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The impacts of the Renzi government's economic policies on income distribution

1. Introduction

Since 2014 the Italian government reacted to the double dip recession experienced since the start of the Great Recession by introducing some policies aimed at encouraging private consumption and stimulating economic growth. The main purposes of the government were to reform the labour market in order to reduce the unemployment rate and to give benefits to some households in order to foster consumption.

In this study we focus on the effects of the Renzi government's main economic policies introduced in 2014 and in 2015. In particular, we consider the introduction of two benefits, the new born bonus ('*Bonus Bebè*') and the '80 euro bonus'; the increase of capital income taxation; the elimination of the property tax on main residences and the increase in the employment rate as a consequence of the labour market reform (Jobs act), which was introduced jointly with a reduction in the social security contribution for firms.

We aim at evaluating the redistributive impact of these measures on income inequality, since Italy has one of the highest income inequality in the European developed countries (Eurostat, 2014).

Our analyses are carried out using EUROMD, the tax-benefit microsimulation model of the European Union, based on data derived from the Italian version of EU-SILC (the European Union Statistics on Income and Living Conditions) collected in 2012. EUROMOD simulates benefits and

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taxes at individual and household level and computes household disposable income. We simulate a counterfactual scenario, using as benchmark household income in 2015 in the absence of policies. We use that counterfactual scenario to evaluate changes in disposable income distribution brought about by the implementation of the new policies.

The remainder of this contribution is structured as follow: in Section 2 we describe the above mentioned policies implemented in 2014 and 2015 by the Italian government, in Section 3 we describe the data and the methodology, briefly presenting the microsimulation model. Section 4 shows the results in terms of the impact of fiscal policies on income distribution and poverty. Finally, Section 5 summarises the main findings.

2. Tax and benefit policies in Italy by the early Renzi government

During its first year in charge the Renzi government was active in proposing new policies to increase tax revenues and stimulate domestic demand.

The government introduced in 2015 two new progressive transfers aimed at increasing domestic demand. The first one, often named '80 euro bonus', was temporarily introduced in May 2014 but then was made permanent starting from January 2015. According to this benefit, employees with a taxable income lower than 26,000 euro and higher than 8,000 euro receive up to 80 euro per each month in occupation. The benefit linearly decreases from 80 euro if yearly income is above 24,000 euro and expires at 26,000 euro.

The second benefit is the so called 'new born bonus'. The aim of this policy is to reduce child poverty and to increase means-tested benefits to households. The recipients are families with children born between 1st January 2015 and 31st December 2017 and with the value of the Indicator of the economic situation (ISEE)³ lower than 25,000 euro. The bonus amounts to 80 euro per month, paid for the first three years of a child's life. For an ISEE indicator below 7,000 euro per year, the amount is doubled to 160 euro per month.

During 2015, the Renzi government approved a reform of the labour market ('Jobs act'), which also has an effect on fiscal revenues. This reform was implemented to increase the employment rate and in particular the share of permanent contracts. The main novelty is the introduction of the

³ The ISEE (Indicator of the economic situation) is an index that estimates the economic situation of families. It takes into account household income, properties (such as houses, assets, dividends) and the composition of the family.

progressive entitlement employment contracts, reducing the cost of firing for firms and hence reducing also the disincentive to hire new workers with long-term contracts. The reform was combined with a temporary cut of social security contribution for firms who hire employees with this new contract. The social security cut amounted to 8,060 euro per year for a maximum duration of three years. To be eligible, firms should hire a worker who was not employed with a permanent contract in the past six months. This policy does not directly affect the workers' income as firms most likely do not share the transfer with their workers, given its temporary duration. However, it is intended to enhance the opportunities to enter into the labour market, therefore increasing individual disposable income.

Starting from July 2014 the Italian government also raised capital income taxation. In particular, the tax on interests paid on corporate bonds and on bank and postal accounts, on dividends and on capital gains was increased from 20% to 26% and the tax on private pension returns was increased from 11% to 20%.

Finally, building and real estate income taxation was reformed. In 2014 the property tax, which had experienced a series of changes over recent years, was cancelled and a new tax on indivisible services TASI (*Tassa sui Servizi Indivisibili*) was introduced, both on the main residence and other building and real estate properties. Starting from 2016 no tax is due by main residence owners.

In this work we simulate all these policies assessing their redistributive effects.

3. Data and main assumptions used

To study the impact of fiscal policy in Italy, we use EUROMOD, the European Union tax-benefit microsimulation model. EUROMOD's updating and development has been supported by funding from the DG-Employment European Union Programme for Employment and Social Security (PROGRESS), starting from 1996. Tax-benefit models are based on household micro-data and calculate disposable income after the simulation of taxes, social security contributions and benefits for each household in the dataset. EUROMOD is a static model, designed to evaluate the immediate 'morning-after' effect of policy changes and it does not incorporate the possible effects of behavioural changes (Sutherland, 2001). This model can be used to analyse whether the change in public policies has contributed to reducing or to increasing income inequality (Figari and Sutherland, 2013). The input data derive from the Italian sample of the European Union Statistics on Income and Living Conditions (IT-SILC) released in 2012. However, using updating factors for income sources, 2015 income is obtained.

In order to evaluate the impact of the measures described in the previous section, we simulate a counterfactual analysis, comparing the scenario after the introductions of the policies with what would have happened in the absence of these measures. In this study, we assume that most of the fiscal policies implemented in Italy had no behavioural effect. This is equivalent, in our case, to assume that the decision to have a child is independent of a monthly 80-euro transfer for three years, or that the allocation of savings among financial instruments, insurance policies and housing properties is independent of taxation. Those assumptions do not seem too demanding to us, as – for their size – these policies are unlikely to have strong behavioural effects. However, the assumption of no behavioural effect of simulated policies is more demanding in some other case, and especially when the simulated policies are explicitly aimed at affecting the labour supply. In particular, the 80-euro monthly transfer might increase the probability to take a job offer for very low wages; furthermore, fiscal incentives to reduce labour costs could increase labour demand and allow some people to exit their unemployment status. To keep the analysis simple, we decided to simulate the effect of the labour market reform by randomly assigning a new job to previously unemployed workers according to statistics on the increased employment rate published by Istat. Given the data used when this exercise was run (February 2016), our simulations cannot disentangle between the two different components of the labour market reform, namely the Jobs Act and the reduction in the social security contribution for firms.

The New born bonus is given to households with a new born baby, in relation to the value of ISEE. Since we are analysing the effect of policies in 2015 but we are drawing on SILC 2012 dataset, we consider as eligible all families with a child born in 2011, which is the last available year of the survey. The ISEE indicator has been computed within Euromod by taking into account the income of all household members, their assets and the composition of the household (number of members and their characteristics).

To simulate the redistributive effects of capital income taxation changes we used the recalibrated incomes as described in Bazzoli *et al.* (2017). This calibration of capital income is necessary to allow for the well-known underestimation of capital income in recall interviews. Capital income taxation is recalibrated by using the Bank of Italy statistics on wealth by Italian households.

The simulation of the employment effect of the Jobs act is complex as this policy was introduced jointly with a transfer to firms to reduce the cost of social security contributions for new permanent contracts. In fact, it is not possible to disentangle the effect on employment of the new progressive entitlement employment contract from that of the reduction of employment costs. Moreover, additional complications arise from the choice of the statistics to be used to measure the size of the employment change (Anastasia et al., 2015). In this study, we use data by Italian institute of statistics (ISTAT), which show an employment increase by 0.6 percentage points from 2014 to 2015. We are assuming that this increase is all due to the labour market reform with no role for the economic trend. According to Istat, from 2014 to 2015 the number of employed people increased by about 186 thousand units, mostly among over 44 years, increasing the occupation rate from 55.7% to 56.3%. Hence, we randomly change the employment status to a corresponding share of people over 44 years who were unemployed in our sample. We assign them an employment income equal to the median of the employment income of individuals in our sample with the same age and level of education.

4. Results

In this section we present the effects of the policies described above on disposable household income. The analysis is presented in terms of individual income changes according to deciles of the equivalent income distribution. Equivalent income is the ratio of the household income to the equivalence scale, according to the «modified OECD scale», where the first adult in the household is given value of 1, each additional adult a value of 0.5 and each child under 14 years old a value of 0.3.

Figure 1 presents the overall effect of the reforms described in Section 2 in terms of change of disposable income in euro. A large increase in disposable income is given by the '80 euro bonus'. Interestingly, the amount of the benefit increases up to the seventh decile and decreases only in the last deciles, although it was designed as means-tested and aimed at low income people. In our simulations individuals in the first decile increase their yearly income by 44 euro on average, while those in the seventh decile by 206 euro. This evidence shows that targeting the 80 euro bonus to individual income instead of household income allows relatively well-off families to receive it and undermines the potential equity-enhancing effect of this measure (Figari and Fiorio, 2015).

The average impact of the 'new born' bonus on the individual disposable income is small and equal to about 9 euro in the first six deciles; it then decreases and goes next to zero in the last decile. This is not surprising as this policy was means-tested on (ISEE-corrected) household income.

The increase of income brought about by the elimination of the property tax on the main residence is greater for better-off families, suggesting a regressive overall effect. This is not unexpected as the percentage of own dwelling owners, and their cadastral value, is well-known to rise with income. Our simulations show that families in the top decile had more than three times the absolute income gain than families in the first decile.

The effect of the reform of capital income taxation, on the contrary, had a clear progressive effect. Households with higher level of income, with larger amount of capital incomes, ended up paying more after the reform. Our calculations suggest that, on average, the disposable income decreases of 150 euro for people in the tenth decile and 52 euro for people in the ninth decile.

Finally, assuming that the number of employed people increased by 186 thousand units because of the labour market reforms, we estimate that the poorest households, and in particular those in the first decile, receive the greatest benefit from the reform (the average benefit amounts to 175 euro).

In order to interpret this last result, two caveats should be made clear. The estimated increase in the employment rate is likely to be an upper bound as part of it is due to the economic trend. Second, we simulated the change in employment randomly assigning new jobs to unemployed workers regardless of the level of income. However, as the unemployment rate in our sample is the highest in the first decile, by randomly assigning a change of status (from unemployed to employed) we are artificially allocating a larger share of new jobs to workers in the first decile.



Fig. 1 – Change in individual disposable income. Distribution by equivalent income deciles

(Source: own calculations using EUROMOD)

Overall, according to our estimates, the greatest benefits from the policies introduced by the Renzi government are received by individuals in the 6th and 7th decile. The richest households, namely those in the last decile, with a median household income of 77,058, on average gain less than 85 euro per year. In the other deciles, people increase their disposable income between 200 and 300 euro. The policies with the greatest redistributive effect are the reform of capital income taxation, which decreases income of the richest, and the labour market reform, which increases income of the poorest.

So far, we presented the effect of the policies in terms of absolute income variation. Figure 2 shows the effect in terms of percentage variation of individual disposable income. In this way, we consider that the same absolute income variation has a different impact on individuals in lower or in the upper deciles. People in the first decile increase their disposable income by 9%, while individuals in the other deciles experience an income increase of less than 4%, which decreases with income. The income variation in the last decile is almost null (+0.2%).



Fig. 2 – Percentage variation in individual disposable income. Distribution by equivalent income deciles

(Source: own calculations using EUROMOD)

Table 1 presents some measures of income distribution and poverty, before and after the simulated policy reforms. Starting from the no reform simulation, we incrementally introduce each policy reform and compute the value of the income distribution indices at each step. Therefore, the impact of the whole policy reform package is computed in the last simulation and the contribution of each policy reform can be derived by comparing the values of the indices at each step with those at the previous step. The first column of the table (named Benchmark) describes the no reform simulation, the second shows the values of the indices after the introduction of '80-euro' and 'new-born baby' benefits, the third includes the effect of the changed capital income taxation, the fourth the effect of increased probability of occupation for unemployed and the last the change in the main residence taxation. To assess the changes in inequality we used the ratio between the 90th and the 10th percentile and the Gini index. The table shows that before the introduction of the policies the

income of the 90th percentile was four time the income of the 10th, while this ratio decreases to 3,86 after the introduction of all these policies. This result is roughly confirmed also by the Gini indicator. It means that benefits, employment policies and change in taxation have most likely slightly reduced inequality, although the size of the reduction is very small and likely to be statistically not different from zero. Finally, we investigate the effect of these polices on poverty. The poverty rate, that is the share of persons under the poverty line, computed as the 60% of the median income. Overall, the policies introduced decreased from 18,5% to 17,2%, the largest contribution given by the larger transfers and by the increased employment opportunities provided.

Table 1 - Measures of income distribution	, inequality and poverty	after the introduction	of some policies
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	Benchmark	Benefits	Benefits and capital income taxation	Benefits, capital income tax and employment	Benefits, capital income tax, employment and main residence taxation
Ratio (percentile 90°/10°)	4.00	3.92	3.91	3.88	3.86
Gini	0.33	0.32	0.32	0.32	0.32
Poverty rate	18.5	17.9	17.9	17.5	17.2

(Source: own calculations using EUROMOD)

5. Conclusion

This study provided the estimate of the impact of the main economic policies introduced by the early Renzi government, namely the '80-euro' and 'new-born baby' benefits, the changed capital income taxation, the labour market reforms and the change in the main residence taxation. Our results showed that these measures, with the only exception of the labour market reform, affected all income deciles with marginal differences. Overall, our analysis shows that the redistributive effects of these policies are very limited. For instance, the '80 euro bonus', by being means-tested at the individual and not at the household level, was distributed also to households in top deciles, showing scope for better targeting of transfer policies.

The main distributional result pointed out by our analysis is a reduction of the poverty index, mostly driven by the simulated increase of disposable income of households at the bottom decile. This is due to the fact that poorest families account for the largest share of unemployed workers, who are likely to largely benefit by an increase in the number of job offers. This result is however to be taken with caution, as the effect of the Jobs Act reform could fade away as the reduction in the cost of social contribution is withdrawn. Moreover, at present there is no clear evidence on the actual size of the occupational change and of its distribution among the population of unemployed workers, which could jeopardize the reliability of our simulations.

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Robert Waldmann

Discussion of Martina Bazzoli, Silvia De Poli, Carlo V. Fiorio Fiscal policy in year 2015 and income distribution

Martina Bazzoli, Silvia De Poli and Carlo Fiorio presented a microsimulation of the effects on the Italian income distribution of four fiscal reforms introduced in 2015 and one proposed for 2016. The enacted reforms are:

- 1. a tax credit of 80 Euros a month for payroll employees with incomes under 24,000 euros per year which is phased out over the range 24,000 to 26,000 the so called 'Renzi' bonus
- 2. a tax credit of 80 Euros a month per child under the age of 3 for familees with income under 24,000 euros per year, which is doubled for families with incomes under 7,000 euros per year the so called 'bebè' bonus
- 3. an increase in capital income taxation
- 4. a three year exemption of employers from payroll taxes for new employees hired on permanent employment contracts who were not so employed in the previous year the hiring subsidy.

The proposed reform is a reduction of taxes on principal residences.

The investigation is principally a static micro simulation using 2012 IT-SILC data, although the incentive effects of the hiring subsidy are considered. The effects are simulated by decile of income.

One striking result is that the benefits of the 'Renzi' bonus increase markedly in income for low incomes peaking at the 6th decile of individual income. This reflects the fact that many people in lower deciles are not employed. The 'Renzi' bonus makes sense if one perceives the problem in the Italian labour market to be insufficient labour supply. It doesn't make so much sense as an antipoverty or redistributive effort. The total effect of income by decile of the 'bebè' bonus is quite small, reflecting the low birth rate. However, it is relatively high for the lowest decile of individual income. This reform does seem to direct income to households in great need which, by defnition, include young children. This is extremely important given quasi experimental evidence of extremely long lasting benefits of such transfers in the USA.

In the analysis of the temporary payroll tax holiday for people newly hired on indefinite term contracts, the static accounting approach makes no sense. The sensible approach of Bazzoli *et al.* is to compare the rate of such hires in comparison to fixed term contract hires before and after the reform. As they note, there is no convincing way to control for the business cycle. The only control is the rate of hiring for fixed term contracts. Similarly this approach does not make it possible to distinguish the effects of the temporary payroll tax holiday and the relaxation of restriction on dismissals of workers with indefinite term contracts.

This gives an estimated effect in which it is not possible to have great confidence. This is extremely important, because the point estimate is that this reform helped 379,000 unemployed people in 2016. The micro simulation suggests benefits overwhelmingly concentrated in the poorest decile with an average expected increase in income of over 9% for individuals in that decile.

The discussion of the proposed possible reform of real estate taxes is necessarily speculative. It is not at all encouraging. The microsimulation with available data makes it clear that the expected average benefits of the tax cuts increase in income. If the lost revenues were replaced by other real estate taxes including taxes on rental housing and the taxes on rental housing were shifted to tenants, then the effect of the reform would be to increase inequality. The analysis is a warning of the risks of ignoring tax incidence.

Notably, the discussion of the reforms of payroll and of real estate taxes shift the approach from the strict static accounting analysis of Renzi and 'bebè' bonuses. Static analysis has the great strength that it summarizes available data and does not rely on theoretical assumptions. It can be complemented by cautious speculation about behavioral effects.

The effects of the Renzi bonus in the Lucifora and Moriconi model¹ are clear – the bonus increases labour supply – it provides an advantage to the worker of reaching an agreement with the potential employer. In that model (and many others) it will cause a reduction in the contracted pretax wage. This means that it would cause increased employment. As noted

¹ Refer to Lucifora and Moriconi's chapter in the present book.

in the analysis of the effects of the three year exemption from payroll taxes, any benefits of such an effect of the bonus are strongly directed at workers who would otherwise be unemployed and have extremely low incomes.

Finally redistribution of income has an effect on aggregate demand. There is strong evidence that lower income households have a higher propensity to consume out of physical wealth plus the present value of labour income. This effect should not be eliminated by monetary policy either in an economy with interest rates at the zero lower bound or in an economy without an independent monetary policy. That is to say, it can't be assumed that effects of Italian taxes on Italian aggregate demand are negligeable. This casual speculation supports the conclusions of the authors.