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Tax measures and household financial behaviour: Evidence from France

Christophe Schalck

Paris School of Business, 59 Rue Nationale, 75013 Paris, France

A B S T R A C T

The aim of the paper was to examine how tax measures on financial assets have affected the investment behaviour of French households. Using an ARDL approach, we estimated the financial behaviour and effect of tax measures for each financial asset. We found that investment behaviour varies according to the considered financial asset. For almost all financial assets, income has a positive influence on the invested amount, and inflation has a negative influence. Nevertheless, we found that previous financial wealth has a significant positive impact only on long term investment. The real interest rate has different impacts on the invested amount according to the individual financial asset. Our results indicate that tax measures have a significant impact on investment behaviour. In particular, we found a spillover effect from tax measures and an asymmetric behaviour. These findings confirm that households have non-standard preferences, since the results could be explained by a liquidity preference and a loss aversion effect. The results have implications for asset managers and policymakers.

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1. Introduction

Since the occurrence of the global financial crisis (GFC), as with most European countries, France has experienced a sluggish economic situation characterised by a weak and slow recovery. Household income growth has slowed (5.2% in 2007–0.6% in 2013), and the performance of main financial assets has been poor (AMF, 2013). The weak recovery weighs on public finances (the public deficit remains above the threshold of 3% of GDP), and governments seek new revenue. The year 2013 was marked in particular by discussions on the taxation of life insurance. This scissoring effect between lower yields and higher taxation of capital raised questions about the link between taxation and financial investments in France. The research question is the following: have tax measures on financial assets had an impact on the investment behaviour of French households?

Theoretically, Auerbach and King (1983) provided an equilibrium portfolio choice in the presence of differential taxation. They show that investors will specialise in the set of assets that are taxed most favourably. Empirically, several studies have examined how differences in the marginal tax rates affect the asset location decisions of US households (Feldstein, 1976; Hubbard, 1985; King & Leape, 1998; Poterba & Samwick, 2003). These studies find that the

variation in marginal tax rates helps explain differences in portfolio structure across households. This result has also been found in Canada (Alan, Atalay, Crossley, & Jeon, 2010). Studies differ in the data used and in how they disentangle the pure tax effect from the income effect on portfolio allocation. Another strategy has been to focus on a financial asset and identify its main determinants. Because life insurance has become an increasingly important part of the financial sector in many countries, several studies have investigated the influence of socioeconomic factors on cross-country differences (Beck & Webb, 2003; Li, Moshirian, Nguyen, & Wee, 2007). It has been found that economic factors (income, inflation, interest rates) and institutional factors (life expectancy, level of education, social security expenditure) explain life insurance consumption across countries. Only Jappelli and Pistaferri (2003) analysed the tax treatment of life insurance. Using repeated cross-sectional data in Italy, they considered the cancellation of tax incentives for investors with high marginal tax rates and the introduction of incentives for those with low rates. They found that the tax reform had no effect on the decision to invest in life insurance or the amount invested.

However, previous studies are limited to identifying the spillover effect of different tax measures. Moreover, they do not consider non-standard preferences such as liquidity preference or loss aversion. Liquidity preference implies that households prefer to hold on to cash and that they will demand a premium for investing in non-liquid assets. This could have a significant effect
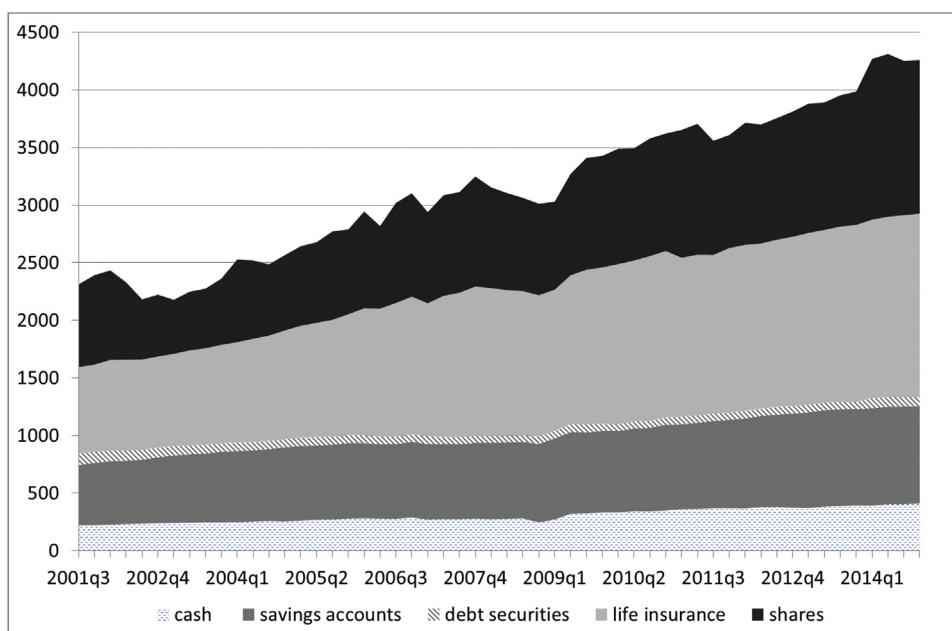
Fig. 1. Households' financial assets (outstanding € bn).

on asset allocation (Dequech, 2000). Loss aversion implies that households will allocate less of their wealth to equities than will households with standard preferences (Barberis, Huang, & Thaler, 2006). Dimmock and Kouwenberg (2010) empirically confirmed from the DNB Household Survey that higher loss aversion reduces the probability of direct stockholding. Finally, most studies that develop empirical evidence on how taxes affect portfolio choice concern the United States. To the best of our knowledge, this issue has not been debated for France. This study aims to contribute to the literature by filling those gaps.

This paper empirically examines how specific tax measures affect the amount invested in financial assets by French households. It focuses on the main types of financial products: bank savings accounts (regulated savings accounts, standard savings accounts, and homebuyers' savings accounts), debt securities, life insurance, and shares. Using an ARDL approach, the financial investment behaviour and the effect of tax measures (changes in tax rates, changes in tax allowances, changes in regulated interest rates) of each financial asset are estimated. For almost all financial assets, income has a positive influence on the invested amount, and inflation has a negative influence. Nevertheless, we found that previous financial wealth has a significant positive impact only on long term investment (debt securities, life insurance, and shares). The real interest rate has different impacts (positive, negative, nonsignificant) on the invested amount according to the individual financial asset. Our results indicate that tax measures have a significant impact on investment behaviour. In particular, the results show a spillover effect from tax measures; for example, a positive tax measure on regulated savings accounts has a negative effect on the invested amount of other financial assets. Moreover, an asymmetric behaviour is highlighted: a positive tax measure on regulated savings accounts has a positive effect on the invested amount, while a negative action has no effect. These findings confirm that households have non-standard preferences, since the results can be explained by a liquidity preference and a loss aversion effect. The results have implications for asset managers and policymakers.

The remainder of the paper is organised as follows. Section 2 outlines the financial assets and tax measures used in this paper.

Section 3 describes the database and the utilised methodology. Section 4 presents and discusses the results. Section 5 concludes.

2. Overview of financial investment of French households

For households' financial accounts, we can distinguish five types of financial assets: cash, debt securities, bank savings accounts, life insurance, and shares. Fig. 1 presents a time evolution of these assets since 2001. The favourite type of investment in France is life insurance, which represented 37% of the total investment amount in 2014 and experienced the largest increase (+6% in average annual growth). A feature of life insurance in France is that it is both an inheritance tool and a savings tool. The increased interest in this financial product may be explained by the tax advantages they offer. The second most popular financial asset is shares, including listed and non-listed company shares and UCITS shares. It represented 31% of the total investment amount in 2014, with an average annual growth of 5%. Nevertheless, it is the financial asset with the highest volatility due to its high sensitivity to economic conditions. The third most popular financial asset is bank savings accounts, which represent 20% of the total investment amount, with an average annual growth of 4%. In comparison to life insurance and shares, bank savings accounts appear to have low volatility. An interesting point is that debt securities represent a small (2%) and decreasing (−2% in average annual growth) percentage of households' financial portfolio.

The relatively smooth evolution of bank savings accounts hides significant disparities. We can distinguish three types of bank savings accounts: regulated savings accounts (RSA), standard savings accounts (SSA), and homebuyers' savings accounts (HBSA). Regulated savings accounts are the most popular type of savings accounts, with over €450 bn held in France in 2014. While there are limits on the amount one can deposit in these accounts, they offer an enhanced rate of interest. This is particularly true in the case of an inflationary situation because inflation is a main component in the computation of the regulated interest rate. The most interesting feature of regulated savings accounts is that they are free from French income tax and social charges. In standard savings accounts, interest rates are not regulated, and there is no maxi-