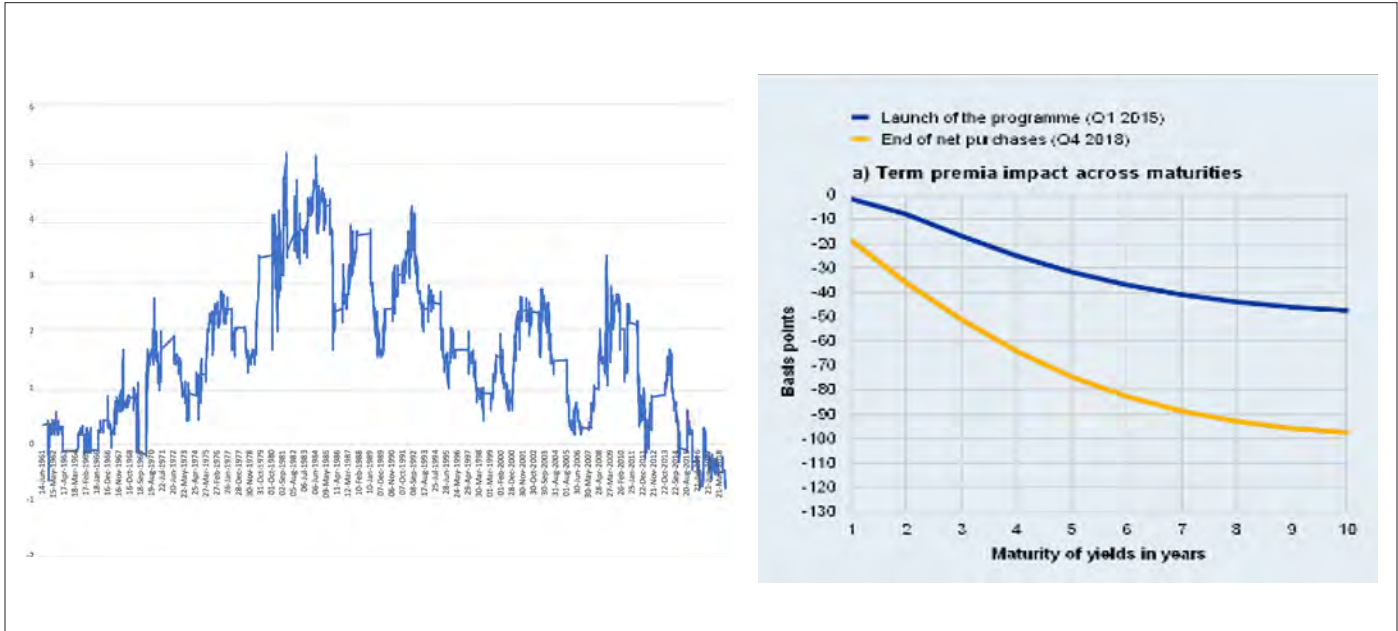
The neutral rate is, by nature, unobservable. Central banks, which have made it an essential tool of their monetary policy, periodically try to estimate it. The Fed has revalued downward its neutral rate between 2.25 percent and 2.50 percent. This assumes, given an inflation targeting around 2 percent, that the real neutral rate is now below 0.5 percent, well below the potential growth of the U.S. economy (still estimated around

2 percent). According to a recent paper by the ECB,² whose purpose is to review the various methods of estimating the neutral rate, the conclusion is that the neutral rate has been continuously declining since the 1980s in the wake of slowdown in growth and aging populations. Risk aversion and security seeking are additional factors. Estimates of European rates show a neutral rate in negative territory regardless of which model is considered.

These estimates are consistent with the studies on secular stagnation, which consider that the natural rate used to balance savings and investments, is negative³. The assumption of secular stagnation rests on the breaking of the approximate long-run equality between the growth rate and the real interest rate when inflation is permanently low. The Fed of New York believes over the long term that the term premium, the compensation required by the investor for long-term investment, is what allows long market rates and anticipated short rates to equalize.



Chart 1
Term Premium



Sources: New York Federal Reserve Bank (left)/ BCE, January 2019 monthly bulletin (right)

This term premium has been steadily declining since the mid-1970s and has become negative since 2012. (See Chart 1)

Similar analyses conducted by the Bank of Japan or the ECB lead to widely comparable estimates with negative term premiums and close to -100 bps over 10 years. This clearly highlights the excess demand for savings in the face of investment needs in a society where overcapacity and waste are plentiful.

THE NATURAL RATE

In the short term, the natural rate of interest is supposed to serve as a reference for central banks when they set their key rate. For the medium/long-term analysis, it is the rate at which production is at its potential level (production gaps close to zero implying low changes in inflation), or the one observed when the economy evolves on its potential growth path. For central banks, accepting that the neutral equilibrium rate is negative, makes it essential to anchor expectations of positive inflation. Otherwise, the risk is that monetary policy will be durably restrictive.

THE JAPANESE EXPERIENCE

The Japanese example, which experienced a demographic shock and a decline in potential growth earlier than the euro area, is very instructive. Despite a massive injection of money by the central bank into the financial system, liquidity has made little

progress in the real economy with weak credit demand and, above all, inflation expectations have remained sluggish. Underlying inflation has indeed fallen from 3 percent to 0 percent between 1990 and today, having only very temporarily reached 2 percent in 2013 following a VAT increase. It should be noted that per capita wages have fallen by an absolute 15 percent since 1997 despite rising productivity, rising employment rates and unemployment among the lowest in the developed world. The USA experiences very low unemployment, but sees only a moderate wage increase, which puzzles a few economists, including J. Powell. Thus, contrary to the theory, the reduction of the labor supply does not lead to a rise in wages and the constraints on the rate of use of the factors of production do not generate inflation. Hence inflation expectations are anchored at 0 percent

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Chart 2
Inflation Premium on Japanese Market



Source : Bloomberg, calcul CDC

and real rates are substantially above their equilibrium level. (See Chart 2)

If for the time being there is still no “unlocking” of inflation expectations in the euro zone or in the United States, the risk is real. Whereas inflation premiums in the euro zone are now close to their historical low and the ECB has stated that inflation will remain under its target over the horizon of its forecast. In the case of unlocking of inflation expectations, the monetary policy would lose any impact of economic cycle and the risk of a deflationary spiral will increase.

Given the factors behind secular stagnation and the structural imbalance between savings and investments, it appears that monetary policy is relatively inefficient. The fact that central banks abound in liquidity savings despite the sharp rise in public spending shows that they themselves do not believe a rise in inflation will happen because several factors (value creation

redistributed amongst agents, globalization, segmentation of the labor market) will structurally reduce it. The rise of savings is not only a consequence of low rates, but also due to a decrease of potential growth and an ageing population.

If low rates encourage debt and higher asset prices, central banks are forced to maintain this situation to prevent financial institutions from suffering significant losses, and therefore a resurgence of the financial crisis.

It is therefore necessary that financial institutions acknowledge the low-rate environment and thus gradually change their time horizon toward long term. It also involves reviewing most allocation models and yield requirements. In particular, insurers need to acknowledge that the low rate environment has secular drivers that can persist longer than they can stay solvent. A transition through regulation is required. ■

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ENDNOTES

- 1 Pourquoi les taux d'intérêt sont-ils aussi élevés ? Annales d'Economie et de statistiques N3 – 1986, O. Blanchard et L.H.Summers
- 2 The natural rate of interest: estimates, drivers and challenges to monetary policy. Occasional paper Series N217 – décembre 2018, C.Brand, M.Bielecki, A.Penalver
- 3 Transformer le régime de croissance», Rapport collectif pour l'institut CDC pour la recherche, octobre 2018

REFERENCES

- Blanchard et L.H.Summers (1986). "Pourquoi les taux d'intérêt sont-ils aussi élevés?" Annales d'Economie et de statistiques N3 – 1986
- C.Brand, M.Bielecki, A.Penalver (2018). "The natural rate of interest : estimates, drivers and challenges to monetary policy." Occasional paper Series N217 – Décembre 2018
- S.G.Cecchetti, K.L. Schoenholtz (2015). "Living with uncertainty: What central banks do when they don't know the natural rate." Money and Banking , 2 mars.
- Hamilton & Harris (2016). "The Equilibrium Real Funds Rate: Past, Present, and Future." IMF Economic Review, November 2016, Volume 64, Issue 4, pp 660–707
- L.H.Summers et L.Rachel (2019). "On falling neutral real rates, fiscal policy, and the risk of secular stagnation." Brookings Papers on economic activity, BPEA conference drafts, mars 2019
- Schmelzing, P. (2018). "Eight centuries of the risk-free rate: Bond market reversals from the Venetians to the VAR-shock." Bank of England, Working Paper 686 (March 2018 update)
- M.Aglietta et alii (2018). "Transformer le régime de croissance." Rapport pour l'Institut CDC pour la Recherche, 1er octobre 2018