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Household investments through Italian asset management products

Prepared by Bank of Italy[1]

Summary

This study is the first to analyse the portfolio investments underlying the Italian asset management products held by Italian households in the period 2014-16. The indirect portfolio is primarily composed of Italian government bonds, while the proportion of Italian corporate bonds and shares is negligible. The share of the bonds and equities issued by foreign intermediaries and firms rose over the three years: at the end of 2016, Italian households were indirectly investing a greater amount in French and US non-financial corporations than in Italian non-financial corporations. As a result of the reclassification of indirect investments, Italian households hold a larger share of Italian government bonds, foreign debt securities and mutual fund shares.

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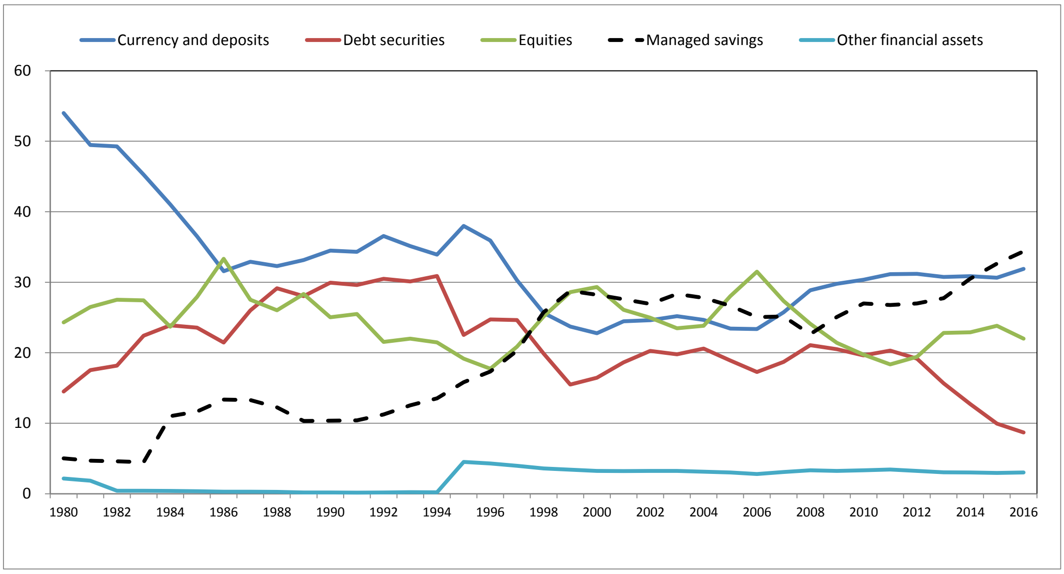
I. Introduction and main conclusions[2]

1. In this work asset management products are defined as the sum of insurance products, mutual funds and pension funds.

2. Until the introduction of mutual funds in 1984, insurance policies were the only type of managed savings product held by Italian households, accounting on average for 7 per cent of the sector's total financial wealth in the period 1950-1980. With the reform of the pension system in the early nineties, they were joined by private pension products which still account for a negligible share of the financial wealth of Italian households.

Fig. 1 - Composition of Italian households' financial wealth



Sources and methods: see Appendix A.2.

3. Between 1998 and 2006 the share of Italian households' financial wealth invested in the asset management component exceeded that held in the form of currency and deposits. At first, this was because of the substantial investments made in mutual funds, while later it was on account of the growth in insurance products which offset the gradual exit from mutual funds (Fig. 1). In 2012, Italian households again began to invest more heavily in asset management instruments. At the end of 2016 these instruments were the largest component of financial wealth, accounting for more than 34 per cent compared with 32 per cent for currency and deposits combined. The structure of Italian households' balance sheet thus became more similar to that of households in the main OECD economies, which mostly hold insurance and pension products and a limited amount of debt securities.[3]

4. Asset management instruments enable households to meet various needs: to improve the risk-return profile of their financial portfolio through the diversification, also geographical, of investments; to build up retirement savings; and to buy protection against risks (e.g. death, disease, invalidity). They include instruments that are both simple and

[2] We would like to thank Giorgio Albareto, Andrea Brandolini, Gabriele Semeraro and Roberto Tedeschi for their helpful comments. We are solely responsible for any errors and imprecisions. The views and opinions expressed in this paper are ours and do not necessarily reflect those of the Bank of Italy.

[3] See Coletta and Zinni (2013) for the impact of the evolution of insurance and pension funds on the financial wealth of households in OECD countries in the period 1995-2009.

low-risk, such as money market funds, and instruments that are both more complex and riskier, such as the recent multi-line insurance products, which combine traditional life insurance policies guaranteed by the company with unit-linked policies where the investment risk is borne by the policy holder (Bank of Italy, FSR, 2016).

5. Moreover, managed savings products permit households to participate indirectly in the financial markets. However, the risks associated with the financial instruments in the portfolios held by the institutional investors falls wholly on households only in the case of investment funds, defined-contribution pension funds and unit-linked and index-linked insurance policies. Even though the difference between direct and indirect placement must not be overestimated,[4] assets held indirectly through the products under management measure the degree of 'institutionalization' of household savings.

6. This work is the first to analyse the portfolio investments underlying the asset management products held by Italian households in the three-year period 2014-2016, applying the look-through method. The method consists of 'looking through' the intermediated financial products in order to show the final destination of household savings and simultaneously provide elements which can be useful in assessing the different types of risk affecting savers.

7. The asset management instruments analysed include insurance policies, units of investment funds governed by Italian law and pension fund units. Portfolio management services offered by banks, securities firms and asset management companies are excluded since they are provided on an individual basis and, according to national accounting rules, the instruments in their portfolios are directly classified among the assets held by the final investor. Closed-end funds governed by Italian law, which primarily invest in real estate and in real estate fund shares, and foreign funds are not analysed due to the lack of sufficient data.[5] To gather data on the financial portfolios of Italian households and Italian institutional investors, various statistical sources have been used, including *security-by-security* information contained in the ECB's Centralised Securities Database (CSDB).

8. The main conclusions of this study can be summarized as follows:

- In the three-years 2014-16 the portfolio underlying the Italian asset management products held by Italian households rose by 12 per cent, from 712 to almost 800 billion euros; at the end of 2016 it accounted for about 20 per cent of total household financial wealth.
- This portfolio was mainly composed of Italian government bonds (42 per cent at the end of 2016), almost entirely BTPs. The proportion of Italian private bonds and shares was negligible.

[4] Even for direct investments, households often avail themselves of financial services (e.g. advisory and asset management services) provided by intermediaries which often participate actively in the portfolio selection process. Moreover, with greater frequency, institutional investors are adopting passive investment strategies designed to replicate the performance of benchmark indices to build financial portfolios. Recently, households can also make use of sophisticated applications (robo-advisors) offered by the financial technology industry (FinTech) to manage their own financial portfolios.

[5] Della Corte et al. (2017) have applied the look-through method in order to estimate the portfolio investments underlying the foreign funds held by total Italian investors in the period 2009-16 using balance of payments data and the information provided by Assogestioni (Association of the Italian investment management industry). A previous estimation had been presented by Felettigh and Monti (2008).

- The weight of the bonds and shares issued by foreign intermediaries and foreign firms increased: at the end of 2016 the level of the indirect investment by Italian households in French and US non-financial corporations was higher than that in Italian non-financial corporations. In the three-year period there was a shift towards foreign mutual fund shares, which at the end of 2016 accounted for one fifth of the indirect portfolio of households: the increase was almost entirely ascribable to foreign funds governed by Luxembourg law.
- In the three years analysed, the composition of Italian households' financial assets after the rebalancing of indirect portfolio investments shows an increase in the share of Italian debt securities, specifically government bonds, and an increase in the geographical diversification of debt securities and mutual fund shares. These results are consistent with the changes in financial intermediation recorded in the euro area in recent years, marked by an increase in both the weight of institutional investors in the financial system and cross-border investments and by a bond market that is more integrated than the stock market

9. The work is composed of four sections. Section 2 analyses in detail the investments underlying the asset management products held by Italian households. In section 3 the results of the look-through method are used in order to reclassify the financial balance sheet of Italian households and compare it with that preceding the application of the method. In section 4 the indirect investments of Italian households carried out through asset management products are compared with those of households in some of the largest OECD economies. The methodological appendix closes the work.

II. The indirect investments of Italian households

10. This section presents the results achieved by applying the look-through method to investment funds governed by Italian law, pension funds and insurance products held by Italian households. The levels of intermediation beyond the first, represented by investments in Italian and foreign mutual fund shares, have not been made transparent. The look-through method, the sources and the criteria adopted for the estimation of the indirect portfolio investments are described in the methodological appendix.

2.1 The indirect investments through the Italian mutual funds

11. In the period 2014-16 the portfolio of mutual funds governed by Italian law held by Italian households rose from 159 to 185 billion euros; at the end of 2016 it accounted for 4.4 per cent of total household financial wealth. This portfolio was characterized by the substitution of Italian debt securities with mutual fund shares issued by non-residents.[6] The shift, amounting to eight percentage points, increased households' indirect exposure to foreign countries which, already high in 2014, rose to more than 61 per cent at the end of 2016.[7] The results of the look-through method, presented in Table 1, make it possible to

[6] The supervisory statistics on the holding sectors of mutual fund shares show that in the three-year period, Italian households held on average about 90 per cent of the shares issued by Italian investment funds; the share of participation was very low in hedge funds and higher in the categories with a lower risk profile (bonds, flexible and balanced funds).

[7] Since the look-through method is not applied to foreign funds in the portfolio of Italian institutional investors, the weight of the indirect exposure to foreign countries arising from these funds is overestimated (see tables 2, 3 and 4). Della Corte et al. (2017) and Felettigh and Monti (2008) found

analyse the components of the portfolio and to single out the key factors affecting the pattern observed.

12. **Debt securities** accounted for about two thirds of the investments that Italian households held indirectly through Italian mutual funds. The decrease in the share of bonds recorded since 2014 was almost entirely due to the decrease in the share of public securities, which fell from 48 to 39 per cent.[8] The share of the Italian debt securities was larger than that of foreign debt securities, even though the difference between the two shares fall in the three-year period from 10 to 3 percentage points. The Italian component was composed mainly of government bonds, in particular of BTPs; the weight of the bonds issued by resident banks and financial and non-financial corporations remained negligible at about 6 per cent. Conversely, those issued by banks and firms prevailed among foreign securities; they accounted for 17 per cent of the portfolio compared with12 per cent for public securities[9].

13. The indirect investment in **shares**[10] remained broadly stable at around 12 per cent; foreign shares accounted for more than 80 per cent. Security-by-security information showed that investments in foreign shares were directed predominantly towards listed non-financial corporations resident in the United States, France, Germany and the United Kingdom.

that the foreign funds held by Italian investors invested almost entirely abroad the savings collected in Italy.

[8] The Italian and the foreign component have contributed 7 and 2 percentage points respectively. The decline in the share of Italian government bonds is mainly ascribable to the short term securities (BOTs and CTZs), while that of the foreign public securities is ascribable to the disinvestment in government bonds of the euro area, partly offset by the increase of the public securities issued by non-EU countries, especially the United States.

[9] Within this component an increase in the share invested in securities issued by non-bank intermediaries, in particular Dutch ones, is observed.

[10] They consist almost exclusively of listed shares.

Table 1 – Mutual funds governed by Italian law held by Italian households: portfolio composition by type of instrument and residence of issuer (per cent)

		2014		2015		2016
Debt securities		**69.7**		**63.6**		**61.8**
Issued by residents		**39.9**		**34.3**		**32.9**
of which: general government		33.7		28.3		27.2
BOTs		*8.8*		*4.0*		*3.3*
BTPs		*19.8*		*20.2*		*19.6*
CCTs		*1.8*		*1.5*		*2.1*
CTZs		*2.9*		*2.1*		*1.9*
Others		*0.4*		*0.5*		*0.3*
of which: banks		3.7		3.5		3.2
of which: financial corporations		0.5		0.6		0.6
of which: non-financial corporations		2.0		1.9		1.8
Issued by non-residents		**29.8**		**29.3**		**28.9**
of which: general government		14.4		14.1		12.3
issued by MU countries		9.7		8.5		6.0
issued by other EU countries		0.7		0.5		0.5
issued by non-EU countries		4.0		5.1		5.9
	United States	*1.6*	*United States*	*3.1*	*United States*	*3.2*
	Mexico	*0.3*	*Mexico*	*0.2*	*Brazil*	*0.3*
of which: banks		4.2		4.0		4.5
	United Kingdom	*1.3*	*United Kingdom*	*0.9*	*United Kingdom*	*1.0*
	France	*0.9*	*Ireland*	*0.8*	*France*	*0.6*
of which: financial corporations		5.7		5.6		6.8
	Luxembourg	*1.4*	*Luxembourg*	*1.1*	*Netherlands*	*1.6*
	Netherlands	*0.8*	*Netherlands*	*1.0*	*Luxembourg*	*1.4*
	United States	*0.8*	*United States*	*0.8*	*United Kingdom*	*0.7*
of which: non-financial corporations		5.5		5.6		5.3
	France	*1.1*	*France*	*1.1*	*France*	*1.4*
	United States	*0.9*	*United States*	*0.8*	*United States*	*1.0*
	Netherlands	*0.6*	*Netherlands*	*0.6*	*Germany*	*0.6*
Equities		**12.2**		**13.0**		**12.1**
Issued by residents		**2.1**		**2.5**		**2.1**
of which: banks		0.6		0.7		0.5
of which: financial corporations		0.3		0.2		0.2
of which: non-financial corporations		1.3		1.6		1.5
Issued by non-residents		**10.1**		**10.5**		**10.0**
	United States	*2.8*	*United States*	*2.8*	*United States*	*2.7*
	France	*1.0*	*France*	*1.3*	*France*	*1.4*
	Germany	*1.0*	*Germany*	*1.1*	*Germany*	*1.1*
	United Kingdom	*0.8*	*United Kingdom*	*1.0*	*United Kingdom*	*0.8*
of which: banks		0.6		0.5		0.8
of which: financial corporations		1.6		1.6		1.4
of which: non-financial corporations		8.0		8.4		7.9
	United States	*2.4*	*United States*	*2.2*	*United States*	*2.2*
	Germany	*0.8*	*France*	*1.1*	*France*	*1.1*
	France	*0.8*	*Germany*	*0.9*	*Germany*	*1.0*
	United Kingdom	*0.7*	*United Kingdom*	*0.8*	*United Kingdom*	*0.6*
Mutual fund shares		**18.1**		**23.4**		**26.1**
Issued by residents		**1.9**		**3.2**		**3.9**
Issued by non-residents		**16.2**		**20.2**		**22.2**
	Luxembourg	*9.7*	*Luxembourg*	*14.0*	*Luxembourg*	*16.3*
	Ireland	*3.7*	*Ireland*	*4.0*	*Ireland*	*4.1*
Total portfolio		**100.0**		**100.0**		**100.0**
- millions of euros		*158,661*		*178,360*		*184,571*
- share in household total financial assets		*3.9*		*4.3*		*4.4*

Sources and methods: see Appendix A.2.

14. In the three years considered, the investment in **mutual fund shares** recorded a significant increase, from 18 to 26 per cent of the portfolio, mostly concentrated on shares of foreign funds. At the end of 2016 the share of Italian investment funds, although increasing, was still negligible compared with that of foreign funds, which were almost entirely composed of funds governed by laws of Luxembourg or Ireland.

15. Overall, the composition of the portfolio of Italian mutual funds attributable to Italian households was mostly oriented towards foreign investments, consistent with an Italian financial market that is characterized by the wide depth of the market for public capital, an underdeveloped private capital market and limited capitalization of the stock market.

2.2 The indirect investments through pension funds

16. In the three-year period considered, the resources managed by Italian pension funds on behalf of Italian households to which the look-through method was applied increased from 86 to 95 billion euros; their incidence on the total financial wealth of households remained subdued (2.3 per cent at the end of 2016). The composition by type of instrument and residence of the counterpart of the investments indirectly held by households through pension funds remained broadly stable: debt securities accounted for the bulk of the total portfolio managed, which was mainly invested abroad.

17. The results of the look-through method (Table 2) show that the predominant weight of **debt securities** is ascribable to public securities, which represent the prevailing form of investment for pension funds (50 per cent at the end of 2016). Over the three-year period, the incidence of foreign public securities exceeded that of Italian public securities.[11] Bonds issued by banks and by financial and non-financial corporations were nearly completely placed abroad; in particular, at the end of 2016 Italian households invested indirectly in bonds issued by US and French non-financial corporations much more than in Italian non-financial corporations (respectively, 2.4, 1.0 and 0.6 per cent of the overall portfolio).

18. Households' indirect investment in **shares** amounted to about 20 per cent of the portfolio; the shares issued by non-residents accounted for more than 90 per cent. More than 50 per cent of the latter were issued by non-financial corporations resident in the United States, France, Germany and the United Kingdom.

19. Investments in **mutual funds**, which accounted for about 12 per cent of the whole portfolio, were broadly stable: the units were issued almost entirely by foreign intermediaries residing mainly in Luxembourg and Ireland.

[11] About 85 per cent of foreign public securities were issued by the main euro area countries, the United States and the United Kingdom; Italian public securities were represented by BTPs.

Table 2 - Pension funds of Italian households: portfolio composition by type of instrument and residence of issuer (per cent)

		2014		2015		2016
Debt securities		**68.6**		**69.4**		**67.3**
Issued by residents		**29.3**		**27.2**		**26.0**
of which: general government		27.4		25.5		24.3
BOTs		*1.6*		*0.7*		*0.0*
BTPs		*25.8*		*24.8*		*24.3*
of which: banks		1.1		0.9		0.9
of which: financial corporations		0.2		0.3		0.2
of which: non-financial corporations		0.6		0.5		0.6
Issued by non-residents		**39.4**		**42.2**		**41.3**
of which: general government		26.6		25.7		26.0
	France	*6.8*	*France*	*6.1*	*France*	*6.4*
	Spain	*5.0*	*Spain*	*5.5*	*Spain*	*5.4*
	Germany	*4.3*	*Germany*	*3.6*	*Germany*	*3.9*
	United States	*2.6*	*United States*	*2.7*	*United States*	*3.4*
	Belgium	*2.0*	*United Kingdom*	*1.8*	*United Kingdom*	*1.5*
	United Kingdom	*1.6*	*Belgium*	*1.6*	*Belgium*	*1.4*
of which: banks		4.5		2.7		4.7
of which: financial corporations		5.0		9.3		5.4
	Netherlands	*0.9*	*Guernsey*	3.1	*Netherlands*	1.1
	International organisations	*0.8*	*Netherlands*	1.4	*United States*	1.1
	Luxembourg	*0.7*	*United States*	0.8	*Luxembourg*	0.7
of which: non-financial corporations		3.3		4.5		5.2
	United States	*1.1*	*France*	1.9	*United States*	2.4
	France	*1.0*	*United States*	1.4	*France*	1.0
Equities		**19.4**		**19.0**		**20.4**
Issued by residents		**1.0**		**1.1**		**1.2**
Issued by non-residents		**18.4**		**17.9**		**19.2**
	United States	*6.7*	*United States*	*6.4*	*United States*	*7.2*
	France	*2.2*	*France*	*2.1*	*France*	*2.2*
	Germany	*2.2*	*Germany*	*1.9*	*Germany*	*1.9*
	United Kingdom	*1.7*	*United Kingdom*	*1.8*	*United Kingdom*	*1.6*
of which: banks		1.5		1.4		1.5
of which: financial corporations		2.2		2.3		2.6
of which: non-financial corporations		14.6		14.2		15.0
	United States	*5.6*	*United States*	*5.2*	*United States*	*5.7*
	Germany	*1.8*	*Germany*	*1.7*	*Germany*	*1.8*
	France	*1.7*	*France*	*1.6*	*France*	*1.7*
	United Kingdom	*1.3*	*United Kingdom*	*1.4*	*United Kingdom*	*1.3*
Mutual fund shares		**11.9**		**11.6**		**12.3**
Issued by residents		**0.8**		**1.0**		**0.9**
Issued by non-residents		**11.2**		**10.7**		**11.4**
	Luxembourg	*6.9*	*Luxembourg*	*7.9*	*Luxembourg*	*9.1*
	Ireland	*3.1*	*Ireland*	*1.9*	*Ireland*	*1.6*
Total portfolio		**100.0**		**100.0**		**100.0**
- millions of euros		*85,995*		*90,002*		*95,047*
- share in household total financial assets		*2.1*		*2.2*		*2.3*

Sources and methods: see Appendix A.2.

20. In conclusion, excluding public securities, Italian households, through the asset allocation adopted by the managers of pension funds, have a high level of exposure to foreign countries and a modest level of exposure to the Italian economy. 'The causes which may have so far hampered investments in securities issued by Italian firms […] include: the replication of market benchmarks diversified on an international scale in which the weight assigned to Italy is marginal; the low level of development of the private capital markets and the limited number of listed firms; difficulties in the valorization and marketability of unlisted instruments' (Covip, 2017) [12].

2.3 Indirect investments through insurance products

21. Attributing the assets underlying insurance products to the main categories of household portfolios is more complex and has more degrees of freedom compared with the case of mutual and pension funds. In fact, only a fraction of the policies sold to households could be interpreted as a 'veil' between households and issuers of the underlying assets: unit-linked and index-linked policies, which accounted for about 20 per cent of the overall level of life insurance reserves at the end of 2016, fall into this category. In the case of the other insurance policies, the portfolio risks are retroceded to the policy holders only partially: the financial risk of the portfolio invested continues to be borne by the insurer, thus making the re-attribution of the investment to the policy-holder arbitrary. For insurance policies, the look-through method can therefore be applied in two ways: either to the whole portfolio covering all policies if the aim is to identify the indirect beneficiaries of the funds collected from households (*lending-through method*), or just to the portfolio covering technical provisions of the indexed life insurance policies that are similar to the mutual and pension fund units dealt with in the previous sections, if the aim is to identify the risk-return profile (*risk-through method*). In the present section the results of the two methods are presented.

a) The lending through method

22. The portfolio covering the life and non-life insurance technical provisions set up by the insurance companies to guarantee the obligations towards Italian households grew by 11 per cent in the three-year period under review (from 467 to 518 billion euros). At the end of 2016 it accounted for 12.4 per cent of household aggregate financial wealth. As found in the case of mutual funds and pension funds, debt securities are the largest component of the portfolio financed by households through insurance policies (80 per cent at the end of 2016). Unlike other intermediaries, the assets vis-à-vis residents exceeded those issued by foreign counterparts.

[12] In his remarks to the 2015 Annual Report, the president of the Italian supervisory authority on pension funds underlined the need for 'a progressive expansion of the supply of appropriate financial instruments enabling pension funds [….] to strengthen the role of institutional investors in the economy, a circumstance which may contribute to the consolidation of the economic and employment recovery'. The president has come back to this subject in his remarks to the 2016 Annual Report, recalling 'the provisions introduced with the Budget Law for 2017, aimed at favouring investments in the capital of firms by pension funds and by occupational social security schemes by means of the taxation and the simplification of administrative mechanisms [….] and the most recent initiatives aimed at extending to pension funds and to occupational social security schemes the possibility to invest in Individual Saving Plans'.

23. The detailed results of the *lending-through* method, presented in Table 3, show that at the end of 2016 public securities accounted for 70 per cent of **debt securities**, mainly Italian, which were also the largest item of the whole portfolio covering technical provisions (51 per cent). The Italian public securities were composed of BTPs; foreign ones were almost entirely issued by member countries of the Monetary union, of which about half were issued by the Spanish government. Private bonds accounted for 24 per cent of the portfolio; the Italian share of them, made up mainly of bonds issued by banks and by non-financial corporations, decreased from 9 to 6 per cent, while the foreign component still prevailed and rose from 15 to 17 per cent of the portfolio. Compared with 2014, the weight of the bonds issued by foreign non-financial corporations rose by 46 per cent; that of bonds issued by foreign banks and other foreign financial intermediaries instead remained broadly stable. As regards the geographical location of the issuers, French banks and firms were still the most represented, accounting for 3 per cent of the portfolio.

24. The **equity portfolio** remained broadly negligible (lower than one per cent) and was composed only of foreign shares.

25. Investments in **mutual funds** by insurance companies rose from 17 to 20 per cent; the increase was exclusively on account of the subscription of shares of Luxembourg and Irish funds.

26. In summary, through insurance policies, Italian households prevalently financed investments in government bonds, especially Italian, and less in bonds issued by financial and non-financial corporations: at the end of 2016, there was a nearly three-to-one ratio between foreign and Italian private bonds (the ratio was lower than two in 2014). These results are mainly due to the prevalence of traditional life insurance policies in the insurance portfolio of Italian households, which implies for the insurer a commitment to buy safe assets, traditionally represented by Italian government bonds.

Table 3 – Technical provisions of Italian households: composition of the hedging portfolio by type of instrument and residence of issuer (per cent)

		2014		2015		2016
Debt securities		**83.1**		**81.0**		**79.7**
Issued by residents		**63.5**		**59.4**		**57.4**
of which: general government		54.6		51.4		51.1
BOTs		*1.2*		*0.8*		*0.0*
BTPs		*53.4*		*50.6*		*51.1*
of which: banks		5.3		4.4		3.1
of which: financial corporations		0.7		0.7		0.7
of which: non-financial corporations		2.8		2.9		2.7
Issued by non-residents		**19.7**		**21.6**		**22.3**
of which: general government		**4.8**		**4.8**		**5.0**
issued by MU countries		4.3		4.1		4.2
	Spain	*1.7*	*Spain*	*2.0*	*Spain*	*2.2*
issued by other EU countries		0.1		0.2		0.2
issued by non-EU countries		0.4		0.4		0.5
of which: banks		4.7		5.2		5.1
	France	*1.0*	*France*	*1.1*	*France*	*1.2*
	United Kingdom	*0.9*	*United Kingdom*	*1.1*	*United Kingdom*	*1.1*
	United States	*0.8*	*United States*	*1.0*	*United States*	*0.8*
of which: financial corporations		6.2		6.4		6.4
	Netherlands	*1.7*	*Netherlands*	*1.7*	*Netherlands*	*1.7*
	Ireland	*0.8*	*Ireland*	*0.7*	*United Kingdom*	*0.7*
	Spain	*0.7*	*United Kingdom*	*0.7*	*United States*	*0.6*
	Luxembourg	*0.6*	*Spain*	*0.6*	*Luxembourg*	*0.6*
	United Kingdom	*0.6*	*Luxembourg*	*0.6*	*Spain*	*0.6*
of which: non-financial corporations		4.0		5.1		5.8
	France	*1.8*	*France*	*1.9*	*France*	*1.8*
	United States	*0.5*	*United States*	*1.0*	*United States*	*1.3*
	Germany	*0.4*	*Germany*	*0.4*	*United Kingdom*	*0.5*
Equities		**0.3**		**0.4**		**0.4**
Issued by residents		**0.0**		**0.0**		**0.0**
Issued by non-residents		**0.3**		**0.4**		**0.4**
Mutual fund shares		**16.5**		**18.6**		**19.9**
Issued by residents		**0.5**		**0.7**		**0.7**
Issued by non-residents		**16.0**		**17.9**		**19.2**
	Luxembourg	*10.4*	*Luxembourg*	*12.4*	*Luxembourg*	*13.6*
	Ireland	*4.2*	*Ireland*	*4.1*	*Ireland*	*4.2*
Total portfolio		**100.0**		**100.0**		**100.0**
- millions of euros		*467,300*		*514,216*		*517,615*
- share in household total financial assets		*11.6*		*12.4*		*12.4*

Sources and methods: see Appendix A.2.

b) The risk through method

27. The *risk-through* method differs from the *lending-through* method in that its application is limited solely to the products for which the risk falls entirely or prevalently on households. This method can assess not only the final destination of the household savings but also the risk/return profile of the underlying assets, like with investment and pension funds (see par. 2.1 and 2.2).

28. The results achieved (see Table 4) confirm the growing diffusion among households of index-linked insurance policies, which combine the search for higher yields with the need to take out an insurance policy. Since 2014 the portfolio covering the provisions of unit-linked and index-linked policies has grown by 21 per cent to 129 billion euros, against an 11 per cent increase in the overall portfolio (see point a) of this section);[13] its incidence on the total financial wealth of households has increased (3.1 per cent at the end of 2016).

29. Compared with the portfolio covering all the policies held by households, the weight of debt securities, which were still mostly Italian public securities, decreased significantly; the weight of shares, issued prevailingly by non-resident non-financial corporations, increased, but remained negligible; investment fund shares, consistent with the financial nature of these insurance policies, were by far the largest component accounting for 80 per cent at the end of 2016.

30. The very high portion of foreign assets is the most relevant feature of this portfolio (see Table 3). The investments underlying the indexed policies were almost entirely in non-resident issuers, essentially investment funds governed by Luxembourg and Irish law. As explained in the introduction, the official statistics available do not allow for an analysis of the portfolios set up by these foreign intermediaries and a comprehensive assessment of the risk arising from the indirectly held assets (see Appendix A.1).

[13] The covering assets are measured at market values and do not match the value of the provisions set up by the insurance companies. This holds also for some index-linked products: in particular for the index-linked policies with guaranteed results, which require companies to set aside an additional reserve, calculated in relation to the credit and liquidity risk.

Table 4 – Portfolio covering technical provisions relative to index-linked policies held by Italian households: composition by type of instrument and residence of issuer (per cent

	2014	2015	2016
Debt securities	**24.5**	**18.4**	**17.4**
Issued by residents	**17.4**	**13.4**	**12.6**
of which: general government	15.3	12.9	12.1
BOTs	*0.0*	*0.0*	*0.4*
BTPs	*15.3*	*12.9*	*11.7*
of which: banks	1.9	0.4	0.3
of which: financial corporations	0.0	0.0	0.0
of which: non-financial corporations	0.1	0.1	0.1
Issued by non-residents	**7.1**	**5.0**	**4.9**
of which: general government	**3.6**	**3.1**	**2.7**
Spain	*0.9*	*1.1*	*0.9*
France	*0.9*	*0.6*	*0.6*
Germany	*0.6*	*0.4*	*0.4*
Belgium	*0.4*	*0.2*	*0.2*
Other countries	*0.8*	*0.7*	*0.6*
of which: banks	2.2	1.2	1.1
United Kingdom	*1.4*	*0.7*	*0.7*
of which: financial corporations	*0.9*	*0.6*	*0.7*
of which: non-financial corporations	*0.4*	*0.2*	*0.3*
Equities	**2.5**	**2.5**	**2.4**
Issued by residents	**0.2**	**0.2**	**0.1**
Issued by non-residents	**2.3**	**2.4**	**2.2**
of which: non-financial corporations	*1.8*	*1.7*	*1.8*
Mutual fund shares	**73.0**	**79.1**	**80.2**
Issued by residents	**2.3**	**2.9**	**2.7**
Issued by non-residents	**70.7**	**76.2**	**77.5**
Luxembourg	*46.0*	*52.8*	*55.0*
Ireland	*18.5*	*17.5*	*17.1*
Total portfolio	**100.0**	**100.0**	**100.0**
- millions of euros	*106,295*	*121,634*	*128,738*
- share in household total financial assets	*2.6*	*2.9*	*3.1*

Sources and methods: see Appendix A.2.

2.4 The indirect investments through Italian asset management products

31. The total portfolio indirectly financed by Italian households through Italian asset management products is obtained by adding the three portfolios analysed in Sections 2.1, 2.2 and 2.3a. Since 2014 this portfolio has grown by 12 per cent, from 712 to nearly 800 billion euros; at the end of 2016 it accounted for about 19 per cent of the total financial wealth of Italian households.

32. The substitution of Italian debt securities with shares issued by foreign investment funds nearly nullified the predominance of Italian securities over foreign ones, amounting to over ten percentage points in 2014.

33. D**ebt securities** remained the predominant form of indirect investment held by Italian households. The growing weight of foreign securities partly offset the reduction in the weight of Italian securities, as a result of the drop in the weight of government bonds: Italian Treasury bonds (BTPs) however remained the most important financial instrument in the whole portfolio with a weight that was still above 40 per cent.[14] The details presented in Table 5 show that while Italian corporate securities, which were already negligible, shrank, the incidence of foreign securities rose to 17 per cent, mainly owing to the component attributable to non-financial corporations. Also, the weight of shares, which remained stable at around 5 per cent, was mostly ascribable to the latter. In particular, the data show that at the end of 2016 the savings indirectly invested by Italian households in debt and equity securities issued by French and US non-financial corporations were nearly twice as high those invested indirectly in Italian non-financial corporations as a whole (respectively, 4.7 and 2.7 per cent of the whole portfolio).

34. In the three-year period the incidence of investments in **mutual funds**, represented almost entirely by foreign funds governed by Luxembourg and Irish law, increased by four percentage points. While Italian households invested directly in almost equal measure in Italian and foreign mutual funds (respectively 51 and 49 per cent of total mutual funds held), indirect investment was almost entirely concentrated in foreign funds.

[14] The increase in investment income taxation to 26 per cent in force in Italy since 1 July 2014 has not been applied to bonds issued by the Italian government, countries of the so-called White list, Italian local authorities and supranational bodies, which continue to benefit from favourable fiscal treatment (12.5 per cent) even when they are the underlying assets of other financial instruments, such as investment funds and life insurance policies.

Table 5 – Total indirect portfolio of Italian households: composition by instrument and residence of issuer (per cent)

	2014		2015		2016
Debt securities	**78.4**		**75.7**		**74.1**
Issued by residents	**54.1**		**50.0**		**48.0**
of which: general government	**46.6**		**43.1**		**42.4**
BOTs	*2.9*		*1.5*		*0.8*
BTPs	*42.6*		*40.7*		*40.6*
CCTs	*0.4*		*0.3*		*0.5*
CTZs	*0.6*		*0.5*		*0.4*
Others	*0.1*		*0.1*		*0.1*
of which: banks	4.5		3.8		2.9
of which: financial corporations	0.6		0.6		0.6
of which: non-financial corporations	2.4		2.4		2.2
Issued by non-residents	**24.3**		**25.7**		**26.1**
of which: general government	9.6		9.3		9.2
issued by EU countries	7.4		6.8		6.4
issued by non-EU countries	2.2		2.5		2.7
United States	*0.7*	*United States*	*1.0*	*United States*	*1.1*
of which: banks	4.6		4.7		4.9
of which: financial corporations	5.9		6.6		6.4
of which: non-financial corporations	4.2		5.2		5.6
France	*1.5*	*France*	*1.7*	*France*	*1.6*
United States	*0.7*	*United States*	*1.1*	*United States*	*1.3*
Equities	**5.3**		**5.4**		**5.5**
Issued by residents	**0.6**		**0.7**		**0.7**
of which: banks	0.2		0.2		0.2
of which: financial corporations	0.1		0.1		0.1
of which: non-financial corporations	0.4		0.4		0.4
Issued by non-residents	**4.7**		**4.7**		**4.8**
of which: banks	0.3		0.3		0.4
of which: financial corporations	0.6		0.7		0.7
of which: non-financial corporations	3.7		3.7		3.8
Mutual fund shares	**16.3**		**18.9**		**20.4**
Issued by residents	0.9		1.3		1.4
Issued by non-residents	15.5		17.6		19.0
Luxembourg	*9.8*	*Luxembourg*	*12.3*	*Luxembourg*	*13.7*
Ireland	*4.0*	*Ireland*	*3.8*	*Ireland*	*3.9*
Total portfolio	**100.0**		**100.0**		**100.0**
- millions of euros	711,956		782,578		797,234
- share in household total financial assets	17.6		18.8		19.1

Sources and methods: see Appendix A.2.

III. The financial balance sheet of Italian households before and after the look-through method

35. In order to complete the analysis presented in Section 2, we have carried out a reclassification exercise of the financial instruments underlying the asset management instruments into the corresponding balance sheet categories in order to compare the composition of the financial assets of households before and after the look-through method, in the version extended to all insurance policies[15].

36. The results highlight two main changes in the composition of financial wealth (see Table 6 and Appendix A.2): an increase in the weight of Italian debt securities largely on account of the significant investment in public securities by insurance companies (see par. 2.3); the increase in the incidence of foreign assets through debt securities and investment funds.[16] Although the assets vis-à-vis the resident sectors remained highly prevalent, in each of the three years the financial assets vis-à-vis non-residents after the reclassification rose by about 80 per cent; at the end of 2016, external assets, held either directly or indirectly, rose from 464 to 823 billion euros.

37. The composition of Italian households' financial assets after the application of the look-through method is consistent with the picture that emerges from the analysis of the developments of financial intermediation in the euro area (ECB, 2016a and 2016b):[17] in recent years, investment funds, insurance companies and pension funds have strengthened their financial intermediation role in the area;[18] these intermediaries, and in particular investment funds, have played a decisive role in favouring cross-border capital movements; financial integration has been achieved more through the debt securities market.

[15] Only the instruments included in the portfolios analyzed in Section 2 of the work have been reclassified. The other financial assets, such as deposits and other residual assets (whose weight is generally negligible), have therefore not been considered.

[16] It is very likely that the weight of foreign securities and equities indirectly held will continue to rise when also the portfolio investments of the funds governed by foreign law placed with Italian households will be made transparent (Della Corte et al., 2017, and Felettigh and Monti, 2008).

[17] See 'Special feature D' on 'New financial integration indicators built from Securities Holdings Statistics' in the *Financial integration in Europe*.

[18] Between the end of 2008 and 2015, in the euro area non-bank intermediaries increased their share of financial assets held by total financial corporations from 42 to 57 per cent (ECB, 2016a).

Table 6 – Composition of Italian households' financial assets before and after the look-through method: shares of total financial assets

	2014		2015		2016	
	Before	After	Before	After	Before	After
	Assets *vis-a-vis* residents					
Currency and deposits	29.9	29.9	29.9	29.9	31.2	31.2
Debt securities	10.3	19.8	7.8	17.2	6.6	15.7
Equities	21.4	21.5	22.1	22.3	20.3	20.4
Investment funds[1]	4.8	1.0	5.7	1.7	5.9	1.7
Insurance policies and pension funds[1]	20.8	7.1	21.7	7.1	22.9	8.2
Other financial assets[2]	3.0	3.0	2.9	2.9	3.0	3.0
Total	**90.2**	**82.4**	**89.4**	**81.0**	**88.9**	**80.2**
Total in millions of euros	*3,644,338*	*3,327,746*	*3,714,360*	*3,367,752*	*3,703,680*	*3,344,658*
	Assets *vis-a-vis* non-residents					
Currency and deposits	0.9	0.9	0.8	0.8	0.8	0.8
Debt securities	2.4	6.7	2.2	7.0	2.1	7.1
Equities	1.5	2.4	1.7	2.6	1.7	2.6
Investment funds	4.9	7.6	5.3	8.6	5.6	9.2
Other financial assets[2]	0.0	0.0	0.0	0.0	0.0	0.0
Total	**9.8**	**17.6**	**10.6**	**19.0**	**11.1**	**19.8**
Total in millions of euros	*393,980*	*710,572*	*440,910*	*787,518*	*464,405*	*823,427*
Total financial assets (millions of euros)	**4,038,318**		**4,155,270**		**4,168,085**	

[1]See Appendix A.2.
[2]Derivatives, loans, trade credits and residual items.
Sources and methods: see Appendix A.2.

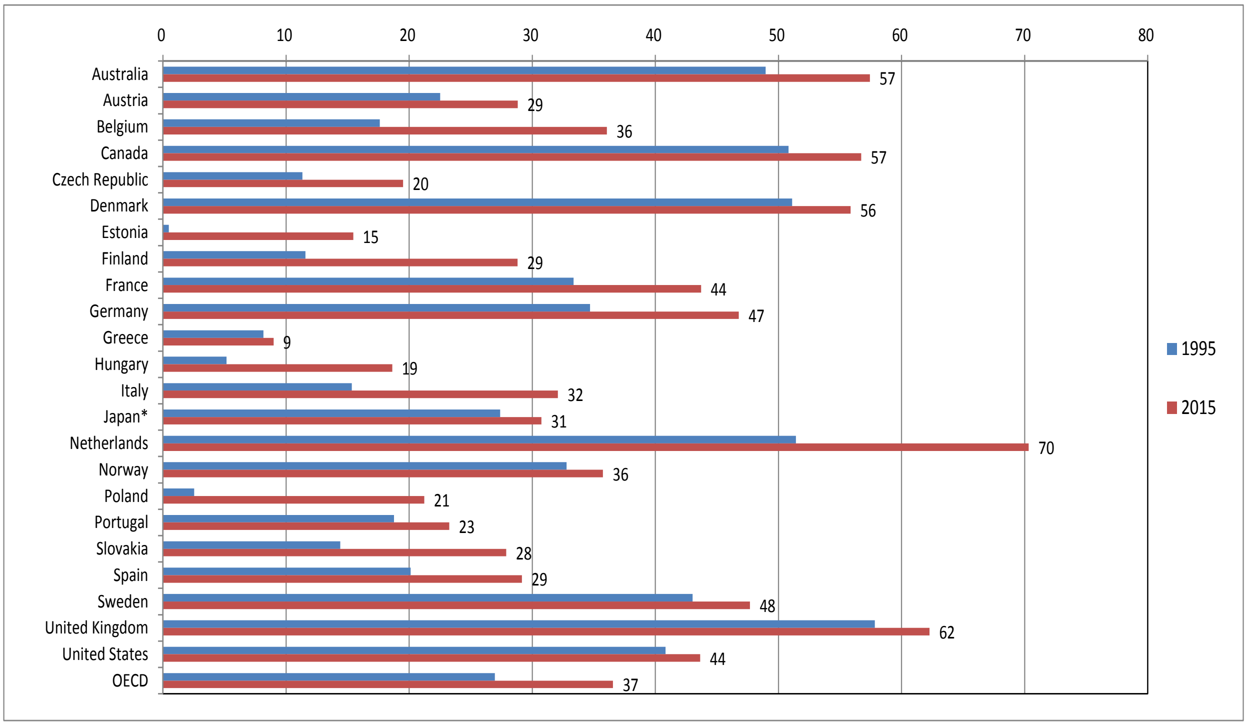
IV. The indirect investments of Italian households: an international comparison

38. From 1995 to 2015 the share of financial wealth invested by households resident in OECD member countries[19] in asset management products increased on average by 10 percentage points, from 27 to 37 per cent. For Italian households the share rose from 15

[19] We have taken into account 23 (out of 35) OECD member countries for which complete financial balance sheets of the household sector relative to the period under consideration are available.

(among the lowest) to 32 per cent; the rise turned out to be below only that of households in the Netherlands, Poland and Belgium and equal to that recorded by Finnish households. However the number of OECD countries where households hold more than half of their financial wealth in asset management instruments remains low (see Fig. 2).

Figure 2 – Household financial wealth in asset management products in 1995 and in 2015 (percentage shares)



* Japan: 1995 and 2014
Direct investments: currency and deposits, debt securities, shares and other equities.
Indirect investments: insurance technical reserves, investment fund and pension fund shares.
Sources and methods: see Appendix A.2.

39. By using both the balance sheets of the institutional sectors and the detailed statistics on institutional investors (see Appendix A.2) it has been possible to produce for the year 2014 an estimation of the investments underlying the asset management products held by households in the nine major OECD countries.[20] Indirect assets have been reclassified in the main balance sheet items and consequently the composition of the financial wealth of households after the look-through method has been calculated. Despite the lack of information comparable to those available on Italian households, it has been possible to identify, although only at the aggregate level, the final destination of the savings of households in the other countries (see Table 7).

40. Taking into consideration the composition at the end of 2014 of the household financial balance sheet before removal of the financial intermediation veil, the ten countries can be broken down into three groups:

[20] The countries have been selected according to the following criteria (in order of relevance): availability of complete financial balance sheets; importance of the financial system; the weight of managed savings on household financial wealth.

- the countries where, especially on account of the significance of supplementary pension schemes, households invest more than half of their wealth in asset management products (Australia, Canada, the Netherlands, the United Kingdom);
- the countries where, despite the prevalence of managed products, the composition of household wealth is more balanced (France, Germany, the United States);
- the countries where household financial wealth turns out to be less intermediated and the more liquid component prevails (Japan, Italy, Spain) [21].

41. After the reclassification of the instruments underlying the asset management products, the financial assets composition shows that:

- in most of the countries, debt securities represent the prevalent final destination of managed household savings;
- in Australia, Canada and the United States equity shares are the prevalent underlying asset category;
- in the Netherlands[22] the insurance companies and the asset management companies invest household savings principally in investment funds.

Table 7. Household financial assets in OECD countries: composition before and after the look-through method *(percentages at the end of 2014)*

	Australia		Canada		France		Germany		Italy		Japan*		Netherlands		Spain		United Kingdom		United States	
	Before	After	Before	After	Before	After	Before	After	Before	After	Before	After	Before	After	Before	After	Before	After	Before	After
Total financial assets	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Currency and deposits	22	29	23	24	29	30	39	45	31	31	53	54	20	20	43	46	24	26	13	14
Debt securities	0	7	2	16	2	26	4	11	13	27	2	17	0	20	1	14	2	17	5	19
Shares and other equities	18	48	19	42	20	25	10	13	23	24	10	12	8	17	26	27	7	16	34	50
Mutual fund shares	0	0	18	6	6	9	10	13	10	9	5	2	3	32	11	7	4	16	13	6
Insurance, pension and standardized guarantee schemes	57	13	35	4	37	4	37	12	21	7	26	0	66	0	17	2	60	16	34	6
Other assets	2	3	3	9	6	7	1	5	3	3	4	16	3	11	2	3	3	8	2	5

*Year 2013
Other assets: loans, derivatives, trade credits and residual items.
Sources and methods: see Appendix A.2.

[21] The direct holding of debt securities continues to represent a distinctive feature of the financial wealth of Italian households. Although steadily decreasing, the incidence of securities on total financial assets continues to be among the highest by international standards; at the end of 2016 their weight had fallen below 10 per cent (it was above 22 per cent at the end of 1995).

[22] The Netherlands and Japan are the only countries for which it has been possible to make transparent the whole portfolio underlying insurance policies and pension funds units.

42. The detailed analysis carried out on Italian households (see Section 3) and on French households (Marionnet, 2009 and Bachellerie, 2016) has shown that investing in asset management products has the main effect of increasing the geographic diversification of the financial portfolio. The higher exposure to foreign countries through the underlying instruments allows for an improvement in the portfolio's risk/return profile but at the same time it may lead to an increase in the risk households are exposed to and may constitute an element of vulnerability. Although it is very likely that this phenomenon also affects households in the other examined countries, in view of the higher propensity of institutional investors to invest in foreign markets, the unavailability in the official statistics of detailed data on the residence of the issuing counterpart does not currently allow us to assess this hypothesis.

43. The shift towards asset management instruments has brought the structure of Italian household wealth closer to that of households in the more financially developed economies. The comparison shows, however, that the level of 'institutionalization' of the savings of Italian households is still among the lowest. The demand and supply factors which might further increase the share of the managed component, in particular the retirement income component, include the increase in the level of financial education, a field in which several initiatives to fill the shortcomings of Italian savers have been undertaken (Visco, 2017).

Methodological appendix

A.1 The look-through method

The method consists of ‘looking through’ the intermediated financial products in order to identify the features of the underlying assets and to assess the final risk borne by investors.

Insurance policies, investment and pension fund shares, that is, the portion of wealth under management, fall within the method’s scope of application, while deposits must be excluded,[23] although they also represent an intermediated form of investment (Bartiloro L. et al, 2005).[24]

There are two main reasons why deposits are excluded: 1) banks[25] don’t build up a portfolio of assets as collateral for their obligations towards depositors;[26] the application of the method to deposits would therefore imply a pro rata allocation of all on-balance sheet assets to households, independent from their connection with the deposit liabilities; 2) deposit guarantee schemes, established by many national legislations, protect depositors up to a pre-established threshold in the event of a bank crisis independent from the features and the value of the assets in which the deposits are invested; if the pro rata estimation of the assets underlying deposits – mostly medium-term and long-term loans to the economy – were adopted, the reclassification in the balance sheet of households would result in an unreasonable transformation of the risk profile.[27]

For life insurance policies, households are guaranteed repayment of paid-in capital; like traditional products, index-linked and unit-linked products may in fact provide a guarantee that covers the financial risk of the investment. This feature, which is shared by life insurance policies and bank deposits, makes searching for the underlying investments questionable. Nevertheless, the application of the look-through to this category of products appears justified on the following grounds: 1) greater financialization of the insurance industry through the supply of products with a predominantly financial profile (e.g. unit-linked policies) has significantly raised the level of risk borne by policyholders; 2) the availability of information makes it possible to match the assets covering the technical provisions to the policies, distinguishing between those that are collateralized and those that are not collateralized, allowing a comparison between the final destination and the risk

[23] Marionnet (2009), when applying the method to French households’ wealth, excludes deposits from his analysis stating that ‘...extending the transparency making process to this part of the households’ financial wealth doesn’t seem straightforward and would deserve in-depth deliberations’.

[24] In the case of Italian households, the portfolio management services promoted by banks, asset management companies and securities firms remain excluded from the analysis as well (see par. 1).

[25] National financial balance sheets do not normally provide details on the counterparty of the deposits held by households; it is nevertheless plausible that they are held mainly with the banking system. In Italy, at the end of December 2016 the household sector accounted for 90 per cent of bank deposits.

[26] Unlike the case of covered bonds.

[27] With the introduction of new rules on bank recovery and resolution, household deposits which exceed the guaranteed threshold might be subject to the application of the ‘bail–in’ tool. It has been estimated that these deposits would account for about 6 per cent of the total financial wealth of Italian households (at the end of 2015). In addition, according to the 2014 Survey on Italian household income and wealth, those deposits would mainly be held by households belonging to the top decile of the wealth distribution (Bank of Italy, FSR, 2016).

profile of the underlying assets in the two cases; 3) while banks perform a significant maturity transformation process in the use of deposits, insurers instead opt for integrated management of their assets and liabilities in order to minimize the risks related to mismatches (so-called asset-liability management).

The interlinkages between intermediaries, for instance insurance companies investing in mutual funds or, more commonly, the case of funds of funds, would require the method's reiteration in order to fully remove the levels of intermediation and to construct the relative final asset allocation. However, the reiteration has to be assessed on a case by case basis taking into consideration the extent of the interlinkages and the quantity and quality of the available information. In this work, the levels of intermediation beyond the first, consisting of investments in mutual fund shares, have not been made transparent for three reasons: 1) the lack of information on the portfolio of funds governed by foreign law in which Italian intermediaries invest a substantial part of the savings of Italian households; 2) the negligible weight of the Italian funds in the portfolio of institutional Italian investors; 3) the decision not to increase the weight of the component estimated using the recursive method.[28]

The look-through method is not a novelty. Allen and Gale (2001) applied it and found that in the mid-1990s households in the United Kingdom indirectly held more equities than anywhere else owing to the greater size of insurance companies and pension funds. Shortly after the onset of the global crisis, Palumbo and Parker (2008) suggested that the method be used to increase the ability of the national accounts statistics to signal a crisis.[29] Among the central banks, this method has been applied by the US Federal Reserve (FED) since 1998[30] and, more recently, by the Banque de France.[31] The legislation and the supervisory practices on insurance companies and pension funds provide for the measure's application in assessing the risks associated with indirect investments carried out through investment funds. European Directive 2009/138/EC on the taking up and pursuit of the business of

[28] For instance, in the case of funds of funds, the total amount invested by households in a final instrument can be estimated by recursively applying to the share held by households in the first investment fund: 1) the share which the fund invests in another fund and 2) the share which the first fund invests in a final asset (Marionnet, 2009).

[29] They state that 'when a mutual fund or hedge fund purchases a security, that security should appear on the household balance sheet, not on the balance sheet of the financial sector. Only firms that provide a significant level of financial intermediation and are not simply conduits for households should be in the financial sector' (Palumbo and Parker, 2008, p. 13).

[30] In the quarterly statistical bulletin, the FED publishes data on the equities indirectly held by households through insurance companies, mutual funds and pension funds (see the table 'Balance Sheet of Households and Nonprofit Organizations with Equity Detail', B.101.e) in order to measure the impact of the volatility of the stock market on household financial wealth by also taking into account the indirect holding. In the United States the growth of the indirect component began in the 80s; in the early 2000s US households were directly and indirectly exposed to the stock market in equal measure(Hume McIntosh, 2010). At the end of 2016 the indirect component accounted for 38 per cent.

[31] Some studies have analysed the indirect investments of French households through insurance companies and investment funds (Rincon, 2007; Marionnet, 2009; Bachellerie et al., 2010 and 2016). In France the private pension schemes are managed entirely by insurance companies. The results show that French households indirectly hold mostly debt securities and listed shares and that the indirect holding of these instruments increases both their exposure to market risks and the geographical diversification of their portfolio.

insurance and reinsurance (Solvency II[32]) provides that the solvency capital requirement shall be calculated on the basis of each of the underlying assets held by collective investment undertakings and other investments packaged as funds in which insurance companies invest.[33] The aim is to ensure that the companies are aware of the risks underlying the assets in which they invest.[34] The Italian supervisory authority on pension funds (COVIP) requires private social security funds to report, partly in order to assess their compliance with the investment limits, the debt and equity securities underlying the shares of collective investment undertakings if their weight exceeds 10 per cent of the total assets held by a given fund.[35]

The wealth of information obtained through the application of the look-through method has wide-ranging uses in policy-making and in economic and financial studies, for instance:

- to identify elements of vulnerability in the balance sheet of households, which might constitute a source of contagion from and to the economic and financial system, in order to allow timely action by policy-makers.36 The financial crisis, which demonstrated the inadequacy of the information on the direct and indirect exposure of sectors to the financial instruments linked to the US subprime mortgage market, has sped up the work underway in bridging the information gap on the holding of securities (ECB, 2015);
- to assess the actual degree of diversification of the household portfolio through investments in asset management products;
- to compare the composition of household financial wealth before and after the application of the look-through method and to measure, for instance, households' overall exposure to non-resident issuers taking into account the foreign component held through institutional investors whose portfolios are typically more geographically diversified than portfolios held by non-financial sectors;

[32] As amended by Directive 2014/51/EC. See Template S.06.03.

[33] The look-through method is explicitly recalled in Article 84 of Commission Delegated Regulation (EU) No. 2015/35 of 10 October 2014 supplementing Directive 2009/138/EC.

[34] (Re)insurance companies must transmit reports broken down by investment category, country and currency of issue. The same approach must also be followed for funds of funds. Moreover, companies must carry out a sufficient number of reiterations of the *look-through* method in order to capture all material risks.

[35] Starting from the supervisory reports relative to 2016, Italian pension funds must apply the look-through method to UCITS and to real estate alternative investment funds accounting for more than 10 per cent of total assets held.

[36] The *look-through* method can be seen as a natural evolution of the Balance sheet approach (BSA) adopted in 2002 by the International Monetary Fund in response to the financial crises of the nineties in order to strengthen the ability to identify, in the balance sheets of sectors, the emergence of new risks and transmission channels within and across economies (IMF, 2015). The G20 Data Gaps Initiative, adopted following the 2007-08 crisis and now in its second phase (DGI-2), has further strengthened the role of the BSA in the Fund's surveillance activity. In these years much progress, albeit gradual, has been made on the sectoral accounts (see Heath and Goksu, 2016). Recommendation II.8 of the DGI-2 asks the G-20 economies 'to compile and disseminate, on a quarterly and annual frequency, sectoral accounts flows and balance sheet data, based on the internationally agreed template, including data for the other (non-bank) financial corporations sector, and develop from-whom to-whom matrices for both transactions and stocks to support balance sheet analysis.'

- to assess on an aggregated basis the consistency between the risk borne by households and the performance of the portfolios built by asset managers;
- to enable more accurate forecasts about the impact of policy decisions on the financial wealth of households: for instance, of the changes in monetary policy rates;[37]
- to provide further evidence for the analysis of financial wealth as an indicator of the current and future well-being of households:[38] in this field, the look-through method can contribute, along with the data of sample surveys, to the debate about the wealth allocation profiles along the life cycle of savers.[39]

A.2 The statistical sources and the estimation criteria

The following statistical sources have been used to analyze the indirect investments of Italian households: the supervisory reports transmitted by asset management companies to the Bank of Italy; the statistics on securities holdings (SHS); the Centralised Securities DataBase (CSDB).

The SHS statistics are collected by the European System of Central Banks (ESCB) on a quarterly basis and cover debt securities and equities including investment fund units. The collection of statistical information from reporting agents is on a security-by-security basis. The collection of data is governed by two legislative texts: ECB Regulation No. 1011/2012 (ECB/2012/24) and Guideline (EU) 2015/948 of the ECB amending Guideline ECB/2013/7. The CSDB is a statistical dataset jointly managed by the ESCB members. The database contains reference information (e.g. ISIN, name of issuer, price, outstanding amount and yield to maturity), dating back to the end of 2008, on securities issued by EU residents, securities likely to be held and transacted in by EU residents and securities denominated in euro, whoever the issuer is and wherever they are held. The CSDB is governed by Guideline ECB/2012/21.[40]

Information about the sources and the estimation criteria used in the figures and in the tables are provided below.

Figure 1. The data are drawn from the financial accounts of the household sector processed by the Bank of Italy; in particular, the data from 1980 up to 1994 are drawn from the historical reconstruction of the financial accounts of the institutional sectors since 1950 (Bonci and Coletta, 2005).

[37] The ECB (2016) has stated that ‘the rising role of non-MFIs that are subject to less regulation and supervision has to be assessed for its possible repercussions on monetary policy transmission. In addition, the interplay of all financial intermediaries needs to be monitored from a monetary policy perspective.’

[38] The Commission on the measurement of economic performance and social progress, also known as Stiglitz/Sen/Fitoussi Commission, in the report published in 2009 underlined that ‘Income and consumption are crucial for assessing living standards, but in the end they can only be truly gauged in conjunction with information on wealth. […] Measures of wealth are central to measuring sustainability. What is carried over into the future necessarily has to be expressed as stocks – of physical, natural, human and social capital.’

[39] The review of the literature and of the debate and the recent evidence about the behaviour of savers are contained in Guiso and Sodini (2013) and Guiso (2016).

[40] For further information, see the booklet ‘The centralised securities database in brief’ available on the website of the ECB.

Table 1. The data on the portfolio of **investment funds governed by Italian law** are drawn from the supervisory reports transmitted by the asset management companies to the Bank of Italy on the portfolio investments of each single managed fund.[41] The closed-end funds governed by Italian law, which primarily invest in real estate and in units of real estate investment funds, as well as the funds governed by foreign law for which the information on the portfolio are incomplete, are excluded from the process of transparency and will be examined in greater depth in the future. The amount of mutual fund assets indirectly held by Italian households has been calculated at the level of the individual fund by applying the share of the fund held by households to each financial instrument in its portfolio. Detailed information on each security comes from the CSDB.

Table2. The composition of the portfolio of **pension funds** has been estimated on the basis of the statistics published in COVIP's Annual Report. The analysis focuses on the portfolio investments of union-negotiated pension plans, open-end funds and pre-existing autonomous funds, while it excludes the portfolio investments of corporate pension schemes, of pension funds whose resources are held and managed by insurance companies, and those underlying individual pension plans, as they are included in the portfolio of insurance companies. Therefore, the perimeter of investigation does not include deposits, direct and indirect investments in the real estate market, which are nearly exclusively held by pre-existing funds, as well as residual assets. The breakdown of the portfolio by type of financial instrument, sector, and residence of the issuing counterpart has been estimated on the basis of information contained in the SHS archive which is provided by the supervisory reports on securities held in custody at banks.[42] Consistent with the analysis carried out on insurance companies and mutual funds, we have not used COVIP's estimates on the composition of the securities portfolio by geographical area which include the component held indirectly through collective investment undertakings. Detailed information on each security comes from the CSDB. Debt securities, equities and mutual fund shares are reported at market value except in those cases where such valuation is not available in the SHS.

44. *Tables 3 and 4.* The data on the portfolio of **insurance companies** come from the SHS archive which contains the quarterly reports transmitted to the Bank of Italy by the Institute for the Supervision of Insurance (IVASS) in compliance with the obligations set out in EU Regulation No. 2015/730 of the European Central Bank amending Regulation No. 1011/2012 concerning statistics on holdings of securities. In particular, the analysis only takes into account the portfolio covering the life and non-life insurance technical provisions set aside by insurance companies to guarantee the payment of the benefits to policy holders. The supervisory reports refer to the third quarter of 2016. Given the lack of detailed information about the non-life technical reserves held by each sector of the insurance industry, the share of assets covering the non-life insurance provisions of households has been estimated using the share of premiums paid annually by Italian households as recorded in the national accounts (65 per cent).[43] The CSDB is the source of data on portfolio instruments. The portfolio investments relative to traditional policies are

[41] The SHS archive has not been used since, pursuant to its data processing rules, the holder of the security is the reporting intermediary, i.e. the asset management company, and not the managed fund. As a consequence, it is not possible to attribute the portfolio of each fund to the households which hold it. However, SHS data are consistent with those on the portfolio of the asset management companies which can be found in the supervisory reports.

[42] The portfolio held in custody at banks represents about 60 per cent of that reported in the COVIP report; however, the two portfolios show a similar composition. A forthcoming ECB regulation will govern the collection of data for the SHS archive through direct reporting by pension funds.

[43] Item D.71 'Net non-life insurance premiums.'

valued at nominal value while those covering index-linked policies are valued at end-of-period market prices.

Table5. See notes to Tables 1-4 and to Figure 1.

Table 6. The composition of Italian households' financial assets is calculated using data from the financial accounts' report of June 2017. The composition after applying the look-through method has been obtained through a reclassification of the indirect investments in the main balance sheet categories. The sources and the estimation methods are illustrated in the notes to the tables and figures of Section 2. Reclassifying the indirect portfolio investments has not made it possible to render fully transparent the Italian investment funds and the insurance provisions. In particular, after the reclassification:

- the item 'Investment funds' in the section "Assets vis-a-vis residents" includes closed-end fund units, financial assets other than portfolio investments held by open-end funds (mostly deposits) and shares of Italian mutual funds held by institutional investors (i.e. funds of funds);
- the item 'Insurance policies and pension funds' includes the financial assets covering technical provisions other than portfolio investments, retirement funds held by households with firms, and statistical discrepancies between the financial accounts and other sources.

Figure2; Table7. The sources used in calculating the weight of the asset management products in household financial wealth and the composition of the financial assets before the application of the look-through method are the tables of the financial accounts published in the *Annual National Accounts* section of the Eurostat database, for the European countries, and those published in the *National Accounts* section of the OECD database (OECD.Stat), for the remaining countries. These tables, supplemented with the balance sheets of the institutional investors available in OECD.Stat,[44] made it possible to estimate the indirect investments used in calculating the composition of the financial assets after the look-through.

The results presented in section 3 are the sources for Italy.

Like Italy, for the other countries only the assets held indirectly by households through managed saving products issued by resident intermediaries have been taken into account.

Indirect assets have been estimated by applying the share of products issued by intermediaries held by households to the financial investments recorded under assets by the same intermediaries. More specifically, the procedure is as follows:

- the financial assets held by resident intermediaries have been considered up to the value of the technical provisions and the investment and pension fund units recorded on the liabilities side of their balance sheet. Therefore, the assets acquired by the intermediaries through other forms of fundraising (e.g. debt securities and equities) have been, pro-quota, excluded. This apportionment criterion has also been used in the case of insurance companies since, unlike Italy, for the other countries statistics on the portfolio covering technical provisions are not available;
- the participation share held by households in asset management products issued by resident intermediaries has been applied to the assets indicated in the previous point. When the amounts held are not stated in the financial balance sheet, the

[44] With the exception of Australia for which the source is the Australian Bureau of Statistics.

participation has been estimated through the share calculated for the whole economy;

- the look-through method has not been applied recursively to the investment funds held indirectly (see Appendix A.1).

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