

EUROMOD WORKING PAPER SERIES

EM 7/15

**Fiscal consolidation policies in the
context of Italy's two recessions**

Francesco Figari and Carlo Fiorio

May 2015



Fiscal consolidation policies in the context of Italy's two recessions¹

Francesco Figari ^a

Carlo Fiorio ^b

^a University of Insubria and ISER, University of Essex and Dondena

^b University of Milan, Irvapp-FBK and Dondena

Abstract

The Italian Great Recession has a double-dip pattern. After the start of the global financial crisis, Italy experienced a second serious recession in 2011 because of the sovereign debt crisis. The reaction of Italian governments was mild at the beginning and more convinced since the start of the sovereign debt crisis in 2011. Adopted policies contributed to realign public finances at a sustainable level, while household real income decreased by 13 per cent and quite unevenly along the household income distribution. The medium-term outlook is still uncertain: a great deal depends on the capacity of the Italian economy to reduce the level of public debt and to return to sustained economic growth, which has been very weak for more than a decade.

JEL codes: H12, H62, H63, H68, H50, I31

Keywords: Great Recession, Italy, net borrowing, debt, microsimulation, public finance.

Corresponding author:

Francesco Figari

Email: francesco.figari@uninsubria.it

¹ The paper has been presented at the ZEW workshop on "European public finances through the financial crisis", June 10-11, 2014, in Mannheim. A substantially revised version of this working paper is forthcoming in a special issue of Fiscal Studies. We would like to thank the Editors, Antoine Bozio, Carl Emmerson, Andreas Peichl, and Gemma Tetlow for their suggestions. We are also grateful to Giampaolo Arachi, Roberto Artoni, Giuseppe Bognetti, Alberto Tumino. This paper uses EUROMOD F6.36. The process of extending and updating EUROMOD is financially supported by the Directorate General for Employment, Social Affairs and Equal Opportunities of the European Commission [Progress grant no. VS/2011/0445]. We are grateful for access to microdata from the Italian component of the EU Statistics on Incomes and Living Conditions (ITSILC 2010) made available by Istat. We are indebted to Holly Sutherland and all members of the EUROMOD project for making EUROMOD freely accessible for research purposes. Usual disclaimers apply.

1. Introduction

The Great Recession hit Italy hard and hit it twice: first, during the diffusion of the 2008 global financial crisis and, second, during the sovereign debt crisis started in 2011. At the end of the 2014 the real per capita GDP fell by almost 16 per cent since 2007, reaching the levels recorded in 1998. As a consequence, the Italian public debt increased by nearly 30% of GDP since 2007, mostly because of the contracting level of national product.

Interestingly, when the crisis stroke Italy at the end of 2008, the national economy was already in troubles, facing an important problem of sluggish growth, as in the ten years before the onset of the economic downturn the real GDP grew by less than 1.5% per year. Although it appeared to be at medium risk with regard to the long-term sustainability of public finances, mainly because of the structural reforms in the pension system that were initiated in early 1990s (European Commission, 2006), when the crisis stroke Italy there was not much room for manoeuvre to implement countercyclical policies, as public finances have been strongly affected by the large public debt accumulated mostly during 1980s.

In fact, the reaction of Italian governments was mild for the first part of the Great Recession, mostly aimed at rebalancing the budget and at exiting the excessive deficit procedure opened by the European Commission in 2005, with only minimal care given to stimulating growth. When the sovereign debt crisis stem from Greece propagated also to Italy, due to its large public debt vulnerability, Italy reacted by appointing a technocratic government which implemented dramatic economic measures, accounting to between 3% and 5% of GDP in 2012 and 2013. The main aims of these policies were to secure public finances limiting the increase of public debt incidence over GDP and to exit the new excessive deficit procedure opened by the European Commission in 2009. In such a scenario, household real income went down by 13% between 2007 and 2013, falling back to the levels recorded in 1988 (Brandolini, 2014). Considering the official national poverty estimates, based on household consumption, the share of poor individuals jumped from 13% in 2007 to 16% in 2012. The estimates based on poverty threshold at 60% of equivalised disposable income are more stable but still increasing, even if a floating poverty line does not account for the generalised decline in incomes occurred at the crisis time. If one considers a constant poverty line the anchored (2007) headcount ratio based on consumption shows an increase of about 46% between 2007 and 2012 and the headcount ratio based on income shows an increase of about 33% in the same period.

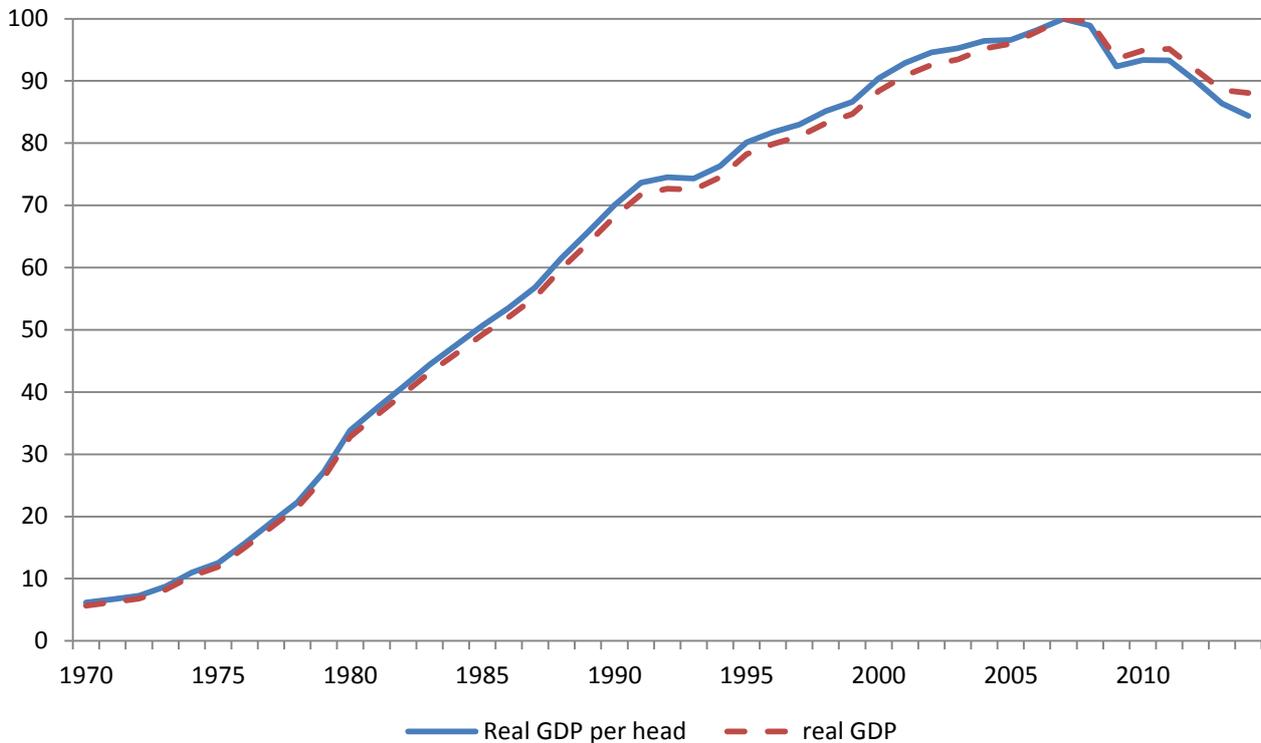
After seemingly securing public finances, current Italian government is now devoting all its efforts to revert the economy back to a positive growth path and to sustain household income mainly through measures aimed at lowering the high tax burden.

2. Impact of the financial crisis: the macro picture

Following a long period of slow growth, in the first phase of the Great Recession the Italian GDP fell far more than in most other European countries: in 2009 the real GDP was 6.5 per cent lower than in 2007, before the beginning of the economic crisis. Furthermore Italy did not follow other European economies in the recovery: in 2011 the GDP increased only by 1.6 per cent with respect to the trough of the Great Recession and then started a new phase of decrease that has not been

interrupted yet. The double dip of the Great Recession following the sovereign debt crisis caused a fall of 7 per cent between 2011 and 2014 (Figure 1, red dashed line).

Figure 1. Evolution of national income (1945-2014)

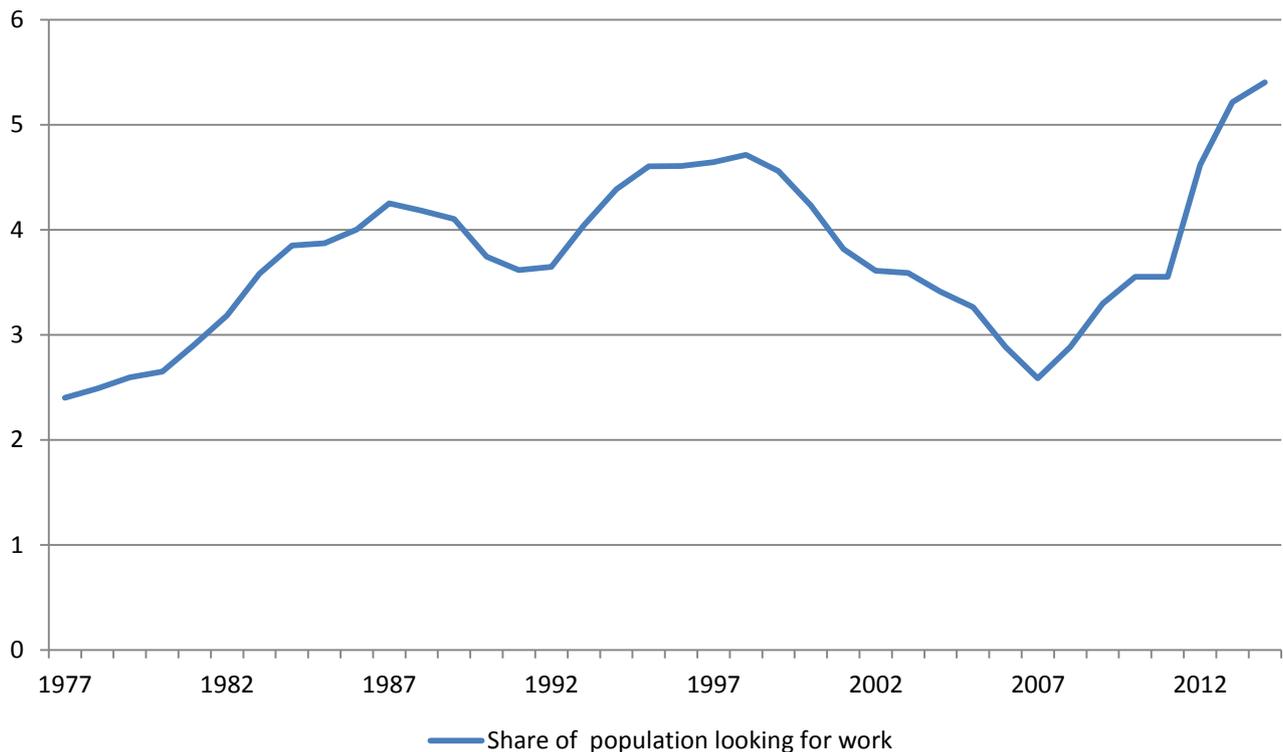


Source: Istat, Data warehouse I.Stat

Considering the evolution of the GDP on per capita basis, the situation is even worse with a fall between 2009 and 2007 of almost 8 per cent, a weak recovery of less than 1 per cent in 2010-2011 and then a new severe and not interrupted fall of almost 9 per cent between 2011 and 2014 (Figure 1, blue solid line). Such an evolution is mirrored by the changes in household income. While in the first phase of the crisis household income did not match the loss in the GDP (mainly due to the shock absorber role paid by the net effect of taxes and benefit), in the second phase it declined more intensively than the GDP (Brandolini, 2014). Such a pattern can be seen as a consequence of the evolution of the labour market and the public government intervention characterised by a long-lasting limited social safety net for those in working age and the newly introduced fiscal consolidation measures.

Figure 2 shows clearly that the Great Recession in 2008 interrupted a long period of decreasing unemployment, a pattern which mirrors the trend in the employment rates (Figure 3). The evolution of the labour market before the onset of the economic crisis was more positive than expected by looking at the dynamics of the economy and was at least partially justified by the massive flexibility introduced in the labour market which induced a larger participation of marginalised workers, such immigrants, youths and those with fixed-term contracts (Berton et al., 2012).

Figure 2. Evolution of share of population unemployed

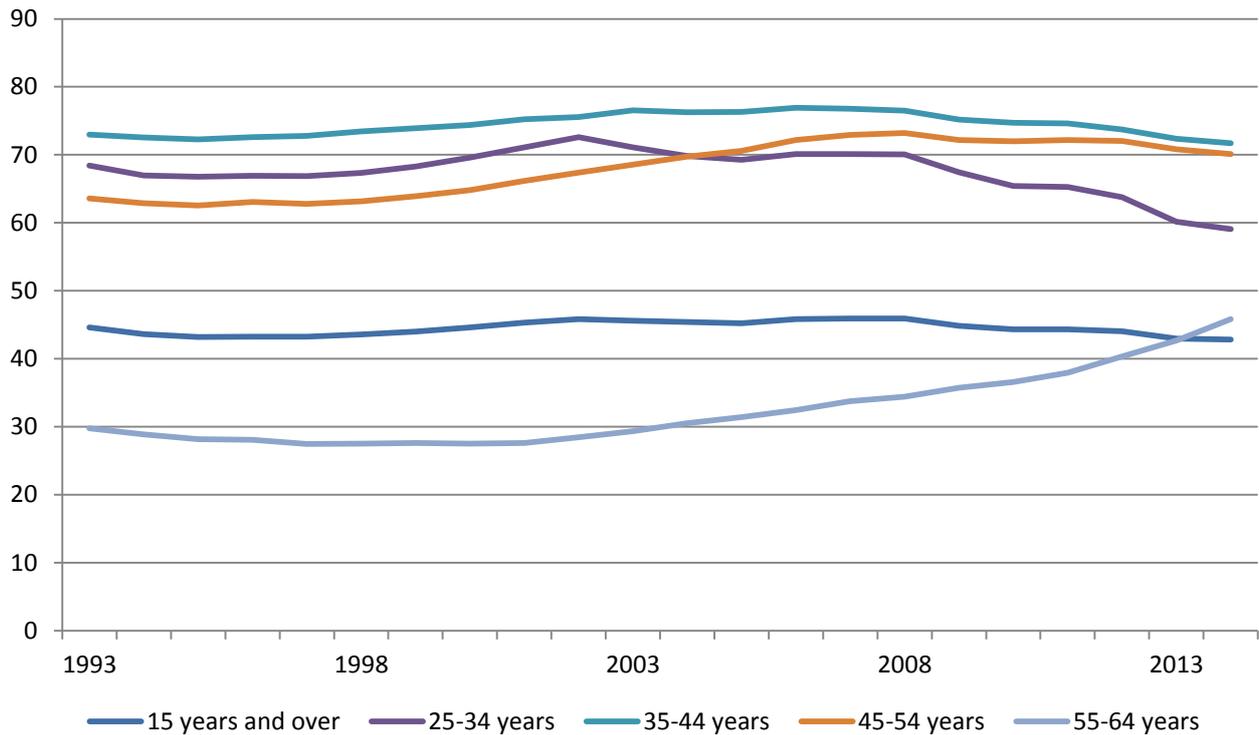


Notes: unemployed as % of total population. Source: Istat, Data warehouse I.Stat

In the years before the crisis, the employment rates showed an increasing labour market participation of the mature workers aged 45+ years and an almost stable participation of the younger ones. With the onset of the crisis, while older workers increase their presence in the labour market also due to changes in the pension system that imposes longer age requirements, the employment rate of young individuals has been falling steadily, with a reduction of about 16% from 2008 to 2013.

The dynamics of the labour market sluggishly followed the one of GDP and presents a clear fall since the beginning of the 2012. During the first recession, employers reduced working time, made use of the Wage Supplementation Scheme (*Cassa Integrazione Guadagni*), declined the renewal of fixed-term contracts and avoided to replace workers leaving for retirement. With the onset of the second recession, the number of job losses increased considerably due to shutting down and layoff combined with a significant decrease in transitions into employment in particular those related to marginalised workers (Baldini and Toso, 2014).

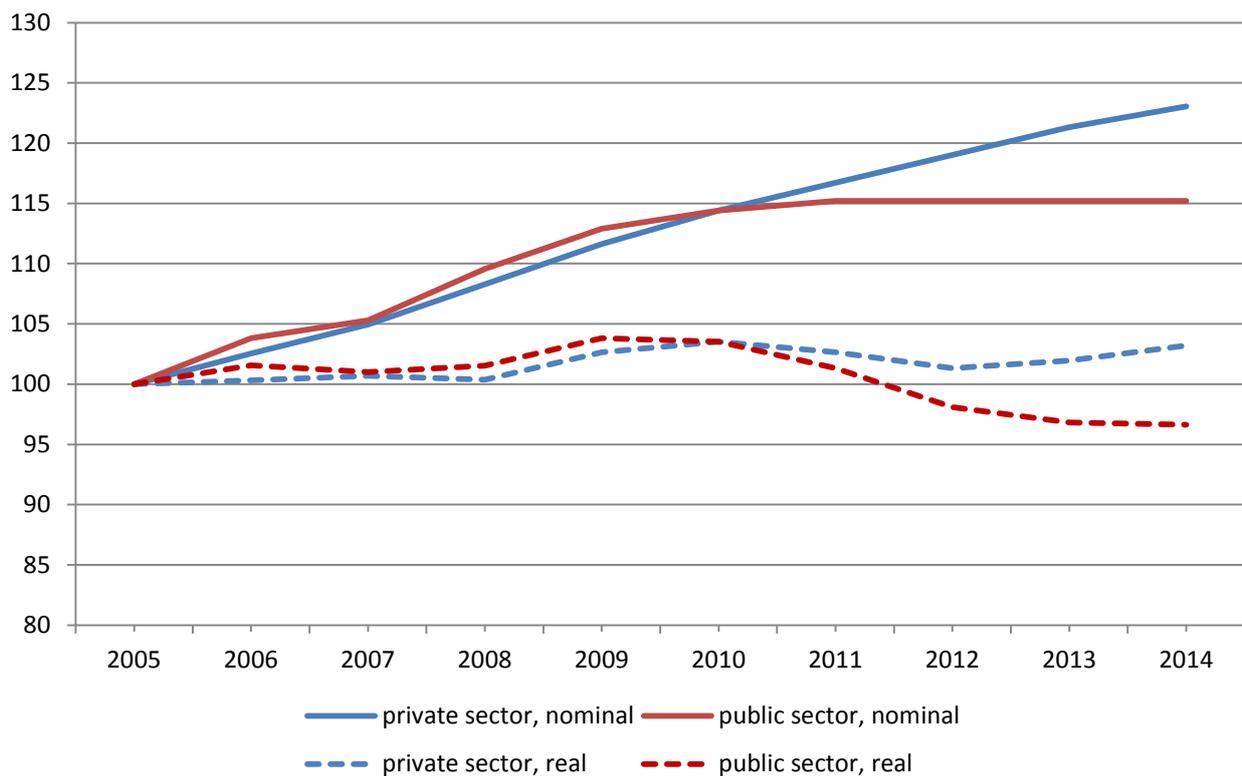
Figure 3. Evolution of employment rate (overall and by age group)



Source: Istat, Data warehouse I.Stat

The years characterised by the most pronounced movements in employment rates witnesses also a very slow increase in real wages, on average less than 0.5 per cent per year. The striking difference between the evolution of gross wages in the private and public sector is due wage freezing policies and the stop of contract renewals in the public sector since 2010. Furthermore, the dynamics shown in Figure 4 hides other important specificities of the Italian labour market where the real wage at first employment decreased progressively together with the uncertainty about career prospects (Giorgi et al. 2011), making the situation of the youth much worse than the one revealed by average patterns.

Figure 4. Change in real and nominal gross wage growth



Notes: CPI used as deflator. Source: Istat, Data warehouse I.Stat

3. Public finance responses

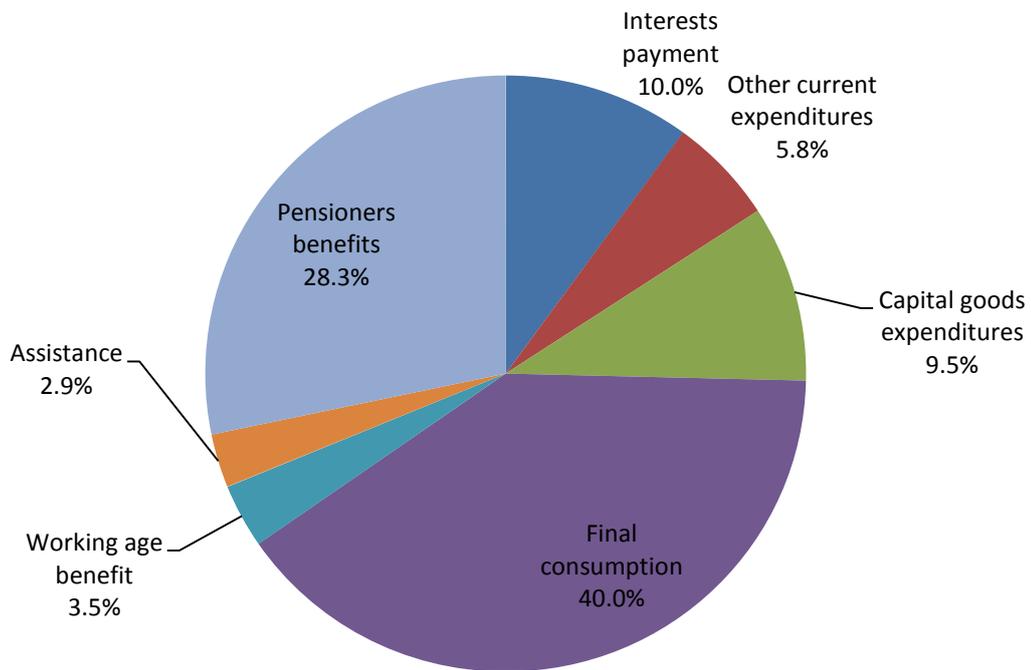
3.1. Fiscal stance before the crisis

As for public finances at the onset of the crisis, the prospects looked improved with respect to a couple of years earlier the government was considering measures to stimulate growth. In 2007 the net borrowing of the Italian economy reduced by 1.5 percentage points, reaching 1.9% after four years above the 3% threshold. This prompted the recommendation of the European Commission of removing Italy from the excessive deficit procedure started in 2005. The reduction of the net borrowing was mostly due to the increased tax pressure, which produced a structural primary deficit (taking into account the economic cycle and non-permanent measures) around 3% (it was equal to zero in 2005).

In 2007 public revenues accounted for 47.2% of GDP and public expenditures for 49.1% (Bank of Italy, 2008). Figure 5 shows the decomposition of public spending in 2007. Final consumption including salaries and wages accounted for about 40% of the total public spending, social protection accounted for a total of 34% (28% for pensioner benefits, 3% for assistance and 3% for working age benefits), capital goods expenditure accounted for about 10% of total public expenditures a size close to that of interest payment (Istat, 2015). Overall the picture shows a large cost of the stock of debt, one of the largest relative to GDP in the EU, and an imbalance in favour of pensioner benefits. On the revenue side, the high level of taxation was split roughly in three parts: indirect taxation, which accounted for 35% of total revenues, social security contributions, for nearly 31%, and direct taxation, for about 35%. Direct personal income taxation accounted for nearly a quarter of total

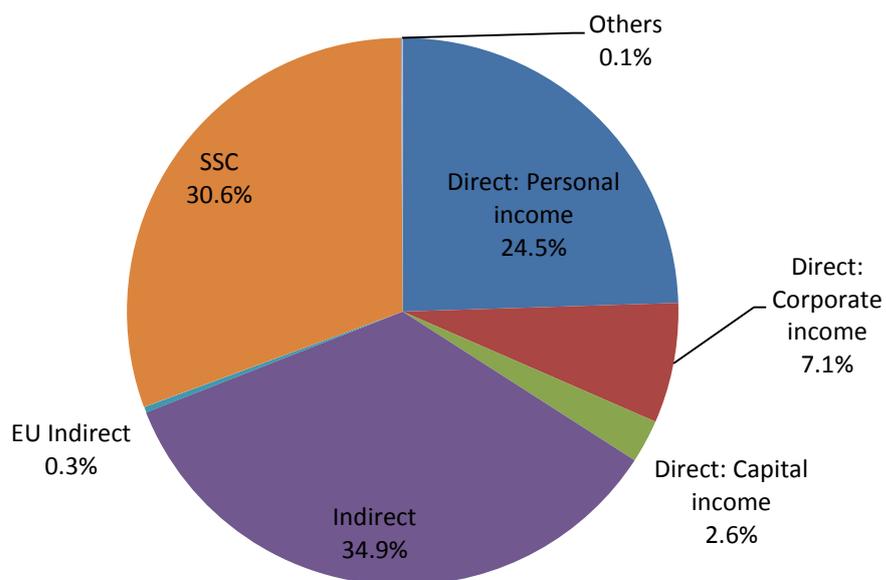
revenues, whereas corporate income for about 7% and capital taxation for less than 3%. Revenues from inheritance tax and tax pardons were negligible in 2007 (Figure 6).

Figure 5. Composition of public spending in 2007



Source: Our elaborations using Istat (2015) and Bank of Italy (2008).

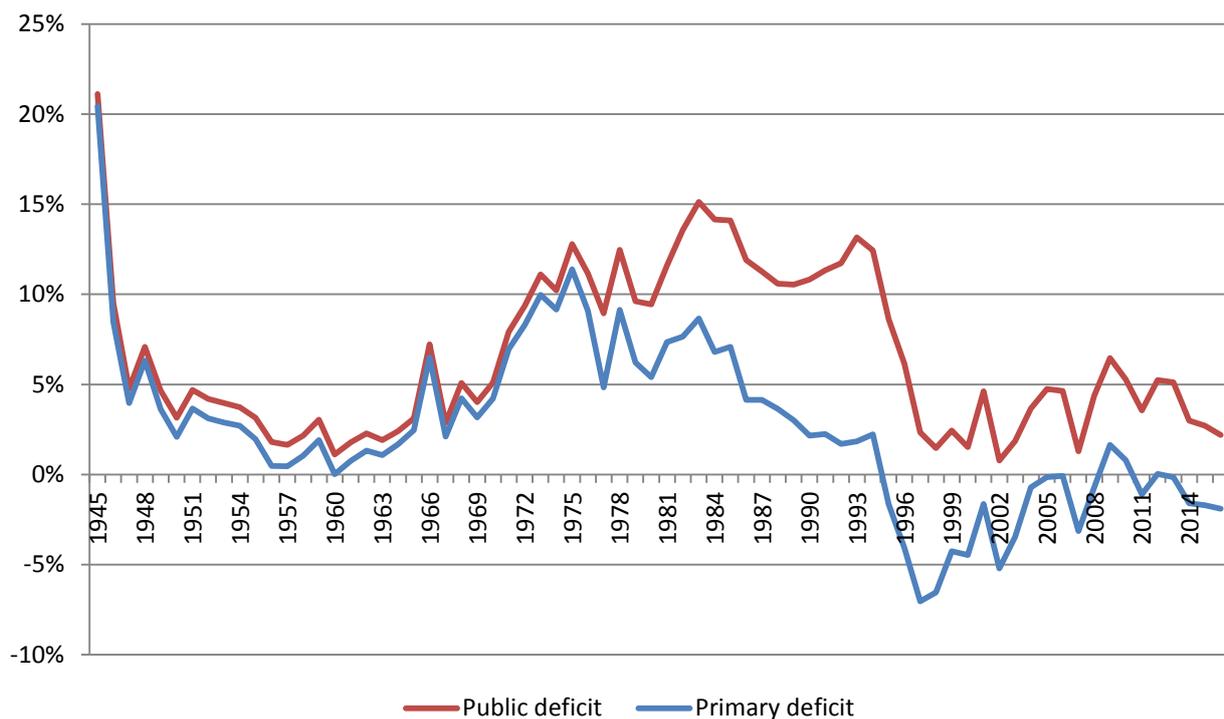
Figure 6. Composition of taxation in 2007



Source: Our elaborations using Istat (2015) and Bank of Italy (2008).

The causes of the little room for manoeuvre available for countercyclical policies of the Italian economy before the crisis started can be dated back few decades and be explained as the result of a combination of various internal factors, in addition to the choice of being part of the monetary union, abandoning the policies of competitive devaluations since early 1990s. Figure 7 shows the primary (net of interests paid on debt) and the total public deficit from 1945 to 2016. In the immediate aftermath of WWII primary public deficit remained at below 5% of GDP for about twenty years, but increased at between 5% and 10% for most of the 1970s and 1980s. During this latter period the welfare system was greatly reformed with the introduction of the lower secondary school and the extension of compulsory education up to the age of 14 in 1962, the national healthcare system was gradually introduced since 1974, the social security system, based on the retributive system with no link with contributions paid, was introduced in 1969 and gradually expanded. The evolution of the welfare system since the end of the 1960s is a common feature of most European countries. However, Italy was peculiar because the welfare system enlargement was mostly funded by debt, which remained below the annual GDP level until the end of the 1980s, also thanks to high inflation rates that fluctuated between 10% and 25% during the 1970s.

Figure 7. Borrowing as a share of GDP (outturns for 1945-2007; official forecasts for 2008 onwards as published pre-crisis)

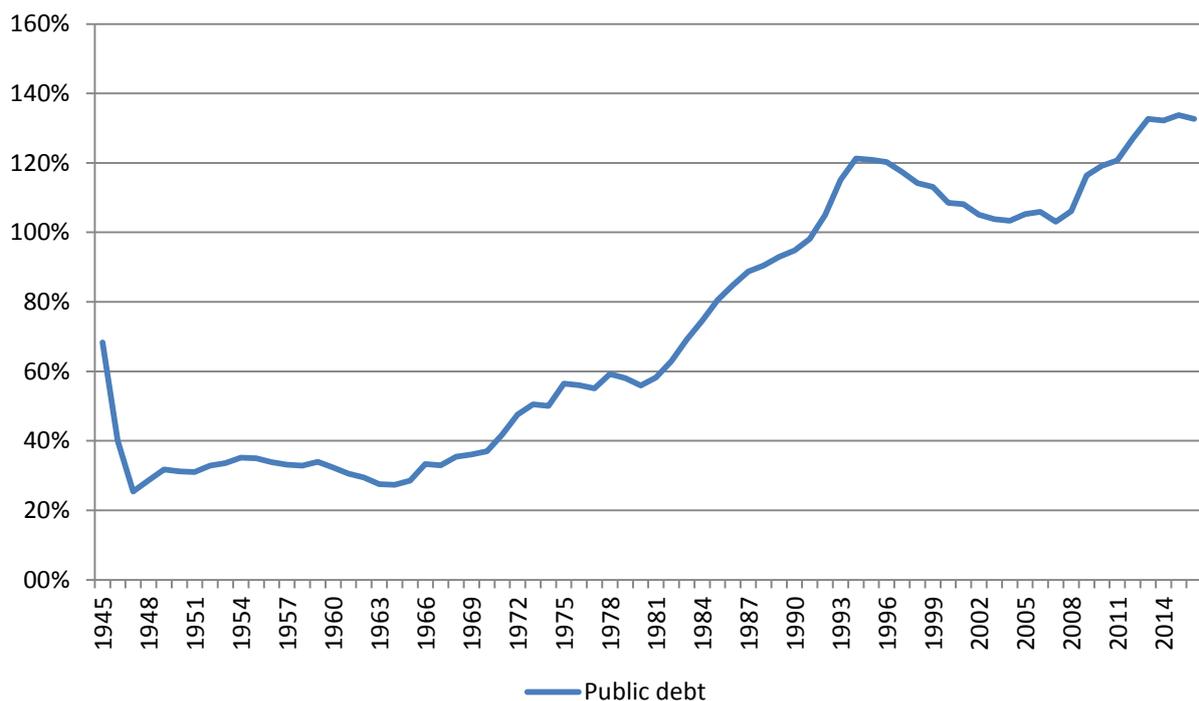


Source: Our elaborations using MEF (2011), Baffigi (2011), and Bank of Italy (2014, 2015). Data on years 2014 to 2016 are based on predictions by the Bank of Italy (2015).

However, since the early 1980s, the cost of interests on the Italian debt increased gradually and largely from 1% to 10% of GDP in early 1990s, a level significantly larger than those of most other European economies. The level of public debt doubled in about a decade after 1981 (see Figure 8)

reaching about 120% of GDP by 1992. This evolution of public debt was also favoured by the weakness of the Italian political system, characterised by very unstable coalition governments formed after elections with perfect proportional representation and unable to establish a clear trajectory in the evolution of the welfare system and the control of public finances. The political instability, the slowdown of the economic growth, the reduction of inflation and its effect on the debt repayment, as well as speculative attacks on the Italian currency, led to the financial and currency crisis that hit Italy in September 1992. Following this first major crisis since the WWII, Italy started a period of strong reforms, aiming at keeping the pace with the process of economic integration at the EU level. In 1992 the pension system was largely reformed reducing the amounts of old-age benefits and in 1995 another major reform was introduced for replacing the retributive with the contributory system, although not for all workers, and others followed. The healthcare system was largely reorganised with the aim of increasing its efficiency with two major reforms in 1992 and 1993, followed by others during the 1990s. Italy reached 2007 with a stabilized expenditure for social protection and healthcare and a decreasing burden of interests on debt largely thanks to the entrance in the Euro area.

Figure 8. Public debt as a share of GDP (outturns for 1945-2007; official forecasts for 2008 onwards as published pre-crisis)



Source: Our elaborations using Baffigi (2011), Francese and Pace (2008) and Bank of Italy (2014, 2015). Data on years 2014 to 2016 are based on predictions by the Bank of Italy (2015).

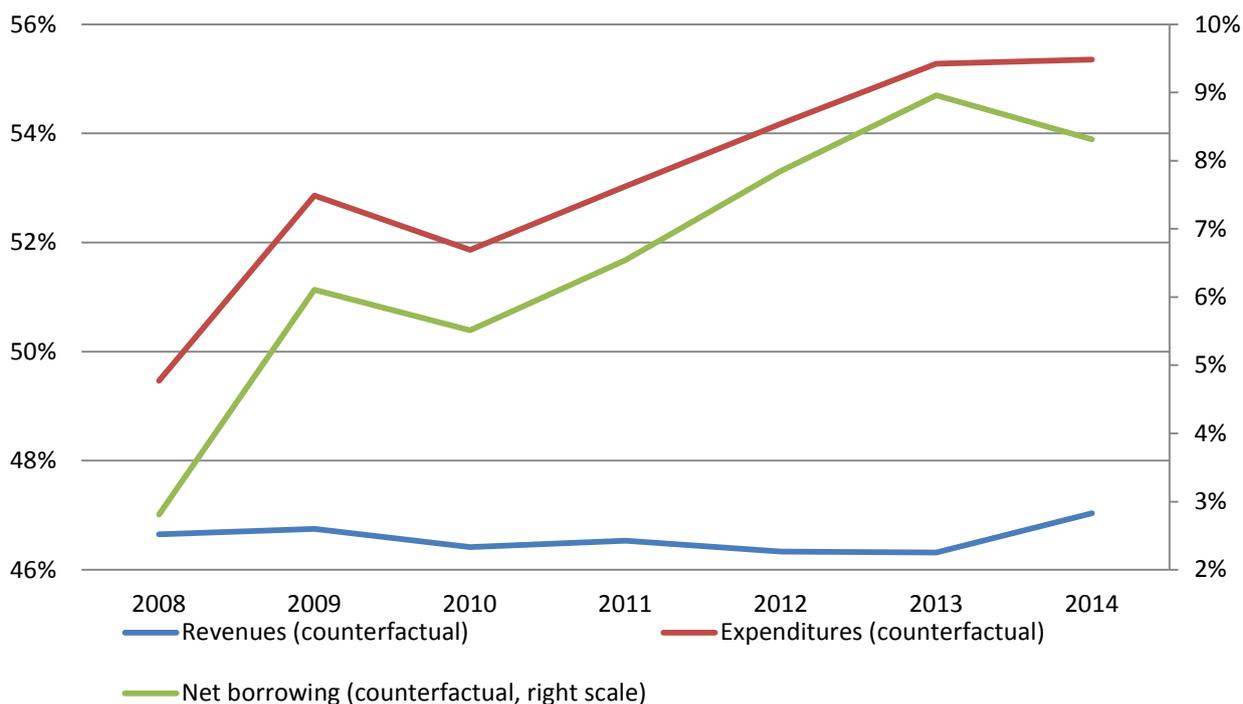
At the very beginning of the crisis Italy had a relatively favourable situation in terms of sustainability of public finances, besides a high level of public debt. According to the European Commission (2006, 2009), Italy appears to be at medium risk with regard to the long-term sustainability of public finances. Before the Great Recession, the long-term budgetary impact of

ageing was lower than the EU average, although the pension expenditure level still remains among the highest in the EU as a share of GDP. This was mostly a positive dividend of the 1990s pension reforms. Suggested plans at the beginning of the crisis were to achieve high primary surpluses, contributing to limiting the medium risk to the long- term sustainability of public finances. This was in fact the main policy undertaken by Italian government since 2008.

3.2. How did the crisis affect the public finances?

In 2009, soon after the onset of the economic crisis, the Italian government deficit increased to about 6% of GDP, mostly due to the contraction of national income, despite a strong increase of government revenues and a slight increase of government expenditures. However, it was the 2011 sovereign-debt crisis that hit Italy the hardest. Figure 9 shows the counterfactual development of the total government revenues and expenditures, along with that of the government deficit, using the latest available published data series and subtracting from these the effect of policy measures taken since 2008. Had no policy response been introduced, the government deficit would have jumped to about 9% of GDP, assuming that no other effect would have happened.

Figure 9. Taxation, spending and borrowing without policy responses, as % GDP (2008 onwards)



Source: Our elaborations using Istat (2015), Bank of Italy (2014).

3.3. What was the fiscal response to the crisis?

The reaction of Italian governments to the crisis was relatively mild up until 2010, with a light budget laws mostly aimed at maintaining the stabilization of the public finance and reducing the contagion effect of the financial crisis to the real economy. In 2008 three “anticrisis decrees” were mainly aimed at increasing revenues by increasing tax audits and VAT on television services. They also introduced a tax pardon (named “tax shield”) for providing incentives to return capital stocks

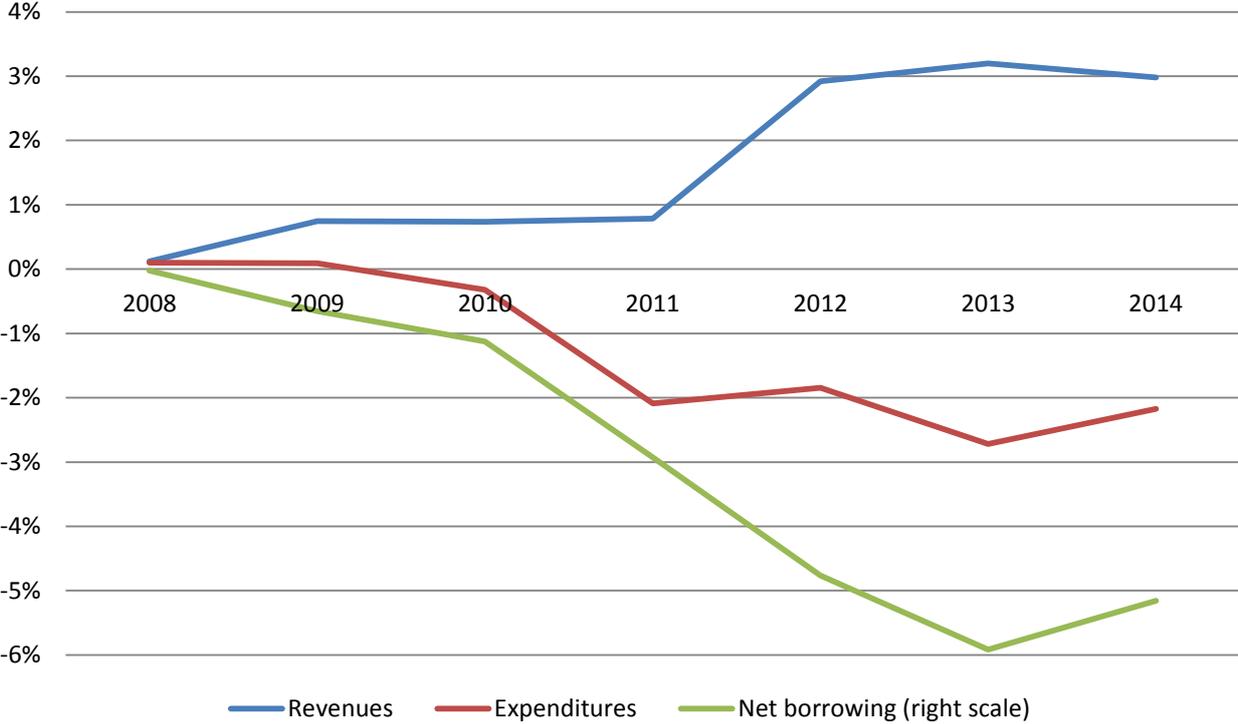
from abroad, which was partly used to allow a delay of personal income tax payments at the end of 2009. No relevant expansionary policies were implemented, mostly because the high level of public debt did not let much room for increasing expenditures without impacting on the public finance balance.

It is only with the 2011 budget law and a new decree law (DL 201/2011) that expansionary policies for increasing competitiveness were introduced, quickly followed by even stronger interventions (DL 98/2011 and DL 138/2011) for reducing the cost of politics and introducing a spending review of the public sector, with cost containment for public employment policies, healthcare, education, and pension benefit and some mild measures for growth. After the new technocratic government entered office in late 2011 a dramatic set of policies was introduced to contrast the effects of the sovereign-debt crisis (see section 4 for a detailed analysis of policies with a direct impact on households). They accounted to 3.1% of GDP in 2012 and to 4.7% in 2013 (Bank of Italy, 2012) that, cumulated with other existing policies, contributed to reduce the government deficit by 4.8% in 2012, 5.9% in 2013 and 5.2% in 2014.

While the public finances significantly improved, reaching a balanced structural budget since 2013, the economy fell into a second serious recession in 2012-2013. It is after 2013 that additional resources are made available by the government to finance the reduction in the tax wedge, the support of the economy, employment and households' income. According to official estimates they had no impact on net borrowing, as they were financed mainly by increasing VAT and some direct taxes (in particular the local taxes on property) and by reducing expenditures. Moreover, in December 2014, the Renzi government announced the nationalization of Ilva of Taranto, to give a future to Italy's largest steel plant (Meneghello, 2014).

Figure 10 and Table 1 give an illustration of the size of the interventions since 2008 and their effect in terms of increased revenues, reduced spending and budget deficit. The commitment to keep public finances in order is self-evident. In fact, notwithstanding low or even negative increase of GDP, revenues increased largely as well as expenditures reduced, contributing to decrease the level of public borrowing by about 6% of GDP in 2013.

Figure 10. Composition of the public finances responses, as % GDP (2008 onwards)



Source: Our elaborations using Istat (2015), Bank of Italy (2014).

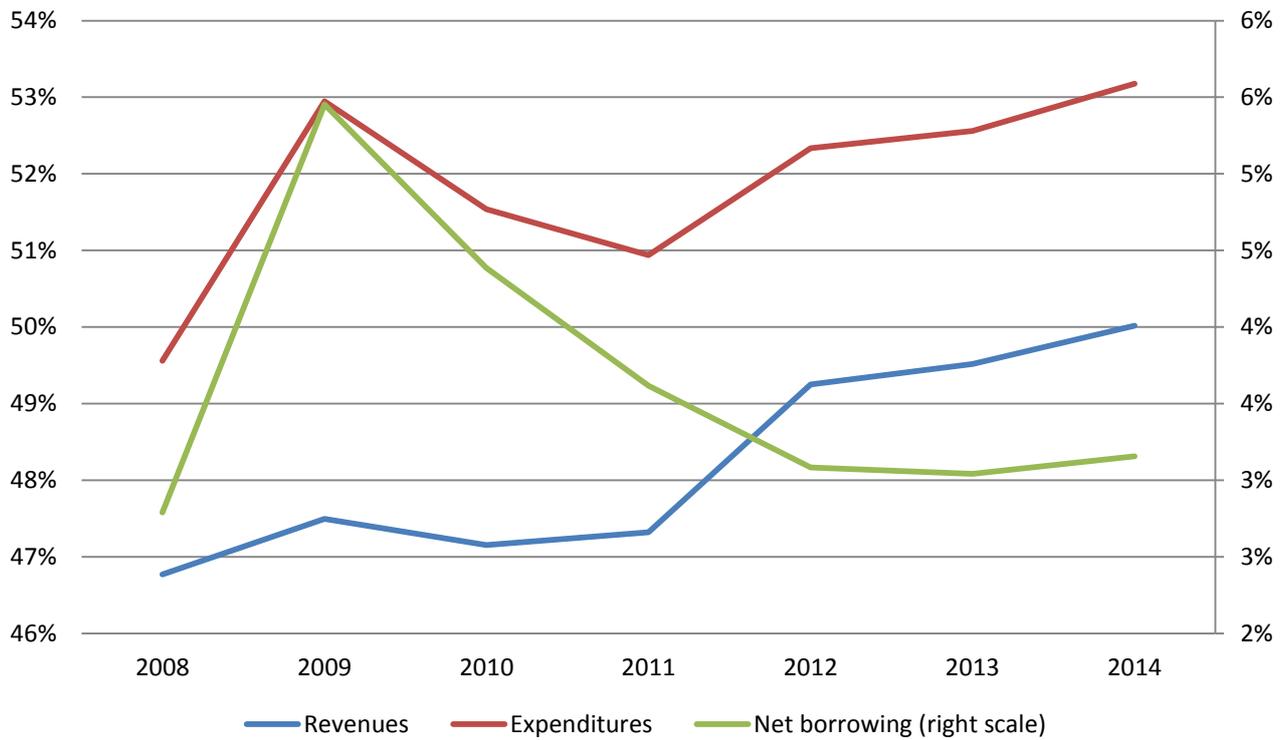
Table 1. The size of the economic policies undertaken since the onset of the economic crisis.

		2008	2009	2010	2011	2012	2013	2014	2015	2016
DL 112/2008	Revenues	1890	5842	5702	5729					
	Expenditures	1554	-4051	-11435	-25196					
	Net borrowing	-336	-9893	-17138	-30925					
LF 2009	Revenues		834	-521	-397					
	Expenditures		834	521	397					
	Net borrowing		0	0	0					
"Anticrisis plans"	Revenues		4649	2190	610					
	Expenditures		4608	1902	311					
	Net borrowing		-41	-288	-299					
LF 2010	Revenues			3321	1	-93				
	Expenditures			3272	-47	-155				
	Net borrowing			-49	-48	-62				
DL 78/2010	Revenues			831	3899	9291	6879			
	Expenditures			795	-8232	-15778	-18154			
	Net borrowing			-36	-12130	-25068	-25033			
LS 2011/LB 2011	Revenues			-76	-18	-308	-335			
	Expenditures			-76	-18	-310	-335			
	Net borrowing			0	-1	-2	0			
DL 98/2011	Revenues				1871	6609	13285	28295		
	Expenditures				-237	1031	-11121	-19677		
	Net borrowing				-2108	-5578	-24406	-47973		
DL 138/2011	Revenues				732	14068	22121	10521		
	Expenditures				0	-8630	-7738	-1301		
	Net borrowing				-732	-22698	-29859	-11822		
LS 2012-2014	Revenues					205	-228	-47		
	Expenditures					-185	-390	-149		
	Net borrowing					-391	-162	-102		
DL 201/2011	Revenues					19366	16962	14891		
	Expenditures					-879	-4358	-6540		
	Net borrowing					-20245	-21320	-21430		
DL 95/2012	Revenues					-3392	-6766	-10237	-10300	
	Expenditures					-3994	-6781	-10264	-10928	
	Net borrowing					-602	-16	-27	-627	
LS 2013-2014	Revenues						-1892	-876	-283	
	Expenditures						427	-1014	-662	
	Net borrowing						2319	-138	-379	
Various DL in 2013	Revenues						-126	1524	1021	1205
	Expenditures						6029	448	36	418
	Net borrowing						6155	-1076	-985	-788
LS 2014-2016	Revenues							2244	234	1367
	Expenditures							4702	-3281	-5936
	Net borrowing							2458	-3515	-7304

Notes: The figures reported are million euros. LF stands for Financial Law (Legge Finanziaria), LS for Stability Law (Legge di Stabilità), LB for Budget law (Legge di Bilancio), DL stands for Decree (Decreto Legge). "Anticrisis plans" is the common name given to three decrees issue at the onset of the crisis (DL 185/2008, DL 5/2009 and DL 78/2009). Effects of the various DL issued in 2013 include: DL 35/2013; DL 43/2013; DL 54/2013; DL 63/2013; DL 69/2013; DL 76/2013; DL 91/2013; DL 101/2013; DL 102/2013; DL 104/2013; DL 120/2013; DL 133/2013.

Figure 11 shows the latest outturns and forecasts for taxation, spending and borrowing as a share of GDP. Contrasted with Figure 9, it shows the important effect of implemented policies to maintaining the government net borrowing at levels relatively close to 3% of GDP for the first year of the Great Recession and to reduce it below 3% since 2012.

Figure 11. Taxation, spending and borrowing with policy responses, as % GDP (2007 onwards)



Source: Our elaborations using Istat (2015), Bank of Italy (2014).

The latest estimates by the European Commission (2015) predict a level of net borrowing of 3% of GDP in 2014, 2.6% in 2015 and 2% in 2016. The structural deficit is expected to diminish by less than 1 percentage points. The debt should reach its maximum in 2015, at 133% of GDP, and start reducing in 2016, after increasing by 30 percentage points since the onset of the crisis. In the period 2015-17, it is expected to decrease by about 10 points, to 125.1 per cent. In 2018 the debt-to-GDP ratio is projected to return to a level close to that of 2011 (120.5 per cent). The planning scenario for 2015-17 complies with the debt reduction rules, but there is no safety margin in the event of even the smallest deterioration in the macroeconomic situation (Bank of Italy, 2014).

4. Policy responses: an opportunity for reform?

4.1. Changes to tax and benefits

As mentioned above, the time span of the policy responses does not reflect the observed changes in GDP because the policy reaction mainly occurred with the second recession that hit the Italian economy in 2012. Before the advent of the technocratic government in late 2011, the main consolidation measures were channelled through the stop of indexation of public salaries and linear cuts to public spending.

As reported in Table 2 and 3 most of the fiscal consolidation measures in Italy take the form of a combination of increases in direct and indirect taxes and social contributions and cuts in public sector salaries and pensions. The most important changes to the tax and benefit system indeed were implemented only in 2012. The financial market instability and the sovereign debt sustainability of late 2011, brought the technocratic government to implement unpopular policy changes in just few weeks, such as the property tax and the reform of the pension system that would have taken much longer to be implemented in different circumstances (Fornero, 2013).

Up to 2013, most of policy changes involve tax increases (with the exception of an increase in the tax credits for dependent children) and cuts in social benefits and public sector pay, and they do not include measures to compensate or alleviate the impact of the wider economic circumstances. Only at the beginning of 2014, there has been a first signal of fiscal stimulus measures targeted to dependent workers through a reduction of their tax burden with new tax relief measures worth €7.4 billion and €0.2 billion of additional expenditure. Most of the tax relief (€6.7 billion) will consist of a reduction of the tax wedge for average-to-low-income payroll workers. A 10% permanent reduction in the productive activity regional tax (IRAP) rates was also introduced starting from 2014 with the aim of fostering aggregate demand (Bank of Italy, 2014).

On the revenue side, in terms of budgetary effects and hence distributional impact, the most relevant measures are the Local taxes on residential property and related services (specifically, waste collection) which have been changed repeatedly since 2011, the changes in taxes on income from capital (respectively decreased in 2012 and increased in 2014) and the increase in the VAT standard rate (from 20% to 22%) . The continuous changes related to the same policy show that most of the measures do not follow a medium or long term plans but are measures announced and introduced at one point and then revised according to political and economic circumstances.

On the expenditure side, the most relevant measures are the cuts and the limitations to the indexation of public sector salaries and public pensions which determine a cumulative effect which impacts the disposable income in the subsequent years. In terms of structural changes, the reform of public pensions is an important attempt to stabilise the pension system and it represents the culmination of 20 years of reforms with an important impact on those who will retire in the future (and hence not captured in our cross-sectional redistributive analysis).

In order to analyse the distributional impact of the measures implemented in 2012, 2013 and 2014, we make use of EUROMOD, the EU wide tax-benefit microsimulation model (Sutherland and Figari, 2013), based on information derived from the 2010 Italian version of the European Union Statistics on Income and Living Conditions (IT-SILC). Given the incidence of the shadow economy in Italy, gross self-employed income has been calibrated in order to obtain an aggregate amount corresponding to that reported in fiscal data (Ceriani et al., 2013). However, tax evasion behaviour is assumed to be the same before and after the policy changes. Moreover, to account for employment and market incomes changes, in line with actual changes between the period when the data were collected and the period covered in the simulations (i.e. 2012-2014), we adjust the 2010 SILC data to replicate changes in employment as indicated by Labour Force Survey (LFS) data up to 2014. As in Navicke et al. (2014), the data are modified by moving selected people, by age group, gender and educational level, from employment into short- or long-term unemployment

(simulating unemployment benefit if entitled) and in some cases from being out of work into employment.

In order to evaluate the redistributive impact of the measures presented above, we simulate a counterfactual scenario defined as the continuation of pre-fiscal consolidation policies, i.e. what would have happened in the absence of the fiscal consolidation measures. This means the same tax-benefit rules in place up to 2011 and benefits and public sector pay indexed according to established indexation rules and conventions (with pensions and benefits indexed mainly by prices and no indexation of Personal Income Tax bands). Indirect taxes impact directly each household's consumption potential, although they do not have an effect on household disposable income. Using estimates based on the Italian Household Budget Surveys on the incidence of (pre-reform) VAT by income decile groups (Taddei, 2012), we have estimated the increase in standard rate VAT and main excises as a proportion of disposable income. In doing so, we have assumed that there is no change in pre-tax expenditure or in pre-tax relative prices and the VAT increases are proportional to the pre-reform VAT payments.

The overall fiscal consolidation, generated by the household income-based measures included in the analysis, ranges from 1.89% of pre-austerity disposable income in 2012 to 1.62% in 2013 and 1.63% in 2014. These figures are well below those found for other Mediterranean countries and Baltic republics in the same period and in line with those related to the UK (Avram et al. 2013).

Figure 12 shows the relative importance of the different types of measures and their impact on the income distribution by decile group, in the years considered in the analysis. In 2012, policy changes present a slightly inverted U-shaped pattern, i.e. poorer and richer income groups contributing more in relative terms. In second half of the income distribution, the effect is primarily due to the incidence of property tax (on main and other residences) and the limited indexation of public pensions that imposes larger losses in percentage terms in the middle and top of the distribution than at the bottom where pensions kept pace with consumer price indexes. Several progressive measures implemented in the same year (i.e. solidarity contribution, cuts in very high public pensions and public salaries) have only a limited effect due to very narrow targeting.² At the bottom of the income distribution, most of the effect is due to the property tax (almost 60% of households in the first quintile lives in residences owned outright) and the increase in indirect taxes, well known to be regressive if measured with respect to income. The effect of public sector pay cuts is captured, net of any reduction in income tax and social contributions: as a consequence, the figures for income tax are net of reductions due to the decreased tax base in these respects. The main reason for the decrease in income tax at the top of the income distribution is due to the changes in taxation of income from capital.

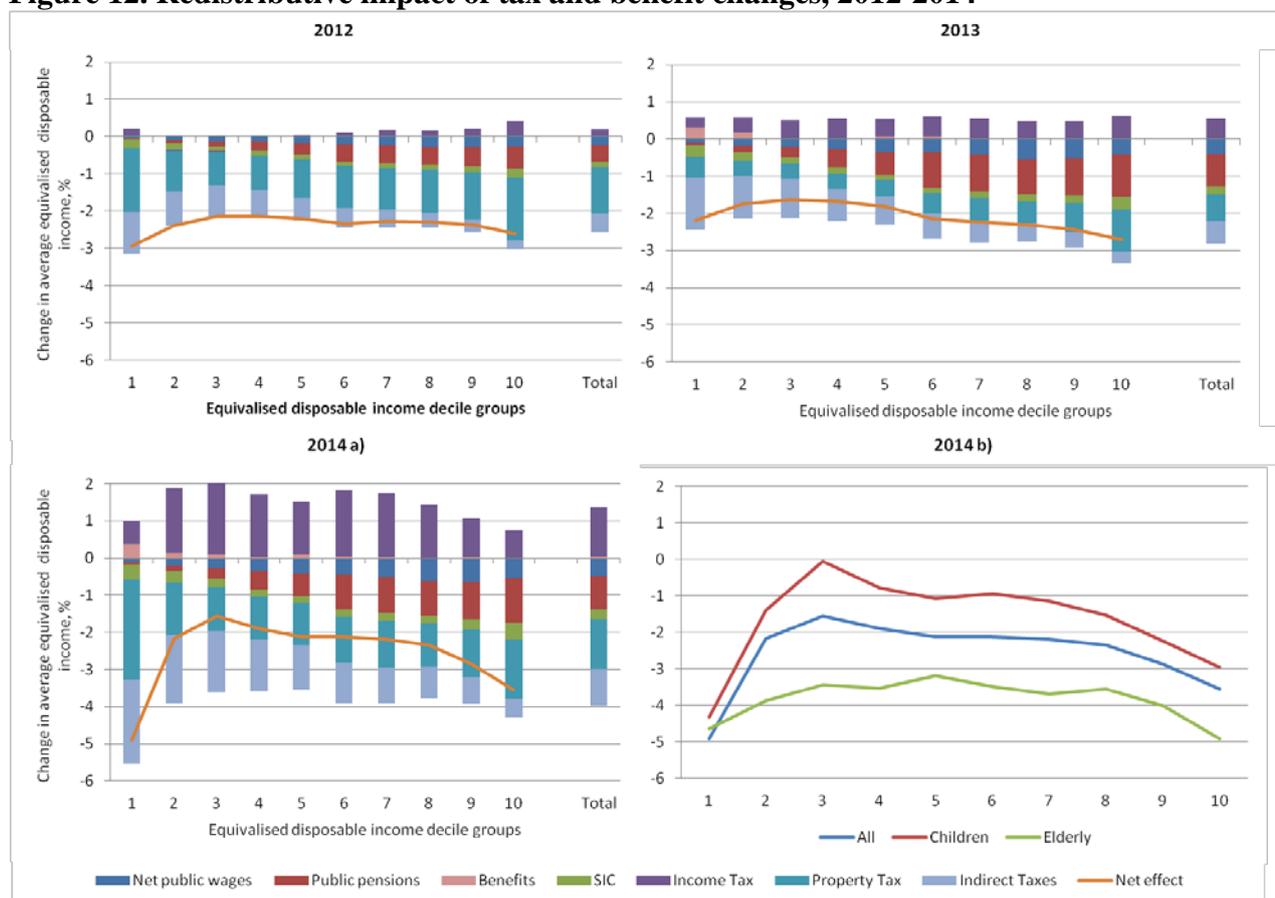
In 2013, it emerges a slight progressive pattern mainly due to the abolition of the property tax on the main residence and the cumulative effect of the freezing of public pensions and public sector salaries which impact largely on those in the middle and top of the distribution. At the bottom of the

² The solidarity contribution (i.e. additional 3% tax on pension incomes and public sector wages above a threshold of 300,000 per year) affects only 0.07% of tax payers (figures based on fiscal data in 2010) and it is deductible from the income tax. The public pension cuts are only above 90,000 euro per year affecting 0.97% of pensioners. The same threshold of 90,000 euro per year is used for the public sector wage cuts, while only 1.49% of Italian employees (considering both public and private sectors) declare earnings above this threshold to the tax authorities.

distribution emerges the positive impact of the new unemployment benefit which covers also the apprentices and it is relatively more generous. Along the distribution the larger generosity of the tax credits for dependent children is clear. At the same time the increase of the standard VAT rate from 21% to 22% since October 2013, reduces the potential progressivity of the fiscal consolidation measures. Overall, it has been a year characterised by a rather uncertain mix of tax policies. The government approved a legislative document (L. 11 march 2014, n. 23) for delivering more growth friendly tax measures including a (new) reformed property tax, new environmental taxes, a reform of tax expenditures and new actions against tax evasion by the end of 2015. However it has been recognised that this does not affect the main problems of the Italian tax system related to the high labour tax wedge and the low efficiency of the VAT (Keen et al., 2012).

As mentioned, the 2014 is the first year that witnesses some fiscal stimulus measures targeted to dependent workers through an increase of the tax credits for employment income and above all through the concession of a monthly “bonus” of 80 euro for employees with yearly taxable income below €6,000, which have a clear redistributive effect. However, such measures are not well targeted on the poorest because they are defined at the individual level and under the condition of receiving at least €8,000 from yearly employment income. This undermines the potential equity and efficiency effects of these measures (Arachi and Santoro, 2014) and is a long lasting problem of the Italian social safety net given that a large part of the public support to families is channelled through the tax system.

Figure 12. Redistributive impact of tax and benefit changes, 2012-2014



Source: our calculations using EUROMOD G1.5

In this way, it does not reach the poorest (Figari et al. 2011) and produces a pattern of effective marginal tax rates that do not provide linear incentives to work. However, the overall net impact of the fiscal consolidation measures is affected by a further increase in the indirect taxes and the new property tax (i.e. TASI) that replaced the previously existing one with potential even worst effects on the poorest if the municipalities do not implement tax credits for the main residence and for families with children. The stimulus measures introduced in 2014 include also some reductions to the Social Contributions and the Regional Tax on Productive Activities (IRAP) paid by employers with the aim to attract more workers with open ended contracts. However, the effectiveness of such measures in boosting employment has been questioned mainly due to the absence of a clear-cut policy and adequate resources allocated to it (Arachi and Santoro, 2014).

If one looks at the ways in which the burden of the fiscal consolidation measures is shared across different types of households, it emerges a picture which is somehow in contrast with the traditional generosity of the Italian welfare system in favour of elderly people. The last panel of Figure 12 compares the proportional change in disposable income occurred in 2014 by decile groups for the whole population with that for (a) people in households with children (defined as aged under 18) and (b) people in households containing elderly people (defined as aged 65 or more). Overall, it shows the larger burden on elderly people due to the property tax levied on the main residence and the partial indexation of public pensions that cumulates over the years. Families with children, likely to have at least one dependent worker, benefit from the stimulus measures and, on average, are less affected by the fiscal consolidation measures.

Table 2 Major tax changes post crisis

	2011	2012	2013	2014
Social Insurance contributions (employee and employers)	Increase in the rates paid by temporary workers			
Social Insurance contributions (self-employed)		Increase in the rates		
Tax on rental income	Fixed rate (i.e. 21%) applied on most private rental income instead of including it in the progressive income tax.			
Property tax		New property tax (i.e. IMU) on main residence and other residences	Property tax (i.e. IMU) only on other residences	New tax on housing services (i.e. TASI) on main residence and other residences.
Solidarity contributions		3% of taxable income above 300.000 euro per year. Deductible from PIT.		
Personal income tax			Increase of tax credits for dependent children	
				Increase of tax credits for dependent workers
				Reduction of fiscal burden on labour income («bonus of 80€ per month») for dependent workers with taxable income below 26.000 € per year
		Regional personal income tax surcharge: increase in the rates in most of the regions.		
Tax on income from capital		Decrease of the tax rate on Deposits (from 27% to 20%), and increase of the tax rate on Bonds (if not State Bonds) and Dividends (from 12.5% to 20%)		Increase of tax rate on Dividends, Bonds (if not State Bonds) and Deposits from 20% to 26% in 2014.
			Financial Transaction Tax	
Indirect taxes		Increase of standard VAT rate from 20% to 21%	Increase of standard VAT rate from 21% to 22% since 1/10/2013.	
		Increase of excises on fuel and tobacco		
Regional tax on productive activities (IRAP)		Increase in the rates		10% decrease in the rates

Source: national legislation. See EUROMOD country report for more details. All policies reported in the table have been simulated with the exception of the Financial Transaction Tax and the Regional tax on productive activities (IRAP).

Table 3 Major benefit and public sector wage changes post crisis

	2011	2012	2013	2014
Unemployment Benefit			Replaced by a relatively more generous scheme (in terms of coverage and adequacy)	
Public pensions		Pensions between 90,000 and 150,000 euro per year subject to a 5% cut, 10% between 150,000 and 200,000 euro per year, and 15% above 200,000 euro per year		New Solidarity contribution (6% between 14 and 20 times the minimum, i.e. ; 12% between 20 and 30 times the minimum; 18% above 30 times the minimum;)
		No indexation of pensions above three times the minimum amount (approximately 1400 euro per month in 2012)		Partial indexation of pensions above three times the minimum amount.
		Structural reform extending retirement age and defining contributory pension system for all workers		
Public sector salaries		Public salaries between 90,000 and 150,000 euro per year subject to a 5% cut, 10% above 150,000 per year		
	No indexation of public salaries			

Source: national legislation. See EUROMOD country report for more details. All policies reported in the table have been simulated with the exception of the structural reform of the pension system which mainly does not affect the cohort of workers and retired people observed in the data.

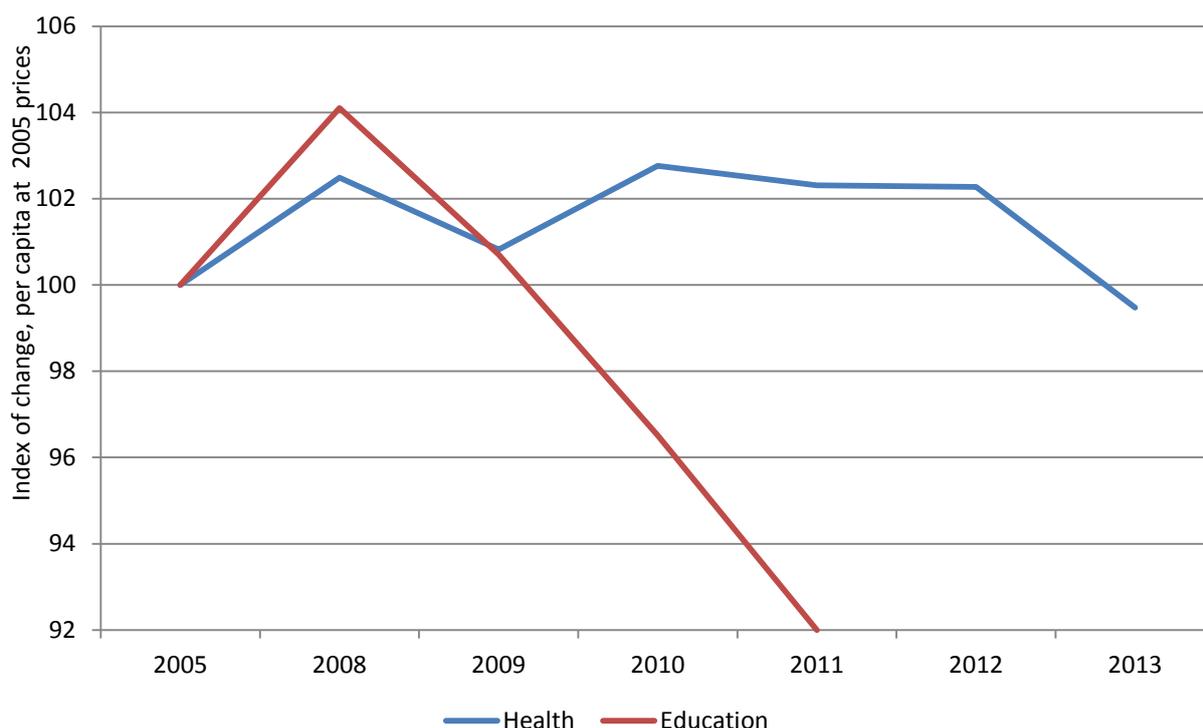
4.2. Changes to spending on public goods and services

The reductions in public services with a direct impact on household welfare are mainly related to health and education services. Figure 13 shows the evolution of spending cuts, expressed as index of change per capita at 2005 constant price. Public expenditure on both health and education sectors witnesses a sharp reduction from 2008, in particular in the educational sector.

The cuts on the health sector, imposed by the governmental spending review mainly as linear cuts to the budgets of the local health authorities, emerge clearly from 2012 on a system that is proved to be financially sustainable and characterised, in comparison to most European countries, by high levels of performance both in terms of efficiency and quality. Expenditures in the healthcare sector reduced because of renewed contracts, pharmaceutical expenditures and rebalancing of expenditures of eight out of 21 Italian regions.

As shown in a growing body of literature (Aaberge et al. 2013; Figari and Paulus, 2013) public services, such as health and education, have a clearly redistributive impact with the households at the bottom of the (extended) income distribution benefitting proportionally more than the affluent ones. Such a pattern suggests a detrimental effect on the extended income distribution of the spending cuts implemented since the beginning of the crisis, which is something worthy a more in-depth analysis as soon as the data will be available.

Figure 13. Spending cuts by function



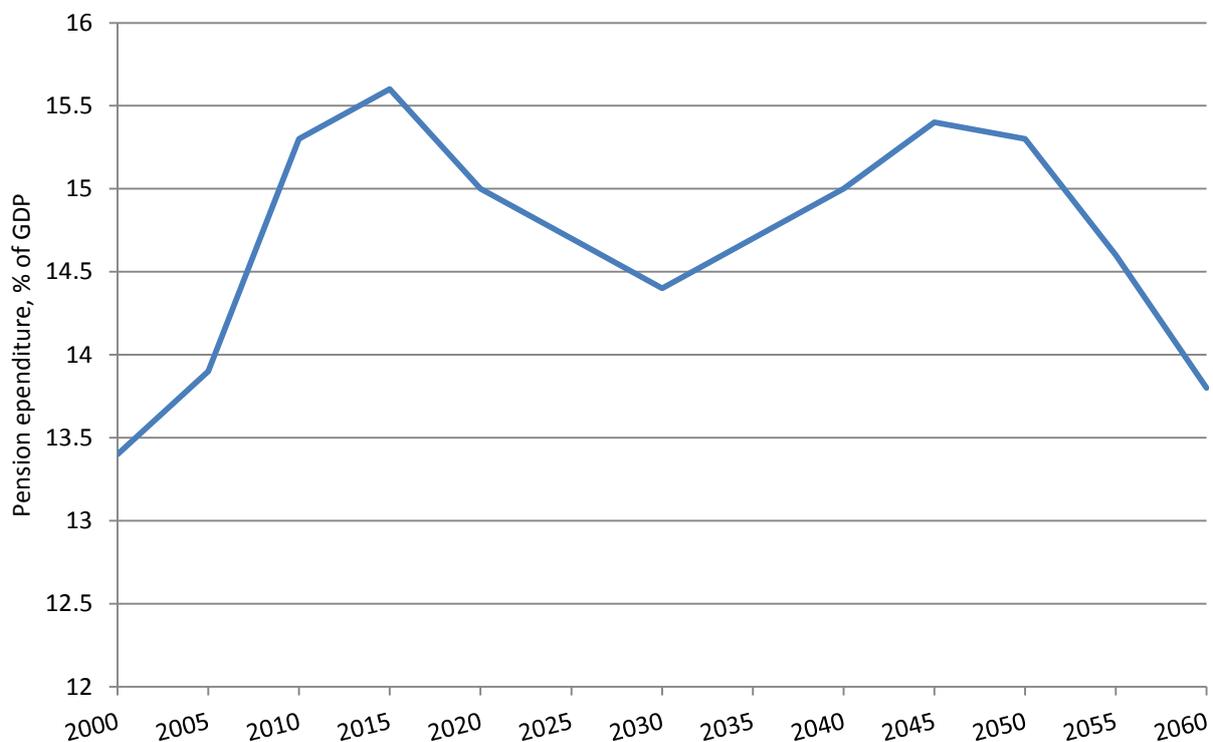
Source: OECD Health Data (2013); OECD (2014), Education at a Glance 2014; Eurostat (2015), Social Protection Expenditure.

4.3. Other structural reforms

As already mentioned, in the aftermath of the economic crisis two important structural reforms of the pension system and the labour market have been implemented, or at least initiated, by the technocratic government in 2011-2012.

The reform of the pension system has been implemented at the end of the 2011, completing two decades of important but “exasperatingly slow piecemeal” reforms of the pension system (Fornero, 2013). The 2012 reform did not change the nature of the Notional Defined Contribution system but increased the statutory retirement ages (to be indexed using the life expectancy), aligning those of women to ages required for men from 2018. Moreover the reform abolished the pensions based exclusively on years of work irrespective of age and imposed the contribution-based method of calculating benefits for all workers. As a consequence, the Italian pension system is now financially sustainable (OECD, 2013) and the expenditure on pensions as % of GDP should decline between 2015 and 2030 (in particular for the increased required retirement age), increase again between 2030 and 2050 due to a worsening in the workers/pensioners ratio due to the retirement of the children of the baby boom cohorts and then decrease again due to the application of the contributory system (Figure 14). However, the financial sustainability of the pension system will depend on the evolution of the GDP and in particular on the effect of the increased retirement age on the labour market participation of the youths and on the overall productivity.

Figure 14. Evolution of pension expenditure



Source: MEF (2012)

On the labour market side, in the last decades work security and flexibility have not been implemented as expected giving rise to a model of flex-insecurity which during the recent economic crisis has shown the dark side of the deregulation: rising unemployment, limited access to social security and, due to low wages, depleted savings to rely upon in bad times (Berton et al., 2012).

The labour market reform implemented in 2012, without any additional resource attached to it, was aimed at supporting directly or indirectly the aggregate demand. It promoted inclusiveness and dynamism in the realm of flexicurity, along four major lines inspired by the German labour market reform (Tompson 2009): a) enhancing employability through flexibility in labour market entry by

means of a reorganisation of the existing types of labour contracts, apprenticeship schemes, re-training and life-long learning programs; b) promoting more effective matching tools and quality employment services; c) flexibility in labour market exit reaffirming the centrality of the open-ended contract but, at the same time, establishing a more extensive safety net inspired by universality and pro-active behaviour; d) implementing reliable active labour market policies (Fornero, 2013). Despite the economic crisis hit very hard the Italian economy at the time of the labour market reform, first empirical evidence at the end of 2013 shows an increase in the share of permanent contracts, apprenticeships and term contracts and a reduction in the share of “project-related jobs” (ISFOL 2013).

In addition, a comprehensive reform of the labour market has been proposed by the new government at the end of 2014 and included in the so-called Jobs Act which has the potential to reduce the widespread segmentation of the Italian labour market and to provide more clarity on the costs and time involved in the dismissal of workers for economic reasons, incentives for firms to hire or convert more workers on permanent contracts, efforts to promote the participation of women and extend income support to all the unemployed (OECD, 2014). Overall, according to the OECD (OECD, 2015) the reforms underway can, over 10 years, boost average annual per capita GDP growth by 0.6%, productivity by 3.6% of GDP and employment by 2.7%.

5. Conclusion

Besides the huge effects of the Great Recession on the Italian economy, great efforts have been exerted by governments to maintain public finance under control, limiting the level of net borrowing and the increase of the public debt.

The effects of the economic crisis and of austerity measures on household income are of great current relevance, not only in its own right, but also because the way that the cost of the crisis is distributed has implications for macroeconomic recovery prospects and for the financial stability, as well as for the political acceptability of policy interventions. In the Italian case, the impact of the two recessions on living standards must be seen in the context of a stagnating economy for almost a decade, with households losing their purchasing power and facing increasing occupational insecurity, and the government obliged to carry out fiscal consolidation and implement structural reforms to acquire new confidence in the international markets.

The effects of the economic crisis, characterised by a second dip in 2011 and still affecting the Italian economy, were generally felt more by non-elderly households due to the large impact on their employment and salaries. In the face of rising unemployment, worsening living standards and continuous pressure on public finances, governments still have choices over the distributional properties of the fiscal consolidation measures that they introduce. The Italian governments implemented a series of consolidation measures only at the beginning of the second recession that hit the national economy since the end of 2011. The magnitude of such measures is much lower than those implemented in other Mediterranean countries, in part due to the relative good stance of the public finances and in part due to the reliance on structural reforms implemented in the same period. The reforms of the pension system and labour market are indeed fundamental to the sustainability of the public finance in the long term and can be seen as the starting point of a rebalancing of economic relationships between generations.

Overall, the distributional pattern of fiscal consolidation measures gives the opportunity to highlight some issues and prospects for the Italian tax-benefit system. The burden imposed on individuals and their families show an overall slightly progressive pattern only if one excludes the high incidence of austerity measures implemented on those at the very bottom of the income distribution through increases in indirect and property taxes. First, this confirms the absence of any generalised social safety net that represents a chronic problem of the Italian welfare system and a unicity within the European context. Second, there has been a partial shift from taxes on labour income to consumption and income from capital, following the wide consensus on growth friendly tax reforms. However, the shift has not been revenue neutral reducing any potential impact on aggregate demand. Third, most of the burden has been allocated on pensioners and public sector employees, categories less affected by the wider consequences of the recession. However, the decline in their real income undermines seriously any positive prospect of the aggregate internal demand and the medium-term outlook is still uncertain: a great deal depends on the capacity of the Italian economy to regain a real growth path that is missing since more than a decade.

References

- Aaberge R., A. Langørgen and P. Lindgren, 2010, “The Impact of Basic Public Services on the Distribution of Income in European Countries”, in A. B. Atkinson and E. Marlier (eds.) *Income and Living Conditions in Europe*, Luxembourg: Eurostat.
- Arachi G. and A. Santoro, 2014, “Il Sistema fiscale e la ricerca della crescita perduta”, in A. Zanardi (ed) *La finanza pubblica italiana. Rapporto 2014*, Bologna: Il Mulino.
- Avram S., F. Figari, C. Leventi, H. Levy, J. Navicke, M. Matsaganis, E. Militaru, A. Paulus, O. Rastrigina and H. Sutherland, 2013, “The Distributional Effects of Fiscal Consolidation in Nine EU Countries”, *EUROMOD Working Paper 2/13*.
- Baffigi, B., 2011, “Italian National Accounts, 1861-2011”. *Economic History Working Papers*, N. 18, October, Bank of Italy.
- Baldini M. and S. Toso, 2014, “Austerità fiscale, distribuzione del reddito e politiche sociali negli anni della grande recessione”, in A. Zanardi (ed) *La finanza pubblica italiana. Rapporto 2014*, Bologna: Il Mulino.
- Bank of Italy, 2008, “Annual Report for 2007”, 31 May, Rome: Bank of Italy.
- Bank of Italy, 2012, “Annual Report for 2011”, 31 May, Rome: Bank of Italy.
- Bank of Italy, 2014, “Annual Report for 2013”, 30 May, Rome: Bank of Italy.
- Bank of Italy, 2015, “Economic Bulletin N. 1 – 2015”, January, Rome: Bank of Italy.
- Berton F., M. Richiardi and S. Sacchi S, 2012, “The political economy of work security and flexibility: Italy in comparative perspective”, Bristol: Policy Press.
- Brandolini A., 2014, “The Big Chill. Italian family budgets after the great recession”, *Italian Politics* 29(1): 233-256.
- Ceriani L., C. Fiorio and C. Gigliarano, 2013, “The importance of choosing the data set for tax-benefit analysis”, *International Journal of Microsimulation* 6(1): 86-121.
- European Commission, 2006, “The long-term sustainability of public finances in the European Union”, *European economy 4*, Directorate-General for Economic and Financial Affairs.
- European Commission, 2009, “Sustainability Report 2009”, *European economy 9*, Directorate-General for Economic and Financial Affairs.
- European Commission, 2015, “European Economic Forecast European economy”, Winter 2015, Directorate-General for Economic and Financial Affairs.
- Figari F. and A. Paulus, 2013, “The Distributional Effects of Taxes and Transfers Under Alternative Income Concepts: the Importance of Three ‘I’s”, *Public Finance Review*, Forthcoming.
- Figari F., A. Paulus and H. Sutherland, 2011, “Measuring the size and impact of public cash support for children in cross-national perspective”, *Social Science Computer Review* 29(1): 85-102.
- Figari F. and H. Sutherland, 2013 “EUROMOD: the European Union tax-benefit microsimulation model”, *International Journal of Microsimulation* 6(1) 4-26.
- Francese, M. and A. Pace, 2008, “Italian Public debt since national unification. A reconstruction of the time series”, *Questioni di Economia e Finanza, Occasional papers*, N. 31, Rome: Bank of Italy.
- Fornero E., 2013, “Reforming labor markets: reflections of an economist who (unexpectedly) became the Italian Minister of Labor”, *IZA Journal of European Labor Studies*, 2013, 2:20.
- Giorgi F., A. Rosolia, R. Torrini and U. Trivellato, 2011, “Mutamenti tra generazioni nelle condizioni lavorative giovanili”, in A. Schizzerotto, U. Trivellato and N. Sartor (eds.), *Generazioni disuguali. Le condizioni di vita dei giovani di ieri e di oggi: un confronto*. Bologna: Il Mulino.

- ISFOL, 2013, “Gli effetti della legge n. 92/2012 sulla dinamica degli avviamenti dei contratti di lavoro. Evidenze ricavate dal Sistema informativo sulle comunicazioni obbligatorie del Ministero del Lavoro e delle Politiche Sociali”, Roma: ISFOL.
- Istat 2015, “Conti ed aggregati economici delle Amministrazioni pubbliche”, Istituto nazionale di statistica, tables downloaded from <http://www.istat.it/it/archivio/78376>, last download on 2 February 2015.
- Keen M., R. de Mooij, L. Eyraud, J. Tyon, S. Bond and L. Walters, 2012, “Italy: The Delega Fiscale and the Strategic Orientation of Tax Reform”, Washington, D.C., International Monetary Fund, Fiscal Affairs Department.
- MEF, 2011, “La spesa dello stato dall’unità d’Italia Anni 1862-2009”, Rome: Ministero dell’economia e delle finanze, Dipartimento della ragioneria generale dello stato.
- MEF, 2012, “Le tendenze di medio-lungo periodo del sistema pensionistico e socio-sanitario”, Rome: Ministero dell’economia e delle finanze, Dipartimento della ragioneria generale dello stato.
- Meneghello, M., 2014, “Government to invest more than €1 bn to bail out and nationalize Ilva steel plant”, *Il Sole 24 Ore*, digital edition.
- Navicke, J., O. Rastrigina and H. Sutherland, 2014, “Nowcasting Indicators of Poverty Risk in the European Union: A Microsimulation Approach”, *Social Indicators Research* 119(1): 101-119.
- OECD, 2013, *OECD Economic Surveys: Italy 2013*, Paris: OECD Publishing.
- OECD, 2014, *OECD Employment Outlook 2014*, Paris: OECD Publishing.
- OECD, 2015, *OECD Economic Surveys: Italy 2015*, Paris: OECD Publishing.
- Taddei A., 2012, “L’ipotesi di tax-shift dal lavoro ai consumi in Italia: un’analisi di microsimulazione fiscale utilizzando il modello EUROMOD”, University of Genova DEP Working Paper 7/2012.
- Tompson W., 2009, “The political economy of reform”. Paris: OECD Publishing.