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A More Effective Euro Area Monetary Policy than OMTs – Gold-Backed Sovereign Debt

Given the shortcomings of the current responses to the sovereign debt crisis in the eurozone, the author proposes utilising national gold reserves as collateral for government debt. Gold backing would be quite attractive to bond investors and would significantly ease the burden of high sovereign debt yields, particularly in Portugal and Italy. Moreover, it would achieve this without adding further risky assets to the European Central Bank's balance sheet and thereby transferring credit risk to Northern European countries.

The European Central Bank opened its third round of secondary bond market purchases on 6 September 2012. Whether they will deliver a permanent reduction in bond yields in Southern Europe is highly uncertain. If the ECB's latest sovereign bond purchase programme consisting of Outright Monetary Transactions (OMTs) fails, then Europe's options look grim. Austerity and growth programmes have not met expectations, and the outlook is further clouded by the fact that the funds available from the IMF and EFSF/ESM are dwindling as a result of other bailouts. Europe is running out of time and options.

The now terminated predecessor of the OMTs, the Securities Market Programme (SMP), was already seen by many as a de facto fiscal transfer from the North to the South and, moreover, a transfer made without democratic consent. By showing a willingness to buy the debt of poorly performing countries, the SMP was seen to reduce incentives for necessary long-term reforms. In addition, although the ECB tries to "sterilise" these transactions, this is not an exact science, leaving a risk of a higher money supply fuelling inflation.[1]

Alternatively, government debt could be securitised, for example, with gold reserves. This could serve the same objectives as the ECB's bond purchase programmes, but without the associated shortcomings. For example, Italy and Portugal have gold reserves of 24 and 30 per cent of their two-year funding requirements respectively. Using a portion of those reserves as leveraged collateral would allow them to lower their costs of borrowing significantly. Such a strategy would clearly raise legal issues, but so did the ESM, SMP and OMT.

The breakdown of the monetary policy transmission mechanism

The sovereign debt crisis is eroding long-standing assumptions around sovereign debt risk. In developed markets, the rising burden of public debt combined with low economic growth is raising concerns about the long-term ability of some euro area sovereigns to repay.

For some countries, the credit spreads of their debt financing costs have increased significantly. This is hampering the so-called monetary policy transmission mechanism. Conversely, changes in long-term sovereign bond yields feed fluctuations in corporate bond yields and bank lending rates. As a reaction to losses from significant declines in sovereign bond prices, consumers tend to enhance their precautionary savings, which in turn works against the intended stimulus to private consumption from monetary policy easing.[2] What is more, some sovereign bonds have recently been exposed to severe haircuts and, as a consequence, the refinancing capacity for all sovereign bonds has become smaller. The volume of available collateral in the form of government bonds has shrunk, which has curtailed the refinancing opportunities of commercial banks. The price corrections of sovereign debt also exert-

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1 A. Belke: Debt Mutualisation in the Ongoing Eurozone Crisis – A Tale of the 'North' and the 'South', in: S. N. Durlauf, L. E. Blume (eds.): The New Palgrave Dictionary of Economics, Palgrave Macmillan, http://www.dictionaryofeconomics.com/article?id=pde2013_D000273, 10 April 2013.

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2 B. Cœuré: The Euro Area Sovereign Debt Market: Lessons from the Crisis, Speech delivered at the 12th IMF Annual Forum on Managing Sovereign Risk and Public Debt: Managing Sovereign Debt: A Seismic Shift in Demand and Supply Dynamics?, Rio de Janeiro, 28-29 June 2012; European Central Bank: Monthly Bulletin, Frankfurt/Main, September 2012, pp. 7-10.

ed an immediate negative effect on the assets on banks' balance sheets and, hence, on the risks markets attach to them. This works against the refinancing necessities of commercial banks. What is more, it has the potential to serve as a significant impediment to the provision of loans to the real sector of the economy.[3]

Although the ECB's longer-term refinancing operations are helping to address the current liquidity crisis for weaker banks, it does not directly address sovereign solvency issues. The risk of default remains with the banks.[4] Sovereign debt still remains on the balance sheets of banks. And there is a collateral top-up requirement if the bonds pledged fall in value or default. This has prompted the ECB to introduce controversial non-conventional monetary policy tools, such as the SMP and its successor, the OMTs.[5]

Securing Europe's debt with gold

In aggregate, the euro area holds 10,792 tonnes of gold. This represents 6.5 per cent of all the gold that has ever been mined.[6] This prompted some economists to propose that eurozone governments (not only the financially distressed ones) should sell some of their gold.[7] Beginning in 2006, the value of gold started to soar (though it has now lost 50 per cent of its value since its August 2011 peak). A popular view in 2011 was that the time was right for euro area member countries looking to secure an unanticipated windfall gain to sell some of their gold reserves – for instance, to pay interest on their sovereign bonds.[8]

However, this would have been a mistake then and would remain a mistake now. Apart from the fact that a massive dump of gold would dampen its price, euro area debt woes are so large that gold sales would only scratch the surface of the problem.[9] As of July 2012, the gold holdings of the financially distressed euro area countries would account for only 3.3 per cent of their central governments' total outstanding debt.[10]

Euro area member countries should instead seek to securitise part of their holdings through the issuance of sovereign bonds backed by gold. This could be enacted either in a rather simple way or in several tranches of different risk levels. The main point in both variants is that gold would serve to provide sovereign bonds with an additional level of safeness – and thus comfort investors who no longer give credence to euro area government balance sheets.

Materiality of gold reserves

Using gold as collateral would not work for all countries, but it would for some of those most in need. France and Germany hold significant reserves but enjoy low unsecured borrowing costs. Greece, Ireland and Spain, on the other hand, do not hold enough gold for it to be a viable solution. Italy and Portugal, however, hold gold reserves of 24 and 30 per cent of their two-year funding requirements respectively. This could have a material impact on their debt-servicing costs (Figure 1).

Gold as collateral: historical experience

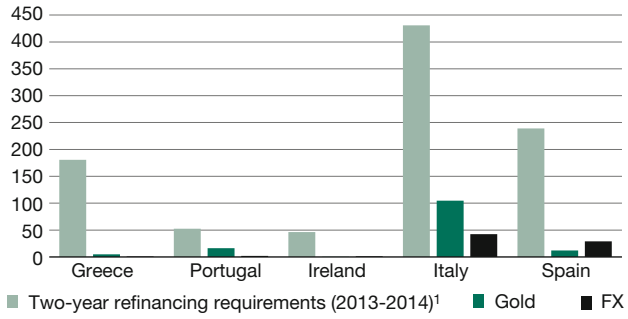
Countries have previously utilised collateral schemes involving gold on quite a few occasions. In the 1970s, for instance, Italy and Portugal employed their gold reserves as collateral for loans (direct loans, not bonds) from the Bundesbank, the Bank for International Settlements and other institutions like the Swiss National Bank. In 2008, Sweden's Riksbank used its gold to raise funds and provide additional liquidity to the Scandinavian banking system.[11]

Gold-backed bonds could help in some respects but would not be a full and all-comprising solution. Questions arise, for instance, over the unintended impact they would have on unsecured debt yields. Moreover, there is scant evidence that the idea has received any significant support from policy makers thus far. Even if euro area political leaders ultimately accepted the idea, significant legal obstacles would need to be overcome, most notably connected with the fact that a large share of the gold is held by central banks and not by treasuries.[12]

Recently, exchanges like LCH.Clearnet, IntercontinentalExchange and the Chicago Mercantile Exchange have increasingly begun to accept gold as collateral for margin require-

3 Ibid.
4 A. Belke: 3-Year LTROs – A First Assessment of a Non-Standard Policy Measure, Briefing paper prepared for presentation at the Committee on Economic and Monetary Affairs of the European Parliament for the quarterly dialogue with the President of the European Central Bank, Brussels, March 2012.
5 For a deeper assessment of the status quo and these programmes, see A. Belke: A More Effective Eurozone Monetary Policy Tool – Gold-backed Sovereign Debt, Briefing paper prepared for presentation at the Committee on Economic and Monetary Affairs of the European Parliament for the quarterly dialogue with the President of the European Central Bank, Brussels, September 2012; and A. Belke: Debt Mutualisation…, op. cit.
6 J. Farchy: Case for Gold in the Eurozone Bailout, Financial Times, 22 November 2011.
7 See, for instance, R. Prodi, A. Quadrio Curzio: EuroUnionBond, Here Is What Must Be Done, Il Sole 24 Ore, 23 August 2011.
8 J. Farchy, op. cit.; L. Pleven: All That Glitters…Will Not Solve Europe's Debt Woes, Financial Times, 14 December 2011.
9 C. Alcidi, P. De Grauwe, D. Gros, Y. Oh: The Future of the Eurozone and Gold, Centre for European Policy Studies, CEPS Special Reports, Brussels, 2010.
10 World Gold Council: Gold's Role in Solving the Euro Crisis, http://www.gold.org/government_affairs/new_financial_architecture/gold_and_the_eurozone_crisis/golds_role_in_solving_the_euro_crisis/.
11 J. Farchy, op. cit.; World Gold Council, op. cit.
12 J. Farchy, op. cit.; G. Tett: Time for Eurozone to Reach for the Gold Reserves?, Financial Times, 30 August 2012.

Figure 1
Refinancing requirements and reserves
in billion euros



[1] Includes refinancing needs of each country and forecast public deficits.

Sources: Bloomberg; and World Gold Council as of July 2012.

ments in derivatives trades.[13] In addition, the Basel Committee on Banking Supervision issued a working paper last year in which it suggested that gold should be one of six items to be employed as collateral for margin requirements for non-centrally cleared derivatives trades, alongside assets such as treasury bonds.[14]

Such moves taken together suggest that a creeping change of attitudes is underway. This evolution owes less to the desirability of gold per se than to the perceptions of increased risk and the undesirability of other allegedly "safe" assets such as sovereign bonds. This pattern will probably not be reversed anytime soon.

Estimating the yield reduction of gold-backed debt

Gold reserves are not typically considered in sovereign yield analysis under normal conditions; consequently, the chosen bond structure would need to offer very explicit risk reduction in order to hold significant benefits. Sovereigns have historically sought to retain their gold reserves and prefer to default on debt obligations rather than sell reserves. Examples of this include Argentina and Russia.

It can be shown that the gold backing of sovereign debt reduces the annual yield, thus supporting the monetary transmission mechanism. Clearly, the functioning of this mechanism would be improved in the short run, since the yields on government bonds – as a key reference point for other interest rates – would fall significantly due to the sharply reduced risk premia of gold-backed bonds. In the case of Portugal, for instance, this would account for several percentage points on five-year bonds. The hedge that the gold would provide against a default would surely attract investors such as emerging market governments and sovereign wealth funds. If a country such as Portugal or even Italy were to default, the price of gold, especially if it is denominated in euros, would skyrocket.[15]

To show this for the example of Portugal, we developed a top-down model to quantify the change in yield when sovereign debt is backed by gold (see Table 1). The credit risk characteristics of bonds are driven by three main factors: the *probability of default* (PD), the *expected unsecured recovery rate* in the event of default and the *collateral/guarantee recovery* in the event of default. The yield rate is modelled as *risk-free rate* + *risk premium*, with the risk premium functioning as a proxy for the compensation for the credit risk of the asset and calculated as PD*(1 - *total recovery rate*). Financial stress on a sovereign leads to an increase in its bond yields as the severity of the crisis translates into an increase in the risk-free rate, an increase in the probability of default and a decrease in the expected recovery rate in the event of default. In the following, we give an illustrative analysis of the issues.

The logic behind the calculations runs as follows. We begin with the estimated annual yield of unsecured debt. In this example, we are looking at a five- or six-year bond and – as a starting point – a hypothetical distressed yield of 10% (Assumption 1). Then we look at an equivalent credit default swap rate to calculate an annual probability of default (Assumption 2). Next, we calculate recovery in the event of a default. Historically, this has been 30-80%, so we assume 50% (Assumption 4). Total recovery of unsecured debt in a default would then be 50%, while the annual likelihood of default is 16%. Therefore, the risk premium would amount to 8% (50 * 0.16). Adding this to the risk-free rate of 2% equals a 10% yield.

Now we consider the case of secured debt and compare it to unsecured debt using a similar calculation. We begin by taking the euro risk-free rate, which is conservatively estimated at 2%. We assume the risk of default is 25% lower, due to the disincentive of losing gold collateral, and now amounts to 12% (Assumption 3). We also assume now that total recovery in the event of default is increased due to the partial gold backing. We then calculate the overall recovery rate using the assumptions of 100% recovery of the gold element and 50% recovery of the rest in the partially collateralised structure. The risk premium can be calculated by multiplying the probability of default by the loss given default (1 - recovery rate). Adding the risk premium to the risk-free rate provides the estimated annual yield.

13 World Gold Council, op. cit.
14 Basel Committee on Banking Supervision: Margin requirements for non-centrally cleared derivatives, Consultative Document, Board of the International Organization of Securities Commissions, Basel, July 2012.
15 D.G. Baur, B.M. Lucey: Is Gold a Hedge or a Safe Haven? An Analysis of Stocks, Bonds and Gold, in: The Financial Review, Vol. 5, No. 3, 2010, pp. 217-229; N. Saidi, F. Scacciavillani: Gold in the New Financial Architecture, Economic Note, No. 13, December 2010; J. Farchy, op. cit.

Table 1
Yield differential of gold-backed sovereign bonds: the case of Portugal
in %

Parameters	Stress-unsecured sovereign bond	Gold-backed facility with 33% collateral	Gold-backed facility with 50% collateral
Gold-secured portion	0	33	50
Estimated annual yield	10[a]	6	5
Risk-free rate	2	2	2
Risk premium	8	4	3
Annual probability of default	16[b]	12[c]	12[c]
Total recovery after collateral		66.7	75
Expected unsecured recovery	50[d]	50	50
Gold collateral recovery (approximate)		100	100

Note: Assumptions: [a] Stand-alone unsecured yield, e.g. from a five-year Portuguese bond yield. [b] Based on five-year credit default swap value. [c] Based on an assumed 25% PD reduction in a gold-backed structure. [d] Sovereign default recoveries average 30-80% (depending on debt size and bargaining power); we assume a 50% conservative average.

Source: Own calculations.

A Portuguese bond which is 33% and 50% collateralised by gold (see Table 1) obviously implies that it only collateralises part of the country's two-year needs. If all bonds were collateralised, the percentage of collateral backing would have to be reduced to something below 30%. In this case, the total recovery after accounting for the collateral is 35% (i.e. (1 - 0.3) * 0.5), and the risk premium amounts to 4.2% (i.e. 0.35 times 12). The estimated annual yield then is 6.2%.

Legal practicalities

Gold backing has legal and political implications.[16] The first critical issue is *reserve ownership*. In most countries, gold reserves are held and managed by central banks rather than governments. Specifically, in the euro area, gold reserves are managed by the Eurosystem, which includes all member states' central banks and the ECB.

The second issue is the *independence of central banks*. National central banks must remain independent of governments in pursuit of their primary objective of price stability (Article 130 of the TEU). The Treaty expressly prohibits the direct financing of governments by central banks. Gold backing is likely to raise questions as to whether this represents a breach of the prohibition on monetary financing of governments by central banks (Articles 130 and 123 of the TEU).

16 For additional information, see World Gold Council, op. cit.

The third issue is related to the *limited potential of gold reserve sales*. There are longstanding gold sale limits which are valid until 2014. The Eurosystem central banks are signatories to the 3rd Central Bank Gold Agreement, which restricts net annual sales of gold reserves to a combined 400 tonnes.[17] A number of other major holders – including the US, Japan, Australia and the IMF – previously announced that they would abide by the agreement and would not sell additional gold in the same period.

European legislation may need to be amended to accommodate a gold pledge for sovereign debt. This could be done via an amendment to the Treaty establishing pledged gold as segregated from central banks in the Eurosystem and other national banks.[18]

Disappointing results from bond purchasing programmes – a case for gold backing

The dependence of Italian, Spanish and French commercial banks on financing through the ECB is now significantly higher than before. The larger this share becomes, the more demanding it will be for Southern euro area banks to tap other methods of financing, especially in consideration of the fact that the ECB enjoys a de facto preferred creditor status. Finally, emancipating the banks from ECB funding may turn out to be more and more complicated. In July 2012 alone, deposits of approximately €75bn left Spain and partly landed in Germany (where the money supply is increasing more rapidly). It is clear that a huge dimension of capital flight from the South – funded by the ECB printing press – must also be dealt with.[19]

After Draghi's September 2012 announcement of the OMT programme, sovereign bond yields in Southern euro area member countries went down. However, this should not necessarily be interpreted as a sign of sustainable recovery. On the contrary, due to the toxic debt instruments on the ECB's balance sheet, there is a huge degree of path dependence: in order to defend the value of its ever riskier assets, the ECB is forced to stand ready with ever larger rescue packages – and the ECB is very credible in defending its own fate. For investors such as Goldman Sachs, Blackrock and other hedge funds, it is thus a quite safe bet to invest in the financially distressed euro area member countries' bonds for the time being. In other words, it could be that in the months to come there will be silence on the sovereign bond yield front – but for the wrong

17 See http://www.ecb.int/press/pr/date/2009/html/pr090807.en.html.
18 For details, see e.g. R. Smits: Innovative Ways Out of the Crisis: Can Gold be Used as Collateral by EU Member States?, Hoofdorp, 2012, http://renesmits.eu/Innovative ways out of the crisis - use of gold as collateral_31 October 2012.pdf.
19 A. Belke: EZB-Bazookas sorgen für Börsen-Strohfeuer, Handelsblatt Online, 4 September 2012.

reasons. What is more, the ECB's policies also create financial repression and fiscal dominance.[20]

Against this background, it is clear that even ECB government bond purchases cannot be expected to reduce the borrowing costs of its governments in a systematic fashion – quite the opposite.[21] If anything, they put downward pressure on the euro and favour the euro area's core exporting country, Germany. This adds to the steadily increasing lack of structural convergence in the euro area. Persistently high bond yields lead to a divergence and fragmentation of the euro area member states. By continuing to flood the economy with money, the ECB risks that any specific monetary policy measure will no longer have a uniform effect on all euro area economies. If the impression among outside investors grows that the current monetary policy stance is easing the pressure for reform in the problem countries, and consequently, the eurozone slowly fragments further, there is a real risk of these countries being forced to leave the eurozone.[22]

If the ECB measures announced on 6 September 2012 do not deliver a permanent reduction in bond yields in the South, policy makers should look for a "last resort" solution, since the failure of austerity programmes to live up to expectations would appear to indicate that the supply of alternative options is exhausted. Additionally, international support from the IMF, the EFSF and similar institutions is stretched as a result of other bailouts.[23]

The point in time may have come to use valuable and fungible assets such as gold to provide the fiscally troubled Southern European countries with temporary but crucial bridge financing in pursuit of a complete long-term solution. To be explicit, such a proposal does not address the gold backing of euro or stability bonds, whose usefulness is conceded by the European Commission only in the very long perspective.[24] Nor is it directly related to the 2011 proposal of debt redemption funds by the German Council of Economic Advisors, according to which the EFSF and ESM resources should ultimately be increased by covering bonds with gold.[25]

Gold prices tend to move countercyclically, which is likely to reinforce their stabilising effects in the current situation of financial stress. We explicitly do not propose to simply raise revenue from any short-term selling of gold reserves, as recently agreed to by Cyprus.[26] It would only drive down the price of gold.[27] Moreover, it would represent a clear breach of the prohibition on the monetary financing of public debt. Finally, gold sales simply raise additional revenues to finance the public budget, which enables new expenditures and would be counterproductive by ultimately leading to even higher indebtedness. In contrast, the gold backing of sovereign bonds exerts disciplinary effects on budgets, since governments do not want to lose their gold reserves.

Comparison of gold-backed bonds with the bond purchasing programmes

Gold-backed bonds are consistent with the logic underlying the SMP and the OMTs and achieve similar outcomes. Gold is available on the balance sheet of the European System of Central Banks (ESCB) and is under the independent control of the Governing Council. Gold-backed bonds would significantly lower yields in malfunctioning markets, thus re-opening the monetary transmission mechanism.

Making use of the national central banks' gold reserves is much more transparent than the bond purchasing programmes. It does not necessarily lead to disincentives and unmanageable fiscal transfers from the North to the South.[28] Hence, gold-backed bonds do not imply significant transfers of credit risk from high-risk to low-risk countries. Potential losses would be borne by specific countries and not by the largest shareholder of the ECB and the main guarantor of the rescue funds (i.e. Germany). This in turn reduces the probability of a downgrading of Germany's credit rating and the resulting possibility of Germany withdrawing its support from the funds. Thus, backing bonds with gold makes the ESM firewall more sustainable. An additional benefit of gold-backed bonds

20 A. Belke: Debt Mutualisation…, op. cit.
21 Ibid.
22 A. Belke: Warum Europa keine Schuldenunion werden darf, in: Financial Times Deutschland, 8 August 2012.
23 Bundesbank: Der Internationale Währungsfonds in einem veränderten globalen Umfeld, Monatsberichte, Frankfurt/Main, September 2012, pp. 63-77.
24 The European Commission proposes that "Stability Bonds could be partially collateralised (e.g. using cash, gold, shares of public companies, etc.)". See European Commission: Green Paper on the Feasibility of Introducing Stability Bonds, COM, 818 final, Brussels, 23 November 2011, p. 9. See also J. Farchy, op. cit. R. Prodi, A. Quadrio Curzio, op. cit., argue that further innovation is necessary with a European Financial Fund (EFF) that issues EurounionBonds. According to their proposal, euro area member states would confer capital to the EFF proportional to their stakes in the ECB. The capital should be constituted of gold reserves of the European System of Central Banks. Gold could be placed as collateral.
25 German Council of Economic Advisors: Assume Responsibility for Europe, Annual Report, Wiesbaden, 2011/2012, p. 79. The Telegraph mentions in this context that Southern Europe's debtor states must pledge their gold reserves and national treasure as collateral under a €2.3 trillion stabilisation plan gaining momentum in Germany. See http://www.telegraph.co.uk/finance/financialcrisis/9298180/Europes-debtors-must-pawn-their-gold-for-Eurobond-Redemption.html.
26 See E. Terazono, Q. Peel, K. Hope: Cyprus to Dive into Its Gold Reserves, Financial Times, 10 April 2013, http://www.ft.com/cms/s/0/e0999506-a204-11e2-ad0c-00144feabdc0.html#axzz2Q8ay1wae.
27 C. Alcidi et al., op. cit.; L. Pleven, op. cit.; World Gold Council, op. cit.
28 A. Belke: Debt Mutualisation…, op. cit.

is that Italy and Portugal would become even stronger guarantors of the ESM.

It could be theoretically argued from a general equilibrium point of view that gold constitutes an asset which accrues to the economy as a whole. To pledge it towards specific bonds then means to remove it from a list of assets potentially safeguarding sovereign debt covered by unsecured bonds or even private sector debt. A "two-tier market" would emerge, consisting of gold-backed bonds and less attractive uncovered bonds. Thus, the effect of gold-backed bonds might net out. What is more, the introduction of gold-backed bonds might have an impact on the balance sheet of the ESCB through exactly this channel – in combination with a potential impact on the distribution of seigniorage.[29] However, gold-backed bonds undeniably bring something new to the equation with an asset that was not previously used. Additionally, the implementation of gold-backed bonds does not shift toxic debt instruments onto the ECB's balance sheet, as is the case with the OMTs. On the contrary, gold serves as high-value collateral.

Moreover, it would avoid sterilisation problems as well as the growing problems of eventually exiting unconventional monetary policy, which make the SMP path-dependent and nearly irreversible in the short to medium run, thus counteracting any bridge-financing character. Simply speaking, a gold-based solution would be less inflation-prone. Those who argue that the gold-backing solution would decouple the money supply and hard currency, potentially leading to hyperinflation, neglect the current non-role of gold for backing a currency.[30] But above all, by putting the gold reserves of the beneficiary countries at risk, the use of gold as collateral avoids the reduction of their incentives for reform.

Furthermore, the ESCB can attach conditions to its gold transfer, such as the implementation of structural reforms. The move would not only fix the monetary policy transmission mechanism but also provide the time to implement the necessary reforms.

Gold price dynamics

Gold prices enjoyed a strong multi-year rally for which easy global monetary policies were quite frequently credited. However, the recoveries of the US currency and US growth forecasts have contributed to the recent fall in the gold price. Nonetheless, the general assessment prevailing in the markets is that "gold should remain in demand as an alternative currency against the backdrop of a possible devaluation race between currencies".[31] In addition, an increasing number of central banks interpret falling gold prices as an opportunity to increase their gold reserves.[32] Exactly this aspect should make gold investments attractive for investors in general: it is not only the absolute movements in the price of gold that are important, but rather their development in comparison with other asset prices such as stock prices. In the past, the incredible increase in gold prices took place independently from the development of stock returns. Gold has thus contributed to lower volatility exposure in portfolios and thus clearly served as an insurance and stabilisation mechanism.

What is more, a decreasing number of forecasters expect inflation in the euro area to remain at the ECB's target rate of slightly below two per cent. Instead, the likelihood that inflation may reach values either beyond 2.5 per cent or below 1.5 per cent has increased substantially.[33] Hence, there is absolutely no necessity to follow those anticipating deflationary momentum only because there is a short- to medium-run buckle in the gold price development.

This contribution clearly adopts the expectations of numerous analysts who continue to see long-term investments in gold as a crisis- and inflation-proof safe haven. This is particularly the case if the exit from unconventional monetary policies proves to be increasingly difficult due to the lack of coordination among the world's leading central banks. Portugal finds itself in an increasingly dramatic economic downturn, and Italy is suffering from declining credibility due to institutional deficiencies such as quality of government and the rule of law. In this scenario, the reputational gains from issuing gold-backed bonds appear to be increasingly desirable. Finally, gold-backed bonds represent a beneficial way to avoid the controversial gold sales recommended in the Troika agreement.[34]

29 This argument is well known from the discussion on the net benefits from the introduction of Eurobonds and from the preferred creditor status or seniority in the case of government insolvency (Modigliani-Miller theorem). I owe this insight to Daniel Gros.

30 However, potential costs would admittedly arise if insolvency triggered the redemption of a country's gold pledge. In the case of a eurozone exit of the specific country, the lack of gold as a backing for the country's new currency would have a negative impact on its value.

31 See D. Shellock: Central Bank Optimism Drives Equities Higher, in: Financial Times, 7 May 2013, http://www.ft.com/intl/cms/s/0/64b215fc-b6c3-11e2-93ba-00144feabdc0.html#axzz2Sn3GqFaU; and A. Belke: Impact of a Low Interest Rate Environment – Global Liquidity Spillovers and the Search-for-yield, Briefing paper prepared for presentation at the Committee on Economic and Monetary Affairs of the European Parliament for the quarterly dialogue with the President of the European Central Bank, February 2013, Brussels.

32 Handelsblatt: Goldeinbruch macht Zentralbanken ärmer, 18 April 2013, http://www.handelsblatt.com/finanzen/rohstoffe-devisen/rohstoffe/milliardenverlust-goldeinbruch-macht-zentralbanken-aermer/8080182.html.

33 See, for instance, M.J. Lamla, J.-E. Sturm: Die EZB und ihre politische Unabhängigkeit, in: Wirtschaftsdienst, Vol. 92, No. 2, 2012, pp. 85-88; and EEAG: Rebalancing Europe, European Economic Advisory Group, Munich, 2013, p. 35.

34 See A. Belke: Cyprus: "Don't Sell, Go for Gold-backed Bonds", in: Financial Mirror, 17 April 2013, http://www.financialmirror.com/news-details.php?nid=29535.