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A "reverse Robin Hood"? The distributional implications of non-standard monetary policy for Italian households

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ABSTRACT

We study empirically the distributional implications of ECB non-standard monetary policy by exploiting a rich micro dataset on Italian households' income and wealth, and contemporaneously taking into account all relevant transmission channels. Our results do not support the claim that an unconventional monetary loosening acts as a "reverse Robin Hood". Larger benefits accrue to households at the bottom of the income scale, as the effects via the stimulus to economic activity and employment outweigh those via financial markets. The response of net wealth is moderately U-shaped: less wealthy households take advantage of their leveraged positions, wealthier households of their larger share of financial assets. Overall, the effects on inequality are negligible. The results also suggest that savers are not hurt, as the decrease in the remuneration of assets is compensated by support to labour income and by capital gains.

1. Introduction

Does monetary policy affect the distribution of income and wealth? The reduction of inequality lies squarely outside the mandate of central banks, whose objectives are the stabilisation of prices and economic activity; however, the issue has come to the fore with the global financial crisis and the adoption of aggressive, non-standard monetary policy actions.

Before the Great Recession, a widely shared conclusion of the empirical literature was that a monetary expansion is likely to be associated with improved conditions for the poor. At the same time, this effect was considered to be temporary, implying that putting emphasis on the cyclical impact of monetary policy on poverty would be misleading. Therefore, the best that monetary policy can do to reduce inequality in the long run is to aim for low inflation and stable aggregate demand (Romer and Romer, 1999).

Nonetheless, the conjecture that non-standard monetary measures may increase inequality has been put forward in the aftermath of the Great Recession. Should this claim turn out to be correct, the negative impact on income and wealth inequality may become a concern for monetary policymakers because it may affect public support for the independence of central banks and undermine their determination to pursue aggressive policies. Moreover, by favouring the wealthy, whose propensity to consume is lower, non-standard measures would have an adverse impact on the monetary transmission

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mechanism, denting the effectiveness of the policy stimulus. Last but not least, these concerns may also have implications for the choice of an optimal fiscal-monetary mix.

In the US, both the role of the central bank during the global financial crisis and the foundations of its independence were questioned (Bernanke, 2015b), based on the claim that the Federal Reserve's non-standard policies acted as a "reverse Robin Hood".[1] In other words, unlike what was observed for conventional monetary expansions, very low rates and large-scale asset purchases may have increased inequality, supporting the wealthy, for instance, via their effects on asset prices.

In the euro area, a common claim is that very low interest rates are "a bane for savers and a boon for borrowers" (Holzhausen and Sikova, 2014), implying an "expropriation of savings" and thus imposing disproportionate costs on particular countries. The issue of the potential distributional implications of the European Central Bank (ECB) policies, not only across individuals but also across member states of the monetary union, was raised in the European Parliament as well (Claeys et al., 2015).

Together with the increasing interest by policymakers and the public, the academic literature also has recently devoted more attention to the effects of monetary policy on income and wealth inequality and has identified three main channels through which a change in the monetary policy stance may have short-run distributional consequences.

The first is the *earnings composition channel* which is based on the evidence that the elasticities of employment status and wages with respect to the business cycle are heterogeneous across individuals depending on personal characteristics that vary across income levels. In this regard, Coibion et al. (2012) and Bivens (2015), using US data on the Great Moderation and the Great Recession, respectively, show that expansionary monetary policy benefits poor and middle-class consumers, by supporting their employment and income that are more sensitive to swings in aggregate activity.[2]

The second is the *savings remuneration (and cost of debt) channel*, which is associated with the existence of differences across households in terms of net financial positions. Because of such differences, a change in interest rates has opposite effects on net borrowers' and net savers' economic conditions.

The third is the *asset price channel*, which stems from heterogeneity in agents' portfolios that leads to very diverse capital gains (or losses) when the monetary stance changes. In this respect, asset price movements induced by expansionary policies are likely to benefit the wealthy and, in some cases, the middle class, to the extent they hold financial and real assets, whose prices respond to monetary measures.

While the above three channels have usually been studied separately, the adoption of a more comprehensive approach is critical.[3] This necessity also is emphasized by Bernanke (2015a) who observes that "[...] The better way to look at the distributional effects of monetary policy is to compare changes in the income flowing from capital investments with the income from labour". Similarly, Panetta (2015) and Draghi (2016) argue that quantitative estimates obtained by singling out one particular channel and based on a "ceteris paribus" assumption may lead to misleading conclusions. The reason is that savers are hurt by lower yields, but they also benefit from improved employment opportunities and increased asset prices. More generally, the existing studies that provide a more encompassing picture either fail to identify the specific impact of each channel or fall short of producing quantitative estimates of their relative importance.

In light of these observations, the contribution of this paper is to consider all three channels through which monetary policy affects inequality, quantitatively compare them and obtain a joint assessment of the impact on inequality indexes. We pursue this objective in three steps. First, we simulate the responses of a series of macroeconomic and financial variables to a monetary policy impulse. Second, we map these aggregate responses onto household level effects allowing the intensity of the *earnings composition*, *savings remuneration* and *asset price channels* to vary across units according to the characteristics of household members and the structure of their balance sheets. Finally, we combine these results, deriving the full impact for each household in terms of income and wealth, and we compute inequality indexes.

We focus on the set of expansionary non-standard measures implemented by the ECB in 2011–2012, as well as on two alternatives, namely a monetary accommodation implemented exclusively via an asset purchase programme and a "traditional" monetary loosening carried out through a reduction in official interest rates.[4] For each of these scenarios we estimate the aggregate effects on the main Italian macroeconomic and financial variables and assess the associated distributional implications exploiting information on those characteristics of Italian households that may produce heterogeneous responses in incomes and wealth.

To this end, we take advantage of a rich survey dataset of about 8000 Italian households, which provides detailed information on individual households' characteristics and financial positions, including portfolio composition. Given that our paper largely relies on the distribution of income, wealth and their components, it is crucial that we take into account the bias due to non-response and underreporting. This issue, indeed, represents a major problem that plagues many of

[1] The claim that monetary measures adopted by the Federal Reserve in response to the global financial crisis implied a redistribution from the poor to the rich has been put forward by several politicians and officials. Even a former Federal Reserve Governor said: "I would say [Fed policy] has been in some sense reverse Robin Hood" (Kevin Warsh, interview with CNBC, 26 June 2014).

[2] Coibion et al. (2012) also study the distributional impact of a change in the central banks inflation target. Among other works studying this topic, see Doepke et al. (2015).

[3] O'Farrell et al. (2016) jointly consider the effects of the financial channels (i.e. the remuneration of savings and capital gains) for a number of countries.

[4] The set of measures implemented by the ECB in 2011–2012 include government bond purchases, liquidity injections and the announcement of a programme aimed at safeguarding an appropriate monetary policy transmission and the singleness of the monetary policy. These measures are discussed in detail in Section 3.1.

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