THE INFLATION LINKED BONDS

GOLIJAN DRAGAN, ŠOJA TIJANA

Faculty for Education of the Executives, Novi Sad, Serbia

Abstract: *Bonds linked to inflation in recent years have experienced significant growth. It can be argued that their growth, and quite surprising, because this type of bond is not new to financial markets by assuming that their development was initiated in the period historically low global inflation and inflationary expectations. Starting from the fact that our financial market is still, it can be said in its infancy, any financial instrument, which comes from the traditional framework, is a novelty. Firstly, there is a little talk about them, is poorly studied and little is known about them.In this context, this paper provides a selective review of key agruments related to indexed bonds. Firstly, it provides a selective overview of the key starting points for and against issuing bonds linked to inflation and the factors that encourage their growth. On the other hand, illustrates the use of these instruments in order to better track the activities of such investment and expectations of inflation movements.*

Keywords: *bonds, inflation indices.*

1. INTRODUCTION

Bonds linked to inflation certainly can not be considered as a new financial instrument, if we start from the fact that bonds are the first of its kind issued by the State of Massachusetts 1790th year. The nominal value of bonds and the interest rate at the time of their original broadcast was linked to price movements or "bundle". Economic reasons for broadcasting these bonds, as well as analysis and approximation system of insurance investors real return, but it was very well developed in the nineteenth century.

However, our circumstances are different. Bosnia and Herzegovina is a classic system of issuing bonds, which carry very high yields, as a result uncertainty investment in it, while not offering any protection mechanism for investors. It is therefore necessary to work on refining and improving financial instruments. On the other hand, it is important that the general public is included in trend and trading systems in developed financial markets, especially in the instruments traded. Of course, inflation linked bonds are one of those instruments.

The last few years are evident changes in the relative positions in bonds linked to inflation in the global financial scene. This type of bond market has experienced significant growth not only in variuos breanching Europe and the euro area than in other major bond markets. Thus, bonds linked to inflation and a growing role in the management of public debt in developed countries.

The purpose of this paper is twofold. The right prom, a selective review of research and the key arguments for and against issuing bonds linked to inflation, which should clarify the current growth of investments in these bonds. On the other hand, will show the potential benefits of this type of bond in the sense of future inflationary expectations.

2. DEVELOPMENT OF BONDS RELATED TO INFLATION

The bonds are linked to inflation in recent years experienced a boom. It must be emphasized that the bonds are linked to inflation, much less innovative than they really meant it. The perception that the bonds are inflation-related news, it comes with are the same as were used rarely in the history of finance.In the period after World War II, there were only a few situations bond issues related to inflation, which can be categorized into three broad categories.

The first includes countries that have experienced high and volatile inflation, which was also developed this type of bond - related to inflation, which is in such situations was the only possibility of long-term investment in bonds. Countries that have emtovale these bonds, in such circumstances are: Chile, 1956., Brazil 1964th, Colombia 1967th Agrentina and 1973rd the[1].

France and Finland have also performed the show of such bond immediately after World War II and continued all the same until 1968. when the “indexing” of financial instruments has become prohibited by law[2].

Italy has issued these bonds 1983rd year, whose maturity was 10 years at a time when it was not possible to issue bonds with longer maturities[3]. Countries like Israel and Iceland also have a long history in the show of indexed debt.

The situation in the second group of countries began issuing indexed debt in the 1980's and early 90's it was last century. It is important to note that these countries did not use indexed bonds as necessary, but as a result of policy and political choices were doing. Countries that have performed the show of indexed debt in this form were the United Kingdom 1981st years, Sweden 1994th, New Zealand and the 1995th year[4]. The primary issue of these bonds was in the context of more or less credible deinflatorne policy. Emissions of these bonds was used as an incentive but also the credibility of government policy commitments to reduce borrowing costs capitalized by the excessive inflation expectations in the market.

The third group of countries overlaps with the previous category and is a group of industrial countries that have developed types of indexed debt in the 90's in the first ten years of the year 2000, and in a setting quite low and stable inflation and inflation expectations. Besides agrumenata listed for the second group of countries, in this case causes the emission of these bonds is usually related to the social benefits of this type of investment.Issuing bonds linked to inflation was presented in part as a step towards the completion of the financial markets, providing effective protection against inflation over the long term (especially in the context of pension funds and their management in the financial market).

[1]Alonso, F., R. Blanco and A. del Río, (2001), “Estimating inflation expectations using French government inflation-indexed bonds”, Banco de España, Working Paper Series No 2001-0111

[2]Barr, D.G. and J.Y. Campbell (1997), “Inflation, real interest rates, and the bond market: a study of UK nominal and index-linked government bond prices”, Journal of Monetary Economics, 39(3), pp. 361-383

[3]Barclays Capital (2006), “Global inflation-linked products: a users’ guide”, January

[4]Campbell, J. Y. and R. J. Shiller (1996), “A scorecard for indexed government debt”, National Bureau of Economic Research, Working Paper Series No 5587.

Among the countries that are significant for this group are Canada, who performed the show 1991st year, the U.S. 1997th year, Francuska 1998. years, Greece and Italy 2003rd years, Japan 2004th year, and Germany in 2006[5].

Although the global market-indexed bonds include a number of developing countries like South Africa, the main market of bonds tied to the developed countries, even when they recorded a relatively low and stable inflation and inflation expectations. We note however that this group is even narrower, and that includes several major issuers of these bonds and to Australia, Kanda, Sweden, United Kingdom, Japan and many countries in the eurozone - and now France, Italy, Greece and now days Germany.

2. DEVELOPMENT OF BOND MARKETS RELATED O INFLATION IN THE EUROZONE

Emissions of indexed debt in the euro area began issuing these bonds, 1998.year, in France, when tied to the same consumer price index (CPI), which would exclude cigarette prices. Initially, investors were mainly domestic, but later expanded to the entire euro area, and to those investors who were willing to accept the system of inflation-related investment in France.

At that time the ECB has defined price stability in the euro area based on the harmonized index of consumer prices (HICP), an index that is published by Euroststa. Based on this index accounted for inflation in France, the structure of this index, as a result of lack of data for the index before 1999[6].

In any case, there is a growing perception that it would be difficult for the market with different indices, with significantly different struktirom inflation index, to develop these markets, and thereby emit indexed bonds. The growing imbalance between supply and demand for indexed bonds in the euro area was found in bonds issued by the Ministry of Finance of France when they decided to broadcast a new round of indexed bonds, ten-year, related to the HICP index. However, it must be noted that in accordance with the laws of France decided to perform emission-indexed bonds, related to the HIPC, but excluding the price of cigarettes[7]. Later this became the market benchmark index in the euro zone, from where it was used as a reference index for all bonds that are tied to inflation, and this situation today. Also, it has become the standard for other financial products such as swaps related to inflation, futures linked to HIPC and economic derivatives related to inflation. The first coupon bonds are related to the euro inflation index was broadcast by the French Ministry of Finance in October 2001., with maturity in July 2012. After a relatively slow start in this market began to record a significant increase in growth during 2003 year. After that, the three countries from the euro area have decided to broadcast this type of bond. These are Greece, Italy and Germany and several other eurozone governments, which began with the consideration of such bonds. Italian, Greek and German bonds share most characteristics with double bonds, in the sense that they are related to the HICP index excluding the prices of cigarettes and also guarantee the purchase of a minimal amount of values, thus providing protection against deflation. However, the bonds of Italy and Greece

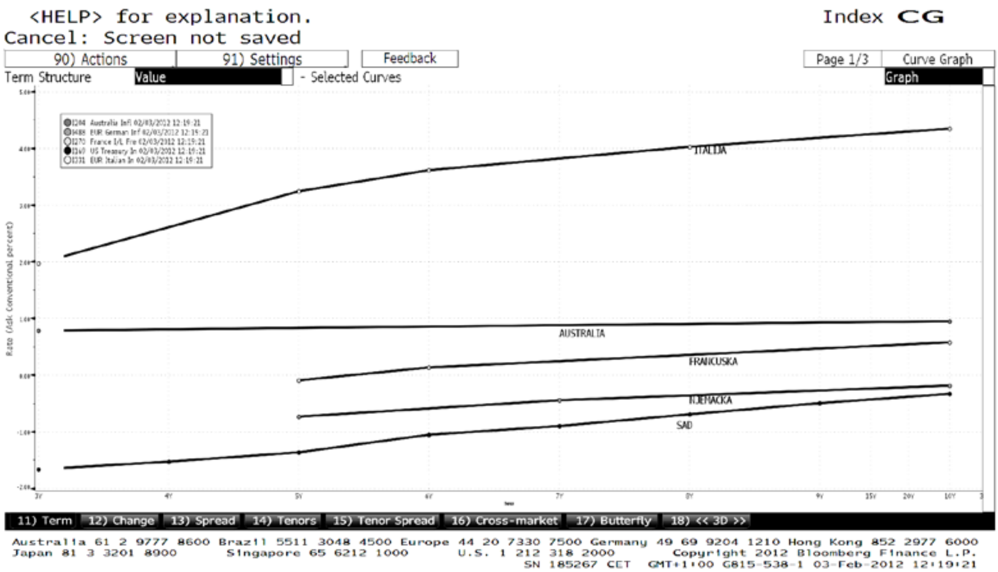
[5]Deutsche Bank (2001), "Euroland inflation-indexed OATs: a new instrument for broader inflation protection".

[6]Evans, M. (1998), "Real rates, expected inflation and inflation risk premia", *Journal of Finance*, 53(1), pp. 187-218

[7]HIPC – include prices of cigarettes

were wearing different credit ratings of French and German government bonds and the yields and the same were higher. In addition, the coupon payments for Italian bonds had a semi-annual frequency, unlike the French who have paid the annual coupons.

Figure 1: Yields on indexed odveznice maturity of 2 to 30 years



Izvor: Bloomberg

3. REASONS TRANSMISSION OF INDEXES BONDS

The first standard argument in favor of the issue of indexed bonds lie in the fact that these governments by reducing financing costs. The logic is that if investors are willing to pay a certain level of premiums, in exchange for protection against inflation, then the premium will be reflected in lower yields, the government will pay for the amount of issued debt. Issuers have raised these arguments to justify their decision to broadcast these bonds that the government act to reduce financing costs. This argument relies on the argument that if the government's broadcast of the debt in the form of indexed bonds might earn less than inflation, and therefore the policy of low inflation has become much more credible. In this regard, it is important to note that the risk of high future inflation goes against the interests of issuers of indexed bonds - just as these bonds protect investors from inflation risk, they are, as issuers are exposed to that risk. Of course, this theoretical argument could be relevant in the past, but today, when the central bank has an independent role that is widely accepted, these stands to lose value. Ex post real cost savings to finance the debt of governments that are broadcast indexed bonds may be the result of lower inflation risk premium, but investors can also make some mistakes in forecasting inflation.

Another argument in favor of broadcasting such bonds is that it is precisely in this way allows the matching of assets and liabilities of government finances. This agrument is in a certain helpfulness, a mirror of the previous argument. A large share of government revenue is de facto more or less indexed to inflation, because the taxes are charged nominally[8]. Value added tax is probably the most obvious example of de facto indexed income, but income taxes, taxes and so on. Essentially follow the same logic. Emission of indexed liabilities because it allows the gap between assets and liabilities to be reduced.

4. INVESTORS AND INDEXES BONDS

Investors have two main reasons to buy indexed bonds. The first and most obvious of course is that it is in this way provides protection against inflation. There are also arguments that the excess of indexed bonds, since there are other ways that investors can protect themselves from the risk of price movements unesceptive. Keeping written treasury indefinitely, real assets, other currencies and the like, causing partial protection against inflation, but not one of them, if they hold long or be combined in a portfolio, without causing a stable and effective protection against the risk of inflation in the long time. In accordance with the preceding arguments, the idea occurred to the standard portfolio diversification, there are benefits to households and investment in indexed bonds if there are uncertainties about future inflation. Fisher (1975) is partly strengthened the argument supporting the government and the other a program of indexed bonds. Similarly, he argued that the benefits of diversification for investors, which is justified by the payment of risk premiums[9].

5. CONCLUSION

Bonds linked to inflation has a long tradition of existence, however, recently gaining in importance. Their essence is that it is in this way ensures the investor of its investment impairment, in terms of rising inflation. It can be concluded that investment in indexed bonds with longer maturities, one of the best role of investor protection system. Although today there are many different options heging risks and returns of investors, we can say that this type of bond is one of the most useful. In our conditions, there is still no such emisionsystems, but with the development financial markets can preserve the instruments and the development of modern financial markets.

REFERENCES

[1] Alonso, F., R. Blanco and A. del Río, (2001), “Estimating inflation expectations using French government inflation-indexed bonds”, Banco de España, Working Paper Series No 2001-0111.

[2] Barr, D.G. and J.Y. Campbell (1997), “Inflation, real interest rates, and the bond market: a study of UK nominal and index-linked government bond prices”, Journal of Monetary Economics, 39(3), pp. 361-383.

[3] Barclays Capital (2006), “Global inflation-linked products: a users’ guide”, January.

[8]Emmons, W. R. (2000), “The information content of Treasury Inflation-Indexed Securities”, Federal Reserve Bank of St Louis, *Review*, November/December, pp. 25-37.

[9]Fischer, S. (1975), “The demand for index bonds”, *Journal of Political Economy*, 83(3), pp. 509-534.

[4] Campbell, J. Y. and R. J. Shiller (1996), “A scorecard for indexed government debt”, National Bureau of Economic Research, Working Paper Series No 5587.
[5] Deutsche Bank (2001), “Euroland inflation-indexed OATs: a new instrument for broader inflation protection”.
[6] Evans, M. (1998), “Real rates, expected inflation and inflation risk premia”, *Journal of Finance*, 53(1), pp. 187-218.
[7] Emmons, W. R. (2000), “The information content of Treasury Inflation-Indexed Securities”, Federal Reserve Bank of St Louis, *Review*, November/December, pp. 25-37.