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No abstract

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1 Introduction

Italy has the fourth largest stock of public debt in the world, the second highest debt-to-GDP ratio in the G7 group of advanced economies, and the highest debt service ratio in the G7.

Although there is no strong evidence that public debt has a causal effect on economic growth (Panizza and Presbitero, 2013), the level and composition of public debt have important effects on economic stability and the wellbeing of current and future generations.¹

The objective of this paper is to discuss the consequences of high public debt in Italy and to evaluate the desirability and feasibility of alternative debt-reduction policies.

The paper concludes that official forecasts on the medium-term evolution of Italian debt are optimistic. Italy needs to rollover €550 billion of debt over 2014-16. Loss of market access is a serious risk and Italy should think about possible policies aimed at avoiding a rushed debt restructuring exercise.

2 Debt Sustainability in Italy

At about €2 trillion, Italy has the fourth largest stock of public debt in the world. Near-term forecasts suggest that by the end of 2014, the stock of Italian government debt will surpass that of Germany (Table 1). While Italy is about to get the bronze medal in the world league of most indebted countries, it already holds the silver medal in the ranking of advanced economies with the highest debt-to-GDP ratio, and the gold medal in terms of debt service. In 2012, Japan spent less than one percent of GDP to service its public debt and Italy spent 5.4 percent of GDP. This difference is due to both low interest rates and to the fact that in Japan net debt is much lower than gross debt, but this is not the case in Italy.²

Sovereign debt sustainability is an elusive concept. In theory, a country's debt is sustainable if the current level of debt is smaller than the present value (discounted from now to infinity) of future budget balances. For all practical purposes this is not a useful definition of sustainability. It requires making guesses about growth, interest

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¹ Appendix A discusses the risks of public debt, with particularly emphasis on self-fulfilling crises

² This paper focuses on gross public debt. Panizza and Presbitero (2013) discuss the pros and cons of using different definitions of debt.

rates, and fiscal policy in the distant future. It also assumes that, as long as debt is sustainable, countries will never face a confidence crisis.

In their attempt of assessing the likelihood of a self-fulfilling run on Italian debt, investors are probably focusing on two elements: (i) the evolution of the Italian debt-to-GDP ratio in the near future; (ii) the willingness of the international community (especially the ECB) to support Italy if a run were to happen.

While debt sustainability is a long-term concept, the near term evolution of debt is important because policymakers in Northern Europe are more likely to approve ECB-ESM support if the fiscal numbers are good. Since good fiscal numbers increase the likelihood of support if a crisis were to happen, they reduce the likelihood that the crisis will happen and that the ECB will be called on its promise to do “whatever it takes.”

2.1 What do the data say?

Italy has relative large amount of debt coming due over the next few years (about €550 billion over 2014-16, Figure 2). If investors start having doubts about Italy's ability to rollover its debt, they will ask for higher interest rates on the new debt and possibly inject a vicious debt spiral (see Appendix A).

The most recent IMF forecasts are encouraging. They indicate that the Italian debt-to-GDP ratio will peak at 135 percent of GDP in 2014 and then decrease by nearly 15 percentage points over the period 2014-19 (Figure 1). Do these forecasts make sense? Will investors share this relatively favorable assessment and keep rolling over Italian debt at a reasonable interest rate?

The change in the debt-to-GDP ratio is driven by the behavior of government debt and nominal GDP. The 17-percentage point reduction in the Italian debt-to-GDP ratio over 1996-2007 was due to slower debt accumulation (the change in trend of the black line in Figure 1). The 25-percentage point increase in the debt-to-GDP ratio over 2008-14 was instead due to slow nominal GDP growth (there was no change in trend in the black line, but annual average nominal GDP growth dropped to 0.5 percent). Debt reduction forecasts for 2015-19 are driven by the expectation of slow debt accumulation (the black line becomes almost flat over the forecast period).

How did the IMF reach the conclusion that Italian debt will stop growing? To address this question we need to look at the standard debt dynamic equation (see Appendix B for a detailed explanation):

$$\Delta d = -pb + (i - g - \pi)d$$

Where d is the debt-to-GDP ratio (Δd is the change of the Debt-to-GDP ratio), pb is the primary balance divided by GDP, i is the average interest rate on existing debt, g is real GDP growth, and π is the inflation rate.

Table 2 reports IMF forecasts on the various components of the debt accumulation equation. IMF forecasts in terms of real GDP growth and inflation are reasonable and consistent with the consensus view that growth and inflation will remain low over the next few years. The interest rate forecasts are also reasonable, as long as Italy does not lose market access. IMF forecasts on future primary surpluses are instead problematic.

They assume that Italy will be able to reach and maintain a primary surplus of 5 percent of GDP by 2017.³

In the recent past, there was only one 5-year period (1996-2000) for which Italy was able to achieve an average primary surplus of about 5 percent of GDP. In this period, however, nominal GDP growth was relatively high, Italian electors were enthusiastic about the euro and willing to make sacrifices in order to be part of the common currency, and the government was able to conduct off-balance-sheet operations that increased the primary surplus.

Even with these favorable conditions, the high primary surplus turned out to be short-lived.⁴ It is unlikely that current and future Italian governments will be able to implement further tight-belt policies in the presence of strong anti-euro sentiments (the most recent Pew poll indicates that 56 percent of Italians have a negative view of the European Union) and low growth. Indeed, a study of 54 emerging and advanced economies over the period 1974-2013 shows that large and sustained primary surpluses are extremely rare events (Eichengreen and Panizza, 2014).

Back-of-the-envelope calculations that use the assumptions of Table 2 but replace the primary surplus forecast with the historical average (2.3 percent of GDP) show that, rather than decreasing, debt will stabilize at about 133 percent of GDP over 2015-19.

3 Policy Options

Italy and the international community have 4 policy options for dealing with the problems highlighted above: (i) Coordination (Plan A); (ii) Business as usual; (iii) Debt restructuring; and (iv) Italy leaves the euro.⁵

3.1 Plan A

Under Plan A, countries in the Eurozone coordinate their policies and guarantee that Southern European countries will be able to service their debts. Such a strategy needs to be based on three elements: (i) credible countercyclical fiscal rules that can deliver debt reduction; (ii) a mechanism that can rule out debt runs and thus allow for a slow and politically sustainable debt reduction process; and (iii) a mechanism for sharing the burden of adjustment between countries with current account deficits and surpluses.

³ According to the Fiscal Compact, Italy needs to reduce the gap between its current debt-to-GDP ratio and the Maastricht 60 percent threshold by one-twentieth per year. Under reasonable assumptions on interest rates and nominal GDP growth, this objective requires that Italy maintains a primary surplus of approximately 5 per cent of GDP for at least ten years.

⁴ The average primary surplus went back to 2.2 percent of GDP over 2000-2007. This is in line with a long long-term average (1990-2006) of 2.3 percent of GDP and with the 1990-99 average of 2.5 percent of GDP (Table 3).

⁵ An unlikely alternative is a Northern exit. Assume that a crisis hits Italy and the ECB does indeed decide to do whatever it takes. Northern countries may then decide to leave the euro if they think that they cannot control the actions of the ECB and believe that ECB policies will result into high inflation or debt mutualization. From the point of view of countries in Southern Europe, a Northern exit is preferable to a Southern exit. It will lead to a cheaper euro and increase the competitiveness of Southern countries with smaller transition problems.

The first element is well-known, uncontroversial, and, to some extent, already part of the Eurozone governance.

The possibility of a debt run can be eliminated with debt mutualization (Eurobonds, Blue Bonds and Red Bonds, etc.) or by giving the ECB the mandate to act as a true lender of last resort for European governments. Both options are currently politically unfeasible because they are deemed to be potentially inflationary and may lead to cross-country fiscal transfers. An interesting alternative is the PADRE plan (Paris and Wyplosz, 2014). The plan proposes to eliminate rollover risk by effectively collateralizing maturing debt with future ECB seignorage. By design, PADRE is politically acceptable because it is not inflationary (it does not require debt monetization) and does not require cross-country fiscal transfers (debt is collateralized with the seignorage owed to the country that issued the debt). While there are several details and implementations issues that need to be fleshed out, PADRE is a good starting point for discussing how to reduce the risk of debt runs in the Eurozone.

The third element requires bridging the North-South divide (Ubide, 2014). Several European countries need to regain competitiveness (i.e., depreciate their real exchange rate vis-à-vis Germany). This is a painful and long exercise in a currency union that since the beginning of the crisis has often undershot its inflation target and where surplus countries refuse to adopt expansionary policies. While Southern countries are undergoing a painful adjustment, surplus countries are left free to violate all rules in terms of excessive current account surplus. Adjustment in deficit countries should be accompanied by a more aggressive expansionary monetary policy (Mody, 2014) and adjustment rules should be applied to both deficit and surplus countries.

3.2 Business as usual

This is the scenario embedded in the official IMF and EU forecasts. Under business as usual, Italy keeps implementing restrictive policies and, assuming no confidence crisis, slowly reduces its debt-to-GDP ratio.

Business as usual is a risky strategy as it assumes that elected politicians will be able to deliver the promised primary surpluses and, crucially, that the majority of Italian voters will continue to support pro-euro politicians, notwithstanding slow growth and continuous belt-tightening policies.

A further strengthening of anti-euro political parties may lead investors to test the ECB's willingness to do whatever it takes. This situation may either lead to a late adoption of Plan A or force Italy to either restructure its debt obligations or to abandon the euro and monetize the debt.

3.3 Debt Restructuring

As there is a non-zero probability that Italy will be forced to restructure its debts under market pressure, it is worth asking whether it would be preferable to conduct a pre-emptive restructuring exercise. I will start by discussing the legal and economic implications of such a debt restructuring exercise and then discuss the desirability of pre-emptive debt restructuring.

Legal considerations

From a purely legal point of view, the Italian public debt is easy to restructure. Edlen et al. (2012) provide a detailed description of the legislation governing Italian public debt. They show that in 2012 about 98 percent of outstanding Italian government bonds were governed by domestic law (the remaining 2 percent was issued under New York and English Law with a strong *pari passu* clause). Italian debt is therefore easy to retrofit with CAC clauses similar to those utilized for the Greek restructuring (Buchheit and Gulati, 2010).

In fact, Italian debt is even easier to restructure than Greek debt. A large share of Italian debt issued under domestic legislation does not have any contract terms and is regulated by an Italian law that gives the Italian Treasury ample latitude to restructure the debt. Specifically, Article 3 of the Law that regulates the issuances of Italian government bonds states that:

In each financial year, the Ministry [of Economy and Finance] has the authority, within the annual limits established by the budgetary law, to issue framework decrees that allow the Treasury to . . . proceed, in order to restructure the national and external public debt, to the reimbursement before maturity of bonds, to the transformation of maturities, to exchange operations as well as substitution of different types of bonds or other instruments provided by the praxis of the international financial markets.⁶

This provision is somewhat tempered by Article 8 of the same law stating that payments of public debt cannot be reduced or postponed not even in case of public necessity.

Edlen et al. (2012) provide a detailed discussion of the implications of Articles 3 and 8 of the Italian decree regulating public debt issuance and conclude that a unilateral decision of the Italian Treasury to extend the maturity of the bonds regulated by the above-mentioned decree is likely to hold in Italian administrative courts.

Edlen et al. (2012) estimate that in 2012 96 percent of Italian debt consisted of easy-to-restructure bonds without contract terms. The composition of Italian public, however, is changing rapidly because in January 2013, Eurozone members started issuing bonds with standardized contract terms (in particular all bonds issued by Eurozone countries now include standardized CAC clauses).⁷ Rough estimates suggests that in July 2014, about 17 percent (€300 billion) of total Italian outstanding bonds (€1,822 billion) included the new European CACs, 81 percent (€1470 billion), were easy-to-restructure decree bonds and the remaining 2 percent (€46 billion) were hard-to-restructure foreign law bonds.⁸

⁶http://www.dt.tesoro.it/export/sites/sitodt/modules/documenti_en/debito_pubblico/risorse_correlate/Public-Debt-Consolidated-Act.pdf

⁷ This was decided by the European Council in March 2010.

http://europa.eu/efc/sub_committee/pdf/supplemental_explanatory_note_on_the_model_cac_-_26_march_2012.pdf

⁸ I am assuming that all short term bonds (BOT) have contract terms and 10 percent of domestic law medium and long term bonds (BTP) have contract terms.

Summing up, at the time of writing, the Italian Treasury can unilaterally extend the maturity of about 81 percent of Italian debt and can restructure almost all remaining debt with the approval of two thirds of existing debt-holders. As time goes by, the share of Italian bonds without explicit terms will decrease (as maturing bonds will be replaced by CAC bonds) and this will make Italian debt more difficult to restructure.

Even if the Italian debt is relatively easy to restructure, Edlen et al. (2012) and Boudreau et al. (2012) suggest that a unilateral debt restructuring would not be desirable and put forward proposals for voluntary restructuring plans which will not put Italy in state of default. While these proposals might have been feasible in 2012 when Italian debt was trading at a considerable discount, they are unlikely to succeed in a situation in which debt ratios continue to increase and, surprisingly, markets are bullish about Italian debt.

Economic considerations

While debt-restructuring exercises are always risky and complicated endeavors, they do not normally have disastrous consequences in terms of reputation and GDP growth. Most countries regain market access two or three years after they complete the restructuring and the economic and financial crises that follow the restructuring are often sharp but short-lived (Borensztein and Panizza, 2009, Panizza et al., 2009, CIEPR, 2013).

Available evidence, however, focuses on relatively small developing and emerging market countries. A debt restructuring exercise in an advanced, highly integrated economy with the world's fourth largest stock of public debt would be a gamble with large downside risk, especially because it would put domestic banks under great stress. Careful planning, execution, and international support can mitigate but cannot eliminate the economic risks and social costs of a debt restructuring exercise.

There are tradeoffs involved in the decision between a reprofiling exercise that only extends the maturity of existing debt and a more drastic restructuring with a face-value haircut. While the latter is likely to be more effective in re-establishing debt sustainability, the former reduces the likelihood of a banking and financial crisis. A decision will thus require a careful analysis of the balance sheets of the domestic banks.

A pre-emptive restructuring?

The main advantage of a pre-emptive restructuring is that it can be carefully planned and designed in a way that minimizes the consequences on the domestic economy. Moreover, the legal structure of Italian debt is changing rapidly and, as time goes by, Italian debt becomes more difficult to restructure.

There are, however, also considerable economic and political risks involved in a restructuring exercise. Political risks will be particularly difficult to manage. Italian savers are likely to associate any financial loss involved in a restructuring exercise with the constraints imposed by the euro. A debt restructuring may thus push Italy out of the Eurozone for political rather than economic reasons.

If a debt restructuring is necessary, the earlier the better, but it is possible that a restructuring will not be necessary. Maybe European policymakers will see the light

and adopt Plan A; maybe investor will keep believing that Italy's debt is sustainable and keep rolling over Italian debt while the Italian political system finds a way to stimulate growth and reduce the debt-to-GDP ratio. The costs and risks of an earlier debt restructuring need to be weighed against the likelihood that an even costlier and riskier restructuring will be needed down the road.

3.4 Italy leaves the euro

This is the nuclear option. Managing the exit would be extremely complicated and risky and may lead to what Eichengreen (2007) has called the mother of all financial crises. Exit will neither lead to hyperinflation nor to the end of civilization, but there will be bank runs and legal uncertainty with respect to all financial contracts with non-residents. Moreover, all entities that have foreign debts which are not regulated by Italian law are likely to suffer large losses.⁹

Forecasting is a difficult business, but I expect that an exit will have a negative effect on (real) growth as the aftershocks of the financial crisis are likely to dominate the competitiveness effect of a cheaper currency (see Bagnai, 2014, for a dissenting view).

The key question here is whether, in the long-run, Italy is better off with or without the euro. I think that Italy is better off with the euro. A discussion of the pros and cons of the euro is beyond the scope of this paper.

4 Conclusions

Business as usual is very risky and policymakers should quickly move towards Plan A.

Unfortunately, there is a strong status quo bias in policymaking and European politicians are unlikely to agree on the more politically risky plan A. Things may change if and when we will be staring the abyss. Hopefully, it will not be too late.

If business as usual fails and plan A is not adopted, a debt restructuring would be preferable to leaving the euro. Italian electors, however, may not agree.

Without decisive policy intervention, Italy's exit from the currency union is a likely outcome.

⁹ Dealing with public debt, however, should not be too difficult. If Italy were to leave the euro, the 98 percent of government bonds issued under domestic law could be easily converted into "new liras."

Appendix A: The risks of public debt

Public debt can finance high-return investment projects and expansionary fiscal policies during recessions. Proper public debt management also allows reducing tax distortions over the business cycle. However, public debt can also finance wasteful public spending and allows delaying necessary, but politically costly, structural reforms.

High levels of public debt alter the structure of public expenditure and limit the government's ability to implement countercyclical policies during recessions.

The composition of public expenditure

For any given interest rate and level of government expenditure, a higher level of debt implies that a larger share of expenditure needs to be dedicated to paying interests on the debt. Such a constraint on the composition of public expenditure could be good if it creates incentives to reduce wasteful spending. However, wasteful expenditure is often politically difficult to cut. Therefore, debt service often crowds out "good" types of public expenditures, such as investment in human and physical capital (Bacchiocchi et al., 2011).¹⁰

Limited ability to conduct countercyclical policy

Self-fulfilling crises are an example of what economists call multiple equilibria. In the good equilibrium, investors think that the government is solvent and are thus willing to rollover government bonds at a low interest rate. In the bad equilibrium, investors think that government debt is risky and, by asking for a high interest rate to compensate for this risk, they amplify the risk of insolvency. In the good equilibrium, the government is solvent because investors think that the government is solvent (think of Japan), in the bad equilibrium the opposite happens.

Self-fulfilling crises may happen even if all investors know that that a debtor is fundamentally solvent. If a fully solvent borrower needs to rollover its debt but investors do not know what other investors think about what other investors think (i.e., in the absence of what economists call "common knowledge") a self-fulfilling crisis cannot be ruled out.

Self-fulfilling crises are the key drivers of bank runs (Frank Capra's "It's a Wonderful Life" and Walt Disney's "Mary Poppins" provide vivid illustrations of how bank runs unfold and wreak havoc). Bank runs can be prevented by a credible lender of last resort that coordinates expectations and rules out the bad equilibrium.¹¹

The same argument and solution applies to government debt (De Grauwe, 2011). Before the introduction of the euro, European governments that mostly borrowed in

¹⁰ For instance, in 2012 Italy spent 5.4 percent of GDP to service its public debt and 4.2 percent of GDP in education. The average values for a sample of advanced EU economies are 2.5 percent and 5.6 percent, respectively.

¹¹ The lender of last resort can prevent bank runs by following Bagehot's rule of credibly committing to lend freely, against collateral, and at a penalty rate to solvent institutions. Like all insurance mechanisms a lender of last resort can be a source of moral hazard. Bank regulation and the penalty rate in Bagehot's rule mitigate (but do not eliminate) moral hazard.

domestic currency were not subject to self-fulfilling runs because the national central banks (which could print an unlimited amount of domestic currency) were acting as de-facto lenders of last resort.

The introduction of the euro has fundamentally changed the situation because national central banks can no longer act as lender of last resort. Eurozone countries have thus become similar to emerging market countries that do not borrow in their own currency (Eichengreen et al., 2005, Dell'Erba et al., 2013, De Grauwe and Ji, 2013).

In the absence of a lender of last resort, policymakers may adopt restrictive policies with the hope of reassuring market participants and reducing the likelihood that a sudden change in investors' sentiments pushes the country towards the bad equilibrium. However, restrictive policies that reduce short-term growth and lead to political turmoil and instability are likely to backfire and amplify investors' concerns. In its massive downgrade of European sovereigns, Standard and Poor's explicitly mentioned that restrictive policies may have a negative effect on debt sustainability (Standard & Poor's, 2012).

The above discussion does not necessarily mean that the euro was a bad idea. While national central banks ruled out default risk, they did not rule out inflation risk and in some countries had suboptimally high real interest rates and inflation. While inflation is not a problem right now (in fact, higher inflation would be welcome), a credible nominal anchor remains essential in the long-run.

Appendix B: The Debt Dynamic Equation

The change in value of outstanding debt is approximately equal to the government balance (i.e., the difference between government revenues and government expenditures).¹² The latter is usually written as the sum of the primary balance (i.e., the government balance net of interest payment) and the interest bill. This is a useful decomposition because policymakers have some autonomy in setting the primary balance, but the interest bill depends on the existing stock of debt. The denominator of the debt-to-GDP ratio is determined by nominal GDP growth which is equal to inflation plus real GDP growth.

Formally, the change in the debt-to-GDP ratio is equal to the negative of the primary balance (i.e., the primary deficit) divided by GDP, plus the interest bill divided by GDP, minus the initial debt-to-GDP ratio multiplied by nominal GDP growth (i.e., inflation plus real GDP growth). For those who like math, this can be written as:

$$\Delta d = -pb + (i - g - \pi)d$$

Where d is the debt-to-GDP ratio (Δd is the change of the Debt-to-GDP ratio), pb is the primary balance divided by GDP, i is the average interest rate on existing debt, g is real GDP growth, and π is the inflation rate.

¹² Campos et al. (2006) discuss why the change in debt may differ from the government balance.

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Table 1: Public Debt in G7 Countries

	2012			2013*			2014*		
	Gross		Net	Gross		Net	Gross		Net
	Billions	% of GDP	% of GDP	Billions	% of GDP	% of GDP	Billions	% of GDP	% of GDP
Canada	€ 1'248	88%	37%	€1'221	89%	39%	€1'1241	87%	40%
France	€ 1'834	90%	84%	€1'935	94%	88%	€2'019	98%	89%
Germany	€ 2'160	81%	58%	€2'137	78%	78%	€2'112	75%	53%
Italy	€ 1'990	127%	106%	€2'068	133%	111%	€2'134	135%	112%
Japan	€ 10'962	237%	130%	€8'965	243%	134%	€8'615	244%	137%
UK	€ 1'712	89%	81%	€1'718	90%	83%	€1'890	92%	85%
USA	€ 12'934	102%	80%	€13'204	104%	81%	€13'525	106%	82%

Source: WEO Database, April 2014, *IMF forecasts

Table 2: IMF Forecasts for Italy (2015-19)

	2015	2016	2017	2018	2019
Primary Surplus over GDP	3.3%	4.5%	4.9%	5.2%	5.2%
Interest rate	3.9%	4.1%	4.2%	4.3%	4.4%
GDP Growth	1.1%	1.3%	1.2%	1.0%	1.0%
Inflation	1.2%	1.4%	1.5%	1.5%	1.6%
SF	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%

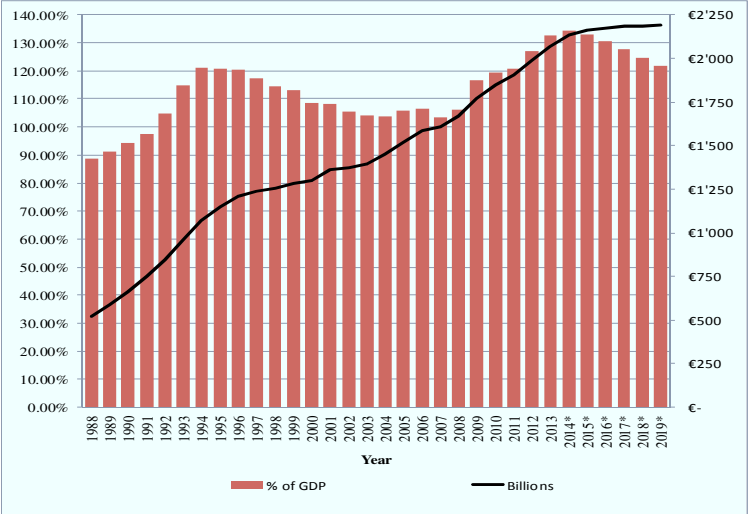
Source: Own elaborations based on WEO database (April 2014).

Table 3: Historical Values (simple averages)

	1990-99	2000-09	2010-14	2015-19*
Primary Surplus over GDP	2.5%	1.9%	1.5%	4.6%
Interest rate	9.7%	4.8%	4.0%	4.2%
GDP Growth	1.4%	0.6%	-0.3%	1.1%
Inflation	4.3%	2.4%	1.2%	1.4%

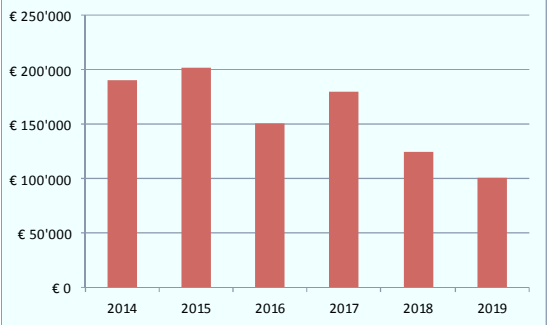
Source: Own elaborations based on WEO database (April 2014). * IMF forecast

Figure 1: Italian Gross Public Debt



Source: WEO database (April 2014). *IMF forecasts

Figure 2: Debt Redemption over 2014-18 (millions of euro)



Source: Own elaborations based on Italian Treasury data.