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Towards an International Tax Order for the Taxation of Retirement Income

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Towards an International Tax Order for the Taxation of Retirement Income

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Abstract

In the last decades all over the world pension policy reforms have tried to account for the changing demographic and socio-economic framework. An excellent starting point for economic analyses of reform strategies is the Mirrlees Review which argues that pension policy should simultaneously address pension benefit design and the taxation of pensions. We focus on old-age pension taxation and address policy conflicts which come along with international migration of citizens as employees and pensioners. The widely implemented system of deferred income taxation of pensions benefits generates problems of international tax equity when workers who were exempted from income tax on their old-age pension saving emigrate and receive pension benefits in another country. We argue that it is unlikely to solve these problems in double taxation treaties and propose to amend deferred income taxation with the equivalent system of pre-taxed pension benefits. This amendment seems politically viable, since it keeps two attractive features of deferred income taxation, viz. intertemporal neutrality and preferential taxation in comparison to traditional comprehensive income taxation, but also avoids income tax revenue losses, which are perceived as unfair when pensioners emigrate. In order to achieve a higher level of fiscal equity among EU member countries we regard a multilaterally coordinated system of pre-taxed pension benefits taxation as a superior strategy to single-country measures or complicated renegotiations of bilateral double taxation treaties.

Keywords: income tax reform, taxation of pensions, deferred income taxation

JEL: H2, H24, H55

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1. Introduction

Financial pressure on social pension schemes caused by population aging due to low birth rates and rising life expectancy has been a driving force for reforms of national pension systems across OECD countries (OECD 2013) since 2000.

One common reform measure in many OECD countries has been the raise of the regular retirement age to 67 years or even higher in the next decades. Moreover measures were implemented which increase the costs for early retirement and should help pushing the effective retirement age towards the statutory one. Finally also the gradual reduction of replacement rates has provided incentives to work longer and to abstain from early retirement

A second objective in pension reform has been the improvement of the income situation for retirees with unacceptably low pension benefits. While sustainability forced countries to cut pension entitlements in order to reduce public expenditures for state pensions in the long run, they also were aware of hardships for low pension recipients and tried to protect them from falling below the poverty line.

A third reform strategy has been the promotion of privately funded pension regimes which complement or partly replace public pensions. The long term target has been to widen the sources of retirement income and to establish multi-tier pension systems which comprise state pensions, occupational pensions and private pensions.

Although the success of pension reform will only materialize in the long run, it is nevertheless useful to look at the short-term performance which helps to improve political support of reform measures. Results differ between member countries but there are positive feedbacks on measures for the OECD as a whole. Based on the Pension Sustainability Index, developed by Allianz Economic Research (Allianz 2014), only one of the 50 countries surveyed has an Pension Sustainability Index below 5 (Thailand) and another 12 below 6 on a “1 to 10” scale, indicating that there is substantial although not urgent need for reform. In the upper tail there are only 12 countries with a Pension Sustainability Index exceeding 7 (including AU, NZ and US, but only three EU member states, viz. SE, NL and DK). A positive development can also be asserted to the old-age poverty rate, which moved down to 12,8% in 2010 from 15,1% in 2007 (OECD 2013, 163ff.). Finally the OECD average gross pension replacement rate of the 65+ population, which is as low as 41% in 2012 if only public pensions are considered, moves up to 54% if also private mandatory pensions are included, and further up to 71% if voluntary private pension income is included as well (OECD 2013, 138ff.). Net income replacement rates, which account for the effects of the tax system during the periods of accumulation and benefit pay-out show a similar pattern starting out with 49% for state pensions, moving up to 64% if mandatory pensions are included and reaching 79% for all three types of pensions (OECD 2013, 142ff.).

This recent development of old-age pensions in OECD countries exhibits three characteristic features. First, old-age income consists of a mix of public and private pensions but the composition in changing over time and varies between countries. Second, the accumulation periods of mandatory pensions have been extended but entitlements to receive pension benefits differ between pension programmes within countries and across countries. Third, countries subsidize pensioners when they have to rely on pensions as their main source of income and they generously support retirement saving for future pensioners. National differences in pension policy are reinforced by remarkable differences in subjecting pension wealth accumulation and pension benefit pay-outs to income taxation.

The objective of the paper is to identify and to characterize these latter differences, to evaluate the consequences and to discuss needs for tax policy reforms in order to avoid undesirable outcomes for pensioners and government revenues. Following the view of the Mirrlees Review we argue that pension reform should simultaneously address pension policy design and the taxation of pensions. We emphasize a further dimension of policy conflicts which comes along with international migration of employees and pensioners and generates problems of international tax equity not addressed in double taxation treaties.

The paper is organized as follows. In section 2 we discuss the composition and the taxation of old-age income in two developed European economies, Germany and Switzerland. Based on evidence within the OECD we try to develop some economic recommendations for a desirable and sustainable old-age pension regime in section 3. In section 4 we shift the focus on taxing old-age pensions and formulate a set of tax principles for a multi-tier old-age pension system. In section 5 we expand our scope to a multi-country world with mobile workers and pensioners and argue in favour of an international coordination of pension taxation. Section 6 concludes.

2. Composition and Taxation of Old-age Pensions in Germany and Switzerland

To characterize the divergence in pension systems we compare two high developed European economies which exhibit a high standard of social policy, Germany and Switzerland. Both countries belong to the wealthiest countries in the world, with welfare indicators well ahead of the OECD average in the last decades. Their current performance is reflected in table 2.1.

Table 2.1 Welfare indicators for Germany and Switzerland

Key indicators 2012	Germany	Switzerland	OECD average
GDP per capita (current prices, PPP, in US $)	41900	53600	37300
Average workers earnings (in US $)	59100	94900	42700
Life expectance at birth (in years)	80,6	82,5	79,9

Source: OECD (2013); OECD (2014)

Both countries have established a three-tier pension system consisting of public, occupational and private pensions. Moreover both countries apply a tax system which supplements a comprehensive income tax with a value-added tax. Being direct neighbours with very intense relations in trade, financial affairs and migration the countries used to adjust their policies to support the close economic relationship. Although Switzerland has refused to become a EU member country the network of bilateral treaties between the EU and Switzerland ensures that there do not exist pronounced obstacles between the two countries which constrain cross-border flows of commodities, capital, firms and people.

Table 2.2 Statutory Pensions in Germany and Switzerland

	Germany	Switzerland
Source of finance	Pay-as-you-go	Pay-as-you-go
Contribution rate in % (ER/EE)	9,95/9,95	4,9/4,9
Benefits	Pension points-based DB	DB
Statutory retirement age (m/f)	65/65 (increasing to 67)	65/64
Replacement rate in % (gross/net)	42/55	32/43
Old-age dependency ratio in %	32	25
Life expectancy at 65 (m/f)	18/21	19/22
Public pension expenditure	10,2% of GDP	6,3% of GDP

Source: OECD (2013)

But with respect to old-age income the two countries have established social systems which differ markedly in the composition of pension income as well as its tax treatment. The system of statutory, occupational and private pensions is compared in tables 2.2 to 2.4. The public sector provides a well-developed statutory pay-as you-go system in both countries, but the setup of the three-tier system differs significantly.

In Germany statutory pensions are the dominant source of old-age income and they are supposed to be high enough to replace current income of employees and their dependents after retirement. Funded pensions, either occupational or private, are a minor supplementary source of old age income, although their importance has grown after the pension reform of 2001.

Table 2.3 Occupational Pensions in Germany and Switzerland

	Germany	Switzerland
Enrolment	Voluntary	Mandatory (above income floor)
Source of finance	Fully funded, employer contributions to book reserves, pension funds, direct insurance	Fully funded, employer and employee contributions
Contribution rates in % (ER/EE)	0/employer determined rates	>7-18/7-18 (age dependent)
Benefits	Mostly DB, but also DC, with capital guarantee, annuity or lump sum	Mostly DC, with minimum return guarantee, up to 25% lump sum
Withdrawal age (m/f)	62/62	65/64 tied to statutory pension
Replacement rate in % (gross/net)	n.a/n.a.	23/31
Coverage in %	22	70
Pension assets	19% of GDP	111% of GDP

Source: OECD (2013); Allianz (2013); Wellisch et al. (2008)

In Switzerland, on the other hand, old-age income is derived from a balanced three-tier system of pensions. The eligibility to statutory pensions is not restricted to employees but covers essentially all residents as there is a general obligation to contribute to the old-age and dependant survivers insurance system (Alters- und Hinterlassenenversicherung, AHV) during the working life. AHV benefits are earnings-related, but the benefit system contains lower and upper bounds, which ensure a minimum pension as well as a cap on statutory pension benefits for pensioners who earned higher income during their working life. The mandatory occupational pension system has become the main source of stabilizing the replacement rate after its introduction in 1986 for almost three quarters of the working force. Occupational pensions are fully funded and are fully portable in course of occupational changes. Moreover mandatory occupational pensions can be supplemented by private pensions and the Swizz population makes universal use of private pension saving.

Table 2.4 Private Pensions in Germany and Switzerland

	Germany	Switzerland
Enrolment	Voluntary	Voluntary
Source of finance	Fully funded Riester pensions (since 2001) Rürup pensions (since 2005)	Fully funded qualified contracts (life insurance, bank deposits, investment banks
Contribution rate	Minimum 4%, ceiling for subsidized annual amount	Individual, ceiling for annual amount
Benefits	Annuities or lump sum	Annuities, phased withdrawal or lump sum
Withdrawal age (m/f)	62/62	60/59
Coverage in %	37	close to 100
Household savings ratio in %	11	10
Average financial wealth per capita in Euro	56.000	152.000

Source: Allianz (2013); Wellisch et al. (2008)

There is a substantial difference between Germany and Switzerland in non-statutory pension saving, as the coverage in Germany is only about one third to that in Switzerland, although Germany has been catching up in the last decade.

Table 2.5 Taxation of Pension Income in Germany and Switzerland

Type of pension	Germany	Switzerland
Statutory	t-E-t ER contributions tax-free, EE contributions deductible up to allowance ceiling, benefits preferentially taxed	E-E-T AHV contributions and asset returns tax-free, AHV benefits taxable
Occupational*	t-E-t (pension funds) E-E-T (benevolent funds) E-T-T (direct pensions)	E-E-T contributions tax deductible, asset returns tax-free, benefits taxed (full, 80%, 60%)
Private	E-E-T contribution to Riester and Rürup pensions deductible and subsidized	t-E-t tax allowance for contributions, preferential tax rates for benefits

* Pension fund = Pensionsfonds; benevolent fund = Unterstützungskasse;
direct pension = Direktzusage

Source Wellisch et al. (2008) p. 27; International Bureau of Fiscal Documentation (2014)

Although income taxation in both countries is designed according to the Schanz/Haig/Simons standard of comprehensive income taxation, the respective income tax codes usually do not tax the annual increase of individual pension wealth but postpone income taxation until accumulated pension wealth is paid out. Progressive income taxation in both countries implies that the downward shift in income after retirement reduces the tax burden on pension benefits and is one important determinant of the difference between the gross and the net replacement rate of pension income. Table 2.5 tries to summarize and to compare income taxation of different forms of pension income in Germany and in Switzerland. There is striking evidence that despite common practice of income tax deferral, income taxation of statutory and private pensions differs within the two countries as well as between them. Table 2.5 presents the income tax rates during to the three phases of pension involvement, viz. the contribution payment phase (= pension saving), the wealth accumulation phase (= current return during the holding period of pension wealth), and the benefit pay-out phase (de-accumulation of pension wealth). During the three phases the tax rates applied are either T, the regular income tax rate, t, a reduced preferential rate, or zero, if income is exempted from taxation and thus denoted by E.

Switzerland applies deferred income taxation, E-E-T, to statutory pensions and to most forms of occupational pensions. Economically this implies that mandatory pension saving is taxed according to the expenditure-tax standard rather than to the comprehensive-income-tax standard. From a legal perspective, however, pension wealth is not regarded as personal wealth which is liable to income taxation, and E-E-T on pension saving is not regarded as a contradiction to T-T-E taxation of comprehensive income taxation and the ability-to-pay principle. This legal view is also true for Germany although the German Income Tax Code codifies another specific form of taxing statutory pensions. Applying t-E-t also denies the existence of taxable pension wealth, but splits the income tax liability on pension benefits. Mandatory contributions to the statutory pension system are only partly tax-exempt and therefore generate a pre-taxation of pension benefits. Returns on pension wealth are tax exempt while accumulating and only taxed as a share of old-age pension benefits being paid out. But since 2005 Germany has been gradually reducing pre-taxation and increasing deferred taxation. By 2040 all statutory pensions will be taxed E-E-T. Private pensions are fully funded in Germany and in Switzerland but they are nevertheless subject to different forms of deferred income taxation which deviate from the comprehensive income standard..

3. Economic Recommendations for a Desirable Pension System

The evidence of taxing pensions in Switzerland and Germany exemplifies the widespread heterogeneity in taxing pension saving in the EU as well as in the OECD. Although comprehensive income taxation is the common standard of income taxation in most of the countries[1], deferred taxation of pension income is a popular exception from the Schanz/Haig/Simons standard, at least for statutory pensions. There are however

[1] The dual income tax of the Nordic countries should be regarded as an exception because the capital income which reflects the normal return to capital wealth is subject to a separate, lower tax rate.

prominent deviations from the E-E-T type deferral rule, e.g. t-E-T in France, Ireland, Canada, Netherlands, UK, t-E-t in Germany (although being phased out gradually until 2040) and the U.S., T-E-E in Liechtenstein, t-E-E in Hungary, E-E-E in Slovakia (see table 4.1). Occupational and private pensions are often supplementary and taxed differently within and between countries reaching from comprehensive T-T-E taxation to almost full income tax exemption.

While countries are free to choose the income taxation standard and to state constitutionally feasible deviations from that standard in order to influence individual behaviour in a politically desirable way, tax preferences usually trigger a strong incentive to overuse them and to create tax loopholes by sophisticated tax engineering. There is ample evidence across countries, how efficient tax loopholes can be expanded and how costly tax preferences can become for the government in terms of reduced tax revenue. With respect to pension saving it is easy to conceive that shifting high taxed regular saving into low taxed pension saving is easy and cheap and it pays if pension wealth can be used at little or no cost for private investment projects[2].

Basically there are two possibilities to get rid of inconsistencies and undesirable tax loopholes in pension saving: First, no inconsistency will occur if pension saving is restricted to a one-tier pension system, presumably publicly run. Second, no inconsistency will be triggered by pension saving, if all forms of saving within a multi-tier pension system are consistently taxed under the Schanz/Haig/Simons standard. Checking these two options we argue below that a single-tier pension system is unlikely to meet the economic requirements of a market-based pension system.

Rational individual pension saving must serve different objectives: A first objective is consumption smoothing in order to meet individual inter-temporal consumption preferences when earned income expires after retirement. A second objective is insurance against the longevity risk in order to keep a desirable living standard over the whole retirement span. Thirdly, the pension system should provide insurance against old-age

[2] Superannuation saving in Australia is a well-documented example showing that investment in tax favored superannuation vehicles is concentrated among upper income earners who may withdraw substantial amounts of superannuation wealth into disposable income as a lump sum. Cf. Bateman and Kingston (2010).

poverty, which is aggravated by frequent unemployment periods during the working life and by increasing subsistence costs due to illness and care) after retirement. Finally, the pension system should give some leeway to the individual to decide upon the point of retirement endogenously. In a perfect market rational individuals should be able to trade off marginal utilities from inter-temporal spending decisions on consumer goods and insurance contracts. But real markets are unlikely to meet these requirements and individual pension savings decisions will suffer from market failures due to biased preferences, capital market imperfections, lacking insurance markets, information deficits, etc. Hence government interference in pension saving is economically justified as a welfare increasing second-best device.

Pension policy design must account for these different objectives and find a socially adequate trade-off which avoids old-age poverty, unfair distribution of old-age income, detrimental income risks for pensioners, inflexibility and non-consideration of individual preferences. Theoretical analyses call for a pension system which includes mandatory as well as voluntary channels of pension saving (cf. Holzmann/Hinz 2005, Barr/Diamond 2008, Mirrlees 2010). Mandatory pension saving seems necessary to avoid inefficient individual insurance against longevity and old-age poverty risk due to moral hazard[3] and adverse selection, but also due to myopic undervaluation of future old-age consumption. Voluntary pension saving will only be efficient with respect to individual inter-temporal consumption and to work-leisure choices (including part-time work and full retirement) if capital markets provide simple and transparent savings tools[4]. The simultaneous existence of mandatory and voluntary components within a desirable pension system indicates that an optimal pension system should be a multi-tier system rather than a general one-tier statutory pension system.

Moreover the government is obliged to keep the pension system sustainable in order to avoid intergenerational inequity, and to adjust it to changes in the economic and demographic fundamentals and to changes in social policy. As these interventions will

[3] Non-saving is a rational strategy for those low-income earners who rationally exploit minimum support measures open to citizens below the poverty line.
[4] Insufficient education of citizens in the mechanism of capital markets leads to economically poor and individually costly pension savings decisions.

affect the capital and the labour market, potential distortions of economic growth must be appropriately accounted for.

4. Tax Reform Requirements to Cope with a Multi-tier Pension System

In a multi-tier pension system retirees receive old-age income from different sources. Under a comprehensive income tax regime the tax authority must check in each tax year to which extent the pension payments which a pensioner receives are taxable comprehensive income or withdrawals from already pre-taxed pension wealth.

Under a pure comprehensive income tax the annual growth of pension wealth must be taxed as comprehensive income, irrespective if the accumulation of pension wealth stems from pension saving or from returns on already accumulated pension wealth. The appropriate form of taxation would be T-T-E. If, however, the entitlement to old-age pensions is not qualified as individual pension wealth and contributions to the pension system are not regarded as pension saving but as a mandatory contribution to a public fund which does not generate taxable returns then only the pension benefit pay-outs are comprehensive income and the appropriate form of taxation would be E-E-T.

Although both forms of taxation avoid double taxation of lifetime income it is important to acknowledge that tax burdens under T-T-E and E-E-T are not equivalent because the nominal interest component which outweighs inflation is taxable under a comprehensive income tax. Deferred taxation of comprehensive income, viz. E-E-T, provides a tax relief by reducing the life-time tax burden in present value terms in comparison to T-T-E.

Empirical evidence across countries nevertheless reveals political willingness to offer tax privileges to pension saving. From an economic perspective taxing pension wealth accumulation under E-E-T can therefore be interpreted as a general tax relief for retirement income. The legal perspective seems to be different and decisions of constitutional courts reveal that deferred taxation of pension saving is not regarded as a tax relief which contradicts tax equity norms.

Table 4.1 Income Taxation of Statutory Pensions in OECD Countries

Tax regime	Country	Characterization of tax regime
T-T-E	None	Comprehensive income taxation
t-E-T	FR, IR, CA, MT, NL, UK	Deferred comprehensive income tax with double taxation relief
E-E-T	BE, DK, EE, FI, GR, IT, LT, LU, AT, PO, PT, SE, CH, SI, ES, CZ, CY	“Deferred” comprehensive income tax, Fisher/Kaldor expenditure tax
t-E-t	DE, US	Fragmented expenditure tax
T-E-E	LI	Prepaid expenditure tax
t-E-E	HU	Reduced prepaid expenditure tax
E-E-E	SK	Full income tax exemption

Source: Wellisch et al. (2008) table 2, p.27.

A closer look at single countries however discloses a broad diversity in tax rules for pension benefits. Whereas in all countries listed in table 4.1 statutory pensions are taxed more lightly than under a pure T-T-E comprehensive income tax, the range for occupational and private pensions exhibits a broad band of tax rules, reaching from T-T-E at the upper end to tax burdens which are even lower than cash-flow taxation E-E-T at the lower end. (tables 4.2 and 4.3)

Tables 4.1 to 4.3 approve that comprehensive income taxation, viz. T-T-E, can certainly not be identified as a normative guideline for national tax policies which treats pension income in an efficient and equitable way. Although the forms of income taxation to statutory, occupational and private pensions differ within countries as well as between countries, there is a common preference for deferred income taxation. Cash-flow expenditure taxation E-E-T is popular for statutory pensions (table 4.1) and to a considerably less extent for occupational pensions, but no country in the sample applies it for private pensions (table 4.3).

Table 4.2 Income Taxation of Occupational Pensions in OECD Countries

Tax regime	Country	Characterization of tax regime
T-T-E	DK, US	Comprehensive income tax
t-T-t	IT, SE	Comprehensive income tax with partially deferred savings taxation
T-E-T	CA, MT	Comprehensive income tax with deferred return taxation
E-T-T	DK, DE, PT, US	Comprehensive income tax with deferred savings taxation
t-E-T	BE, EE, FI, FR, IR, LT, AT, SI, UK, CY	Deferred comprehensive income tax with double taxation relief
E-E-T	DE, GR, CA, LU, NL, AT, CH, SI	Fisher/Kaldor expenditure tax
T-E-E	PO	Prepaid expenditure tax
t-E-t	DE, LI, AT,PT, SK, ES, HU, US	Partially deferred prepaid expenditure tax
t-E-E	GR, LI, LU, AT, HU, CY	Reduced prepaid expenditure tax

Source: Wellisch et al. (2008), table 3, p. 29

One conclusion to be drawn from the revealed social preference for taxing pensions is that tax equity is of minor importance, given that the deviation from comprehensive income taxation is ubiquitous in all countries. Given that providing incentives to old-age pension saving by a general tax relief on pension saving is the dominant policy objective, efficient tax policy should not differentiate tax benefits between different forms of pension saving. Thus preferential taxation should be complemented by a neutrality rule which grants a level playing field for the competing vehicles of retirement saving. Neutrality is achieved if risk-free equal post-tax returns among different forms of pension saving implies equal risk-free pre-tax returns. Moreover intertemporal neutrality would eliminate any form of systematic bias against future consumption which is inherent to the comprehensive income tax.

Table 4.3 Income taxation of private pensions in OECD countries

Tax regime	Country	Characterization of tax regime
T-T-E	DK, SE	Comprehensive income taxation
t-T-t	IT	Partially deferred comprehensive income tax
T-E-T	FR, MT	Comprehensive income tax with deferred return taxation
E-T-T	DK	Comprehensive income tax with deferred savings taxation
t-E-T	BE, EE, FI, FR, IR, CA, LT, LU, CH, SI, UK, CY	Comprehensive income tax with deferred savings and partially deferred savings taxation
T-E-t	DE,FI, FR, MT, ES	Comprehensive income tax with deferred preferential savings taxation
E-E-T	None	Fisher/Kaldor expenditure tax
T-E-E	PO, US	Prepaid expenditure tax
t-E-t	DE, LT, LI, LU, NL, AT, PT, CH, SK, ES, CZ, HU, US	Partially deferred prepaid expenditure tax
t-E-E	GR, LT, LI, AT, HU, CY	Reduced prepaid expenditure tax

Source: Wellisch et al. (2008), table 4, p.30

In a perfect capital market this systematic bias is eliminated by applying a Fisher/Kaldor expenditure tax instead of a Schanz/Haig/Simons comprehensive income tax because the first does not distort the first-order condition of optimal intertemporal consumption whereas the latter does.

From an economic perspective the intertemporal neutrality property makes E-E-T taxation of pension savings a more attractive guideline for national tax codes than the documented package of the EU Commission's objectives of reducing the income tax burden of pension savers and shifting national tax revenue to future periods[5]. Another attractive feature of E-E-T taxation is that all returns on pension wealth associated with statutory, occupational or private pensions are subject to income taxation when benefits are paid out. This is particularly welcome for excess returns on pension funds but it is also justified for pension benefits which are partly financed through direct injections or loss coverage of the state if revenue from contributions falls short of expenditure for pension benefits.

While intertemporal neutrality of pension saving and consumption smoothing, as well as subjecting excess returns on pension saving to income taxation, are economically attractive features of deferred income taxation, running an E-E-T system for pension saving will not be simple and cheap. On the one hand monitoring tax deductible contributions to different forms of pension saving is challenging as there will be a strong incentive for tax engineering to declare regular saving and variants of capital investment as tax deductible pension saving. On the other hand comprehensive taxation of pension payouts requires compliance with the growing 65+ sector of the population who will receive old-age income from different institutional bodies depending on their professional affiliation during working life and their individual decisions on supplementary private pension. Moreover this pension benefits will not only be paid out by domestic but also by foreign financial bodies. Filing income tax returns of some complexity and tax auditing will accompany old and geriatric tax payers for the rest of their life.

There is however a further problem with deferred taxation of pension benefits, in particular within the EU. Free mobility of EU residents affects income tax revenue of EU member states because tax deductibility of pension saving in the working years and

[5] Based on its Communication Document of 2001 (COM(2001) 214, 19f.) the Commission welcomes a broader application of the E-E-T principle and restates this view in its website in 2015 (icon Pension Taxation http://ec.europa.eu/taxation_customs/taxation/personal_tax/pensions/index_en.htm) "The Commission supports this system of deferred taxation since contributions to pension funds diminish a person's ability to pay taxes and since it encourages citizens to save for their old age. In addition, it will help Member States to deal with the demographic time-bomb, as they will be collecting more tax revenue at a time when more elderly people may call on the state for care."

taxation of pension benefits in the retirement years may not take place in the same country. We discuss these objectionable effects of income tax distribution among national fiscs in the next section.

5. The Case for International Coordination of Pension Taxation

One of the crucial liberties of the EU Internal Market is the free mobility of persons. Free mobility includes free access to the labour market and to business activities as well as free access to residency in any EU member country for every EU citizen.

The number of foreign-born people in a country can be used as a crude indicator of immigration to that country and as a share of total population in the EU-28 this indicator has reached a level of 10,1% by 2014 (table 5.1). The figures vary across member countries reaching more than 40% in Luxembourg and less than 2% in Bulgaria, Poland and Romania. A high share of foreign-born residents, viz. 15% or more, can be found in Belgium, Ireland, Cyprus, Austria and Sweden. The share of foreign citizens in the EU member states exhibits a similar pattern. In the last decades the share of foreign citizens as well as foreign born residents has been rising, based on increasing numbers of EU citizens migrating within the EU or non-EU individuals entering and leaving the EU. Roughly one third of foreign-born residents in the EU27 are born in other EU member states while two thirds are born in a non-EU country (cf. Vasileva 2012).

Countries which are affected by immigration and emigration have to cope with various policy problems, one of them and up to now certainly not the most important one is impact of migration on government revenue.

Table 5.1 Foreign Citizens and Foreign-born population in EU Member Countries 2014

Country	Population (Mill.)	Foreign citizens (% of population)	Foreign born citizens (% of population)
EU-27	502,6	6,8	10,1
BE	11,2	11,3	15,8
BG	7,3	0,8	1,5
CZ	10,5	4,1	3,8
DK	5,6	7,1	10,1
DE	80,8	8,7	12,2
EE	1,3	14,8	14,9
IR	4,6	11,8	16,1
GR	10,9	7,7	11,4
ES	46,5	10,1	12,8
FR	65,8	6,3	11,6
IT	60,8	8,1	9,4
CY	0,9	18,6	22,3
LT	2,0	15,2	13,5
LI	2,9	0,7	4,7
LU	0,5	45,3	43,3
HU	9,9	1,4	4,5
MT	0,4	5,9	9,4
NL	16,8	4,4	11,6
AT	8,5	12,4	16,6
PL	38,0	0,3	1,6
PT	10,4	3,8	8,2
RO	19,9	1,1	1,1
SI	2,1	4,7	11,4
SK	5,4	1,1	3,2
FI	5,4	3,8	5,5
SE	9,6	7,1	15,9
UK	64,3	7,8	12,5

Source: Eurostat (2015)

E-E-T taxation of pension saving implies that each year the income tax base is reduced because earnings spent on old-age pension contributions or on pension saving are deductible. In a closed economy this income tax revenue loss is only temporary because income tax becomes due in later years when old-age pension income is paid out after retirement. If pensioners move to another member state later in their working life or after retirement and are taxed according to the residence principle, which is the general rule in double taxation treaties, then the emigration country would face a revenue loss because migrants pay income tax to the tax authority of their new residence country. The typical tax policy measure of national governments is to make use of the room for source taxation of old-age pension income or to call for a revision of double taxation treaties which do not contain an appropriate source tax entitlement.

The current tax rules on old-age pension income to non-residents differ widely. The national rules differ with respect to statutory, occupational and private pensions, they differ within countries and between countries according to the form of tax assessment (withholding at source or annual returns), according to the tax rate to be applied (progressive or specific income tax rate), and according to income tax preferences granted when contributions were made. Apart from the incredible complexity of tax rules any extensive use of limited income tax liability in the source country runs the risk of international double taxation.

Efficiency and fairness design of an old-age income tax regime can only be achieved if national and international objectives are considered simultaneously: Firstly, subsidizing voluntary old-age pension saving of the young seems necessary to complement mandatory statutory and occupational pensions which are regarded as insufficient to smooth intertemporal consumption in an aging society. Second, national as well as international double taxation of old-age pensions should be avoided. Thirdly, revenue from income taxation over the life-cycle must be allocated fairly among involved states. Finally, pension taxation should not distort migration decisions individual of workers or pensioners. Basically objectives 2, 3 and 4 are closely related to fundamental principles of the European Union and seem to recommend a coordinated European approach.

The problem of the current state of pension taxation is that the EU concentrated on objective 1 by recommending portability of pension entitlements and E-E-T taxation of pensions but left the solution of the other three objectives to the member states. It is not surprising that member countries focused on national fiscal revenue by using or extending the room of existing double taxation treaties.

The crucial problem of fairness among national fiscs is that initial income tax exemptions to migrants cannot be recouped by measures of double taxation treaties in a simple and transparent way. Negotiations on any form of source taxation of cross-border pension income suffer from the lack of transparency on previous income tax losses induced by preferential income tax treatment of pension savings. A temporary extension of unlimited income tax liability in the source country will only work if pensioners migrate when they already receive pension payments. And codifying a reimbursement scheme according to which residence countries compensate source countries for migration-induced income tax losses seems an impossible political venture.

Thus it should be good news for the EU to perceive that there exists a tax regime which promises a tax relief to pensioners which (subject to certain assumptions) is equivalent to that under deferred pension taxation but avoids international tax revenue losses when pensioners migrate.

Besides the once-only principle of taxing old-age pensions under an E-E-T income tax the other crucial economic property is intertemporal neutrality, viz. no distortion of lifetime consumption by a Fisher/Kaldor type expenditure tax. The same neutrality principle is ensured by a T-t-E income tax which keeps withdrawals of accumulated pension wealth tax-free, but taxes pension savings, when contributions are made, and excess returns on pension wealth, when they accrue. It must be admitted that equivalence, implying that E-E-T and T-t-E taxation are equal in present value terms and charge the same total tax burden on pensioners, can only be achieved under simplifying assumptions, i.e.. marginal income tax rates are constant over time, symmetrical treatment of positive and negative income tax bases. It is however true for both income tax regimes that the present values of the tax burdens are lower than the corresponding tax burden under comprehensive income taxation.

Whereas E-E-T and T-t-E taxation are intertemporally neutral and amounts of taxes in present value terms are paid by the tax payer and received by the tax authority in a closed economy, the situation changes in an open economy setting. National tax authorities are no longer indifferent between the two tax regimes as their revenue situation changes if tax payers migrate.

The important advantage of applying T-t-E is that migration of pensioners will no longer distort international equity among treasuries. Pension benefits will be pre-taxed when contributions to pension systems are not deductible in the country of residence and no recouping of income tax relief is required to restore equity among international fiscs.

It is however true that double taxation occurs if a source country implements T-t-E and the residence country continues taxing pension benefits of immigrants as current income. But due to the almost completed net of double taxation treaties this problem can be avoided if the residence country applies exemption with progression to cross-border old-age pension payments.

Another important point of discussion for every tax regime is administrability which for a T-t-E tax crucially depends on a transparent and simple determination of excess returns on pension wealth. One attractive feature of T-t-E taxation is that its administration is largely in line with capital income taxation under a comprehensive income tax regime. Under both regimes pension savings are not deductible. There is however a difference in the treatment of returns to pension wealth. While under a comprehensive income tax the total annual returns on pension wealth R are taxable income, T-t-E requires that only excess returns are taxable. The appropriate calculation of excess returns requires a political decision on a rate of normal returns to pension wealth. A theoretical benchmark for such a rate is a risk-free interest rate. This normal rate of return must be fixed for each year and it must be the same for all tax payers. Once this normal rate of return is fixed the allowance A for the amount of normal returns and the respective tax load $T.(R - A)$ can be calculated for each tax payer. Instead of using $(R-A)$ as a component of the individual income tax base T-t-E income taxation makes use of a simple transformation by defining a reduced income tax rate t, which applied to total returns R raises the same amount of income tax, $t.R = T.(R - A)$. t is thus defined by $t = T.(1 - R/A)$. Allowance A or equivalently the tax rate decrement (T-t) reveal the tax preference which is implicitly incorporated in the EU recommendation for deferred pension taxation rather than applying the comprehensive income tax.

A second advantage in administering T-t-E in contrast to E-E-T is that no control of correct deductions for pension saving is required. Administration and compliance are greatly simplified as old-age pension contributions and pension savings do not reduce the income tax base. Excess returns on pension wealth are calculated in the pension accounts of the financial institutions which accumulate pension wealth. Control of appropriate tax payment by tax authorities can thus focus on a small number pension funds and other registered institutions managing old-age pensions and no further audit of millions of individual income tax returns is necessary. Since old-age pension benefits to pensioners are tax-free no income tax filing is required even if they receive pension benefits from several sources. This final advantage will not be reaped if not all pension savings vehicles are pre-taxed although any mix of E-E-T and T-t-E taxation for different types of old-age pensions does not jeopardise intertemporal neutrality or interpersonal equity.

Statutory pensions may nevertheless generate two kinds of excess returns which cannot be appropriately captured by pre-taxation. Minimum pensions which are granted and contain a subsidy to match the old-age poverty line are one form of excess return. Another form of excess return is pension benefits in case of longevity. For both cases individual pre-taxation based on expectation values of poverty or longevity might be regarded as unfair. An appropriate solution to this problem would be to disentangle and to separate old-age pension claims and social insurance claims in case of poverty and longevity. But even if these public transfers are regarded as taxable income the income tax burden will be zero in most cases as the resulting annual tax base for poor and very old pensioners will be well below their personal income tax allowance .

6. Concluding Remarks

Although national tax codes exhibit a huge variety of tax preferences offered for old-age pension saving there is evidence that the EU recommendations for deferred income taxation have been implemented by a majority of EU member countries. Thus the Commission's initiative has to be be regarded as a successful start toward a coordination of old-age pension taxation, which supports objectives to reform national pension systems across Europe in order to cope with distortions in private saving, demographic changes, and old-age poverty.

The drawback of this EU recommendation is however that it did not account for migration of citizens, either as workers or as retirees, and for its effects on the international distribution of income tax revenue under an E-E-T regime. It is very unlikely that the existing network of bilateral double taxation treaties can me revised appropriately to cope with undesirable international inequities caused by tax revenue shifts if workers and pensioners migrate. Unilateral measures taken by single states to recoup income tax losses by taxing the accumulated pension wealth of migrants upon emigration have been judged inconsistent with EU law by the European Court of Justice (cf. Wellisch et al, 2008, 48ff.).

There is no doubt that the Commission is forced to deal with this problem since unrestricted mobility of EU citizens is one of the fundamental achievements of European integration. The paper proposes a coordinated income tax regime for taxing old-age pensions which should be interpreted as an extension of the E-E-T proposal rather than ita repeal. This view can be backed economically since E-E-T and T-t-E are equivalent systems of pension income taxation. As a matter of fact the Commission's intended preferential treatment of pension saving can be implemented by two intertemporally neutral and present-value equivalent forms of taxation, viz. E-E-T and T-t-E.

We show in the paper that European pension tax coordination pursuant to T-t-E is attractive since conflicts about the international distribution of income tax revenue due to migration of workers and retirees can be avoided and costs of administration and compliance can be kept low.

The advantage of T-t-E pension taxation can however only be earned to its full extent if all member countries affected by revenue losses due to migration agree and switch to the prepayment system. To speed up the coordination process among EU member states a recommendation of the Commission in favour of T-t-E taxation as an amendment to E-E-

T taxation would certainly be helpful. It will certainly take some time for the EU Commission to consider pension taxation as a serious problem which should be solved at the European level. But such a step towards a consistent European tax order should also be welcome by the member states once they realize that constraining the room for national tax legislation by adopting T-t-E taxation of pensions on the one hand leaves their national fiscal autonomy untouched on the other.

References

Allianz (2013) Country Factsheets 2013, Allianz International Pensions, Allianz SE, Munich.

Allianz (2014) 2014 Pension Sustainability Index, Allianz International Pension Papers 1/2014, Allianz SE, Munich

Barr, N., and Diamond, P. (2008) Reforming Pensions: Principles and Policy Choices. Oxford UP.

Bateman, H. and Kingston, G.. Tax and Super - Unfinished Business. JASSA Finsia Journal of Applied Finance, No. 4, 2010: 49-54.

Diamond, P. (2009) Taxes and Pensions. Southern Economic Journal 76, 2-15.

Diamond P. (2011) Tax Theory and Tax and Pension Policies. Economic Record 87, Special Issue, 2-22.

Eurostat (2015) Migration and Migrant Population Statistics. Eurostat Data Base.

Genser (2015) Towards an International Tax Order for the Taxation of Retirement Income, University of Konstanz Working Paper 2015-13, March..

Holzmann, R. and Hinz, R. (2005) Old-age Income Support in the 21st Century. An International Perspective on Pension Systems and Reform, The World Bank, Washington, D.C.

International Bureau of Fiscal Documentation (2014) European Tax Handbook 2014, Global Tax Series, IBFD, Amsterdam.

Mirrlees, J. (2010) Tax by Design – The Mirrlees Review, Oxford UP

OECD (2013) Pensions at a Glance: OECD and G20 Indicators. OECD Publishing, Paris.

OECD (2014) OECD Factbook 2014: Economic, Environmental and Social Statistics. OECD Publishing, Paris.

Vasilewva, Katja (2012) Population and Social Conditions. Eurostat Statistics in Focus 34/2011.

Wellisch, D., Lorz, S. Thiele, K., and Gahl, R. (2008) Besteuerung der Altersvorsorge. Nomos, Baden-Baden

Zaidi, A. (2009) Poverty and Income of Older People in OECD Countries, SSRN Working Paper, Vienna.