



BANCA D'ITALIA
EUROSISTEMA

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(Occasional Papers)

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and international comparison

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THE TAXATION OF SAVINGS: THE ITALIAN SYSTEM AND INTERNATIONAL COMPARISON

by Nicola Branzoli^{*}, Giovanna Messina[^], Elena Pisano[♦],
Giacomo Ricotti[♦] and Ernesto Zangari[♦]

Abstract

After a brief review of the economic literature, the paper offers a comparative analysis of the main features of capital income taxation in Italy, the EU and the US. The paper also analyses the recent evolution of capital taxation and portfolio allocation in Italy. The findings point to high heterogeneity in the choice of the type of tax system, taxation level and forms of preferential taxation, suggesting no convergence towards a single model of taxation among countries. However, a common feature of most systems is that capital income is taxed more lightly than labour income. The heterogeneity in the tax treatment of households' savings is likely to persist in the future; recent developments at international level concerning the transparency of taxation are expected to increase governments' degrees of freedom in choosing their preferred tax system. Empirical evidence for Italy suggests that the tax burden on financial assets has increased in recent years but the evolution of financial assets over time is not particularly sensitive to tax changes.

JEL Classification: E21, H24, K34.

Keywords: capital income, taxation, savings.

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1. Introduction*

In the wake of the crisis, the taxation of savings has drawn renewed attention from both academics and policy-makers. The debate on possible tax reforms has mainly focused on the opportunity to increase taxation on financial income, as well as on introducing mechanisms to enforce the taxation of savings (such as the automatic exchange of information) in order to curb international tax evasion and improve the fairness of tax systems. In addition, the use of taxation has been discussed as an instrument to alter economic agents' behavior in order to address undesirable or inefficient conducts (*e.g.* through taxes on speculative transactions). Furthermore, in the light of the debate on the harmonization of fiscal policies, questions still arise on the heterogeneity of tax systems across European countries.

Assessing the tax systems and the level of fiscal levies on financial income across countries can help to understand whether common models of taxation exist, whether theoretical recommendations find a concrete application in reality and whether behaviors are sensitive to tax policies. For our purposes, a comparative analysis will also enable us to evaluate where Italy stands compared to its main counterparts.

This paper contributes to the topic of taxation of financial assets from several perspectives.

Firstly, it reviews the most relevant issues concerning capital income taxation debated in economic literature. Secondly, following a detailed description of taxation of financial assets in Italy, it carries out a careful review of the main differences in the taxation of capital income in EU countries and in the US. Finally, the paper provides descriptive evidence of capital tax revenue and portfolio allocation in Italy.

The main findings of the study are the following. Despite the fact that the economic literature advocates forms of taxation that meet the criteria of economic efficiency, the analysis suggests that all countries adopt distortionary taxes on capital income. In addition, no convergence to a unique taxation model has been identified: there exists a high degree of heterogeneity in the tax treatment of income arising from financial assets, as well as in the type of system adopted (*e.g.* proportional versus progressive), in the level of taxation and in the categories subject to forms of preferential taxation. Most systems tax capital income more lightly than they do labor income; in several cases, this is also due to particularly favorable tax regimes for savings income. As regards the descriptive statistical analysis, first of all we document the strong increase in the tax burden on financial assets in Italy in recent years, which has significantly contributed to the overall increase in State revenue. Secondly, we show the evolution over time of financial assets held by households in Italy and we observe that it is not consistent with the pattern one would expect if tax changes had played a predominant role.

The work is organized as follows. Section 2 reviews the literature on the taxation of capital incomes by focusing on three main questions: i) whether taxing capital income is efficient in economic terms; ii) what the economic effects of a tax on capital are; iii) how such tax should be implemented. Section 3 states the scope of the study, the assumptions adopted and the dimensions of the analysis on the taxation of financial capital income, namely: a) comprehensiveness; b) uniformity; c) method of collection; d) type of levy (proportional/progressive) and rates. Section 4 focuses on the Italian system of capital income taxation. Section 5 illustrates the main rules applying to the taxation of financial assets across EU jurisdictions and the US. The last two sections distinguish among: i) a levy on income (dividends, interest and capital gains); ii) treatment of mutual funds; iii) forms of levy on financial wealth (taxes on capital and transfer). The analysis relies on charts and figures summarizing the characteristics of the chosen system, the level of rates and withholding, and the relationship with personal income tax (PIT) minimum and maximum rates, as well as on summary tables (in Annex 1) which report the main features of the systems and

* The authors are grateful to the Italian Ministry of Economy and Finance – Department of Finance for kindly providing tax revenue data. The analysis and conclusions expressed herein are those of the authors and should not be attributed to the Bank of Italy.

the relevant exemptions or specific rules. Details on special tax regimes for the main countries are also provided. As regards investment funds, the existence of corporate tax on the funds and the treatment of the savings income of unit-holders are accounted for. Finally, Section 6 discusses the possible influence of taxation on households' investment decisions using both tax and financial accounts data. First, we focus on the effects of Italian tax changes on tax revenues in the period 2011-2015; subsequently, we look at the allocation of households' financial savings among different assets in Italy. Section 7 concludes.

2. Capital taxes in theory: a brief review

Capital taxation is at the heart of the public finance literature and has been producing a prolific and vibrant strand of research.¹ Nevertheless, theory is often disputable and research has not led, to date, to unambiguous results. Three fundamental questions have been raised by scholars: 1) Should capital be taxed? 2) What would be the economic effects of a tax on capital? 3) How should such a tax be implemented? These questions address capital taxation both from a positive and from a normative point of view, as they encompass an analysis of tax incidence as well as issues of tax policy design.

Should capital be taxed?

A well-acknowledged finding of optimal tax theory is that neither capital income nor wealth should be taxed. Taxing capital amounts to raising the relative price of future versus current consumption. This entails a substitution effect (people consume today because it becomes cheaper) and an income effect (people need to save more today in order to preserve the same level of consumption tomorrow). As long as the former effect prevails, savings will fall. Hence, welfare maximization implies that it would be more appropriate to tax labor income or consumption, as they do not alter the relative price of consumption over time and leave saving decisions unaffected.²

The undesirability of a capital taxation is a finding that emerges from a wide variety of models.³ In a multi-period framework and in presence of alternative tax bases, taxes on capital could be highly distortionary even at very low rates since the tax wedge between current and future consumption cumulates over time; this effect is magnified by inflation.⁴ Additional arguments discouraging capital taxation are the "double taxation of savings" (income used for purchasing assets would be taxed twice) and the circumstance that economic agents are myopic and have a tendency to save too little, providing inadequately for their future.

Some of the assumptions underpinning such models are indeed questionable, hence leaving a role for capital taxation. Households are often treated as identical, but several studies have shown that individual decisions are heterogeneous since they are driven by demographic factors (such as family size or the timing of childbearing) or by the distribution of earnings over time.⁵ Moreover, the assumption that labor income is exogenous is quite unrealistic, since labor supply decisions are not independent from capital income: it may well be the case that a decrease in the after tax rate of return on capital induces individuals to work more, making the net effect on savings undetermined.

¹ Interest on this subject has been rekindled by the recent work of Piketty (2014) and the reply by Auerbach (2014).

² This result emerges from a simple two-period model with exogenous labor income and consumption allocated between the two periods *via* the saving decision. The model, initially developed by Fisher (1930), has been extensively used in public finance research. For a thorough discussion, see Sandmo (1985).

³ The most influential being Atkinson and Stiglitz (1976), Auerbach (1979), Judd (1985) and Chamley (1986).

⁴ On this point see Auerbach and Hines (2002).

⁵ The relative magnitude of the income effect versus the substitution effect depends on the intertemporal rate of substitution and on the discount factor, which can be different across individuals. Furthermore, the income effect is positive for a lender and negative for a borrower, so, the intertemporal distribution of earnings may influence the elasticity of savings with respect to variations in after tax interest rates (Sandmo, 1985).

Furthermore, the result for untaxed capital in the steady state is sensitive to all the factors that may hinder consumption smoothing over time. In particular, the long-run interest elasticity of saving is influenced by the bequest motive: it is much higher if bequests are altruistic, whereas it declines if they are accidental.⁶ Liquidity constraints are also relevant since, if borrowing is limited, the relation between saving decisions and interest rate is less intense, and therefore the welfare cost of capital taxation is reduced. Finally, as demonstrated by an extensive literature, the life cycle planning process can be driven by uncertainty (*e.g.* mortality risk or income variability). Since precautionary saving tends to be relatively insensitive to the after-tax rate of return, factoring in uncertainty usually results in a considerable fall in the interest rate elasticity of saving.

To sum up, the literature suggests exempting capital from taxation on efficiency grounds. This prescription rests on saving decisions being responsive to variations in interest rates, but the sign and the magnitude of this relation are not clear-cut, as they can be determined only under very restrictive circumstances.

The theoretical ambiguity on the interest rate elasticity of savings still leaves room for capital taxation; this is even more so when equity purposes are taken into account. Taxing capital can be an important instrument to achieve redistribution across individuals with different earning capacities (as proxied by the observed level of savings) or across generations (since capital taxes are levied on second-period consumption and hence hit older individuals at any given point in time).⁷ Other arguments supporting capital taxation are the need to preserve human capital investment (exempting savings from taxation may distort investment decisions away from human capital towards financial assets) and the difficulty in several cases of disentangling capital income from labor income.

What would be the economic effects of a tax on capital?

A comprehensive assessment of the economic consequences of capital taxation calls into question issues of tax incidence. Since savings are used to acquire productive capital that each generation leaves to the following one, the supply of capital can be thought of as an increasing function of the after-tax rate of return, while the demand for capital is decreasing in before-tax interest rates. A change in the capital tax rate hits savers or investors according to the slope of the two functions: if capital supply is inelastic, the tax burden falls entirely on savers *via* a reduction in their after-tax rate of return; if, by contrast, the demand for capital is inelastic, investors are hit by the tax through a corresponding increase in the before-tax interest rate so as to leave the after-tax rate of return unchanged.⁸

In a general equilibrium framework, the negative impact on investment decisions reduces capital accumulation, thus hindering growth in the long run. The tax is shifted to workers through lower wages, since capital per worker falls, with the magnitude of the tax shifting depending on the relative slopes of the labor supply and demand functions.⁹

The economic effects of capital taxation concern not only the total amount of saving, but also its allocation across different types of assets. A general argument in the literature is that a capital income tax, by lowering the expected rate of return of saving, discriminates against risk-taking

⁶ This leads to different implications as to include bequests or inheritances in the tax base; see the discussion in Bernheim (2002).

⁷ Cognitive ability tends to be associated with patience and higher propensity to save, higher likelihood of holding stocks and of having a private pension; this would suggest that saving is an indicator of earning capacity (as argued in Mirrlees 2011, pp. 308-310). With only labor and capital taxes available, a shift from the former to the latter would be the only way to shift the fiscal burden from the young to the old.

⁸ In a partial equilibrium setting the interest rate works as an equilibrator of saving and investment decisions, as in the following equation: $S(r(1-t))=I(r)$, where r is the (before tax) interest rate, t is the tax rate and $r(1-t)$ is the after-tax rate of return. See Sandmo (1985), p. 287.

⁹ See Diamond (1970).

(although a different point of view emphasizes that the direction of tax discrimination cannot be assessed *a priori*, since the government also shares in some of the risk).¹⁰ Further channels through which capital taxation may influence portfolio choices depend on the different treatment of the various forms of savings (*i.e.* pensions versus housing versus financial assets), on its interaction with progressive tax systems (which magnifies the variation in tax rates), and on the specific design of the tax (*i.e.* whether it is levied on an accrual or on a realization basis).¹¹

How should it be implemented?

If a case for capital taxation can be made, then its structure should be carefully designed to achieve the maximum possible degree of neutrality. Bearing in mind the economic effects of capital taxation, there are two dimensions of individual choice along which neutrality would have to be preserved: the first concerns the level (and timing) of saving, the second its allocation between different types of assets.

According to the most recent debate on optimal tax policy design, a tax which is not levied on the “normal” but only on the “excess” return on savings would meet both neutrality criteria.¹² The normal return simply compensates for the delay in consumption: “it can be thought of as the return obtained by holding savings in the form of a safe, interest-bearing asset” (see Mirrlees et al., 2011; p. 298) and can be approximated by the interest rate on medium-maturity government bonds. Returns above the normal level, on the other hand, reflect differences in the risk profile of different assets or entail some form of rent earned by investors. Such returns should be taxed, as they can be considered a symptom of a higher lifetime earning capacity.

In order to exempt the normal return on savings, a capital tax should be structured either as a cash-flow expenditure tax – which taxes income only at the time it is spent for consumption – or as an income tax with a rate-of-return-allowance. The two regimes preserve the incentives to save and avoid distortions across different forms of saving, since they achieve an equal treatment of capital gains and interest income.¹³ The first regime has the disadvantage that tax collection is delayed and that government receipts are uncertain in their amount (since they depend upon actual returns). The second bears some administrative complexities, as it would entail onerous record-keeping requirements and frequent revisions in the allowed tax-free rate in order to keep up with the evolution of government bonds yields. By contrast a standard comprehensive personal income tax including savings in the tax base, would be advantageous in terms of the time of collection, since revenues are received in advance and are certain in their amount, and would be easier to manage; however, it would tax all the returns on capital investments, including the normal ones, thus discouraging saving.

A third option standing between the comprehensive income tax and the expenditure tax is the Dual Income Tax (DIT). The essence of a DIT is to tax capital income at a low single rate and labor income under a progressive schedule. It differs from a comprehensive income tax in that it taxes capital and labor income differently, and from an “expenditure” tax since it also applies to the normal return to capital. The DIT alleviates the distortions to the allocation of savings among

¹⁰ See the discussion in Sandmo (1985), pp. 293-302.

¹¹ With a progressive system, tax rates vary not only among assets but also among individuals. Based on survey data for US, Feldstein (1976) shows that the variance in net yields due to taxation explains the pattern of asset holdings within different income classes. Taxation on realization (*i.e.* on disposal of the asset) rather than on accrual basis (*i.e.* as long as a rise in the asset value occurs) reduces the effective tax rate, thus favoring investment in assets that generate returns in form of capital gains rather than cash income, and also creates a lock-in effect.

¹² Such a tax is envisaged in the Chapter 13 of the Mirrlees review (see Mirrlees, 2011 pp. 283-317).

¹³ In the expenditure tax regime, the tax is paid on the value of savings at their withdrawal, regardless of whether they arise from capital gains or accumulated interest. In the rate of return allowance regime, the allowance is computed over the initial investment and the net present value of the tax paid is unaffected by the form of the returns (Mirrlees, 2011 p. 303).

different assets, while at the same time responding to a number of practical considerations, including those related to the mobility of capital between jurisdictions and assets, inflation, and - where applied in the form of a proportional tax - tax administration costs and lock-in effects in the taxation of capital gains (see Sorensen, 2010). This system may also appear in line with those economic arguments mentioned above which leave some room for deviating from neutrality.

3. Capital taxes in practice

A thorough assessment of savings taxation would require to consider not only the full range of investment choices – *i.e.* interest bearing accounts, direct equity holdings, as well as investment funds, pension funds, insurance plans and housing wealth – but also the taxation of small firms and self-employed individuals. Indeed, the taxation of income from financial assets may also affect the choices of these economic agents, and particularly the allocation of capital in the economy.

The scope of this study is limited to the taxation of financial income deriving from equity shareholdings, government and corporate bonds, and interest bearing accounts (*i.e.* dividends, interests and capital gains) held by resident individuals other than entrepreneurs, excluding bequests and/or *inter vivos* transfers. It does not consider, among other things, the taxation of income deriving from real estate investment.

More specifically, the paper focuses on three different kinds of levies: on income, on financial wealth, and on transactions.¹⁴

Concerning income, only personal taxation is considered; surcharges and municipal taxes are also accounted for. Taxation of investment funds is described only for the major countries, and for Ireland and Luxembourg, which have a well-developed investment fund industry.

Since the regulations of the various countries are extremely complex and diversified, four dimensions have been identified to build taxonomies and classifications:

Comprehensiveness

With regard to the scope of the system, it is possible to recognize:

- Comprehensive systems: all financial income is subject to tax with no relevant exemptions;
- Non-comprehensive systems: at least one category of income is either not taxed at all (for instance, capital gains are entirely untaxed), or relevant specific exemptions are available for some types of investment income (*e.g.* on public bonds).¹⁵

Uniformity

As regards the uniformity of the tax treatment, it is possible to distinguish:

- Uniform systems: no differential tax treatments are provided on any income category;
- Non-uniform systems: favored tax treatments or exemptions are granted to some types of income (such as capital gains, and/or sub-categories of incomes like public bonds or tax-advantaged savings accounts).

This feature is strongly related to the second meaning of neutrality mentioned in Section 2, since differential tax regimes may affect the allocation across different asset types.

¹⁴ Wealth taxes are analysed only for the main countries.

¹⁵ This definition does not correspond to the public finance concept of a comprehensive personal income tax. For our purposes, a comprehensive system is defined as an arrangement taxing all incomes with no exceptions, not necessarily with a PIT or with the same tax and/or rates. Obviously, several degrees of comprehensiveness could, in principle, be singled out, since the coverage of the taxation system may vary among countries.

Though comprehensiveness and uniformity are linked, it must be noted that not all the comprehensive-model countries have a uniform system of taxation (owing, for instance, to lower rates on some incomes), while some non-comprehensive countries are uniform (*e.g.* because they provide an overall lump-sum exemption).

Collection

According to the way the tax is collected, it is possible to identify:

- **Final systems:** tax is levied by means of a final withholding applied when the income is paid to the taxpayer;
- **Assessment systems:** the tax is assessed in a moment of time following the income payment, either under the rules of the personal income tax (PIT) or by means of a separate tax taking into account the possible advance payment at the source.

Type of levy

Concerning the way the tax is computed, one may distinguish:

- **Proportional taxation:** income is taxed either by means of a final withholding tax – where the levy is definitive at source – or by means of a proportional tax subject to assessment.¹⁶
- **Progressive taxation:** financial income is taxed either at the ordinary progressive PIT rates, or at separate *ad hoc* progressive rates.

Obviously, there is an overlap between the collection method and the type of levy, since a final withholding implies a proportional levy.

4. Taxation of financial assets in Italy

This section provides a quick review of the Italian taxation system of household savings, focusing on the main categories of financial income (dividends, interest and capital gains) both in the case of direct investment and in the case of investment through funds, as well as the taxation of wealth and transactions.

4.1 Taxation of dividends, interest and capital gains

Taxation of financial income in Italy can be described according to the abovementioned four dimensions.

Comprehensiveness

The Income Tax Code classifies financial incomes into two categories: capital incomes (*redditi di capitale*) and other incomes (*redditi diversi*). The Income Tax Code lists financial assets within the scope of the law, but the lists basically include all types of assets.¹⁷

- a) *Redditi di capitale* include interests, dividends, and other incomes derived from the mere possession of financial assets (for instance, income from investment funds, repos and reverse repos, capitalization contracts, etc.).

¹⁶ A special case of proportional taxation is a flat PIT with an advance withholding at the same rate (as in Estonia for interest and in Lithuania for dividends and interest).

¹⁷ Financial assets include: bank and post office deposits, saving certificates, state and corporate bonds and similar instruments, stocks and similar, repos on financial instruments and currencies, individual portfolios shareholding, mortgages and other loans, joint ventures, derivatives of every type on securities, currencies, commodities, pension funds, insurance contracts, participations in CIVs (Collective Investment Vehicles), REITs (Real Estate Investment Trusts) and other trusts, and any other financial instruments.

- b) *Redditi diversi* include capital gains and losses derived from the disposal of financial assets, as well as income from derivatives. These incomes are always taxed net of financial losses and expenses, but the timing of taxation depends on the regime chosen by the investor (described below).

Incomes other than capital gains are taxed on a gross basis, with no deduction of expenses and no significant exemptions; capital gains are instead taxed on a net basis, since – under certain conditions – losses may be deducted from gains and proceeds of the same type.

Until 2016, the Italian system could be regarded as comprehensive, since financial incomes (dividends, interest and capital gains) were all liable to tax with no exception. Since 2017, the system can no longer be considered as purely comprehensive, owing to the introduction of long-term individual savings plans (“*Piani di risparmio individuali a lungo termine* - PIR; see below).

Uniformity

Two different withholding rates (12.5% and 26%) are applied, depending on the asset (essentially, government bonds and similar instruments versus other assets). Thus, uniformity is not guaranteed since an important and favored tax treatment is provided for the relevant category of public bonds and similar assets, for which the reduced rate applies. Additional departures from uniformity are due to the differential tax treatment of substantial shareholdings.¹⁸

Collection

A final withholding tax is the main instrument of taxation of investment income. However, some types of income are included in the PIT tax base, and are subject to assessment. For instance, inclusion is required for dividends and capital gains from substantial shareholding. In addition, individual taxpayers may also explicitly opt for self-assessment of some of the financial incomes in the personal tax return (*i.e.* in the “tax return regime” explained below).

The way the tax is collected depends on the regime chosen by the taxpayer. Individuals may select one among three different systems to pay taxes on these revenues. As the timing of taxation may differ among regimes, the effective tax burden may also be affected.

- Under the tax return regime, tax duties must be satisfied by investors by filing the tax return. This regime is mandatory for substantial shareholders, while it is optional for those who do not rely on intermediaries for the management and reporting of their financial wealth. Taxpayers calculate taxes according to the PIT rules (in the case of substantial shareholdings) or based on substitute tax rates (26%) in the tax return. They are also required to report analytically their *redditi diversi*.¹⁹ Capital gains are taxed at realization, namely on the disposal of the financial asset. Gains and losses can be set off against each other, but only between incomes of the same nature;²⁰ a negative balance can be subtracted from capital gains of the same type realized in the following four years. Under this regime, investors are monitored since incomes are reported to the tax administration by intermediaries or other entities which intervene in the transactions.
- Under the administered assets regime the investors deposit their financial assets with an intermediary, retaining the management of their wealth, while delegating the intermediary for all

¹⁸ Substantial shareholding are those representing more than 2% of the share capital/equity or more than 5% of the voting rights, for listed shares; the figures are 20% or 25% respectively for unlisted shares. Starting in 2018 there will be no difference between the taxation of substantial and not-substantial shareholdings.

¹⁹ Capital gains from public bonds enter the taxable base only for 48.08% (which is equivalent to 12.5% rate on the overall amount).

²⁰ For example capital losses from substantial shareholding can be deducted only up to capital gains of the same type; and losses from shareholdings in companies resident in tax-advantaged countries can be offset only against the same typology (distinguishing between shares traded on regulated market and non-regulated respectively).

tax obligations.²¹ The intermediary calculates, for every transaction, the taxes due and withholds the necessary amount to pay them. Taxes are calculated only on capital gains actually realized; loss offsetting can only take place for incomes of the same nature. If the balance between gains and losses is negative, this can be subtracted from capital gains realized up to the subsequent four years. Under this regime, investors remain anonymous.

- Under the investment portfolio regime, not only do investors deposit their financial assets with an intermediary – which takes care of all tax obligations – but they also delegate the intermediary to manage the portfolio. The intermediary calculates and pays taxes on the operating result (including interest, dividends, capital gains with no distinction) not only realized, but also accrued during the year, comparing the valuation of the investment portfolio at year-end with that at the beginning of the year (net of contributions and withdrawals). Losses are compensated in full, since netting is possible even between financial income and other income categories. If the balance is negative, this can be subtracted from the operating result of the following four years. As in the administered assets regime, investors remain anonymous.

Type of levy

As mentioned above, the two different rates of withholding are not related to the amount of income received, but to the type of underlying financial assets, resulting in a mainly proportional levy.

The 1998 reform set two rates (12.5% and 27%), the latter applying mainly to bank deposits. Since 1.1.2012 the 12.5% rate only still applies to proceeds from public bonds; a higher rate (originally 20% and subsequently raised to 26% starting from 1.7.2014) applies to proceeds from private bonds, non-substantial shareholdings, bank deposits and other financial assets.

However, as already pointed out, incomes meeting certain conditions are included in the PIT at progressive rates.

To summarize, the system is structured as follows:

- i) Dividends stemming from substantial shareholdings are included for 49.72% in the personal income tax base (as opposed to those deriving from non-substantial shareholdings, which are excluded from the PIT base and subject to the 26% final withholding tax). When dividends are paid on shareholdings in companies resident in a tax haven,²² they are always fully included in the PIT base, unless the shareholding is non-substantial and shares are traded on regulated markets; in this latter case, the 26% final withholding tax applies.
- ii) Interest income is never included in the PIT, *i.e.* is subject to a 26% final withholding tax. However, income from public bonds (Italian or of other non-tax-advantaged countries) and similar securities (including postal saving certificates) benefits of a lower 12.5% rate.
- iii) Capital gains on shares are taxed according to the same criteria that apply to dividends depending on the nature of the shareholding, while other capital gains (e.g. on bonds) are subject to the final withholding rate (12.5% or 26%) depending on the type of underlying assets (public bonds versus other securities).

4.2 Tax-preferred savings schemes

Starting in 2017, income derived from investments made using PIRs is completely exempt from taxation. PIRs are equally exempted from the bequest tax.

²¹ This regime is not allowed for taxpayers with capital incomes and gains which need to be included in the PIT base.

²² To this aim, a company is deemed to be resident in a tax haven when in the host country it is subject to a corporate income tax statutory rate that is less than fifty percent of the rate applicable in Italy; an EU Member State is never considered a tax haven, whatever the level of the corporate income tax (CIT) rate.

The exemption applies only to Italian resident households, which can subscribe to only one PIR. Individuals can invest no more than EUR 30,000 per year; their overall invested amount is capped at EUR 150,000. The composition of the PIR portfolio must follow certain rules: a) at least 70% of the investment must be in financial instruments issued by Italian resident companies or by companies having a branch in Italy; b) at least 30% of the 70% share described in point (a) must be invested in instruments issued by companies not listed in the FTSE MIB stock index or similar index; c) no more than 10% of the total funds may be invested in financial instruments issued by a given company.

The investment may be made directly or indirectly, *via* investment funds or “PIR compliant” capitalization contracts, and must be held for at least five years.

PIRs met the favor of Italian investors: in the first three quarters of 2017 “PIR-compliant” investment funds raised around EUR 7 billion, equivalent to roughly two thirds of total net inflows of Italian open-end funds in the same period.²³

4.3 Taxation of investment funds

On 1 July 2011 a new regime was introduced for incomes derived from investing through mutual funds.

Investment funds are subject neither to corporate tax²⁴ nor to the regional tax on productive activities (IRAP). In addition, most returns and gains received by the fund are not subject to any withholding tax (except for atypical securities, bonds issued by Italian resident unlisted companies other than banks, and foreign bank accounts and deposits).²⁵

Individuals investing *via* mutual funds are only taxed on the distributed incomes and on the gains realized from disposal of the fund units. Moreover, investors benefit from the possibility of compensating the dividends and interest relating to the fund’s assets with the capital losses arising from the fund’s trading of assets. The distributed dividends and interest and capital gains realized following transfers or redemptions of the funds’ shares are subject to a 26% withholding tax,²⁶ except for interest on government (Italian or EEA) bonds, which are subject to a 12.5% withholding tax; in both cases the withholding tax is final if investor is not an entrepreneur.²⁷ If a loss is recorded following transfers or redemptions of the funds’ shares, the investor can carry forward the loss up to the fourth year.

4.4 Taxation of financial wealth: the stamp duty

In 2011, in the wake of financial crises, Italy introduced a wealth tax by widening the scope of the stamp duty on communications due by financial intermediaries for accounts and deposits of securities.

²³ See Assogestioni (2017).

²⁴ Before 1 July 2011, funds were taxed at a 12.5% substitute tax rate on the yearly operating results. A transitional regime was envisaged.

²⁵ In addition, some substitute taxes are not levied (e.g. on bonds issued by Italian companies and banks with maturity less than 18 months accrued before 2011; on bank deposits and certificates accrued to the fund before 2011 if the average value exceeds 5% of the average value of the fund; and on withholding tax on income from securities and repos accrued before 2011).

²⁶ The withholding tax is levied by the management company or qualified intermediaries.

²⁷ The existence of two rates makes it necessary to identify the components in each capital gain arising in the event of transfer or redemption of the fund shares. The criterion to identify the two components is based on the percentage of the fund’s total assets invested in bonds taxed at 12.5%. This percentage is applied to the overall capital gain and only 48.08% of the resulting amount is taxed at 12.5%.

Bank and postal accounts (including savings accounts) exceeding an average yearly stock of EUR 5,000 are subject to a duty of EUR 34.20; deposits of securities are subject to a duty of 2‰ of the assets' market value. A levy of the same amount applies to bank accounts and deposits of financial instruments held abroad. The tax applies, among other things, to investment fund shares and life insurance.

4.5 Taxation on transactions: the Italian Financial Transaction Tax (FTT)

Since 2013 Italy has been applying a Financial Transaction Tax (FTT) on transactions involving financial assets issued by companies resident in Italy.²⁸

The FTT is levied on: i) transactions on shares (including equity-like financial instruments) issued by Italian companies; ii) transactions on derivatives (swaps, futures, options, and credit default swaps, including warrants, covered warrants and certificates) for which the underlying assets are shares as defined under point (i). The FTT is also levied on high-frequency trading defined as the trading of financial instruments under points (i) and (ii) - as well as those issued by foreign companies and traded in Italy - generated by a computer algorithm automatically placing orders, and for which the ratio of orders amended and/or cancelled in a time frame shorter than half a second to total placed orders exceeds 60%. Arguably, this latter levy could be considered more a tax on speculation, rather than a tax on savings.

The rates are as follows:

- Transactions on shares: a proportional tax on the daily balance of all transactions on the same asset. The rate is 0.1%, if transactions take place on a regulated market or in a multilateral trading facility, and 0.2% for over-the-counter (OTC) transactions. Intra-day transactions are not relevant. The tax is due by the buyer and it applies regardless of the place of execution of the transaction and of the place of residence of the contracting parties.
- Derivatives: a fixed-amount tax ranging from EUR 0.01875 up to EUR 200, according to the type and the amount of the transaction; if the latter takes place on a regulated market, the amount of the tax is equal to 20% of the correspondent ordinary fixed amount. The tax applies regardless of the place of execution and of the place of residence of the contracting parties and is due by both parties of the transaction.
- For high-frequency trading: a tax rate of 0.02% of the value of the modified and/or cancelled orders that in a trading day exceeds a threshold equal to the 60% of the ratio of the sum of cancelled and modified orders to the sum of entered and modified orders. The tax is due by the person on whose behalf the orders are executed.

The tax is due by the financial intermediary intervening in the trading activities, including non-resident ones; they are also allowed to defer the execution of the transactions until clients provide appropriate funds to pay the FTT.

The Italian legislation also includes a number of exemptions,²⁹ and exclusions are provided from the scope of taxation, the most relevant being primary market operations, and the transactions on shares traded in a regulated markets issued by companies with an average market capitalization lower than EUR 500 million in the previous year.³⁰

²⁸ For a detailed account of the economic effects of the financial transaction tax in Italy see Cappelletti et al. (2016).

²⁹ For both parties of transactions involving the EU or European institutions, the European Central Bank, the European Investment Bank or the central banks of EU Member States, related to ethical and socially responsible products; for parties involved in market making and in providing liquidity on behalf of the issuer; for pension funds subject to supervision, and for mandatory social security institutions (Pillar I pensions).

³⁰ For instance, inheritance or donations, bonds converted into new shares, or the acquisition of new shares through the exercise of rights or derivatives, intra-group transaction and corporate restructuring, securities financing

5. The taxation of financial assets in Europe and the US

This section provides an overview of the most relevant features of the taxation of financial investment income in European countries and in the US. Firstly, it analyses the taxation of dividends, interest and capital gains, including a review of the main tax-preferred savings schemes existing in some select countries. Secondly, it examines the taxation of investment funds in the most significant countries. Finally, it describes indirect forms of taxation of financial income, *i.e.* wealth taxes and financial transaction taxes.

5.1 The taxation of dividends, interest and capital gains in Europe and the US

Scope of the analysis

This section focuses on tax rules in European countries and the US as of the tax year 2017.³¹ For the sake of simplicity, the present work considers the following types of income, deriving from the most standard assets issued by resident companies:³²

- Dividends from listed, non-qualified/non-substantial shares;
- Interest from public bonds, corporate bonds and banks' accounts, respectively;
- Capital gains on long-held shares and bonds (*i.e.* with a holding period of more than one year).

However, for each country some additional information regarding the taxation of income stemming from unlisted and substantial shareholding (which are outside the scope of the study) is provided in tables in Annex 1 and notes in Annex 2. Whenever a distinction for tax purposes is made between assets traded in a regulated market and other assets, the former are not considered for the purposes of the classifications, and additional details are reported in Annex 2. Similarly, speculative capital gains (*i.e.* with less than a one-year holding period) are not considered for the classifications. A thorough account of differential taxation depending on the holding period can be found both in the Table A3 and in Annex 2.

For France, Germany, Spain, the United Kingdom and the US the tax-privileged assets are examined in Section 5.1.4. Special tax treatment of investment schemes in small, unlisted, early-stage companies, start-ups and venture capital trusts are not specifically tackled in the main text; however, whenever relevant (*e.g.* for the UK), they are accounted for in Annex 2.³³

An overview of the results and some remarks

The dimensions of comprehensiveness, uniformity, collection and type of levy – described in Section 3 – can be applied to each country's overall taxation system of investment income. Table 1 provides a summary.

Out of the 29 countries analysed, only two present truly comprehensive systems since all saving incomes are subject to taxation with no exemptions (AT and SE). As regards uniformity, only seven countries are characterized by a strictly uniform system of taxation in that the categories of dividends, interest and capital gains are taxed with the same system/rate (AT, CZ, DE, HU, LT, NL

transactions (repos and securities lending/borrowing), and purchases/sales for clearing and collateral purposes by authorized entities.

³¹ For the UK only, the reference tax year starts on 5 April 2017.

³² The source of information is International Bureau of Fiscal Documentation (IBFD).

³³ For a cross-country review of the venture capital trust experiences, see Magliocco and Ricotti (2013).

and SE).³⁴ Notice that Germany is an uniform but not a comprehensive system, owing to the lump sum exemption on capital incomes.

Concerning the collection method, about half of the countries apply final withholding on capital income (AT, BE, BG, CY, CZ, HR, DE, GR, HU, IT, PO, PT, RO, SI and SK). Finally, the majority of countries tax capital income in a proportional way (the above 14 countries with final withholding systems, three countries applying a flat-rate PIT to financial income – EE, LT and LV – and Sweden with a proportional assessment system).³⁵

Considering the relationship between the tax rates on capital income and those on personal income, most countries tax capital income at rates broadly equal or lower than the PIT rates, displaying one important feature of dual income systems.³⁶

All in all, the overall picture suggests a large heterogeneity in the tax treatment of income from financial assets, with respect to the scope, the level, and the administrative features. It is also hard to identify a common model to which countries converge.

Looking forward, due to the changing international tax environment, the overall heterogeneity in taxation of capital incomes is likely to persist, since taxing these incomes could become relatively easier than in the past. The principle of residence, commonly adopted in the taxation of financial income, implies taxation in the residence country of the investor, making the level of taxation in the source country irrelevant. However, this system lacks safeguards against the possibilities of “escaping” the levy by transferring capitals abroad without reporting them in the country of residence. Indeed, the recent transparency international initiatives - such as the exchange of information - will make it more difficult to move capitals abroad without reporting them in the country of residence.

In this regard, the OECD Global Forum on Transparency and Exchange of Information initiatives require governments to gather detailed information on the accounts held with their respective countries’ financial institutions (banks, insurance companies, etc.) and to exchange it automatically with other jurisdictions on an annual basis.³⁷ The exchange includes all relevant financial information (account balances, interest, dividends, and proceeds from the sale of financial assets) on accounts held by individuals and entities, including trusts and other arrangements.

At the EU level, a Directive³⁸ transposed the automatic exchange of information on financial accounts into EU law. Member States started to exchange tax information in September 2017 (Austria in September 2018). Moreover, tax transparency agreements have been signed with Switzerland, San Marino, Andorra, Monaco and Liechtenstein for automatic exchange of information.

Similarly, in the US, since 2010, the Foreign Account Tax Compliance Act (FATCA) requires foreign financial institutions to report US citizens living abroad and their financial accounts/assets to the US Department of Treasury.

³⁴ France is formally characterized by a uniform tax system, but it provides several preferential tax regimes for interest and it exempts a part of dividends. Spain is not considered a uniform system since it features a preferential tax regime for capital income.

³⁵ It has to be remarked that a proportional levy with a lump-sum exemption result in a certain degree of progressivity (*e.g.* in Germany).

³⁶ A pure DIT system would require a flat tax rate on all capital income - aligned to the corporate income tax and equal to the bottom PIT rate on earned income - as well as a splitting of all business income into an imputed return to capital and residual labor income. In this work, we neglect these latter issues.

³⁷ In particular, this exchange will be implemented through the CRS (Common Reporting Standard), containing the reporting and due diligence procedures to be imposed by participating jurisdictions on their financial institutions; and the Model Competent Authority Agreement, containing the detailed rules on the exchange of information.

³⁸ Council Directive 2014/107/EU.

The greater opportunities to enforce an effective residence-based taxation of financial income, made possible by the wider scope of the exchange of information, have potentially important implications. In particular, policy-makers could have more leeway in designing their preferred tax system. The extent to which this scenario will materialize ultimately depends on the effectiveness of the implementation of the exchange of information at global level, and more generally on the actual level of cooperation in tax matters at the international level.

Table 1. Summary characteristics of taxation systems

| Countries | Comprehensiveness | Uniformity | Final Withholding | Flat taxation |
|-------------|--|--|-------------------|-----------------|
| Austria | x | x | x | x |
| Belgium | CG exempted | | x | x |
| Bulgaria | Interest on bonds and CG exempted | | x | x |
| Cyprus | CG exempted | | x | x |
| Croatia | Exemption of interest on bonds and deposits up to 0.5%; exemption of CG with long HP | | x* | x |
| Czech R. | Lump-sum exemption on CG and on CG with long HP | x (lump-sum exemption on CG and on CG with long HP) | x* | x |
| Denmark | Lump-sum exemption on interest and CG on bonds | | | |
| Estonia | Exemption of deposits | | | x |
| Finland | <i>Ad valorem</i> exemption on dividends | | | |
| France | <i>Ad valorem</i> exemption on dividends; exemption on some interest from special accounts; preferential tax treatment for CG with long HP | | | |
| Germany | Lump-sum on capital income | x | x | x |
| Greece | Interest on public bonds and CG on shares exempted | | x | x |
| Hungary | Preferential tax treatment on long-term interest, exemption on CG with long HP | x (preferential tax treatment on long-term interest and exemption CG with long HP) | x | x |
| Ireland | Interest and CG on public bonds exempted; preferential tax treatment on long-term interest; exemption of CG on public bonds and lump-sum exemption on CG | | | CG only |
| Italy | PIR | | x | x |
| Latvia | Interest on public bond exempted | | | x |
| Lithuania | Lump-sum exemption on interest from public bonds and current accounts and CG | x | | x |
| Luxembourg | CG exempted | | | (only interest) |
| Malta | CG exempted | | | (only interest) |
| Netherlands | Lump-sum exemption on tax base | x | | |
| Poland | Exemption on CG on public bonds | | x* | x |

| | | | | |
|-------------|--|---|-------------------------|---------------------|
| Portugal | Exemption on some public bonds and deposits | | x | x |
| Romania | Interest and CG on public bond exempted | | x* | x |
| Slovak Rep. | CG exempted | | x (except public bonds) | x |
| Slovenia | All bonds exempted; lump-sum exemption on deposits; preferential tax treatment on CG with long HP | | x* | x |
| Spain | Exemption on some bank deposits | | | |
| Sweden | x | x | | x |
| UK | Lump -sum exemption on dividends and interest; exemption on CG from public bonds and special schemes | | | |
| USA | Zero rate for low-income taxpayers | | | x (except interest) |

* These countries have final withholding on dividend and interest income and proportional or flat PIT assessment systems on capital gains.

Notes: CG = Capital Gains; HP = Holding Period.

i) comprehensiveness: all incomes are subject to taxation (lump-sum exemptions are not considered); ii) uniformity: all incomes are subject to taxation with the same system/rate; iii) finality: among taxed incomes, the levy is final; iv) proportionality includes final withholding, proportional tax and flat PIT.

The following sub-sections offer a taxonomy of countries according to the dimensions of comprehensiveness, finality and proportionality proposed in Section 3 for the categories of dividends, interests, and capital gains (considered individually); the uniformity dimension is considered only for interest income since it distinguishes between categories of underlying assets.

5.1.1 Dividends

There are two possible models for the taxation of dividends: either company profits are taxed first at the corporate level and then when they are distributed to shareholders (double taxation), or there exists an integration mechanism between corporate and personal taxes. In our set of countries, double taxation systems are largely dominant. The only exceptions are: Malta, which has a full imputation system, whereby corporate profits are taxed in the hands of the company and dividends carry an imputation credit for the corporate tax paid³⁹ and Estonia, where profits are taxed only once, when distributed.

Among countries with double taxation, a special case worth mentioning is the Netherlands, where dividends are taxed in the hands of the recipient, but only indirectly by means of a wealth tax, with a 30% tax rate applied on a 4% notional return on the value of all financial assets.

The comparative analysis is presented and summarized using a number of graphical tools and tables. Figure 1 summarizes the taxation systems for dividends in European countries and the US. Figure 2 presents a ranking of countries based on adjusted statutory tax rates (namely accounting for *ad valorem* exemptions, *i.e.* expressed in percentage terms). Figure 3 completes the analysis by offering a comparison between the levies on dividends and the levies on overall personal income (minimum and maximum PIT rates). Table A1 in Annex 1 provides details regarding the type of

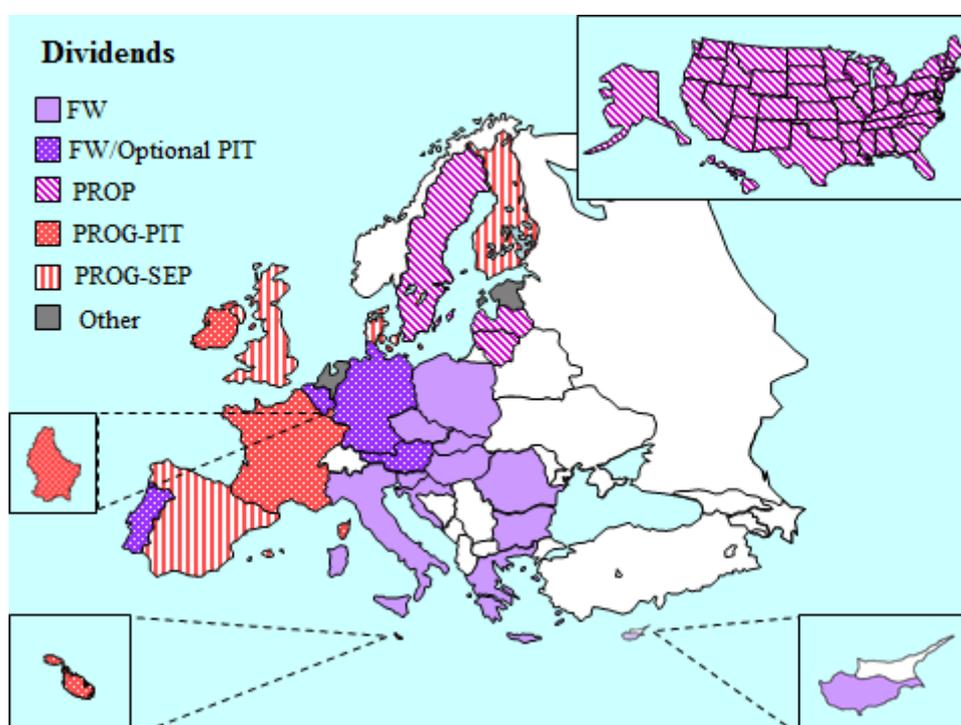
³⁹ Until 2015, the United Kingdom had a partial integration mechanism as well. The dividends received, increased by an amount equal to 1/9 of their amount, were subject to the statutory rates; a tax credit equal to 1/9 of the dividends received was applied to the result thus obtained. The statutory rates amounted to 10% for the first bracket, 32.5% for the second bracket, and 37.5% for the excess. The effective rates once the tax credit is factored in were 0%, 25% and 30.56%, respectively.

system (final withholding, progressive taxation, etc.), withholding tax rates (both final and advance payments), tax rates of progressive levies, as well as special rules and exemptions. Finally, Figure 3 compares the tax rates on dividend income with PIT rates.

Broadly speaking, the bulk of the countries enforce a comprehensive system of taxation. Several countries provide for some exemptions: in the UK there is a lump-sum specific exemption; Germany provides for a lump-sum exemption on overall capital income; the Netherlands offer a lump-sum exemption on the wealth tax base; finally, Finland, France and Luxembourg – with a progressive PIT – provide *ad valorem* exemptions taxing only a part of dividends (see Table A1). The US provides for a zero rate on taxpayers in the two lowest PIT brackets.⁴⁰

As to the tax collection method, Figure 1 shows that – apart from some of the special cases mentioned above (EE, NL) – the countries are roughly equally distributed between final systems with a definitive withholding tax (11 countries: BE, BG, CY, CZ, GR, HR, HU, IT, PL, RO, SI, SK; plus three where the withholding is final at the option of the taxpayer: AT, DE, PT) and assessment systems (four countries with progressive PIT rates: FR, IE, LU, MT; four with progressive separate rates: DK, ES, FI, UK; and 4 with proportional rates: LV, LT, SE, US).

Figure 1. Dividends taxation in Europe and US



Source: Based on IBFD data.

Key: FW = Final Withholding; PROG-SEP = Progressive with rates other than those of PIT; PROG-PIT = Progressive with PIT rates; FW/Optional W+PROG-PIT = Dividends can be included in the PIT tax base at the option of the taxpayer; PROP = Proportional taxation.

As regards the way the tax is computed, the most common system is a proportional levy (primarily by means of a final withholding – 15 countries, including the ones where the withholding is final at the option of the taxpayer: BE, BG, CY, CZ, GR, HR, HU, IT, PL, RO, SI, SK plus AT, DE, PT – and secondarily through a proportional tax – three countries with a separate tax (LV, SE, US), 1

⁴⁰ Considering also cases not included in the scope of the analysis, differential tax treatments (favorable or non-favorable relative to the standard case) can be found with regard to dividends from listed vs. unlisted shares (FI, SK), small businesses (BE) and substantial vs. non-substantial shareholdings (IT, NL) (see Table A1 in Annex 1 and Annex 2).

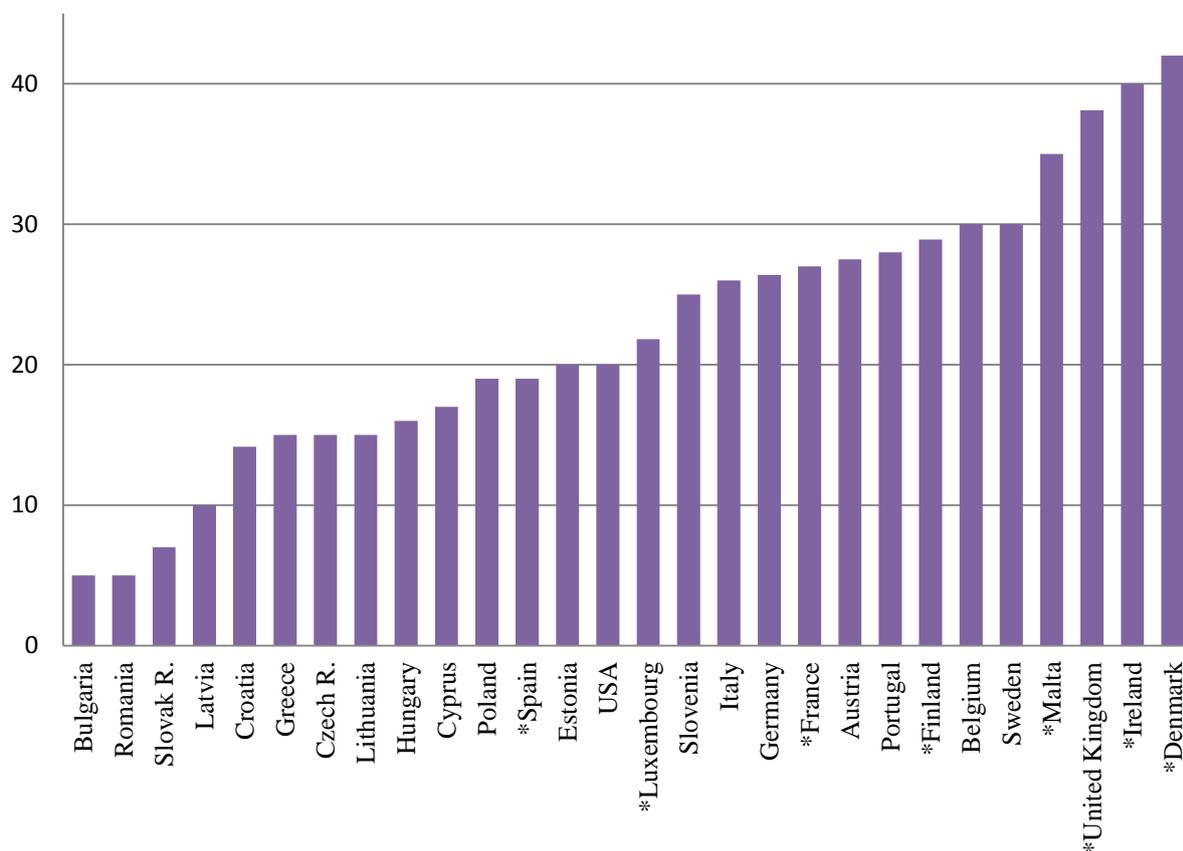
country with a flat PIT (LT). In the remaining countries, dividends are subject to a progressive levy (PIT: FR, IE, LU, MT; separate: DK, ES, FI, UK).

With regard to the tax burden, Figure 2 displays the tax rate assuming that, in case of progressive taxation, capital income falls under the top marginal rate.

Overall, the picture – starting from the 5 percent final withholding rate of Bulgaria and Romania to the 42 percent top marginal rate in Denmark – shows that the bulk of the largest (central European and Mediterranean) countries fall in the middle, with rates lower than 28 percent; Eastern European countries plus Cyprus, Greece, Luxembourg and the US feature rates lower than 22 percent; the UK, Ireland and Scandinavian countries, which have progressive taxation (except for Sweden, which has a proportional levy), locate at the top of the scale with rates from 28 to 42 percent.

However, this figure needs some qualification, since tax rates only give an incomplete picture of the actual burden put on taxpayers owing to the existence of exemptions. For instance, Germany and the UK feature a general lump-sum exemption and the US provides for zero rate for low taxpayers, which may result in a non-negligible reduction of the actual tax burden compared with the statutory one.

Figure 2. Adjusted statutory rates on dividends in Europe and US



* For ES, DK, FI, FR, IE, LU, MT, and UK the top rate of the progressive levy is considered; for FI, FR and LU the top rate is scaled down by the percentage of exemption (15%, 40% and 50% respectively).

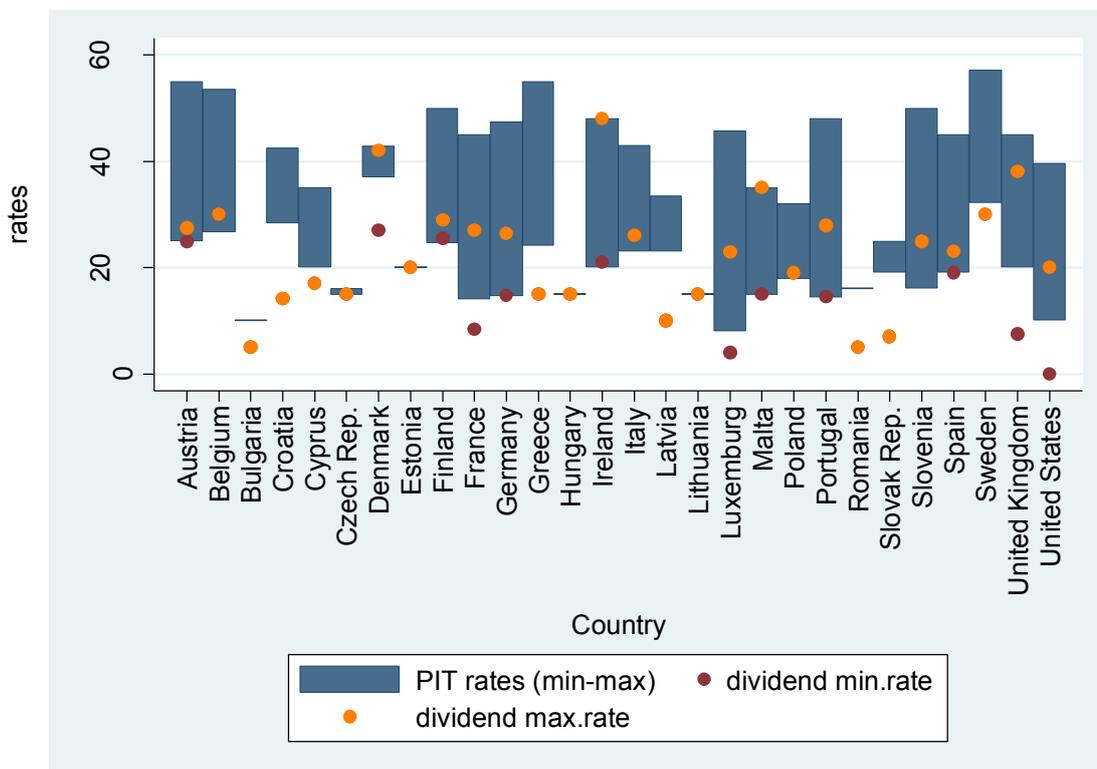
Assumptions: i) Where optional progressive taxation is available, it is assumed that final withholding is preferred by the taxpayer; ii) lump-sum exemptions are not accounted for.

Notes: a) AT, DE and PT have optional progressive systems; b) EE does not have CIT but a 20% distribution tax on profits; c) MT has an imputation system; individuals are allowed to deduct the tax credit attached to the dividend for the taxes paid by the distributing company; d) NL is not considered in the figure since it applies a wealth taxation system; e) for the US, the maximum rate (20%), corresponding to the highest tax bracket, is considered.

Figure 3 offers a final summary comparison of the taxation of dividends relative to the taxation of other personal incomes. The figure makes it possible to disentangle the different taxation systems: for instance, where minimum and maximum rates on saving incomes correspond to the PIT ones, it can be inferred that these incomes are included in the progressive PIT; where there is only one point for a given country, then a flat levy is in force (either a final withholding or a proportional tax). In addition, it also helps to visualize countries applying a more favorable levy to capital income compared with the PIT one.

As shown in the figure, all countries but Ireland, Lithuania and Malta apply a *separate and more advantageous* tax schedule for all dividend incomes relative to other incomes.⁴¹ Among them, a significant number adopt a flat taxation of dividends: in some cases, the taxation is at rates equal or close to the lowest PIT rates (AT, BE, HR, IT, PL, SE); in other cases, the flat rate is even below the PIT rates (BG, CY, GR, LV, RO, SK). In most of the remaining countries, taxation of dividend income is progressive, but the tax burden is lower compared with PIT one: Spain and Finland apply rates close to the minimum rate of PIT; Denmark, the UK and the US have multiple rates partially overlapping with those on personal incomes.

Figure 3. Tax rates on dividend income vs PIT rates (min and max)



Notes: i) For the PIT rates, the first non-zero rate is considered (the income is assumed to be above the exemption level); ii) NL are not considered; iii) for FI, FR and LU, the rates are scaled down by the percentage of exemption (15%, 40% and 50% respectively); iv) for Austria, Germany and Portugal the lowest tax rate for capital income is the lowest PIT rate which one is allowed to opt for, if advantageous.

⁴¹ Estonia applies a distribution tax on dividends; France and Luxembourg do not tax dividends separately, *i.e.* they include these incomes in the PIT base, but only for a share, resulting in actual tax rates lower than PIT ones. The Czech Republic and Hungary apply a separate withholding tax equal to the flat PIT rate (which is increased by a solidarity surcharge in the Czech Republic).

5.1.2 Interest

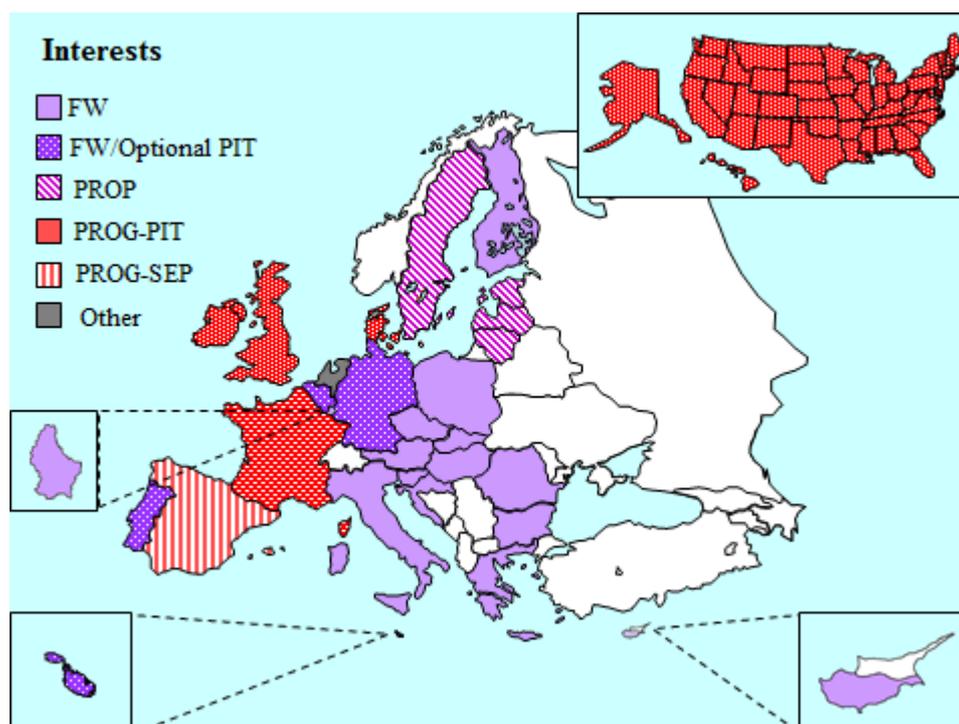
This section focuses on the tax treatment of interest income in Europe and the US. Figure 4 summarizes the main features of the taxation systems. Figure 5 shows the statutory tax rates, distinguishing between government and corporate bonds on the one hand, and deposits on the other. Figure 6 offers a comparison with the PIT rates. Table A2 in Annex 1 provides summary information on withholding tax rates, exemptions and special regimes.

Concerning comprehensiveness, differently from what it is the case for dividends, a significant number of exemptions/differential treatments are provided, typically depending on the type of asset, amount of interest income, and in some cases length of the investment and the taxpayer's overall personal income.

An important distinction exists between “comprehensive” countries, which feature no exemptions at all on interest income (AT, CY, CZ, FI, IT, MT, PL, SE, SK and US), and the rest of the countries where such exemptions exist for at least one of the three categories of assets considered.

Exemptions on at least some public-sector bonds are the most frequent, being present in nine European countries (BG, GR, HR, IE, LV, PT, RO, SI, UK⁴²). Rates on public-sector bonds significantly lower than the ordinary rate are provided in Cyprus (3% vs 30%) and Italy (12.5% vs 26%). A few countries also deliver exemptions on corporate bonds (BG, HR, PT, SI).

Figure 4. Interest taxation in Europe and US



Source: Based on IBFD data.

Key: FW = Final Withholding; PROG-SEP = Progressive with rates other than those of PIT; PROG-PIT = Progressive with PIT rates; FW/Optional W+PROG-PIT = Interest can be included in the PIT tax base at the option of the taxpayer; PROP = Proportional taxation.

A non-negligible number of jurisdictions present some kind of exemption on deposits/savings accounts, most of them in a lump-sum form: BE, DK, DE, EE (where accounts are generally

⁴² In the United Kingdom, National Saving Certificates are exempted.

exempted), ES, HR, HU, FR, IE, LT, LU, NL, PT, SI, and the UK⁴³. In addition, in some countries, tax rates on deposits are different (lower or higher) from the ones on the other categories of interest income (AT, BE, IE).⁴⁴

Concerning the uniformity of treatment, half of the countries can be regarded as “uniform” (AT, CZ, DE, DK, FI, HU, LT, MT, NL, PL, SK, SE, US). However, it has to be remarked that not all the comprehensive countries have a uniform system of taxation of all interest income (*i.e.* CY and IT which tax public-sector bonds at lower rates), while some “non-comprehensive” countries are “uniform” (as they only provide lump-sum exemption on interest from all assets: DE, DK, HU, LT, NL).

Regarding tax collection, the final system is the most common, being adopted in 18 countries (12 with a final withholding: AT, BE, CY, CZ, FI, GR, HU, IT, LU, PL, RO and SK; 3 with a final withholding on deposits only: BG, HR and SI; three countries where the withholding is final at the option of the taxpayer: DE, MT and PT). The assessment system is adopted by the remaining countries (five countries applying progressive PIT rates: FR, DK, IE,⁴⁵ UK, US; one country applying progressive separate rates: ES; and four applying proportional rates: EE, LT, LV, SE).

As regards progressivity vs proportionality, whenever interest income is not exempt, the prevailing system is proportional (mainly by means of a final withholding – 18 countries including optional cases: AT, BE, BG (for deposits only), CY, CZ, DE, FI, GR, HR, HU, IT, LU, MT, PL, PT, RO, SI, SK – and secondarily through a proportional tax – two countries with a separate tax: LV, SE; two countries with a flat PIT: EE, LT). In the remaining countries, interest is subject to a progressive levy, at separate or PIT rates (DK, FR, ES, IE, UK, US).

Figure 5 shows the ranking of countries based on the statutory tax rates on interest on government bonds and corporate bonds (panel a) and bank accounts (panel b). Similarly to dividends, in the case of progressive taxation, it is assumed that capital income is taxed at the top marginal rate.

For interest on public bonds (panel a), whenever no exemption is available, tax rates range from 3 percent in Cyprus to 45 percent in France. Ireland exempts some of this income, as well as many Eastern European countries. Southern Mediterranean countries do not share the same pattern: Greece exempts this income, Italy taxes at 12.5 percent and Spain and Portugal tax at 23 and 28 percent, respectively.

For interest on corporate bonds (panel a), whenever no exemption is available, taxation goes from 10 percent in Latvia to a top marginal rate of 45 percent in France and the UK. Bulgaria, Croatia and Slovenia provide exemptions for such income, while the remaining countries are ranked broadly similarly to dividends: Eastern European countries and Greece still rank low; the majority of EU15 countries rank in the middle, with rates ranging from 20 to 30 percent; France, the UK, Denmark, Ireland and the US stand out with rates over 30 percent.

Ireland and – to a lesser extent – Cyprus, Romania, Greece, Italy, and Latvia are characterized by a significant difference in the tax treatment of government bonds (exemptions or reduced rates) as opposed to that of other assets (with rates ranging from 10 percent in LV to 40 percent in IE), owing to a preferential tax regime for the former.

⁴³ In Germany, the Netherlands and Denmark there exists an exemption on overall capital income, including interest income.

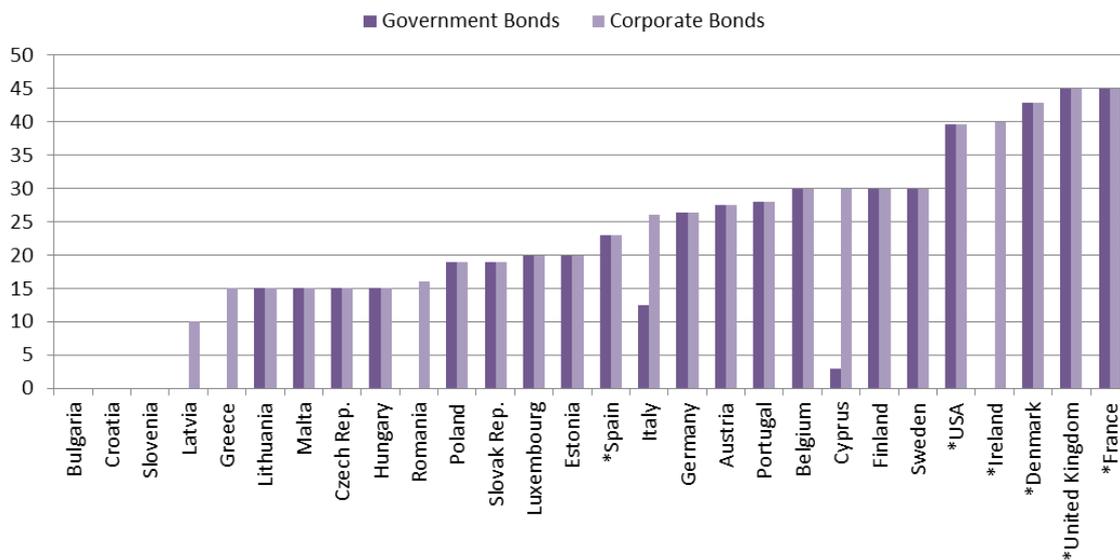
⁴⁴ Considering also cases not included in the scope of the analysis, differential treatment can be applied to specific targeted investment schemes (BE), long-term private-sector bonds (HU), and public-sector bonds (US) under some specific conditions (see notes to Table A.2 in Annex 1, and Annex 2).

⁴⁵ Ireland applies a final withholding system on interest from bank deposits.

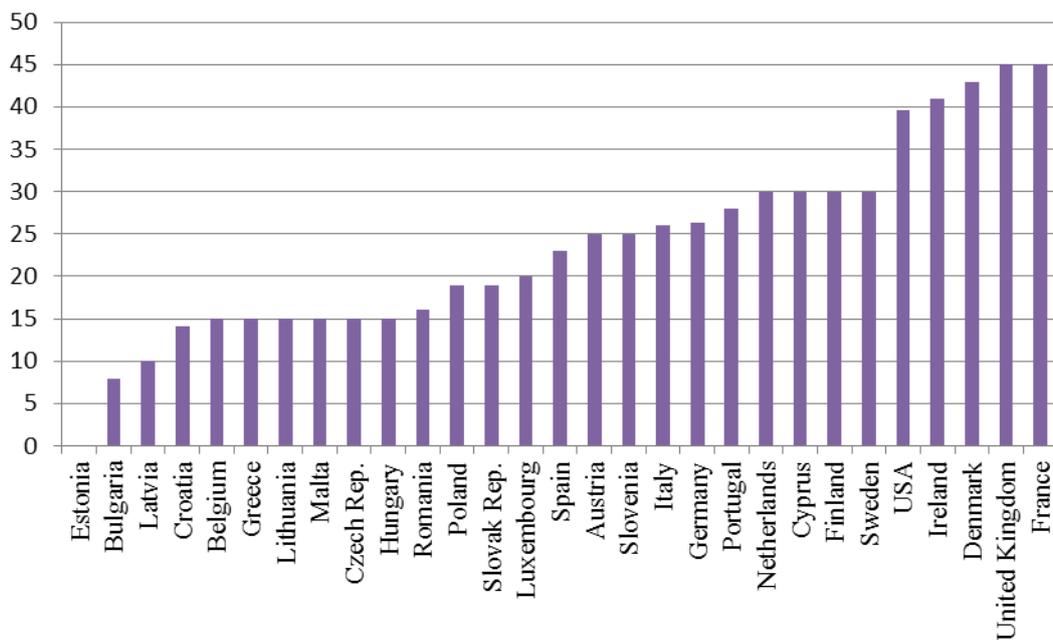
Finally, for interest on bank deposits (panel b), tax rates range from 8 percent in Bulgaria to 45 percent in France and the UK. Broadly, in terms of groups, the ranking of countries is similar to the one found for the other categories of interest income. One may notice that full exemption is less frequent compared to other interest income, with Estonia being the only country fully exempting interest on bank deposits. France and the UK stand out by taxing interest on bank accounts heavily. However - even more so than in the case of dividends - this picture is misleading since several jurisdictions, and especially France and the UK, provide a number of alternative tax-preferred investment options which allows taxpayers to benefit from generous exemptions (see Section 5.1.4 for more details).

Figure 5. Statutory rates on interest in Europe and the US

Panel a: government and corporate bonds



Panel b: deposits



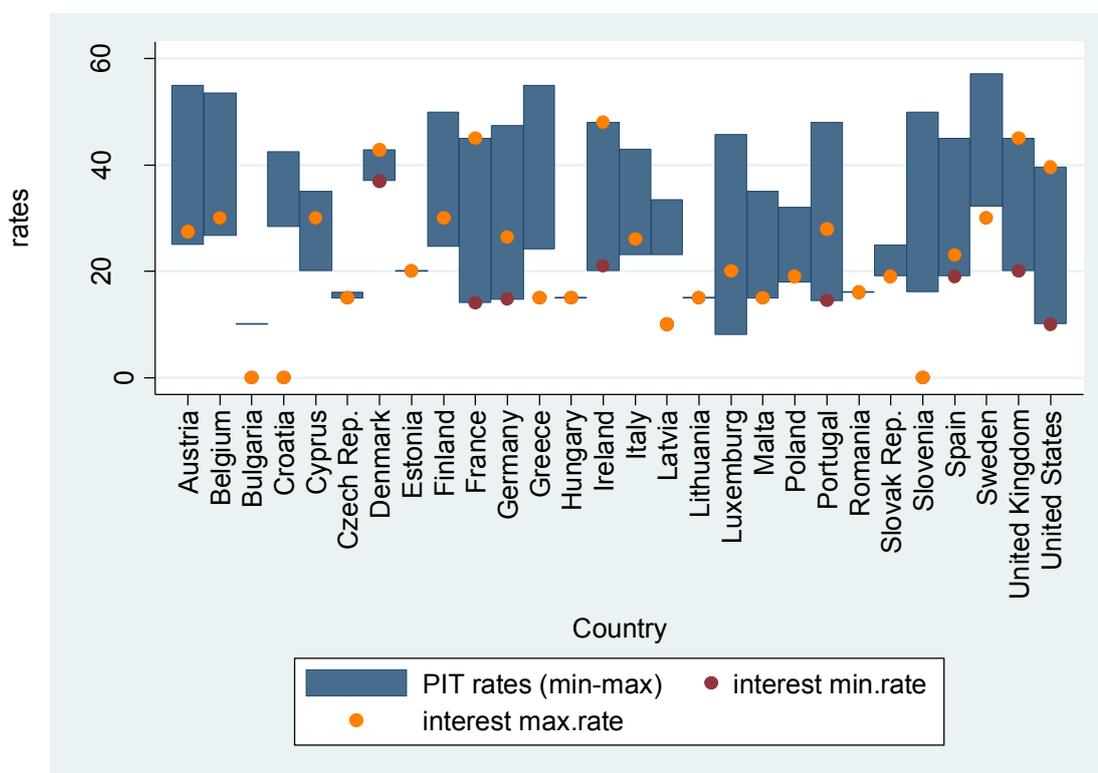
* For FR, DK, ES, IE (bonds only), the UK and the US the top rate of the progressive levy is considered.

Assumptions: i) Where optional progressive taxation is available, it is assumed final withholding is preferred by the taxpayer; ii) lump-sum exemptions are not accounted for.

Notes: a) DE, MT and PT have optional progressive systems; b) NL are not considered in the figure since they apply a wealth taxation system.

Concerning the relationship between tax rates on interest income and PIT rates, Figure 6 provides a picture broadly similar to the one found for dividends: all countries but Denmark, France, Ireland, the UK and the US provide a separate and more favorable tax schedule for interest income relative to other incomes.⁴⁶ Countries with rates equal or close to the PIT minimum rate (AT, BE, IT, MT, PL, SE, SK) mostly overlap with those found for dividends, while only two countries (GR, LV) feature a rate on interest income that stands below the lowest PIT rate. Again, among countries with progressive taxation, Spain and Finland apply rates close to the PIT minimum .

Figure 6. Interest income (corporate bonds) vs PIT rates (min and max)



Notes: i) For the PIT rates, the first non-zero rate is considered (the income is assumed to be above the exemption threshold); ii) the Netherlands are not considered; iii) For Germany and Portugal the lowest capital income tax rate is the lowest PIT rate which the taxpayer is allowed to opt for, if advantageous.

5.1.3 Capital gains

This section assesses the tax treatment of capital gains in Europe and the US. Figure 7 shows the taxonomy of taxation systems for capital gains on shares and bonds in Europe and the US.⁴⁷ Figure 8 gives statutory tax rates. Figure 9 proposes the usual comparison with personal income tax rates. Table A3 in Annex 1 reports more details about tax rates, the treatment of capital losses, exemptions and favorable tax rules.

Concerning comprehensiveness, only seven countries tax capital gains without offering exemptions or favorable tax treatment (AT, EE, ES, FI, IT, LV, PT and SE). Several countries opt for a

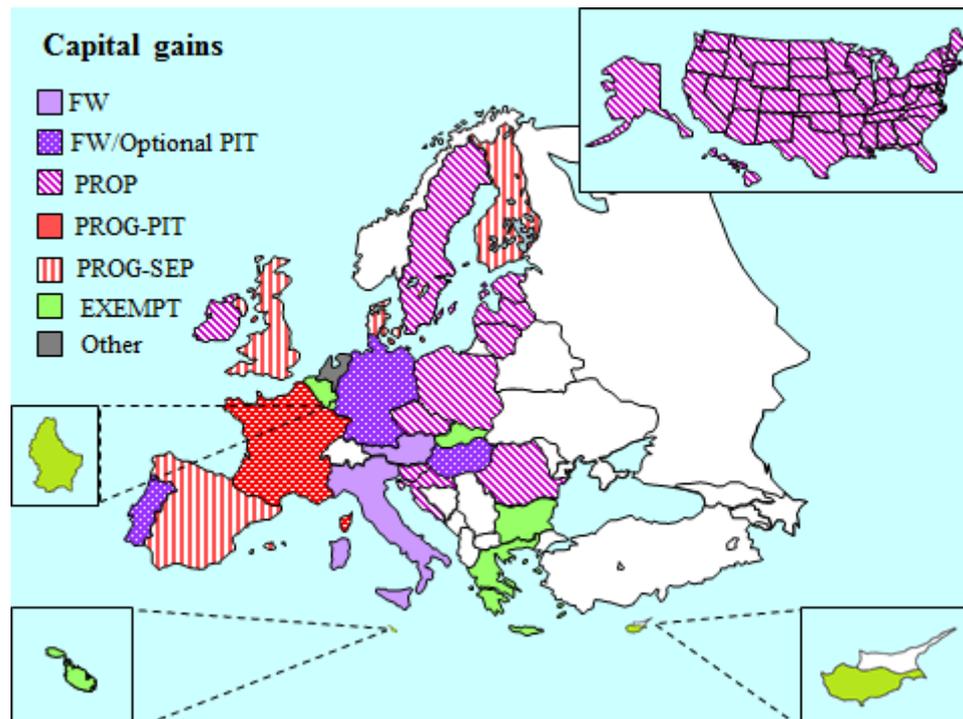
⁴⁶ The Czech Republic, Hungary and Romania tax interest with a final withholding at the same rate of the flat PIT.

⁴⁷ Whenever the final withholding tax is not explicitly mentioned in IBFD, the cases of flat tax are considered as proportional assessment systems.

complete exemption of capital gains from taxation (BE, BG, CY, LU, MT, SK; GR only for shares). In addition, some countries provide for specific tax treatments related to an asset's holding period (CZ, FR, HR, HU, SI, US). In other countries the exemption is related to the amount of the realized capital gain (CZ, DK, IE, LT, UK)⁴⁸ (see Table A3).⁴⁹

Among the countries taxing capital gains, the assessment system is predominant (11 countries where the levy is proportional (or at a flat PIT):⁵⁰ CZ, EE, HR, IE, LT, LV, PL, RO, SI, SE, US; four countries with progressive separate rates: DK, ES, FI, UK; one with progressive PIT rates: FR). The final withholding system is present in five countries only (AT, IT; at the option of taxpayer: DE, HU, PT).

Figure 7. Capital gains taxation in Europe and the US



Source: based on IBFD data.

Key: FW = Final Withholding; PROG-SEP = Progressive with rates other than those of PIT; PROG-PIT = Progressive with PIT rates; FW/Optional PIT = Capital gains may be included in the PIT tax base at the option of taxpayer; PROP = Proportional taxation.

Whenever a full exemption is not allowed, the prevailing system is a proportional levy (17 countries: AT, CZ, DE, EE, HR, HU, IE, IT, LT, LV, PL, PT, RO, SI, SE, US; GR, only for bonds). In the remaining countries, capital gains are subject to a progressive levy (DK, ES, FI, UK, FR).

The clusters previously identified for dividends and interests can also be observed with reference to the treatment of capital gains. In particular, Eastern European countries are divided among those exempting capital gains and those taxing them at a flat rate, while progressive systems encompass the usual countries.

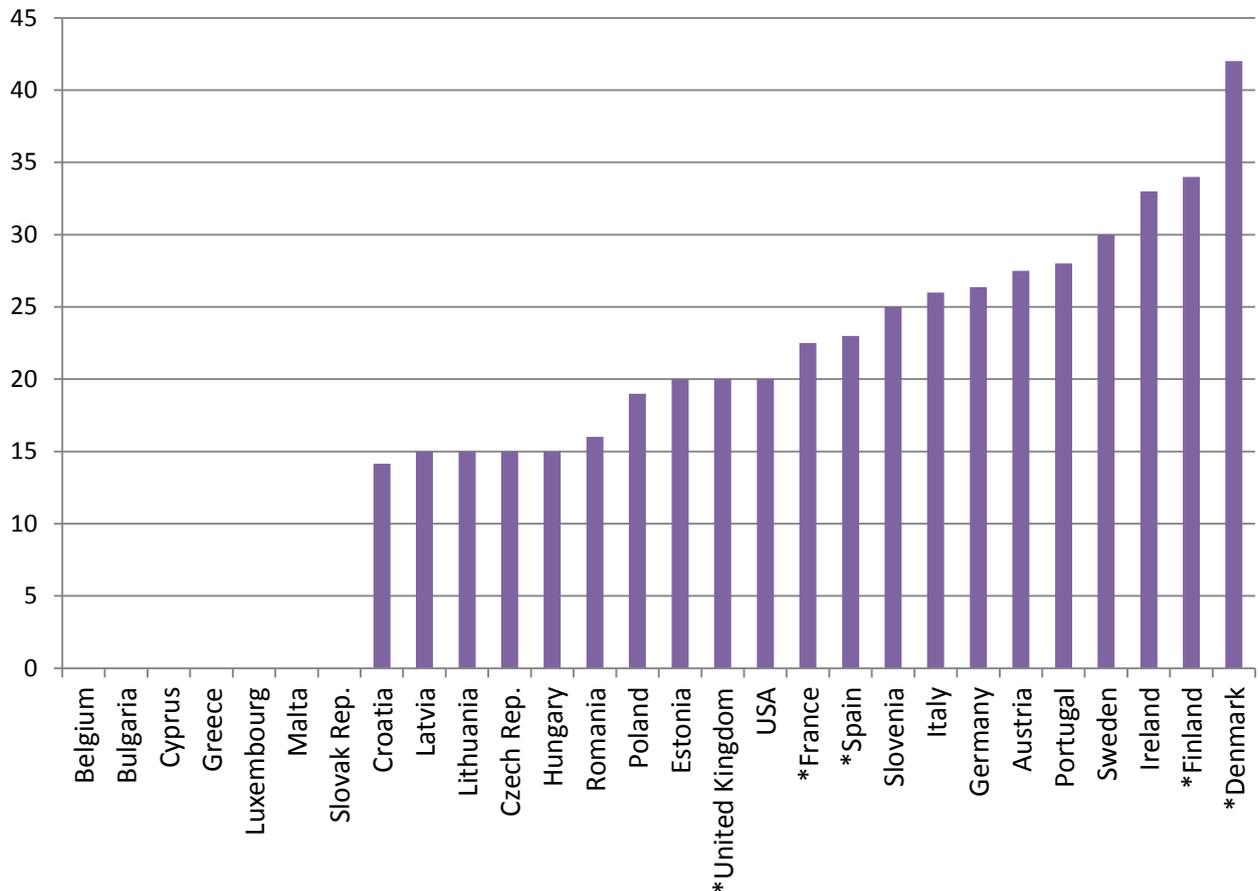
⁴⁸ In Germany and the Netherlands there exists an exemption on overall capital income, including interest income.

⁴⁹ Considering also cases not included in the scope of the analysis, some countries provide special unfavorable tax treatment for holding periods below 12 months (LU, SK). Differential tax treatments are also provided according to type of: assets - listed vs unlisted (BG, GR, MT, SK), bond, public bonds vs shares (DK, GR, IE, PL, RO, UK); company (SMEs in FR); participation - substantial vs non-substantial (DE, GR, IT, LU, NL). For details, see Table A.3 in Annex 1, and Annex 2.

⁵⁰ Greece applies a proportional tax on capital gains on bonds only.

Figure 8 presents the nominal tax rates on capital gains. The overall picture does not change much compared with interest and dividends, but for the UK that now ranks at a medium-lower level of taxation (around 20% against about 40% for interest and dividends).

Figure 8. Statutory tax rates on capital gains in Europe and the US



* For DK, FI, FR, ES and the UK, the top rate of the progressive (PIT or separate) levy is considered.

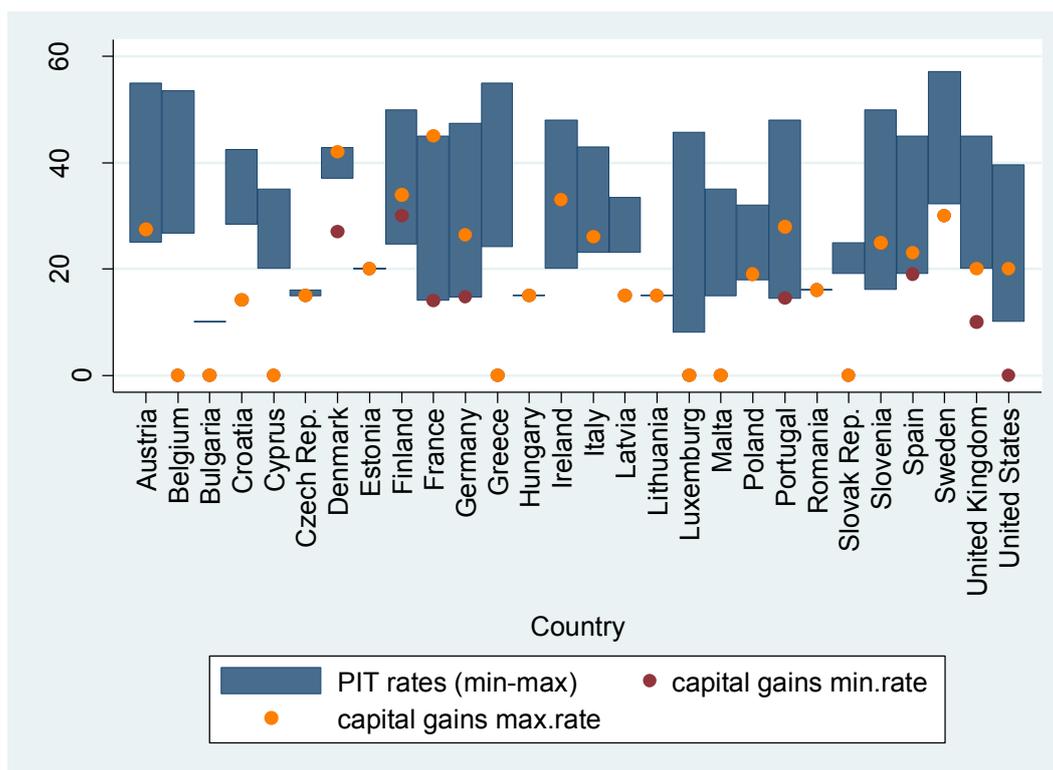
Assumptions: i) Where optional progressive taxation is available, it is assumed final withholding is preferred by the taxpayer; ii) Where progressive levy, the top rate is considered; iii) lump-sum exemptions are not accounted for.

Notes: a) For FR a holding period of more than 2 years (50% exemption) is assumed; b) DE and PT have an optional progressive system; c) for Greece the exemption regards shares; for bonds, the tax rate is 15%; d) for Denmark 42% refers to shares; for bonds, the rate is 42.91%; e) NL are not considered in the figure since they apply a wealth taxation system.

As regards the comparison between tax rates on capital gains and PIT rates, Figure 9 shows, as previously mentioned, that France is the only country with ordinary PIT taxation of capital gains. Among countries taxing capital gains, those with a separate and more advantageous regime on all gains are few (AT, IT, HR, LV, PL, SE).⁵¹ Among countries taxing progressively, Spain and Finland apply rates close to the PIT minimum rate and a small number of countries have multiple rates partially overlapping with those on personal incomes (DK, UK, US).

⁵¹ Croatia, Poland and Slovenia have a separate and lower taxation of capital gains, but they do not tax the whole category (they provide some exemptions); Hungary applies a separate final withholding but at a rate equal to the flat PIT rate (at the option of taxpayer).

Figure 9. Capital gains on shares vs PIT rates (min and max)



Notes: i) For the PIT rates, the first non-zero rate is considered (the income is assumed to be above the exemption level); ii) The Netherlands are not considered; iii) For Germany and Portugal the lowest tax rate for capital income is the lowest PIT rate which the taxpayer is allowed to opt for, if advantageous.

5.1.4 Tax-preferred savings schemes

Governments may introduce special provisions that offer tax advantages to household savings. Therefore, a comparison across countries has to take into account such peculiarities in order to provide a more complete picture of the effective taxation on savings.

In what follows, the focus is on tax-preferred schemes not linked to retirement and insurance, and not targeted to specific categories of household expenditure (such as health and education) or to start-ups. Among the main European countries (France, Germany, Italy, Spain and the UK) and the US, such schemes are found in France, Italy, Spain and the UK.⁵²

France

As a rule, in France, interest income is taxable as ordinary income (at progressive rates) and it is also subject to social contributions. The withholding tax is an advance payment. However, France provides for many fixed-term saving schemes under which interest income is exempt or taxed at rates that may be substantially lower than the standard ones.

Interest paid on some financial instruments is exempt from income tax, as well as from social contributions.⁵³ These subsidized financial instruments are: i) “Livret A” saving accounts

⁵² In the US different tax-preferred saving schemes are available. However, these are targeted saving schemes helping households to finance children’s education, college expenses and medical expenses and providing tax-preferred treatment for investment in the form of life insurance. They are out of the scope of our analysis.

⁵³ We focus only on tax-free investments that can be subscribed in 2017; other tax-free products (e.g. the company savings accounts, *livrets d’épargne-entreprise*) are not offered anymore, but the proceeds deriving from these investments are still tax-exempt.

(maximum deposit EUR 22,950; current rate of interest is 0.75%); ii) *épargne populaire* savings accounts (*livrets d'épargne populaire*, maximum deposit EUR 7,700); iii) *livret jeune* savings accounts (maximum deposit EUR 1,600); iv) durable development savings accounts (maximum deposit EUR 12,000; current rate of interest is 0.75%).

In other cases, the interest paid on some financial instruments is exempt from income tax, but not from social contributions. Financial instruments subject only to social contribution are: i) the *épargne-logement* savings accounts (maximum deposit EUR 15,300) and savings plan (maximum deposit EUR 61,200); ii) classic and SME (small and medium sized enterprises) share savings plan (*plan d'épargne en actions*; maximum deposit EUR 150,000 on classic plan, EUR 75,000 on SME plan), provided that the taxpayer does not disinvest over a five-year period.

In some cases a reduced final withholding tax (plus a social contribution rate of 15.5%) applies: i) life-insurance products held for at least eight years (7.5% on revenue exceeding EUR 4,600 per year); ii) classic and SME share savings plan (*plan d'épargne en actions*; maximum deposit EUR 150,000 on classic plan, EUR 75,000 on SME plan; final withholding of 22.5% on plans held for less than two years, 19% between two and five5 years).

Overall, all these tax-friendly investment options imply a tax exemption that could reach EUR 345,000 if taxpayers allocate their savings properly among such accounts. All in all, only very high-saving individuals are subject to the general rule (inclusion of this income in the PIT).

Spain

In Spain, savings income – which includes both income from movable capital (such as dividends and interest) and capital gains that arise from the transfer of assets – is taxed separately from general income at 19% on the first EUR 6,000, at 21% between EUR 6,000.01 and EUR 50,000, and at 23% on the excess over EUR 50,000.

A specific – more favorable - tax regime for savings income is in place for the *Planes de ahorro a largo plazo*.⁵⁴

Planes de ahorro a largo plazo were introduced on 1 January 2015. They are long-term savings plans which can be composed of life insurance contracts, deposits and other financial contracts. A minimum holding period of five years is required for this financial product. There is a yearly limit of EUR 5,000 for contributions to the plans and the taxpayer may only withdraw the capital in one solution in the form of a lump sum. Accrued incomes have to be accumulated in the plan. As for the tax treatment, income from capital accrued during the contract life is exempt. Losses can be only used in the tax year in which the plan terminates and only for the part exceeding total positive capital income.

United Kingdom

In the UK interest income is subject to PIT progressive tax rates with some exemptions based on the taxpayer's income. However there exist several tax-preferred schemes offering the exemptions for interest income and other capital returns.

An individual is liable to income tax on the UK-source interest, subject to exemptions for the following:

- interest on National Savings Certificates;

⁵⁴ Another tax-preferred savings scheme are the *Planes Individuales de Ahorro Sistemático* (PIAS), which are savings plans whose objective is to establish an annuity after a certain period of time. These plans are not considered here since they imply the payment of an annuity and therefore, in this respect, their structure is close to that of a pension fund.

- interest earned on Save As You Earn (SAYE) schemes;
- interest on Individual Savings Accounts (ISAs).

National Savings Certificates

Interest from Premium bonds⁵⁵ and National Savings Certificates is exempt.

SAYE

A SAYE plan is a savings-related share option plan which allows employees (under some eligibility rules) to buy shares of the employer company at the end of the plan period. The option can be used only after a fixed period of three or five years. The investment limit is equal to GBP 500 per month. The tax advantages are that: i) the interest and any bonus at the end of the scheme is tax-free; ii) there is no income tax or national insurance on the difference between the price of acquisition and the value of the shares.

Capital Gains Tax may be due on disposal of the shares unless they had been held in an ISA since their purchase.

ISA

There are three types of accounts:

- Cash ISA, which includes savings in bank and building society accounts and some National Savings and Investments products: interest is exempt;
- Stock and Share ISA, which include shares in companies, unit trusts and investment funds, corporate bonds, government bonds: returns or capital gains are tax-free;
- Innovative Finance ISA, introduced in 2016, cover loans arranged through peer-to-peer (P2P) platforms.⁵⁶

As of 2017, the tax-free amount that can be invested is GBP 20,000 for each tax year. These accounts can only be subscribed by UK residents aged 18 or above.⁵⁷ Money can be withdrawn from the account at any time. It is not possible to transfer non-ISA shares into an ISA unless they come from an employee share scheme (saving incentive scheme and share investment plan, within 90 days from the end of the investment).⁵⁸

5.2 The taxation of investment funds

Table 2 provides summary information about the most relevant features of the taxation systems for investment funds in select European countries and in the US. For the sake of comparison, information on the Italian system is also added. Annex 3 provides additional details.

Investment funds are either untaxed (i.e. either an exemption from corporate income tax is provided as in France, Germany,⁵⁹ Ireland, Italy, Luxembourg and the United Kingdom,⁶⁰ or they are pass-

⁵⁵ A given person can invest no more than GBP 50,000 in Premium bonds.

⁵⁶ Peer-to-peer lending is a form of alternative saving allowing individuals and companies to borrow money from lenders directly.

⁵⁷ Individuals aged 16 can open a Cash ISA. For children born after 2011 Junior ISA are available (with an annual limit of GBP 4,080 and funds cannot be withdrawn until the age of 18).

⁵⁸ Starting in 2015, the Help-To-Buy ISA, for first-house buyers, was introduced. The initial deposit cannot be higher than GBP 1,000 and monthly contributions higher than GBP 200; when holders buy the house, they will receive a bonus of 25% of the value of the account (up to a maximum of GBP 3,000), to be spent on dwellings with a value not exceeding GBP 450,000 in London, and GBP 250,000 in the rest of the country. Both the interest accrued and the bonus are tax-free. The programme will be in force for four years but there are no time limits regarding both the length of the contribution and the purchase of the house. A given individual may have only one account (and cannot have a Cash ISA); individuals buying a house together can pool the bonuses.

⁵⁹ Starting 1 January 2018, the tax transparency will be dropped; see Annex 3 for additional details.

⁶⁰ United Kingdom funds are formally subject to corporate tax but exempt in practice resulting in no taxation at fund level.

through entities, as in the US, where they are usually established as partnerships)⁶¹, or taxed very lightly (as in Spain with a 1% corporate income tax).⁶²

Table 2. The direct taxation of investment funds

| Country | Direct Taxation at fund level | Transparency* | Investor | | | Tax-advantages |
|----------------|-------------------------------|---------------|----------|-----------------------------|-------------------------------------|--|
| | | | Interest | Dividends | Capital gains | |
| France | E | Yes | P/D | P/D | P/D | Tax deferral; no withholding at fund level. |
| Germany | E | Yes | P | P | P/D | Tax deferral on capital gains |
| Ireland | E | No | 41%/D | 41%/D | 41%/D (A if 8-year deemed disposal) | Tax deferral on interest and dividends, partial tax deferral of capital gains (8-year deemed disposal); no withholding at fund level |
| Italy | E | No | P/D | P/D | P/D | Tax deferral; no withholding at fund level. |
| Luxembourg | E | Yes | P/D | no W; no 50% exemption. P/D | E | Tax deferral. Tax exemption on first EUR 1,500 of movable income (including dividend and interest); no withholding at fund level. |
| Spain | 1% | No | P/D | P/D | P/D | Tax deferral; no withholding at fund level. |
| United Kingdom | E | Yes | P | P | P/D | Tax deferral on capital gains; no withholding at fund level |
| United States | No: Pass-through entities | Yes | P | P | P | No |

Key:

P = ordinary taxation

D = distribution or disposal

E = exempt

A = advance withholding

W = withholding

* Transparency is defined as the situation in which there is no taxation at fund level and the income generated by the fund retains its character when allocated to the investor.

Note: The analysis is limited to funds investing in financial assets, ignoring the case of real estate and private equity funds; in addition, only domestic funds and resident investors are considered. Where not explicitly mentioned, the withholding is to be intended as final.

⁶¹ In the US, funds qualifying as Regulated Investment Companies (RIC) achieve *de facto* integration between taxation at the fund and at the investor level, owing to the deductibility of distributed dividends against the corporate income tax base and the obligation to distribute almost all the yearly income.

⁶² Luxembourg applies a subscription tax.

The most important common feature is the tax deferral at the investor level. Income from investment funds is indeed taxed only at the disposal or the reimbursement of the fund shares: this advantage is available for all types of capital income in France, Italy, Ireland Spain and Luxembourg; it is available in Germany and the United Kingdom for capital gains only. On the other hand, the US taxes all incomes on an accrual basis according to a full pass-through approach. As a result, only the US - and to a lesser extent the UK and Germany – can be regarded as real, “no veil”, transparent systems.⁶³

Finally, in almost all the examined countries the distributed income is subject at the investor level to the ordinary taxation of capital income, with the following exceptions: Ireland, which applies a different and final withholding rate on both dividends and capital gains (and partly on interest); and Luxembourg, where there is no withholding tax on dividend distributions - differently from ordinary dividends, on which a 15% advance withholding is levied - and which are wholly subject to PIT (no 50% exemption).

5.3 Financial wealth taxation

Among the main European countries, only France and Spain have actual taxes on financial wealth. In the Netherlands a comprehensive wealth tax substitutes the direct taxation of capital incomes.

France

An annual net wealth tax (*Impot de solidarité sur la fortune*) is levied on the difference between assets and liabilities if this exceeds EUR 1.3 million. The base is computed by cumulating household assets according to their fair market value, including movable and immovable worldwide wealth with some exemptions (*e.g.* business assets and some life insurance policies) and a 30% allowance on the value of the main dwellings. The wealth tax itself can be deducted from its base. The tax is paid on the value exceeding EUR 800,000 according to progressive rates by bracket ranging from 0.5% to 1.5% for wealth above EUR 10 million. A linear relief is provided for wealth below EUR 1.4 million, and some tax credit is provided for the subscription of shares in small and medium-sized enterprises (50% up to EUR 45,000), investment funds (50% up to EUR 18,000) and donations to non-profit organizations (75% up to EUR 50,000). The sum of income and wealth taxes cannot exceed 75% of the previous year’s income ; the excess is not due.

Starting in 2018, the net wealth tax will be repealed and replaced by a “real estate wealth tax” (*Impôt sur la fortune immobilière*, IFI). The real estate wealth tax will retain some features of the current net wealth tax (taxation threshold, progressive rates, evaluation rules, etc.). The main difference will be in the tax base , which will not include movable property, but will be limited to immovable property owned by the taxpayer; property used for business purposes will not be included in the tax base.

*Spain*⁶⁴

Spain has a net wealth tax (*Impuesto sobre el patrimonio*) on individual worldwide net assets. The tax is managed at the regional level; the regional government may also set rates and exemption thresholds under the State law limits. A general exemption of EUR 700,000 is provided as well as a

⁶³ Other tax advantages are sometimes available for indirect investment through the funds. For instance, in Italy it is possible for investors to compensate dividends and interests with capital losses stemming from the trading of securities by the fund. In Spain, taxation at the investor level of the proceeds of the sale of the fund shares can be deferred as long as the amount obtained through the sale is immediately re-invested into another investment fund (a practice known as “avoiding the tax toll” tax advantage).

⁶⁴ The Spanish wealth tax will be in force until 2018.

specific allowance of EUR 300,000 on permanent dwellings.⁶⁵ Progressive rates range from 0.2% (up to about EUR 167,000) to 2.5% (over about EUR 10.6 million). The sum of income and wealth tax cannot exceed 60% of the previous year's income ; the excess is not due (however, at least 20% of the original tax must be paid).

The Netherlands

Since 2001, in the Netherlands investment income earned by individuals (other than substantial shareholders) is no longer taxed at the ordinary progressive rates. Instead, the underlying property and assets are deemed to produce a notional yield equal respectively to 2.87%, 4.6%, and 5.39% per year,⁶⁶ when the net value of assets is less than EUR 75,000, between EUR 75,000 and EUR 975,000, higher than EUR 975,000. The amount thus obtained is taxed at a flat rate of 30%. This translates into an effective wealth tax levy respectively equal to 0.861%, 1.38%, and 1.617% on the value of the capital assets as of 1 January of a given tax year.

Taxpayers are entitled to a capital exemption of a certain amount. Depending on the amount of capital and income, people aged 65 and over are entitled to an extra exemption of 50% of their net capital up to a pre-set maximum. In 2017, the basic exemption amounts to EUR 25,000. Furthermore, debts may be offset against assets according to some rules; however, a threshold for debt liabilities applies in so far as they exceed EUR 3,000.

The assets subject to taxation are: (rights on) intangible assets; tangible assets which are kept for investment purposes; rights on tangible assets; rights not related to goods, such as cash; land and property (other than the owner-occupied dwelling); other property rights, with a real economic value. There are several exemptions, such as on the principal residence and cash amounts up to EUR 520.

5.4 Financial transaction taxes

Transaction taxes are indirect taxes imposed on the transfer of a financial instrument from one owner to another. This type of taxation has been highly debated at European and international level following the financial crisis, as a policy option to reduce the probability of future crises, while at the same time raising additional revenues (see IMF, 2010a,b). At European level, two directive proposals were presented in 2011 and 2013 for the introduction of a European financial transaction tax: the second proposal, approved by ten Member States under the enhanced cooperation procedure is still under assessment.

There exist several forms of transaction taxes. In this study, the focus is on taxes levied on transactions on a stock exchange; stamp duties and registration taxes are not considered. On this basis, taxes on transactions on a stock exchange are present in nine EU Member States (BE, CY, FI, FR, GR, IE, IT, MT, UK). Generally, these taxes cover trade in shares and in some cases bonds. Derivatives are generally out of the scope of the tax; one notable exception is Italy. Options are taxed (in eight countries out of nine) when they are exercised. There exist exemptions for some financial intermediaries (*e.g.* central counterparties and central depositories) and for some transactions (such as primary market transactions and transactions involving government bonds). The majority of taxes are *ad valorem*; one exception is Italy, where the duty is levied on the derivatives in lump-sum form.

Summary information on transaction taxes in the set of countries considered in the study is provided in Annex 4.

⁶⁵ Exemptions include unlisted shares in corporations in which the taxpayer has more than 5% of equity capital and holds a managerial role from which he receives more than 50% of his income.

⁶⁶ The deemed return was equal to 4% per year until 2016.

6. Taxation and households' financial choices in Italy

6.1 The evolution of taxation in Italy: the effects on tax revenue

In this section firstly we offer a brief description of the evolution of the Italian taxation of financial assets between 2011 and 2015. Secondly, the effects of this evolution on tax revenue are showed and the main components of the change in tax revenues are presented.

As mentioned in Section 4, Italy features a cash-based system of taxation, distinguishing between public or private securities; in addition, a wealth tax on every security and a financial transaction tax (only on stocks) are in place. This scenario is the result of a dramatic change started in 2011. From 1998 to 2010, the Italian tax system provided for just an all-inclusive tax on dividends, interest and capital gains, with a low single rate (12.5%; a 27% rate was applied to interest from deposits and on some other minor income).⁶⁷ The other main characteristic was the taxation of capital gains on accrual: tax was levied on the gain accrued during the tax period, calculated according to a mark-to-market criterion. In this way, the tax system avoided the “lock-in effect”, *i.e.* the postponement of disposals in connection with taxation of gains at the time of realization. The principle of accrual taxation was fully applied to the taxation of investment funds (it is still applied only in the investment portfolio regime, while in all other cases, proceeds are now taxed upon realization).

Taxation on a cash basis was provided in the administered assets regime, and in the tax return regime. However, in the two latter cases, the principle of accrual was achieved by an adjustment mechanism, the “equalizer”, that brought the tax on realized gains into line with that which would have been paid on an accrual basis. Yet, the equalizer, which was not adopted until 2000, was abrogated the following year.

After more than a decade, since 2011 the tax system has been changed in five steps (see Table 3).

The first two steps have implied a departure from neutrality.

Firstly, since 1.7.2011 the investment funds are no longer taxed on an accrual basis, but rather on a realization basis: household investors become subject to taxation on a cash basis, when proceeds are distributed by the fund or when they realize a capital gain by dismissing fund shares. Taxation on a cash basis implies a tax deferral effect; this effect is added to the preexisting advantages of the funds and of the individual managed assets regime, *i.e.* the possibility of receiving dividend and interest payments gross of tax and the possibility of offsetting between capital losses and dividend or interest. Hence, the tax deferral effect gives an advantage to indirect investment through funds versus direct investment; indeed: a) the individual managed assets regime still provides for yearly taxation on an accrual basis; and b) in the administered assets regime and in the income tax return regime only the net amount can be invested by household investors.

Secondly, since 1.1.2012 the lower tax rate (12.5%) applies only to the proceeds of investment in public bonds, whereas the higher rate (20%) applies to the proceeds from other securities.

Thirdly, since 1.1.2012 a wealth tax is levied on the value of financial securities: the rate was equal to 0.1% in 2012, increased to 0.15% in 2013, and has been equal to 0.2% since 2014.

A financial transaction tax (FTT) was introduced in 2013. The timeline for its introduction was as follows : from 1.3.2013 for transactions and high-frequency trading on shares; from 1.9.2013 for transactions and high-frequency trading on derivatives on shares. As regards the FTT on shares, the rates were equal to 0.12% in 2013 and have set to 0.1% since 2014 (respectively, 0.22% and 0.2% in case of over-the-counter transactions).

⁶⁷ For more details, see Ricotti and Sanelli (2005).

Lastly, on 1.7.2014 the tax rate rose from 20% to 26%.

Table 3. The taxation of financial income: rates applied since 1.1.1998

| | 1.1.1998 | 1.1.2012 | 1.1.2013 | 1.3.2013 | 1.9.2013 | 1.1.2014 | 1.7.2014 |
|--|----------|----------|-------------|----------|-----------|----------|----------|
| Income Tax | | | | | | | |
| <i>Public bonds and similar</i> | 12.5% | | | | | | |
| <i>Corporate bonds, non-substantial shareholding, investment funds</i> | 12.5% | 20% | | | | 26% | |
| <i>Bank deposits, other financial assets</i> | 27% | | | | | | |
| Wealth Tax | | | | | | | |
| <i>Financial assets other than deposits</i> | Lump sum | 0.1% | 0.15% | | 0.2% | | |
| <i>Deposits</i> | Lump sum | | | | | | |
| Financial transaction tax | | | | | | | |
| <i>Italian Shares</i> | N/A | | 0.12%/0.22% | | 0.1%/0.2% | | |
| <i>Derivatives on Italian shares</i> | N/A | | | | Lump sum | | |

These changes obviously increased the tax burden on savings: until 31.12.2011 the tax burden was equal to the 12.5% of the return on the investment, whatever the investment was; today, in the case of an investment in shares it is equal to 26% of the return, plus 0.2% of the investment value on a yearly basis plus 0.1% of the transaction value; for an investment in public bonds, it is equal to 12.5% of the return, plus 0.2% of the investment value on a yearly basis.

In order to appreciate the increase in the tax burden, let us consider an investor who buys shares at a purchase price of 1,000; he receives a dividend equal to 20 every year and sells the shares after five years, at a selling price of 1,100. The pre-tax internal rate of return (IRR) of the investment is 3.89% (Table 4). Under the tax system in force until 2011, the investor had to pay only the 12.5% substitute tax when he perceived dividends and realized the capital gain: the after-tax IRR was 3.42%. Considering the tax system in place since 1.7.2014, the investor has to pay not only the 26% substitute tax on dividends and capital gains, but also the 0.1% FTT and the 0.2% yearly wealth tax: the after-tax IRR falls to 2.68%. Obviously, the effect of taxation on the IRR is sensitive to several assumptions (such as the duration of the investment and the distribution of the returns between dividends and capital gains), but the reduction of the return on the investment appears substantial.

The changes in the tax system obviously had an effect on the revenue from investment in financial assets, which has more than doubled in five years, raising from EUR 12 billion in 2011, to EUR 24.8 in 2015 (Table 5).⁶⁸ The increase is significant also in relative terms: considering the overall

⁶⁸ It is worth noting that in the same period the overall tax revenue increased by just EUR 24.1 billion (from EUR 412.2 to EUR 436.3 billion).

household financial “taxable” assets,⁶⁹ the implicit tax burden (tax revenue on asset value) rose from 0.42% to 0.76%.

Table 4. Changes in the taxation of financial assets: the effect on the IRR.

| Date | Description | Before-tax cash flow | After-tax cash flow (system applied until 31.12.2011) | After-tax cash flow (system applied since 1.7.2014) |
|-----------|---------------------------|----------------------|---|---|
| 01/01/x | Investment | -1,000 | -1,000 | -1,000 |
| 01/01/x | Financial transaction tax | | | -1 |
| 30/05/x | Dividends | 20 | 17.5 | 14.8 |
| 31/12/x | Wealth tax | | | -2 |
| 30/05/x+1 | Dividends | 20 | 17.5 | 14.8 |
| 31/12/x+1 | Wealth tax | | | -2 |
| 30/05/x+2 | Dividends | 20 | 17.5 | 14.8 |
| 31/12/x+2 | Wealth tax | | | -2 |
| 30/05/x+3 | Dividends | 20 | 17.5 | 14.8 |
| 31/12/x+3 | Wealth tax | | | -2 |
| 30/05/x+4 | Dividends | 20 | 17.5 | 14.8 |
| 31/12/x+4 | Wealth tax | | | -2 |
| 01/01/x+5 | Disinvestment | 1,100 | 1,087.5 | 1,074 |
| | Net profits | 200 | 175 | 137 |
| | Internal rate of return | 3.89% | 3.42% | 2.68% |

Table 5. Tax revenues on household investment in financial assets (in millions of euros)

| | 2011 | 2012 | 2013 | 2014 | 2015 |
|---------------------------------|--------|--------|--------|--------|--------|
| Tax on income | 9,211 | 12,826 | 16,744 | 17,038 | 19,712 |
| Interest | 5,519 | 8,347 | 9,281 | 8,583 | 8,150 |
| Dividends | 438 | 636 | 567 | 971 | 883 |
| Capital gains | 694 | 882 | 2,347 | 2,830 | 4,163 |
| Investment funds | 456 | 703 | 1,243 | 1,499 | 2,788 |
| Life insurance | 2,103 | 2,258 | 3,306 | 3,154 | 3,728 |
| Financial transaction tax | 0 | 0 | 247 | 404 | 492 |
| Financial wealth tax | 2,774 | 3,444 | 5,078 | 4,995 | 4,642 |
| Total | 11,985 | 16,270 | 22,069 | 22,436 | 24,845 |
| % of “taxable” financial assets | 0.42% | 0.56% | 0.73% | 0.70% | 0.76% |

⁶⁹ The “taxable” assets include all financial assets held by household, except for: cash, prepayments of insurance premiums and reserves for outstanding claims, and commercial credit. In other words, this amount includes every financial asset that can produce financial income subject to tax.

Source: own elaboration on tax data (government budget). The income tax on dividends includes the withholding on dividends paid to non-resident shareholders. The substitute tax on investment portfolio regime is included in the income tax on capital gains, even though the tax base is equal to the algebraic sum of dividends, interest, capital gains and capital losses accrued on yearly basis; the revenue from this substitute tax amounted to EUR 313.9 million in 2011 and rose to EUR 1,375 million in 2015. The wealth tax is equal to the stamp duty collected by the bank: it includes stamp duty on deposits held by companies.

The introduction of new taxes on transactions and on wealth explains only part of the increase in tax revenue (about a quarter of the increase, around EUR 2.4 billion). The remaining amount is due to the increase in revenue from income taxes. This can be generated by: i) an increase in tax rates; ii) an increase in the financial assets held by Italian households; iii) an increase in the pre-tax returns on the financial assets. As the Italian tax system is mainly a cash based system, an increase in revenue can also be due to an increase in the volume of transactions giving rise to realized capital gains from shares, bonds and investment funds, all other things being equal. As it is not possible to evaluate the changes in the volume of transactions made by household and the differences in interest or dividends received only by household, in the following analysis we assume that the ratio between the value of the transactions (or the amount of interest/dividends distributed) and the value of the assets did not change between 2011 and 2015.

In order to tentatively disentangle the role of tax changes in determining revenue trends, firstly we assess the effect of the tax rates changes on revenue, all other things being equal. In Table 6 we calculated the 2015 expected income tax revenue, assuming that only tax rates changed between 2011 and 2015.

Table 6. Taxation of financial income: expected and actual revenue in 2011 and 2015 (in millions of euros).

| | 2011 | 2015 | 2015 | 2015 | 2015 |
|------------------|----------------|----------------|------------------|---------------------------|-----------------------------|
| Tax on income | Actual revenue | Actual revenue | Expected revenue | Actual revenue (2011=100) | Expected revenue (2011=100) |
| Interest | 5,519 | 8,150 | 9,918 | 148 | 180 |
| Dividends | 438 | 883 | 911 | 202 | 208 |
| Capital gains | 694 | 4,163 | 1,444 | 600 | 208 |
| Investment funds | 456 | 2,788 | 736 | 611 | 161 |
| Life insurance | 2,103 | 3,728 | 3,567 | 177 | 170 |
| Total | 9,210 | 19,712 | 16,576 | 214 | 180 |

Notes: as regards the taxation of interest, investment funds and life insurance, the calculation estimates the part of the income subject to the 12.5% rate, assuming that this part is proportional to the portfolio share invested by households, investment funds or life insurance in public bonds.

The variation of the tax rate changes can explain the revenue increase arising from the taxation of dividends and life insurance. Indeed, there were material differences between the actual and the expected revenue from interests, capital gains and investment funds. In the following, some evidence on the evolution of pre-tax returns and of the holdings of financial assets is provided in order to assess the other determinants of the revenue.

Concerning interest income, in the period 2011-2015 the pre-tax yield on deposits and bank bonds (which account for most of private bonds) was fundamentally flat, while the pre-tax yield on public bonds decreased (Figure 10, panel a). In the same period, the sum of public and private bonds decreased: this latter phenomenon is due to the dramatic reduction of bank bonds in households' portfolios (see Figure 11, panels a and b). As regards deposits, the decrease in the yield and in the

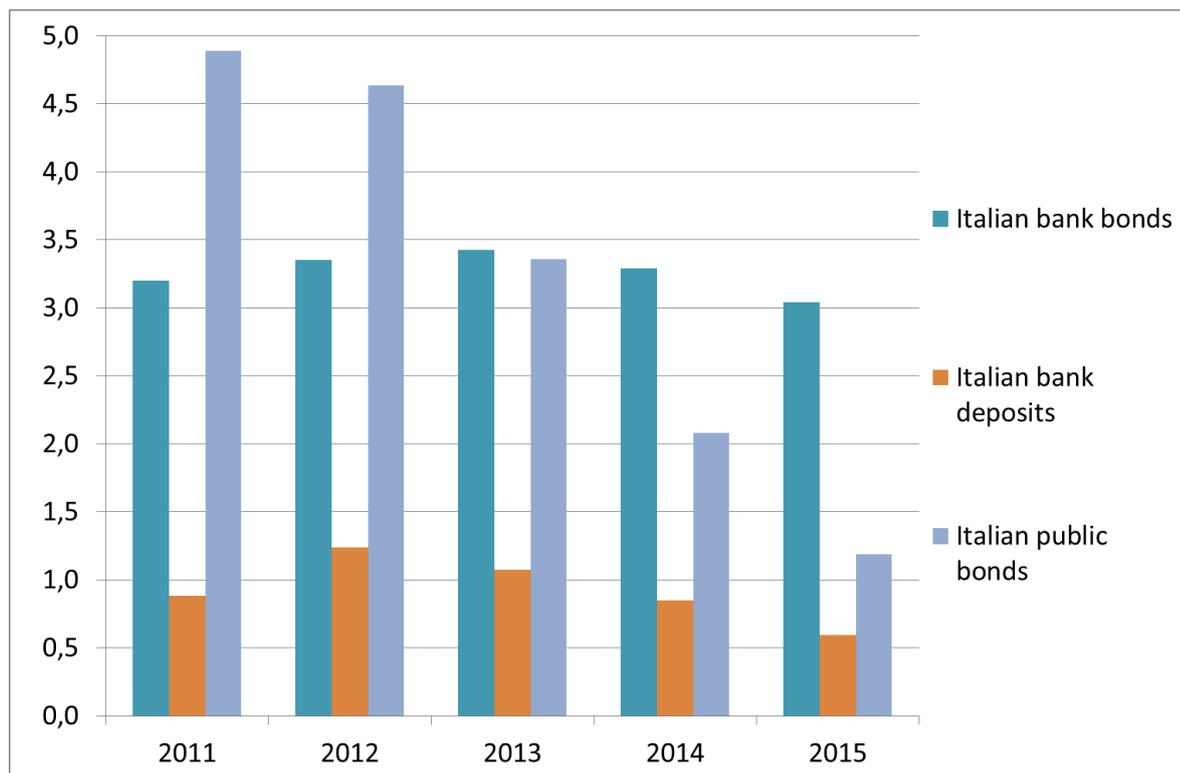
tax rate offset the increase in the stock of deposits. Hence, the main driver of the rise in the tax revenue from interest income seems to be the increase in the tax rate on private bonds, which rose from 12.5% in 2011 to 26% in 2015. Indeed, the lower-than-expected increase of the revenue from interest can be explained by the decrease a) in the private bonds holdings and b) in the returns on public bonds.

Concerning investment funds and shares the picture is not clear. The significant increase in revenue may be due not so much to the tax rate variation, but rather to the pre-tax yield (Figure 10, panel b) and, to some extent, to the variation in the stock of assets. Indeed, an analysis based on financial accounts data points to a considerable increase in investment holdings in funds and life insurance (Figure 11) in this period:⁷⁰ even neutralizing the variation of the asset prices (see the net flows in panel b), the amount held by Italian households increased as well; a possible explanation is that Italian households could have been investing the resources derived from the disinvestment of public and private bonds in investment funds and life insurance.

Moreover, the capital gain tax revenue increase can be explained only in part by tax rate changes; the variation in the pre-tax yield and in the level of the assets played the main role. For instance, as regards bonds, the reduction in market interest yields observed in this period increased the price of these assets: in the same period, Italian households reduced their investment in public and private bonds, realizing capital gains (Figure 11, panel b).

Figure 10. Pre-tax yields (in percentage points)

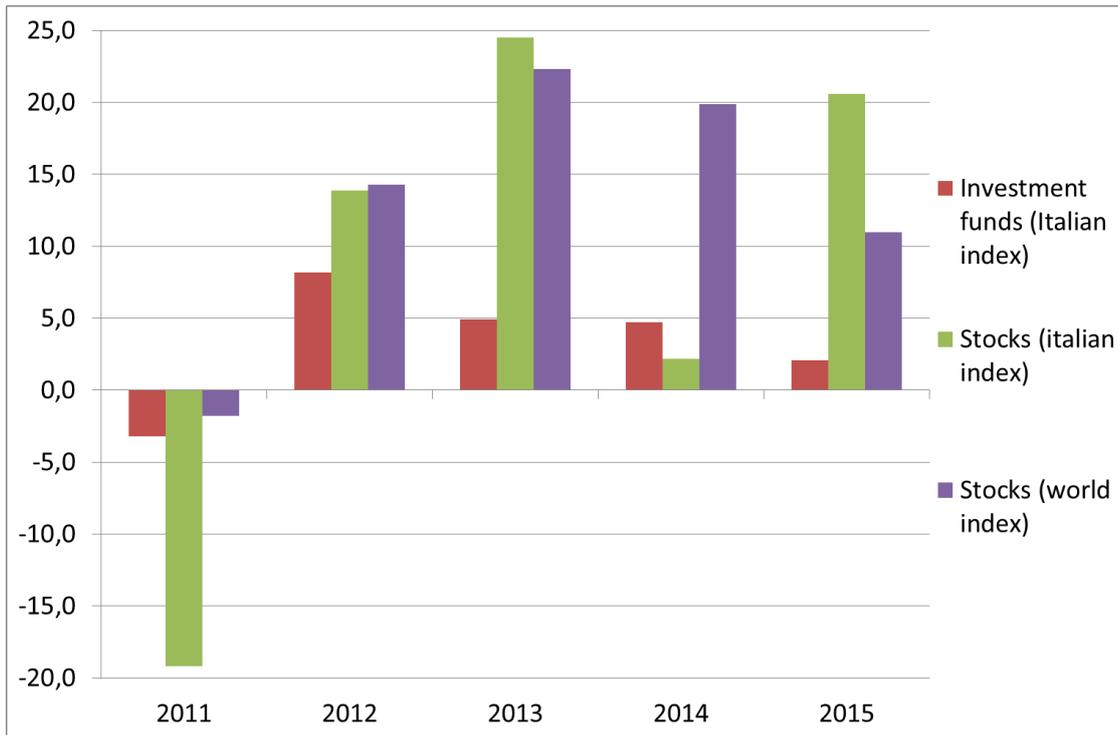
Panel a: bonds and deposits



Source: Money and Banking Supplements to the Statistical Bulletin, various issues.

⁷⁰ The analysis compares financial accounts data at the end of 2015 with the same data collected at the end of 2010. This is because, even though the tax reform came into effect on 1.1.2012, it was enacted by a law passed in August 2011. Hence, we prefer to compare 2015 data with 2010 data in order to avoid incorporating any modification of investment behavior due to news about tax reform.

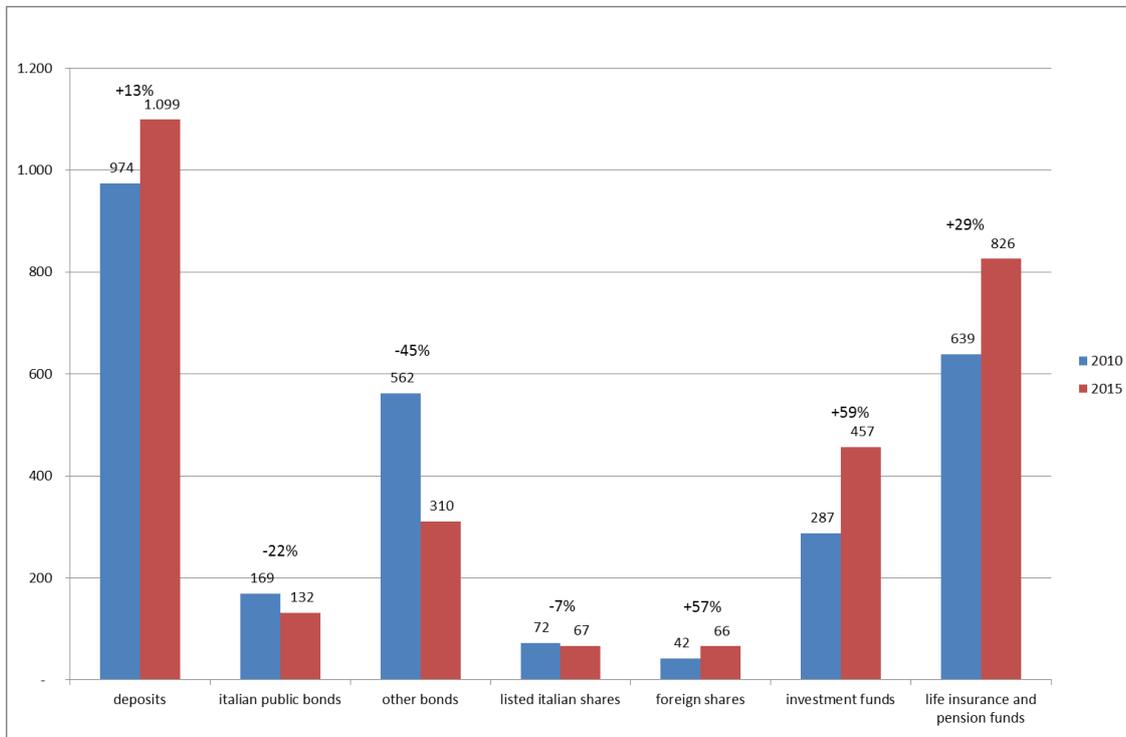
Panel b: Shares and Investment funds



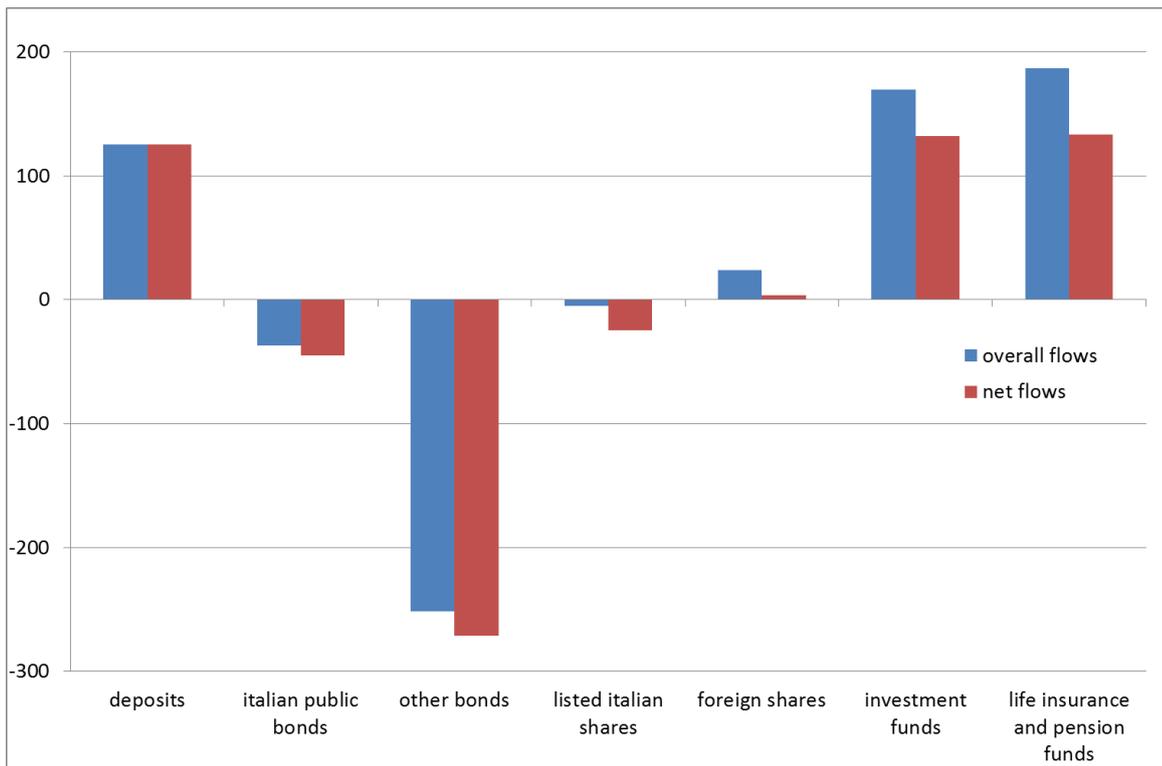
Source: Banca d'Italia, Annual Report, 2016.

Figure 11. Italian household's financial assets (millions of euros)

Panel a: increase in stocks (end 2015 to end 2010)



Panel b: flows in the period 2011-2015.



Source: own elaboration on financial accounts data. Net flows disregard assets price variation between 2010 and 2015.

6.2 Descriptive evidence on changes in taxation and the evolution of Italian households' savings invested in financial assets

Many factors influence the allocation of savings. Taxation is one of the determinants, as an increase in the tax rate reduces, *ceteris paribus*, the return obtained from an investment and, therefore, the share of a portfolio optimally invested in that asset. A rich literature on households' investment decisions, however, highlights the importance of many other factors. For example, according to the Capital Asset Pricing Model (CAPM), an increase in the risk associated to an investment reduces, *ceteris paribus*, the amount of savings allocated to that investment. The level of income and the liquidity constraints may also influence investment decisions, as low income households may need to keep their savings in liquid assets, such as deposits. Peer effects have also been shown to be important factors, because individuals tend to be influenced, in their financial decisions, by the choices made by people close to them.⁷¹

Data limitations do not allow to take into account all these factors, and preclude a thorough analysis of the impact of the recent modification of taxation on Italian households' portfolio.⁷² Nonetheless, it can be useful to look at the evolution of households' financial savings in recent years to see whether the increase in the tax burden described in the previous section has mirrored a significant reduction of investment in financial assets or a different allocation of financial wealth. The evidence

⁷¹ See, for example, Sharpe (1964); Guiso, Haliassos, and Jappelli (2001); Hong, Kubik, and Stein (2004).

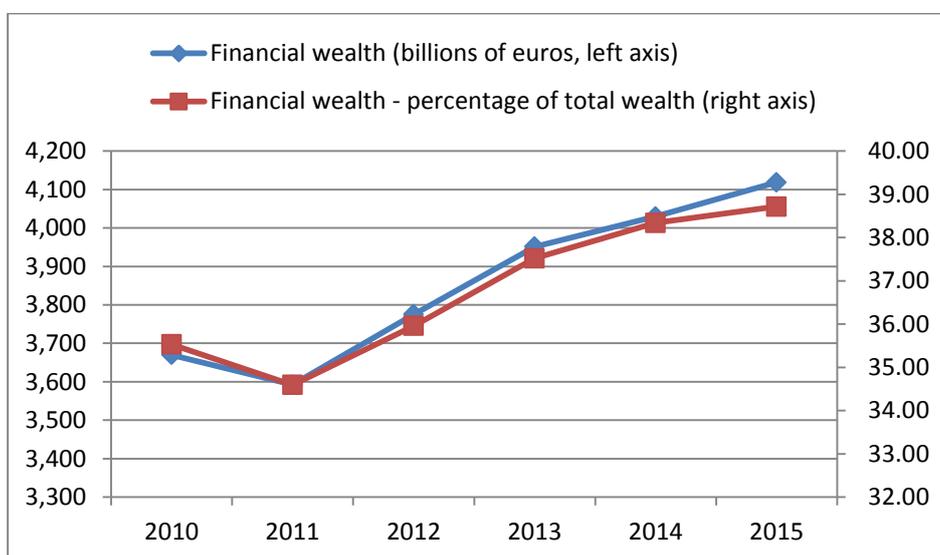
⁷² Such analysis would need highly granular data on households' portfolio, individual information on wealth, risk attitude, network of personal relationships and education. Moreover, it would not be sufficient to know the amount of wealth invested in each asset class, *e.g.* corporate bonds, because there can be significant variation in the risk and returns associated to assets in the same class, *e.g.* bonds issued by different corporations. In addition, the annual frequency of the data and its aggregation at the national level do not allow an econometric analysis capable of isolating the causal effect of the changes in taxation on households' investment decisions during this period.

presented in this section should however be interpreted with caution, as many factors influencing households' investment decisions, such as risk, income and wealth, have also changed during the period analysed; furthermore, investment in non-financial assets should be considered.

In this section we provide a description of the evolution of Italian households' financial portfolio since 2010. We start with the evolution of the financial wealth of Italian households between 2010 and 2015; we then focus on the changes in the shares of portfolio invested in different asset classes, and we suggest some general conclusions toward the end of the section.

Figure 12 points out that the financial wealth of Italian households has increased both in absolute terms and as a percentage of total wealth. This trend is likely due to multiple factors, among which a mild improvement in households' propensity to save (see Annual Report (2013)) and an increase in the prices of financial assets (see Annual Report (2014)). By the end of 2015, financial wealth was 14 percentage points higher than in 2011, recovering from the fall that occurred in the previous decade both in percentage and in per capita levels (see Annual Report (2015)).

Figure 12. The evolution of the financial wealth of Italian households since 2010.

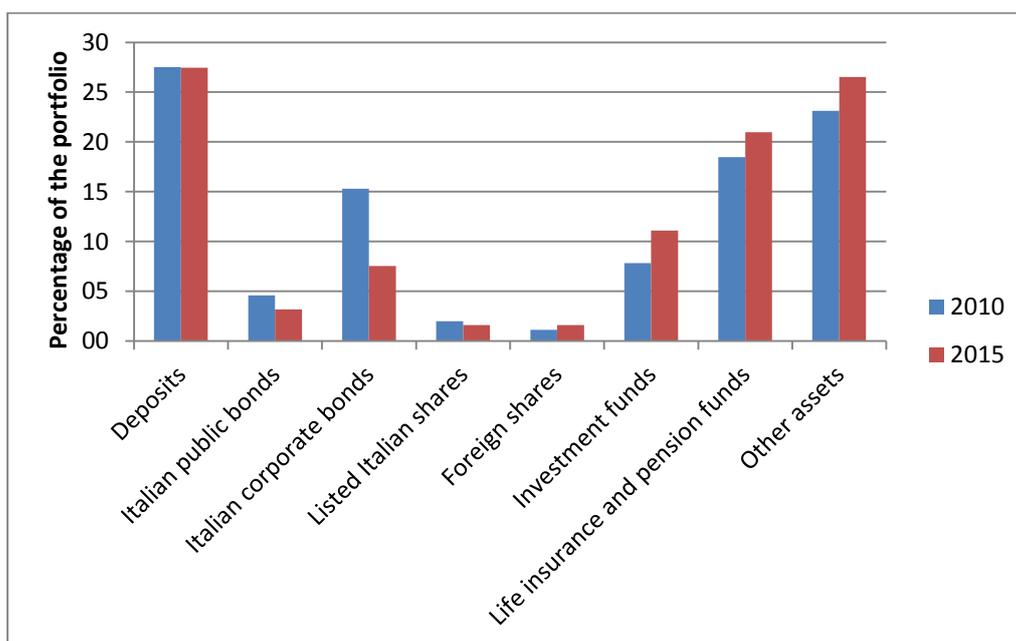


Source: Bank of Italy, Financial accounts.

In 2015 Italian households held around 27 per cent of their financial wealth in deposit accounts (the same share as 2010), less than 5 percent in Italian sovereign bonds and more than 20 percent in the sum of stocks, private bonds and investment funds. The remaining portion was invested in life insurance, pension funds and other assets.

In the period 2010-2015 the share of deposits remained roughly constant, despite the changes in the tax rate on deposit interests from 27% to 20% in 2012 and from 20% to 26% since 1.7.2014 (Section 6.1); the share of financial wealth invested in sovereign bonds decreased, despite that the tax rates on returns from alternative asset classes increased while the tax rate on the returns from sovereign bonds remained constant.

Figure 13. The financial portfolio of Italian households by asset class.



Notes: Deposits include checking and savings accounts. Other financial assets include non-listed Italian shares.

Source: Bank of Italy, Financial accounts.

The recent evolution of the demand for financial assets by Italian households has likely been influenced by the evolution of returns, shown in Figure 14, based on the after-tax, composite returns by type of investment.⁷³

As regards deposits, Figure 14 highlights that the return on deposits was close to zero. When the tax rate decreased from 27% to 20% in 2012, the average after-tax return on deposits was around 1% and it decreased to half a percentage point in 2014 when the tax rate was increased from 20% to 26%, so the monetary value of these changes was relatively small.⁷⁴ This suggests why the effect of this tax change on households' portfolio allocation may have been small. Of course, the invariance of the share of deposits can be due to the relevance of the monetary and custody functions of the deposits, which can be more important than the investment function. Moreover, the share of the portfolio held in deposits may have been influenced by the recovery of wealth after the recession (see Figure 12), which is likely to have been initially held in fungible forms of savings such as deposits.

The constant decrease in the share of the portfolio of Italian households invested in sovereign bonds is consistent with the decline in the return on Italian sovereign bonds, which fell from almost 5% at the beginning of 2012 to 1% in 2015.

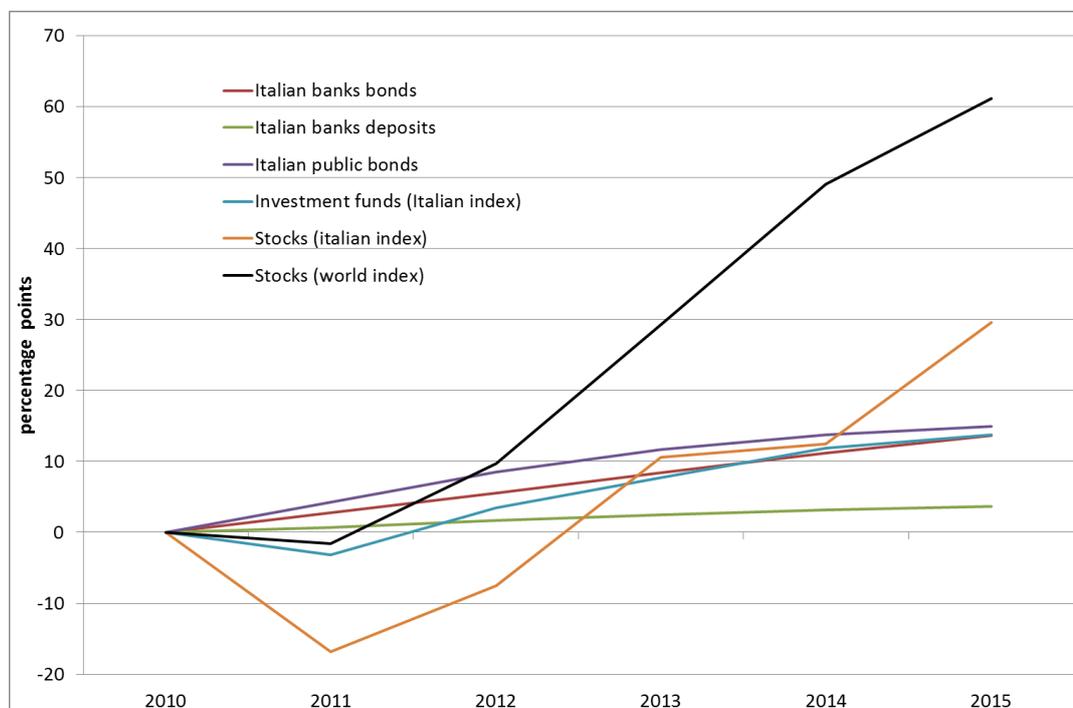
The decrease in the investments in corporate bonds was mainly driven by the reduction in the amount of bank bonds, which is related to the decline in banks' funding needs due to weak credit growth in this period (see Annual Report (2015)).

⁷³ Another key determinant of investment decisions could have been the pro-cyclicality of returns, *i.e.* the correlation between the returns and Italian GDP.

⁷⁴ To have an idea of the magnitude of this effect, it is useful to consider that an estimated three quarters of households in Italy hold less than EUR 13,000 in their bank account (source: Bank of Italy, SHIW). An increase in the tax rate of 6 percentage points combined with a return of 0.5 percentage points is equivalent to 4 euros a year for an account holding EUR 13,000. This change is likely to have had little effect on the saving decisions of many households. In addition, the low level of inflation of this period has not eroded the value of money held in deposit accounts.

In sum, the dramatic increase in the tax burden does not seem to have been associated with a significant reduction of investment in financial assets nor in a different allocation of financial wealth by Italian households. This evidence is, however, the result of multiple factors, such as the accumulation of wealth by households and changes in risks and returns of different asset classes, which hinder our ability to establish a causal relationship between taxes and households' savings decisions in this period.

Figure 14. The after-tax, composite return on financial investment.



Source: own elaboration.

7. Concluding remarks

Taxation of financial incomes has become increasingly relevant in the public policy debate from a number of perspectives. The paper tackles this issue from several standpoints.

In the first part, it provides a review of the most significant topics in the literature on capital income taxation. Based on the standard assumptions made in previous literature, capital should be excluded from taxation. However, relaxing these earlier hypotheses leaves some room for capital income taxation. To this end, theoretical prescriptions are in favor of a taxation system designed to comply with efficiency requirements with respect to the level and timing of savings as well as to their allocation among different assets.

In the second part, the paper carries out a review of the Italian system and a comparative analysis of EU and US legislations. Contrarily to earlier theoretical prescriptions, no country completely exempts capital from taxation. Indeed, distributional concerns provide a strong rationale for taxing financial assets since taxation is regarded as a tool to make financial investors bear a fair share of the tax burden for equity purposes. However, in spite of efficiency-based theoretical arguments aimed at avoiding distortions to the level, timing and allocation of savings, no country applies a fully neutral taxation regime.

With regard to the distortions to level and timing of savings, all the examined jurisdictions present distortionary taxes on saving income. Indeed, no “labor-earnings-taxes” nor any “cash-flow expenditure taxes” proposed by the literature have been introduced in real-world systems: savings are made out of taxed income and returns to savings are taxed when they are paid to the individual,

regardless of when they are spent for consumption. Moreover, no country grants a rate of return allowance, which would imply taxation only on returns exceeding the “normal” level; however, in some countries lump-sum exemptions on overall capital income and/or on single income categories may approximately resemble such principle.

Concerning the distortions to the allocation of savings between different assets, only a small subset of countries provide a uniform treatment of investment income, although the neutrality is not full even in those countries since basically no system provides for capital gains being taxed on accrual.

The picture that emerges from this review points to significant heterogeneity in the tax treatment of income from financial assets, in the patterns and the levels of taxation and in the categories subject to preferential taxation. The existence of allowances and tax preferred schemes does not allow to infer the effective tax burden by just looking at the level of rates.

Several countries are found to adopt systems whereby capital income is taxed more lightly than labor income. Indeed, such systems have a number of desirable properties, both from a practical perspective – as they generally entail lower compliance and administrative costs – and in terms of efficiency, since they mitigate several distortions such as those due to capital mobility and the effects of inflation.

In the third part, a first assessment is conducted on the relation between tax changes and changes in Italian households’ investment in financial assets. The analysis of the changes in the Italian taxation system shows a substantial increase in the overall tax burden. However, the evolution over time of the asset shares held by households does not seem to mirror the significant tax changes that occurred in Italy in latest years.

In perspective, the heterogeneity in the tax treatment of households’ savings income – in line with a less intense international tax competition for these incomes than for corporate incomes – is likely to persist in the near future. The recent international coordination initiatives – such as FATCA (Foreign Account Tax Compliance Act) and the CRS (Common Reporting Standard) – will indeed improve the exchange of information on tax matters at the international level. In this regard, the initiatives taken by OECD Global Forum on Transparency and Exchange of Information require the governments to gather detailed account information from their financial institutions (banks, insurance companies, etc.) and exchange it automatically with other jurisdictions on an annual basis. The information exchanged will be all relevant financial information (account balances, interest, dividends, and sale proceeds from financial assets) taken from accounts held by individuals and entities, including trusts and other arrangements. At the EU level, a directive transposes the automatic exchange of information on financial accounts into EU law. Member States must begin exchanging tax information from September 2017. Moreover, tax transparency agreements have been signed with Switzerland, San Marino, Andorra, Monaco and Liechtenstein for automatic exchange of information. Similarly, in the US, since 2010, FATCA has required foreign financial institutions to report US citizens living abroad and their financial accounts/assets to the US Department of Treasury.

The economic consequences of these changes may be particularly far-reaching on several aspects such as, among others, overall tax revenues, distributional issues and tax design. In terms of this latter aspect, these developments are expected to make the residence principle in the taxation of savings more enforceable for each country and, more broadly, to increase the degrees of freedom of governments in their choice of the preferred system.

Annex 1

Table A1. Dividend taxation in Europe and the US (listed shares, non-substantial shareholdings)

| Country | System | Withholding rate (%) | Exemption/Allowances |
|-------------|---|----------------------|---|
| Austria | FW / Optional W + Prog-PIT (0-50%) | 27.5 | |
| Belgium | FW | 30 | |
| Bulgaria | FW | 5 | |
| Croatia | FW | 14.16 | |
| Cyprus | FW | 17 | |
| Czech R. | FW | 15 | |
| Denmark | W+Prog-Sep (27-42%) | 27 | |
| Estonia | Distribution tax | 20 | |
| Finland | W+Prog-Sep (30-34%) | 25.5 | Only 85% of dividends from listed shares are taxed. |
| France | W + Prog-PIT (0-45%) | 36.5 | Only 60% of dividends are taxed. |
| Germany | FW/ Optional W+ Prog-PIT (14.77-47.475) | 26.375 | An allowance of EUR 801 applies to the overall capital income. |
| Greece | FW | 15 | |
| Hungary | FW | 15 | |
| Ireland | W + Prog-PIT (20-40%) | 20 | |
| Italy | FW | 26 | |
| Latvia | W + Prop (10%) | 10 | |
| Lithuania | W + Flat PIT (15%) | 15 | |
| Luxembourg | W + Prog-PIT (0-43.6%) | 15 | Only 50% of dividends are taxed. A EUR 1,500 exemption is available for the total amount of dividends and interest income not subject to the 10% withholding tax. |
| Malta | Imputation System Prog-PIT (0-35%) | | |
| Netherlands | W+Wealth Taxation (30% on 2.86%-5.39% notional return) | 15 | There is a wealth tax base exemption equal to EUR 25,000. |
| Poland | FW | 19 | |
| Portugal | FW/ Optional W+ Prog-PIT (14.5-48%) | 28 | Individuals may opt to include 50% of the dividends in the PIT base. |
| Romania | FW | 5 | |

| | | | |
|----------------|-----------------------|----|--|
| Slovak Rep. | FW | 7 | The exemption only applies to dividends from listed shares. |
| Slovenia | FW | 25 | |
| Spain | W + Prog-Sep (19-23%) | 19 | |
| Sweden | W + Prop (30%) | 30 | |
| United Kingdom | Prog-Sep (7.5-38.1%) | | Exemption for the first GBP 5,000 (provided that the other taxable income - net of personal deduction of GBP 1,000 - does not exceed this amount; this threshold will be reduced to 2,000 GBP from 2018). From 2016, generalized deduction up to GBP 1,000 (GBP 500) of saving income (including dividends and interest) for taxpayers who fall within the first (second) band. |
| USA | Prop (0%-15%-20%) | | Zero rate for taxpayers in the two lowest PIT brackets. |

Notes: Where applicable, PIT rates and final withholding rates include surcharges, local taxes, and other possible taxes. For details, see Annex 2.

Key

- E Exemption
- FW Final Withholding
- W Non-Final Withholding
- Prog-PIT Progressive PIT (Personal Income Tax)
- Prog-Sep Progressive Separate (tax rates other than ones of the PIT)
- Flat PIT Proportional PIT (Personal Income Tax)
- Prop (X%) Proportional with rates other than flat PIT

Table A2. Interest taxation in Europe and the US

| Country | System | Withholding rate (%) | | | Exemptions/special rules |
|-------------|--|----------------------|-----------------|--------------|--|
| | | Public Bonds | Corporate Bonds | Deposits (a) | |
| Austria | FW | 27.5 | 27.5 | 25 | |
| Belgium | FW | 30 | 30 | 15 | Exemption on the first EUR 1,880 of interest on ordinary savings accounts. |
| Bulgaria | FW | E | E | 8 | |
| Croatia | FW | E | E | 14.16 | Exemption for interest on current accounts up to 0.5%. |
| Cyprus | FW | 3 | 30 | 30 | Individuals with taxable income up to EUR 12,000 are entitled to a 27% reimbursement of the tax paid at source. A 3% rate applies to interest on savings certificates issued by the government. |
| Czech Rep. | FW | 15 | 15 | 15 | |
| Denmark | Prog-PIT (36.99-42.91%) | | | | Capital income (including interest) up to DKK 2,000 is exempt. |
| Estonia | W+Flat PIT (20%) | 20 | 20 | E | |
| Finland | FW | 30 | 30 | 30 | |
| France | W+Prog-PIT (0% - 45%) | 39.5 | 39.5 | 39.5 | Interest paid on special financial instruments and accounts is exempt from income tax, as well as from social contribution. In other cases, interest is exempt from income tax, but not from social contribution (see Section 5.1.4 and Annex 2). Taxpayers may apply for a final withholding tax (24%+15.5%) when the sum of interest earned in a year is below or equal to EUR 2,000. |
| Germany | FW/Optional Prog-PIT (14.77-47.475) | 26.375 | 26.375 | 26.375 | An allowance of EUR 801 applies to the overall capital income. |
| Greece | FW | E | 15 | 15 | |
| Hungary | FW | 15 | 15 | 15 | For specific long-term investment income (interest and capital gains), there is a preferential tax treatment (10% tax rate after 3 years; exemption after 5 years). |
| Ireland | W + Prog-PIT (20%-48%); FW (deposits) | E | 20 | 39 | Some medium and long-term deposit accounts benefit from an exemption up to an amount of EUR 635 of interest. |
| Italy | FW | 12.5 | 26 | 26 | |
| Latvia | W + Prop (10%) | E | 10 | 10 | |
| Lithuania | W+Flat PIT (15%) | 15 | 15 | 15 | Interest from deposits and public debt securities are exempt up to EUR 500. |
| Luxembourg | FW | 20 | 20 | 20 | For certain savings deposits, there is a threshold of EUR 250 per person and per paying agent below which interest income is exempt. |
| Malta | FW / Optional Prog-PIT (0-35) | 15 | 15 | 15 | |
| Netherlands | Wealth Taxation | | | | There is a tax base exemption equal to EUR 25,000. |

| (30% on 2.86%-5.39% notional return) | | | | | | | | | |
|--------------------------------------|---|----|----|----|----|---|--|--|--|
| Poland | FW | 19 | 19 | 19 | 19 | | | | |
| Portugal | FW/ Optional W+ Prog-PIT (14.5-48) | 28 | 28 | 28 | 28 | Some exemptions on public bonds. | | | |
| Romania | FW | E | E | 16 | 16 | | | | |
| Slovak Rep. | Prop (19%) - public bonds; FW – other interest | 0 | 0 | 19 | 19 | | | | |
| Slovenia | FW | E | E | E | 25 | Interest on bank deposits is exempt up EUR 1,000. | | | |
| Spain | W+Prog-Sep (19-23) | 19 | 19 | 19 | 19 | Special regime on long-term investment plans. | | | |
| Sweden | W + Prop (30) | 30 | 30 | 30 | 30 | | | | |
| United Kingdom | W+Prog-PIT (20% - 45%) | 20 | 20 | 20 | 0 | From 2016, generalized deduction up to GBP 1,000 (GBP 500) of saving income (including dividends and interest) for taxpayers who fall within the first (second) band. Exemptions for: National Savings Certificates, certain contractual savings schemes known as SAYE schemes, and Individual Savings Accounts (ISA). | | | |
| USA | Prog-PIT (10-39,6) | | | | | | | | |

Notes: Where the treatment of current account and saving deposits is differentiated, the base case is saving deposits. For additional details, see Annex 2.
Where applicable, PIT rates and final withholding rate, include surcharges, local taxes, and other possible taxes. For details see Annex 2.

Key

E Exemption
FW Final Withholding
W Non-Final Withholding
Prog-PIT Progressive PIT (Personal Income Tax)
Prog-Sep Progressive Separate (tax rates other than ones of the PIT)
Flat PIT Proportional PIT (Personal Income Tax)
Prop (X%) Proportional with rates other than flat PIT

Table A3. Capital gains taxation in Europe and US

| Country | System* | Tax Rate | Capital Losses | | | Differential tax treatment related to the holding period (HP) | Other exemptions/allowances |
|------------|---------------------------------------|-------------------------------------|----------------|------------|---------------|---|-----------------------------|
| | | | Deductibility | Carry-Back | Carry-Forward | | |
| Austria | FW | 27.5 | D | NO | NO | | |
| Belgium | E | E | | | | | |
| Bulgaria | E | E | | | | | |
| Croatia | Prop | 14,16 | D | NO | NO | Exemption for HPs larger than 2 years. | |
| Cyprus | E | E | | | | | |
| Czech Rep. | Flat PIT | 15 | D | NO | NO | Exemption for HPs >= than 3 years (if non-substantial shareholdings). Unconditional exemption after 5 years. CZK 100,000 exemption (about EUR 3,700 Euro). | |
| Denmark | Prog-Sep | 27-42% (PIT 36.99-42.91% for bonds) | D | NO | YES | For bonds, only capital gains exceeding DKK 2,000 (about EUR 250) are taxable. | |
| Estonia | Flat-PIT | 20 | D | NO | YES | | |
| Finland | Prog-Sep | 30-34 | D | NO | YES - 5y | | |
| France | Prog-PIT | 0-45 | D | NO | YES - 10y | 50% exemption HPs between 2 and 8 years; 65% for HPs larger than 8 years. | |
| Germany | FW/Optional W+Prog-PIT (14.77-47.475) | 26.375 | D | NO | YES | An allowance of EUR 801 is granted. It applies to the overall capital income. | |
| Greece | E (shares)/ Prop (bonds) | E (shares)/ 15% (bonds) | D (bonds) | NO | YES (bonds) | | |
| Hungary | FW/Flat PIT | 15 | D | NO | YES - 2y | For specific types of long-term investments: 10% tax rate for HPs larger than 3 years; full | |

| | | | | | | | exemption after 5 years. |
|----------------|--|---------|---|----|----------|--|--|
| Ireland | Prop | 33 | D | NO | YES | | EUR 1,270 exemption. Exemption on capital gains on public bonds. |
| Italy | FW/prop | 26 | D | NO | YES - 5y | | |
| Latvia | Prop | 15 | D | NO | NO | | |
| Lithuania | Flat-PIT | 15 | D | NO | NO | | EUR 500 exemption. |
| Luxembourg | E | E | | | | | Speculation tax for HPs < 6 months |
| Malta | E | E | | | | | |
| Netherlands | Wealth Taxation (30% on 2.86%- 5.39% notional return) | | | | | | There is a tax base exemption for the wealth tax equal to EUR 25,000. |
| Poland | Prop | 19 | D | NO | Yes - 5y | | Exemption on public bonds. |
| Portugal | FW/ W+Prog-PIT (14.5-48) | 28 | D | | | | |
| Romania | Flat PIT | 16 | D | NO | Yes - 7y | | Exemption on public bonds. |
| Slovak Rep. | E | | | | | | Tax for HPs < 1 year. 15% tax rate for HPs larger than 5 years; reduction by 5 p.p. per each subsequent 5 years of holding: full exemption after a 20- year HP. |
| Slovenia | Prop | 25 | D | NO | Yes | | |
| Spain | Prog-Sep | 19-23 | D | NO | Yes - 4y | | |
| Sweden | Prop | 30 | D | NO | NO | | |
| United Kingdom | Prog-Sep | 10-20 | D | NO | YES - 4y | | GBP 11,100 exemption. Exemption on some public bonds (national saving certificates). |
| USA | Prop | 0-15-20 | D | NO | Yes | | For HPs less than 1 year, progressive taxation (10-39.6%) |

* The classification refers to listed shares and bonds with a holding period of more than 1 year but less than 3 years.

Notes: Where applicable, PIT rates and final withholdings, include surcharges, local taxes, and other possible taxes. For details see Annex 2.

| | |
|------------|---|
| Key | |
| E | Exemption |
| FW | Final Withholding |
| W | Non-Final Withholding |
| Prog-PIT | Progressive PIT (Personal Income Tax) |
| Prog-Sep | Progressive Separate (tax rates other than ones of the PIT) |
| Flat PIT | Proportional PIT (Personal Income Tax) |
| Prop (X%) | Proportional with rates other than flat PIT |

Annex 2. Notes on tables on dividends, interest and capital gains

Belgium

The regions may levy surcharges on 25.99% of the federal taxable income. For 2017, the rate of the surcharge is fixed at 0.35117% for all regions. The municipalities may levy surcharges on the total of the national and regional income tax. The rates vary from 0% to 10%, according to the municipality (the average rate is 7%). The municipal and regional surcharges do not apply to dividends and interest.

Dividends

Withholding tax rates are reduced for dividends distributed by SMEs under some conditions (in the first three years after the issuance of the shares, the rate is 20%; from the fourth year onwards it is reduced to 15%).

Interest

As of 2014 there exists a privileged term account scheme, known as the “thematic citizen’s lending scheme”. The goal of this tax provision is to encourage taxpayers to invest in some specific projects, such as schools, hospitals, and lending to SMEs. The minimum term is five years. The interest on this investment is subject to a withholding tax of 15%. If the chosen project is not finalized, the taxpayer remains subject to the 15% tax only, but the financial institutions has to pay the difference between the 27% general rate and the 15% rate.

In 2015 a tax exemption was introduced for interest income derived by individuals from the provision of loans to newly established SMEs or to SMEs existing for a period of maximum four years. The exemption is available for interest accrued on capital up to EUR 15,000.

Capital gains

A separate 16.5% rate applies to capital gains on shares forming a substantial participation in a Belgian company if they are sold outside Europe. The gain is also taxable at the 6.5% rate if the shares are sold outside Europe within a period of 12 months from the first sale. A separate rate of 33% applies under some conditions to capital gains on shares not forming a substantial participation.

Bulgaria

Dividends

Dividends distributed in the form of new shares and through increases of the value of existing shares are exempt.

Capital gains

Capital gains realized as a result of the disposal of financial instruments outside regulated stock markets are taxed at 10% rate.

Croatia

In addition to the PIT, there is a city surtax. The tax base is the amount of income tax. The rates of surtax cannot be higher than 10% for municipalities, 12% for a city with a population of less than 30,000, 15% for a city with a population of more than 30,000, and 18% for the city of Zagreb.

Thus, the tax rate on capital incomes is 12%, plus the city surtax (we assume the 18% rate, *i.e.* that of the city of Zagreb).

Czech Republic

The Czech Republic imposes a 15% flat rate system. An additional 7% “solidarity surcharge” applies to the part of the aggregate employment income, business and professional income exceeding four times the annual average salary (CZK 1,355,136 for 2017).

Denmark

Dividends

A 27% withholding tax is final for dividends not exceeding DKK 51,700. Dividends exceeding DKK 51,700 are subject to income tax of 42% by assessment with a tax credit for the 27% dividend tax withheld.

Interest

Capital income comprises net interest, gains and losses on bonds and other debt claims and gains on the disposal of immovable property, as well as dividends from companies resident in a low-tax country. Tax rates are equal to the

separate PIT rates on capital income 10.08% (15%) + the national average of the municipal tax (24.91%) + health contribution (3%). Capital income up to DKK 45,000 (single taxpayers) is not subject to the higher tax rate (15%), in that it is not considered when computing the income subject to the higher rate.

Capital gains

For individuals, gains on shares (both listed and unlisted), are taxed as income from shares. The share income is taxed at 27% up to the amount of DKK 51,700 in 2017 and at 42% on any amount in excess of that. Gains and losses on bonds are included in capital income, added to personal income and taxed at progressive rates: 10.08% up to DKK 45,000 and 15% on the excess amount above that. To these rates, the municipal tax (national average: 24.91%) and health contributions (2%) have to be added. Losses on listed shares may be offset against gains realized on other listed shares. Losses on unlisted shares may be offset against positive income from other shares. Any excess losses may be carried forward indefinitely. Capital losses from the sale of most shares are deductible only if the purchase of shares was reported to the tax authorities.

Estonia

Dividends

Estonia has no corporate tax. Dividends are subject to a distribution tax paid by the distributing company. It is a final tax.

Interest

The 20% flat rate is the same as the withholding tax rate.

Capital gains

Capital gains are exempt if derived from the disposal of financial assets acquired using funds deposited on specific investment accounts.

Finland

Municipal taxes (18.5% as in Helsinki) are added to both the minimum and the maximum PIT rates. No local income taxes are imposed on the investment income of individuals.

Dividends

For unlisted companies, 25% of the dividends which is equal to or less than 8% of the share value (equal to net assets divided by the number of shares) is taxed as capital income (with rates equal to 30% up to EUR 30,000 and 34% for the exceeding part). The remaining 75% of such dividends is exempt up to EUR 150,000 per shareholder. 15% of dividends exceeding EUR 150,000 - but within the 8% ceiling - is exempt, and the remaining 85% is taxed as capital income. As regards the amounts in excess of the 8% ceiling, 75% of that amount is treated as earned income and the remaining 25% is exempt.

France

The 36.5% withholding tax rate on dividends is equal to a 21% rate (advance payment) plus a final 15.5% social contribution rate.

The 39.5% total withholding tax rate on interest is composed of 24% rate plus a 15.5% social contribution rate. In some cases, 5.8% of CSG are deductible against the overall personal income.

A compulsory final withholding tax applies to interest paid on bearer bonds (60%), on interest coming from a tax haven (75%), and on solidarity bonds (5%).

Progressive rates are up to 45%. From 2012: an additional surcharge of 3% is imposed on income exceeding EUR 250,000 (EUR 500,000 in the case of couples); and an additional surcharge of 4% is imposed on income exceeding EUR 500,000 (EUR 1 million in the case of couples).

Capital gains

The social contributions rate is 15.5% rate of the full gain, irrespective of the period during which the shares were held. Special rules apply to capital gains on: i) shares in SMEs incorporated for less than ten years; ii) shares of a company where more than 25% of the rights to profit is held by family members, provided that the buyer does not sell the shares to a third party within five years; iii) and shares in SMEs realized by the directors/owners at the moment of their retirement. Under this regime, the reduction of taxable capital gains is: 0% for securities held for less than one year; 50% between one and four years; 65% between four and eight years; and 85% for those held for more than eight years.

Germany

There is a solidarity tax of 5.5% is added to the minimum and maximum PIT rate.

Dividends and interests

Dividends, interest and capital gains are subject to a 25% withholding tax, which rises to 26.375% when factoring in the 5.5% solidarity surcharge.

Considering that the taxpayer will opt to be taxed at progressive rates if this results in a lower level of taxation, the option will be only chosen by taxpayers with an income up to about EUR 16,000; this leads to the application of tax rates from 0 to 25.29% (including the solidarity surcharge).

Capital gains

Capital gains realized on shares in a resident company of which the shareholder owns a substantial interest (*i.e.* at least 1% of the capital) are taxed as ordinary business income. In this case, only 60% of the gains constitutes taxable income.

Greece

PIT rates include the special social solidarity contribution introduced since 2010 (0-10%).

Capital gains

A separate 15% capital gains tax applies to capital gains realized among other things on: (i) non-listed shares, (ii) listed shares and other securities, if the seller holds at least 0.5% of the capital of the company and the shares were bought after 1 January 2009, and (iii) state bonds, corporate bonds and T-Bills.

Ireland

PIT rates include the Universal Social Charge (USG; +1% to the minimum rate; +8% to the maximum rate in the case of employees) which applies to overall income. The 5.5% USG surcharge is not considered. No USG on capital gains is assumed based on IBFD information.

Italy

In the figures, the minimum and maximum PIT rates are increased by the regional and municipal taxes of Rome (1.73-3.33% and 0.9% respectively).

Latvia

Latvia applies a flat tax regime with an ordinary tax rate of 23%. Since 2018, a progressive tax system will be introduced with tax rates equal to 20%, 23% and 31.4%.

A solidarity tax is applied when annual earnings subject to social security contributions exceed the ceiling for social security contributions (which is EUR 52,400 in 2017). For employees the rate is 10.50%.

Lithuania

Interest

Interest on deposits and securities issued before 31 December 2013 is exempt.

Luxembourg

PIT rates are increased by a 7% surcharge for the unemployment fund if income is over EUR 150,000 (9% for taxpayers with a taxable income higher than EUR 300,000).

A EUR 1500 exemption is available for the total amount of dividends and interest which is not subject to the 10% final withholding tax (for instance, income realized upon the sale, refund or redemption of shares or units in undertakings for collective investments or assimilated entities).

Capital gains

Capital gains are taxed if: i) they are realized from speculative transactions (sales within six months from the date of acquisition) and exceed EUR 500. However, gains on ordinary bonds issued by Luxembourg residents and acquired in Luxembourg are exempt; in this case they are taxed as ordinary income; ii) they are realized from the sale of shares of a company in which the shareholder owns a “qualified” participation of more than 10% of the company’s share capital for a period exceeding six months; in this case, the taxable capital gain – computed according to specific rules - is classified as extraordinary income, taxed at a rate equal to one half of the average tax rate on the taxpayer’s total income.

Malta

Dividends

Malta operates a full imputation system: dividends paid by a resident company carry a tax credit equal to the tax paid by the company on its profits. Shareholders are taxed on the gross dividend, but they are entitled to deduct the tax credit

against their total income tax. This tax may be treated as final at the taxpayer's option. If the individuals fall within a lower tax bracket, they may opt to declare dividend and benefit of a tax refund.

Interest

If the taxpayer opts for progressive taxation, there is no withholding.

Capital gains

Capital gains are exempt when realized on listed securities. Capital gains realized on non-listed securities are included in the personal income tax base.

The Netherland

Investment income (including interest, dividends and capital gains) is not subject to income tax as such, but to a wealth tax computed applying a 30% tax rate to a "deemed return" on all asset values. The "deemed return" is equal respectively to 2.87%, 4.6%, 5.39%, when the net value of assets is less than EUR 75,000, between EUR 75,000 and EUR 975,000, and higher than EUR 975,000; the effective tax rate is respectively equal to 0.861%, 1.38%, and 1.617%. There is a tax base exemption threshold for the wealth tax equal to EUR 25,000.

Dividends and capital gains

Dividends (as well as interest and capital gains on shares) from a substantial shareholding are subject to a 25% flat rate tax. A shareholding is considered substantial if the taxpayer owns, directly or indirectly, at least 5% of the share capital.

Portugal

The tax rates given in the tables do not consider the solidarity tax (whose rates are 7.5% and 20% depending on income) and the extraordinary tax (applied with rates varying from 1% to 3.5% depending on income) since they were temporary and were abolished in 2017.

Dividends

Resident individuals may opt to include 50% of the dividends in the PIT base.

Interest

There is an exemption on interest derived from savings accounts which are held by retired individuals whose monthly pension does not exceed three times the national minimum monthly salary, with a cap set at EUR 10,500; there is also a partial interest exemption on non-negotiable certificates of deposit or long-term (more than five years) deposits issued or created before 1 January 2012, under certain conditions.

Poland

Capital gains

Capital losses can offset taxable income arising from the same source. No more than 50% of the loss may be used in one year.

Romania

Capital gains

Losses incurred on transactions on unlisted companies cannot be offset or carried forward.

Slovak Republic

Dividends

Until 2016, dividends from unlisted shares were subject to a 14% health insurance contribution withheld at source by the payer of the dividend.

Interest

The income obtained by resident individuals on state bonds and state treasury bills is subject to individual income tax at a rate of 19% (*via* self-assessment procedure).

Capital gains

The exemption is granted for holding periods of more than one year and for securities traded in a regulated market. There is a EUR 500 general exemption for capital gains realized on shares in a resident company. Capital gains exceeding this threshold are subject to a 19% tax rate for amounts below EUR 35,022.31 and a 25% tax rate for the exceeding part.

Spain

The rates and the brackets on saving income are the following:

| | | |
|----------------|------------|-----|
| Up to | EUR 6,000 | 19% |
| EUR 6,000.01 – | EUR 50,000 | 21% |
| Over | EUR 50,000 | 23% |

Interest

Interest on some short-term bonds (with maturity between 6 and 18 months) is exempt from withholding tax (but is subject to individual income tax by assessment).

Capital gains

Capital losses on the disposal of assets may be offset against capital gains. If there is a net loss, it may be used to offset capital income up to 25% of the total income. If this results in a loss, it may be carried forward for four years to offset future net capital gains.

Sweden

PIT rates include the municipal tax at an average rate of 32.1%.

Capital income is taxed separately at a 30% flat rate. No municipal tax is imposed on such income.

Capital gains

Capital losses incurred on listed shares are only deductible from gains on listed shares, while capital losses on non-listed shares are deductible from gains both on listed and non-listed shares. 70% of yearly unused capital losses are deductible from other capital income. If capital income is negative, 30% of the capital loss up to SEK 100,000 plus 21% of the loss exceeding SEK 100,000, may be used as a tax credit against the national and municipal income tax due on earned income (employment and business income), as well as against the national real estate tax and the municipal fee. Any amount that cannot be offset in this way is lost.

United Kingdom

Dividends

Dividends are considered the top slice of personal income to which specific rates are applied. The rates are 7.5% up to GBP 32,000 of personal income (including dividends), 32.5% from GBP 32,001 to GBP 150,000 and 38.1% for any amounts exceeding GBP 150,000.

Interest

The progressive tax rates are: 20% up to GBP 32,000; 40% from GBP 32,000 to GBP 150,000 and 45% for any amount above that. Any withholding tax may be deducted (and possible refunded in the case of exemption). A person who does not expect to have to pay income taxes can request the payment of gross interest on bank deposits or under certain conditions ask for a refund of the withheld amounts.

Gilts (bonds issued by the British government) are not subject to withholding but still taxed under the PIT; the same is true for interest on bank deposits (as of April 2016).

Capital gains

The 20% rate applies to taxpayers above the basic rate for PIT purposes; the part of the gains exceeding the individual's basic rate band is taxed at the 10% rate.

Several capital gains exemptions are provided. Among them, the most significant regard: government securities, disposal of assets in the context of ISA accounts, shares subscribed by employees of a company up to the value of GBP 50,000, and debenture issued by resident companies under certain conditions (which represent debt payables in sterling).

EIS, SEIS and VCT

Exemptions are also provided on capital gains from the disposal of shares in⁷⁵:

⁷⁵ For the allowance to be granted, the disposal has to relate to the sale of ordinary shares purchased for genuinely commercial reasons and not in order to reduce the amount of taxation.

- EIS (Enterprise Investment Scheme, an investment scheme in small unlisted UK trading companies⁷⁶). The relief is available provided that the corresponding personal tax relief⁷⁷ (30% of the invested amount being exempt from PIT⁷⁸) was already enjoyed and investments have been held for at least three years from the time of issue or on the starting date of the activity. Deductibility of capital losses is allowed, also against personal income (with a carry back option). In addition, tax on a capital gains on assets can be deferred indefinitely if the gains are re-invested in EIS shares, but the investment must be made either one year before or three years after the gain arose;
- SEIS (Seed Enterprise Investment Scheme: investment in UK small, early-stage companies or start-ups). This scheme is similar to the EIS scheme but with an increased allowance (personal allowance 50% of the cost of the shares, on a maximum annual investment of GBP100,000)⁷⁹. The same exemptions of EIS applies on capital gains from this scheme.
- Investments in venture capital trusts (VTC) under certain conditions (*i.e.* the company has to operate on a European regulated market, hold at least 70% of its investment in unlisted companies and distribute 85% of its income). The personal allowance is 30% of the invested amount up to GBP 200,000, and the gains are exempt subject to a holding period of five years.

United States

Only taxation at the federal level is considered. Not all States levy income taxes. Municipal taxes exist in a limited number of municipalities.

Other than taxes on single types of capital incomes, an additional federal income tax of 3.8% is imposed on net investment income that exceeds a given threshold (*e.g.*, USD 200,000 for single filers).

The US also imposes an alternative minimum tax (AMT) to the extent that it exceeds the regular income tax; this is to ensure that all taxpayers pay a minimum level of taxes.

Dividends

For individuals in the 39.6% tax bracket for ordinary income (over about USD 415,000), dividends are taxed at a maximum rate of 20%; for individuals in the 25%, 28%, 33% and 35% tax brackets, dividends are taxed at a maximum rate of 15%; and for individuals in the 10% and 15% tax brackets (below about USD 37,000), dividends are taxed at a rate of 0%. To qualify for these rates, the share must be held for at least 61 days during the 121-day period beginning 60 days before the ex-dividend date for the stock. If these conditions are not met, dividends are taxed at normal PIT rates.

Interest

Interest received on bonds issued by US states and municipalities for qualified public purposes is exempt from US federal income tax. Interest on US government bonds is exempt from State taxes.

Capital gains

The case in the table refers to assets with holding periods of more than one year.

The 20% tax rate applies to capital gains of individuals in the 39.6% tax bracket for ordinary income. For individuals in the 25%, 28%, 33% and 35% tax brackets for ordinary income, the tax rate is 15%. For individuals in the 10% and 15% tax brackets for ordinary income, the rate is 0%.

Capital losses may be deducted only against capital gains. Capital losses in excess of capital gains, if any, can be deducted against ordinary income up to an annual amount of USD 3,000.

⁷⁶ The amount of funds raised by the company with this schemes cannot be higher than GBP 5 million. The overall company assets cannot exceed GBP 7 million at the time of issuance, and the company cannot have more than 50 employees. There are several additional conditions the company has to meet to enjoy the qualifying status (type of activity, the type of company, use of the funds raised, and the type of trade carried on). Excluded activities are dealing in land, commodities, futures, shares, securities, and other financial instruments; and activities such as banking, insurance, leasing, legal and accountancy services, etc..

⁷⁷ Connected person (defined as having significant substantial interests - control, holding more than 30% of capital or voting shares, or more than 30% of the assets in the event of a winding up, in the period beginning two years before the issue of the shares and ending three years after the issue - or being employed – both as a director or as an employee) cannot be eligible for Income Tax relief.

⁷⁸ Relief can be claimed up to a maximum of GBP 1,000,000 invested in such shares, giving a maximum tax reduction in any one year of GBP 300,000 provided there is sufficient income tax liability to cover it.

⁷⁹ The amount of funds raised cannot be higher than GBP 150,000. The overall company assets cannot exceed GBP 200,000 at the time of issuance, and the company cannot have more than 25 employees.

Annex 3. Taxation of investment funds

Ireland

The final withholding on dividends and interest is 60% for personal portfolio investment undertakings; for capital gains, a deemed disposal is assumed to occur every eight years counting from the date the shares were acquired, constituting a chargeable event. The exit tax on deemed disposal is considered as an advance payment of tax to be set off against the liability due on a subsequent chargeable event (with refund of the possible excess). This tax is not applied if the shares are sold within six months from the eight year period. The issue, transfer and redemption of shares are exempt from stamp duty.

France

As a general rule, distributed profits are taxed as dividends but without the 40% allowance. However, if the investment fund distinguishes the profits according to the source, the standard personal tax treatment is in general available for the different types of income. Capital gains realized by the fund (when distributed) and capital gains on the sale or redemption of fund units may benefit from the most favorable tax treatment linked to the holding period if the fund invests more than 75% of its assets in stocks or shares.

Germany

The law differentiates between investment funds, partnership-like investment funds and corporate-like investment companies. The case in the table is that of investment fund. Although some tax rules are different for the other two categories of investment funds, the basic principle is tax transparency, which is achieved by taxing in the hands of investors both distributed and deemed distributed income. Tax neutrality is not full because capital gains are taxed only when distributed. In order to benefit from the specific tax regime applying to the funds, the fund has to fulfill specific publication requirements. If these requirements are not fulfilled, the investors are taxed on a lump-sum basis.

Effective from 1 January 2018, the principle of tax transparency will be dropped for mutual investment funds. This will allow to eliminate any type of investor tax reporting. In the new system, German-sourced income will be subject to corporate income tax and trade tax at the fund level. To compensate for the double taxation, a part of the income will be exempt in the hands of the investor. The investors will be taxed ordinarily on distributed income, on a lump-sum amount if the investment fund retains income and on capital gains from the sale of the units. The lump sum amount will be based on an average interest rate on government bonds and it will be deducted from the capital gain arising from the sale of the units.

Luxembourg

A subscription tax is levied on the value of net asset; the rate is 0.05% rate, reduced to 0.01% or to zero in some cases. The reduction applies in the case of shares reserved for institutional investors, i.e. investment in money market instruments or deposits and SIFs (Specialized Investment Funds, which are lightly regulated funds reserved for professional investors). The exemption applies in the following cases: if the fund holds shares in other UCITS (Undertakings for Collective Investment in Transferable Securities); for shares dedicated to institutional investors: if the fund performs exclusive activity in money intermediation, the residual portfolio maturity exceeds 90 days, and fund received a high rating from a rating agency; if the shares are reserved for institutions for occupational retirement provisions; for investment in microfinance; for exchange-traded funds; capital gains, which are exempt from income tax if the shares have been held for at least 6 months.

United Kingdom

Generally, UK authorized investment funds (open-ended unit trusts and OEICs – Open Ended Investment Companies) are liable to a modified corporate taxation at a rate equal to the basic rate of income tax (20%), but in practice they escape taxation almost fully. Indeed, equity funds are rarely subject to income tax due to dividend income exemption, so that management expenses offset other income; bond funds (*i.e.* investing more than 60% in interest bearing assets) are equally not taxed in practice as interest distributions are considered as a loan relationship debit and are accordingly deductible from fund income for tax purposes. Tax elected funds (*i.e.* funds which have substantial investment in both equity and bonds and comply with some special requirements) enjoy the dividend exemption and the deductibility of other income (except for property income) with the result that they hardly suffer taxation on this latter. Investment unit trusts (closed-end funds set up as public limited companies) enjoy a similar treatment, with dividend exemption and interest deduction. In addition, gains by funds are also exempt and they are subject to tax in the hands of shareholders when they sell fund units.

United States

Investment funds based in the United States generally use pass-through entities for US federal income tax purposes. US citizens and tax residents are subject to tax on their worldwide income. Worldwide income includes a partner's distributive share of partnership income. The character of the income earned by the partnership also flows through to the investor.

Annex 4. Financial transaction taxes

Table A4 presents summary information on taxes levied on transactions in stock exchanges in the set of countries considered in the study. Information is taken from the Impact Assessment of the 2013 proposal for the introduction of a European financial transaction tax, updated to 2017 using the IBFD database.⁸⁰

Table A4. Financial transactions taxes in Europe

| Country | Tax | Tax base | Exemptions | Tax rates | Taxation of derivatives |
|---------|--------------------------------|--|--|--|-------------------------|
| Belgium | Stock exchange transaction tax | Any purchase or sale of (Belgian or foreign) securities carried out or concluded in Belgium, on both regulated and unregulated markets | Primary market transactions, trading on own account, market making, trading by central counterparties (CCPs) and Central Securities Depositories (CSDs) | 0.27% (with a max of EUR 1,600 per transaction); 1% (with a maximum of EUR 4,000 per transaction) for transactions involving capitalization of stock of investment companies, Belgian or foreign sovereign bonds and bills etc., company bonds, units in UCITS (Undertaking for Collective Investments in transferable securities) and AIFs (Alternative Investment Funds); 0.9% (with a max of EUR 1,300) for transactions on the secondary market involving bonds and debentures. | Y |
| Cyprus | Stock exchange transaction fee | It applies to transactions carried out with all types of securities excluding company | Over-the-counter (OTC) trade is not covered. Certain types of transactions specified by the law (<i>e.g.</i> repurchase of own shares, transactions in bonds, etc.) are exempted | 0.15% | Y |

⁸⁰ European Commission (2013).

| | | | | | |
|---------|--|---|--|---|---|
| | | bonds at the Cyprus Stock Exchange. | | | |
| Finland | Transfer tax | The tax covers only transactions in shares issued by companies resident in Finland. | Transfers made through the stock exchange. Primary market transactions are exempted. If neither party to the transaction is (fiscally) resident in Finland, or the transaction involves a Finnish branch of a foreign financial institution, the tax is not levied | 1.6% | Y |
| France | Transaction tax on shares and naked Credit Default Swaps (CDS) | The acquisition of French shares issued by a company whose market capitalization exceeds EUR 1 billion, high frequency trading tax (cancelled orders above a certain threshold) and naked sovereign CDS. | For the tax on the acquisitions of French shares: primary market, CCPs and CSDs (except transactions realized on their own account), market making; intragroup and restructuring operations, temporary transfer of securities, employee savings, convertible and exchangeable bonds. For the high frequency trading tax and the naked sovereign CDS tax, only market making is exempted. | 0.3% (0.2% before 1.1.2017) for the acquisitions of French shares; 0.01% for the high frequency trading tax and the naked sovereign CDS tax. | Y |
| Greece | Stock exchange transaction tax | Sale of shares listed in the Athens Stock Exchange (ASE), sale of shares listed in foreign stock exchanges or other internationally recognized stock exchange institutions carried out by Greek tax residents or enterprises established in Greece, OTC transactions and transactions made through multilateral negotiations mechanism. | The tax does not apply to sales of shares listed on the ASE regarding transactions conducted by market makers in the ASE and in the Athens Derivatives Exchange (ADEX) to cover risks arising from the implementation of market making obligations, provided such sales are cleared through a special code maintained on their behalf by the CSD. | 0.2% | N |
| Ireland | Stamp duty | Transfers of shares in Irish incorporated companies | Intermediaries, CCPs, stock borrowing; intra-group transfers, mergers/reconstructions/amalgamations, American Depositary Receipts (ADRs); loan capital. | 1% | Y |

| | | | | | |
|-------|--|---|---|---|---|
| Italy | Transaction tax | <p>For the sale of shares and other equity securities: (1) the value of the transaction; (2) for transactions on derivative contracts, taxation is fixed and determined by the type and notional value of the contracts.</p> | <p>The issuance and cancellation of shares and financial instruments in certain conditions; the sale of shares on the regulated markets and multilateral trading systems, securities issued by companies whose average market capitalization in the month of November of the year preceding the transfer is less than EUR 500 million; Transfers of property by inheritance or gift; operations centering around the conversion into new shares and the temporary acquisitions of securities.</p> | <p>(1) 0.2% (0.1% on sales taking place on regulated markets); (2) 0.2%; (3) Derivatives will be taxed at a flat rate ranging between EUR 0.1 and EUR 200 per transaction depending on the type and value of the contracts. For transactions that take place on regulated markets or multilateral trading systems, the tax will be reduced to 1/5 and determined by decree according to the average value of a standard contract.</p> | Y |
| Malta | Stamp duty | <p>The tax is due on every document providing for the transfer of marketable securities (share, stock, debenture, bond and alike, or similar instruments, including options with physical delivery of such shares and bonds).</p> | <p>Transactions involving securities listed in a stock exchange recognized under the Financial Markets Act, those between spouses and those involving trusts etc. are exempted.</p> <p>No duty is chargeable on any restructuring of holdings through mergers, de-mergers, amalgamations and reorganizations within a group of companies defined as: a holding company and its subsidiaries (a company is deemed to be a subsidiary if more than 50% of its voting shares are beneficially owned by its holding company); companies which are controlled and beneficially owned directly or indirectly to the extent of more than 50% of the shares is owned or controlled by the same shareholder.</p> | 2% | Y |
| UK | Stamp duty; stamp duty reserve tax (SDRT) | <p>Stamp duty: UK stocks and marketable securities which are transferred on sale for consideration.</p> <p>SDRT: chargeable securities <i>i.e.</i> stocks, shares and certain</p> | <p>Primary market transactions are exempted from the tax.</p> <p>Other reliefs and exemptions: intermediary relief (a principal broker dealer which is recognized as an intermediary by a trading venue and by HM Revenue & Customs is subject to relief from stamp duty and SDRT on any purchases of UK securities made as principal), stock lending relief, and clearing.</p> | <p>Stamp duty and SDRT: 0.5% on transfers of securities although a higher 1.5% charge applies where UK incorporated shares are transferred on sale (or otherwise than on sale) to a depositary</p> | Y |

| | |
|--|--------------------------------------|
| types of loan capital issued or raised by UK companies, which are agreed to be transferred for money or money's worth. | receipt issuer or clearance service. |
|--|--------------------------------------|

Source: European Commission (2013) and IBFD.

Notes:

Belgium: also taxes exchange-traded derivatives (futures, options etc.).

Cyprus: as regards the taxation of derivatives, taxation is only upon physical delivery (*e.g.* options).

Greece: the Greek stock exchange transaction tax ceased to apply for shares purchased from 1/1/2013 onwards.

Italy: a (flat rate) stamp duty on contracts officially registered by a public notary or under private signature is in place. These taxes have more in common with the indirect taxes other than VAT that apply to services related to certain financial activities.

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