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Taxing German Old-age Pensions Fairly and Efficiently

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INTRODUCTION

In the German pension system, the statutory pension pillar is dominating whereas occupational and personal pension schemes still play a minor role. German pension taxation was changed fundamentally by the Retirement Income Act of 2005. Based on a decision of the Federal Constitutional Court, which declared the rules for taxing pensions to be unconstitutional, the taxation of different forms of old-age pensions will become aligned over a period of 35 years and deferred pension taxation will become the pension tax standard by 2040. Despite compliance with the recommendation of the EU Commission,[1] questions arose in EU member states if deferred pension taxation is too generous because the income tax rate at which pension contributions are deductible is generally much higher than the tax rate on pension benefits after retirement, or because returns in pension funds are tax-exempt, or because pension wealth accumulation is taxed differently from other forms of wealth accumulation, e.g., through private saving, investment in owner-occupied housing, or saving of business owners.

In this paper we address these problems and recommend a fundamental change to German pension taxation by replacing deferred income taxation of pensions by a front-loaded pension tax regime, which avoids the problems sketched above and offers further attractive features.

The remainder of the paper is organized as follows. Section 2 starts with a short review on pension taxation in Germany. In section 3, we check the economic relevance of critical remarks on deferred pension taxation and identify the existence of a double fairness dilemma. Sections 4 and 5 present the reform proposal and discuss the pros and cons of a switch to front-loaded pension income taxation. Section 6 summarizes and concludes.

Income Taxation of Old-Age Pensions in Germany

Up to 2004, pension benefits paid out under the German statutory pension scheme were income-taxed as life-time annuities. The income tax code determines splitting factors that separate the tax-free wealth repayment component and the interest component of pension benefits. Factors vary with the retirement age of the pensioner and remain fixed for the rest of their life span.

The Retirement Income Act 2004 codified deferred pension taxation, to be implemented gradually between 2005 and 2040. Pensioners who retired before 2005 are given a tax-free allowance of 50 percent of their pension benefits. The allowance for those retiring between 2005 and 2039 is reduced in steps of 2 percent until 2020 and then 1 percent per year, and finally becomes zero in 2040. As a compensating measure, the deductibility of contributions to the statutory pension insurance scheme is increased from 20 percent in 2005 in steps of 4 percent up to 100 percent in 2025.

Old-age pension benefits of civil servants (or comparable pensions of workers) who do not pay contributions during their working life remain fully taxable under deferred income taxation. But the tax base of these retirement benefits is reduced by a specific pension allowance, which is also phased out over the transition period 2005–2040.

Occupational pension benefits are taxed differently depending on the pension scheme applied. Pension benefits that are paid by the employer directly or via a benefit fund are taxable as deferred labor income but allow for the deduction of the specific pension allowance. Occupational pension benefits paid out by pension funds, pension insurance funds, or by insurance companies are taxed differently depending on the tax treatment of individual contributions to the pension scheme.

Private pension benefits are also taxed differently depending on the tax treatment of contributions. The income tax code codifies deferred income taxation of the full amount of pension benefits, splitting rules to separate a repayment and an interest component, or reduced taxation of the interest component depending on the duration of pension contract and the age of the retiree. Moreover, the application of an old-age relief allowance, which is also phased out in steps by 2040, reduces the tax base of taxable pension benefits.

The German regime of pension taxation is complex, nontransparent, and generates substantial compliance and administration costs. This situation will last for the whole transition period up to 2040 because only new retirees will be subject to deferred income taxation then, whereas pensioners who retired earlier still keep their cohort-specific allowances for the rest of their life. Nevertheless, the shift to deferred pension taxation will reduce the complexity of the German tax system in the long run. The following section, however, points out two caveats related to progressivity and international migration.

PROBLEMS OF BACK-LOADED PENSION TAXATION

With respect to the critical remarks on deferred pension taxation addressed in the introduction, non-taxation of returns of pension funds must not be qualified

[1] The Commission supports the elimination of obstacles to pension saving (European Commission 2001) although the arguments in favor of deferred taxation, viz. “deductible contributions to pension funds diminish a person’s ability to pay taxes” deferred taxation “encourages citizens to save for their old age”, are economically weak (EU Commission 2019).

as a tax break because returns are taxed when pension wealth is withdrawn. Moreover, the "discrimination" of non-pension saving vanishes if expenditure taxation is extended. But progressivity erosion remains a critical point and fairness infringements emerge as a new problem in a global economy setting.

Progressivity Erosion

Progressive taxation of fluctuating annual income violates horizontal equity in a lifetime perspective. Although this is well known, tax codes do not provide general measures to correct such horizontal equity violations, even though strategic tax-base smoothing has become a tax planning strategy for highly taxed individuals. Deferred pension taxation subject to a progressive income tax schedule generates a built-in tax-base smoothing effect because deductible contributions shift earned income to retirement years. Resulting erosion of tax progressivity favors all pensioners and might therefore even be regarded as welcome. But there are also social costs of deferred pension taxation, namely the permanent loss of national income tax revenue as well as the violation of vertical equity in a lifetime perspective.

The crucial problem of identifying revenue losses and redistributive effects is the choice of a benchmark. Caminada and Goodsworth (2008) and Johnson (2018) chose comprehensive income taxation, namely T-T-E, and report substantial tax revenue losses of 1.5 percent of GDP for the Netherlands in 2003 and 1.7 percent of GDP for the UK in 2016–17. On the other hand, the European Commission (2014), the OECD (2015), and most recently Barrios et al. (2016, 2018) chose deferred pension taxation, namely E-E-T, and consequently tax revenue losses are quite small.

Given the lack of studies that would help to answer questions on the generosity of tax-base smoothing, we quantify these effects in a simple life-cycle model for a cohort of single wage earners under the German statutory pension and taxation system of 2018. To concentrate on the tax-base smoothing effect, we regard a cohort of heterogeneous workers in a zero-inflation and zero-growth economy. Each worker earns constant labor income for 45 years and receives pension benefits for 20 years after their retirement in 2018. In this setting, E-E-T and T-T-E taxation are equivalent under a proportional income tax due to the zero-normal-interest assumption, but progressivity matters if taxable period income changes. Table 1 compares comprehensive income taxation, T-T-E, as the benchmark, with deferred income taxation, E-E-T. Column 1 shows that base smoothing under E-E-T causes a substantial reduction of the lifetime average tax burden over the whole income range. Tax reliefs for workers with annual wages between EUR 40,000 and EUR 80,000 exceed eight percentage points, the tax burden of the average wage earner (EUR 38,000) is reduced by more than one third. Tax relief for higher income levels shrinks due to the pension benefit cap, but is still almost six percentage points lower for a EUR 100,000 earner. The last column shows that front-loaded expenditure taxation without taxing excess returns, T-E-E, generates a tax relief in comparison to T-T-E, because German statutory pensions include injections from the federal budget which remain untaxed. Compared to E-E-T, under a T-E-E regime the tax increase by abolishing tax-base smoothing is partly compensated by exempting these returns.

Table 1

Lifetime Income Tax Burdens under Different Tax Regimes for Statutory Pensions in Germany (Average Tax Rates in Percent)

Annual income in EUR	Tax regime for statutory pensions		
	E-E-T	T-T-E	T-E-E
10,000	0	3.00	1.24
20,000	6.38	13.76	10.96
30,000	11.31	19.17	15.98
40,000	14.82	23.09	19.34
50,000	17.51	26.78	22.19
60,000	20.17	29.52	25.35
70,000	22.88	30.99	27.93
80,000	24.89	32.18	30.12
90,000	26.68	33.20	31.36
100,000	28.13	34.03	32.37

Source: own calculation based on a no-growth, no-inflation cohort model of single wage earners who earn statutory pension claims for 45 years and receive pension benefits for 20 years; contribution rates 9.3% employer and 9.3% employee; mandatory social contributions for health, unemployment, and care are considered deductible in all tax regimes.

The Double Fairness Dilemma

International migration of workers and pensioners has only recently been recognized as a problem of pension taxation (see Genser/Holzmann 2016, 2018, 2018a, 2019). According to article 18 of the OECD model tax convention (OECD 2017), pension benefits disbursed across borders "in consideration of past employment" are taxable only in the residence country of the recipient. The consequence of deferred pension taxation therefore is that fully deductible pension contributions leave a source state with zero income tax revenue on the corresponding earned income of a migrant because income tax revenue on pension benefits accrues to the residence state.

The OECD is aware of national claims of source countries to receive a fair share of income tax revenue on trans-border pension payments and lists a set of provisions in the commentary to article 18, e.g., exclusive, or non-exclusive, or limited, or conditional source taxation of pension benefits, which might be codified in bilateral tax treaties if both treaty states agree (cf.

OECD 2017a, C(18)-3ff.). But the OECD is reluctant in recommending such treaty amendments due to foreseeable administrative problems necessary to avoid double taxation.

Another possibility for source states to reduce the migration-induced revenue loss would be taxing pensions during the contribution and the pension wealth accumulation phase. But pension taxes, which are not levied on pension benefits, e.g., by limited deductibility of contributions or income taxation of pension wealth returns, are not addressed in the model tax convention and do not give rise to tax credits and therefore result in international double taxation.

The double fairness dilemma of deferred cross-border pensions taxation reveals the incompability of two worldwidely recognized equity targets, viz., double taxation avoidance for individual migrants and fair tax revenue sharing among states, under the current treaty network. And there is little hope that a satisfactory tradeoff between these conflicting targets can be found by renegotiating the complex network of bilateral double taxation treaties.

FRONT-LOADED PENSION TAXATION

The starting point for a new framework for pension taxation is the existence of two unsolved problems in the prevailing architecture of pension tax systems.

First, there is the simultaneous orientation of tax equity along two mutually exclusive equity standards: comprehensive income taxation and expenditure taxation.[2] These standards imply different time patterns of capital income taxation over the cycle of accumulation and use of capital. The Schanz/Haig/Simons principle requires taxation while capital wealth accrues, namely T-T-E, whereas the Fisher/Kaldor principle defers taxation until capital wealth is withdrawn and used for consumption, namely E-E-T. The Fisher/Kaldor approach exempts the normal rate of return on saving and establishes intertemporal neutrality of consumer spending decisions, but erodes progressivity by shifting earned individual income to after retirement years and reducing the lifetime income tax burden. The Schanz/Haig/Simons approach taxes nominal returns on saving, including normal returns, and thereby distorts intertemporal consumption but avoids tax-base shifting to post-retirement periods and progressivity erosion.

Second, tax assignment and double taxation avoidance methods in tax treaties are codified only for cross-border pension benefit flows. These treaty rules ignore the fact that pensions might have already been pre-taxed when pension wealth was accumulated.

To overcome these two deficiencies, we formulate two requirements for fair and efficient pension taxation:

- pensions should be taxed according to the Fisher/Kaldor principle[3], and
- fair pension taxation has to account for the pension tax burden over the whole pension cycle.

To satisfy the first requirement, the proposal makes use of a fundamental equivalence property of the Fisher/Kaldor approach. Intertemporal neutrality cannot only be ensured by a E-E-T regime, but also by a front-loaded income tax regime (T-t-E), which can be shown to be economically equivalent under a set of simplifying assumptions.[4] Under a T-t-E regime, income spent on pension savings is taxed when contributions are made and exempted when pension benefits are paid out. Returns on pension wealth are only liable to income tax if they exceed normal returns which are tax-exempt. This partial income tax exemption of returns is indicated by t. t<T immediately reveals that tax liability under Fisher/Kaldor taxation, namely E-E-T and T-t-E, is smaller than under comprehensive income taxation, T-T-E.

The second requirement makes use of the time pattern of T-t-E taxation which pre-taxes pensions when pension wealth is accumulated but exempts pension benefits.

Pre-taxing pensions following the Fisher/Kaldor principle should be attractive to treaty partners because this principle generates a fair distribution of income tax revenues and avoids international double taxation of pensioners even under the existing assignment rules in bilateral treaties.

- Pre-taxation of pension implies that the recouping pressure of deferred income taxation in source states is absent upon migration because pension wealth has been appropriately taxed upon accrual. No income tax is due for pension benefits paid out to migrants and non-migrants in source as well as in residence states. Pre-taxation of pension income accounts for the personal circumstances of the income earner and their ability to pay under unlimited tax liability as a resident of the source state.
- Since pension premiums are not deductible, no administrative check is necessary to verify the status of the pension system.

[2] The inconsistencies in cross-border taxation of pensions are grounded in theoretical ambiguities of taxation of pensions and their implementation in the national context. For the state of the theory of pension taxation and the implementation of pension taxation in key industrialized countries, consult Holzmann and Piggott (2018). Mirrlees (2011) proposes broader perspectives on the taxation of labor and capital and calls for an integrated approach for the design of pensions and their taxation.

[3] Genser/Holzmann (2018, 2018a) show that deferred income taxation of pension schemes is quite common in OECD countries but the diversity of tax regimes is huge within and across countries. See also OECD 2015, 2017.

[4] Standard assumptions are that the tax schedule remains unchanged over the pension cycle, the tax schedule is perfectly adjusted to inflation, and the tax regime treats positive and negative incomes symmetrically. Another crucial issue is the implicit assumption of progressive tax systems of what is considered tolerable and not regarded as violating tax equity under fluctuating period incomes over the lifecycle, which affects the lifetime tax burden of individuals with exactly the same present value of lifetime income. Perfect lifetime tax equity would require applying the progressive tax schedule to a notional average gross period income over the lifecycle. The same implicit assumption is necessary for lifetime pensions, although the tax burden differences are salient: in contrast to T-t-E taxation, deferred income taxation E-E-T implies that low pension benefits after retirement may go untaxed if they fall below the general income tax allowance. Perfect equivalence is attained under the implicit assumption that taxable lifetime earnings, including taxable pension benefits, are taxed by calculating the notional gross period income over the pension cycle.

- Pensioners do not have to file income tax returns in the new residence state after migration because pension benefits are tax-exempt.
- If both treaty states tax pensions T-t-E, then assignments according to articles 18 and 19 become irrelevant.

If, however, one treaty state decides to keep deferred pension taxation and to tax pension benefits, then avoidance of international double taxation requires the residence state to account for pre-taxation of pensions in the source state. The simplest solution would be to codify a pension article in the OECD model tax convention that assigns the right to tax pension benefits exclusively to the source state.

PROS AND CONS OF FRONT-LOADED PENSION TAXATION

Section 4 focused on the features of a well-established front-loaded pension tax system and left aside the transition process from deferred to front-loaded pension taxation.

The switch to front-loaded pension taxation is straightforward for pension contributions that are paid after the tax reform. They are no longer deductible and the individual income tax bases include pension contributions of employers and employees. As accumulated pension wealth must cover only net pension benefits after the reform, pension funds should split contributions into a net pension wealth component and an income tax component that is used to pay income tax demands by the tax authority.

Pension wealth accumulated under deferred income taxation before the tax reform can analogously be split into a net pension wealth and an income tax component that can be used to cover the reform-induced implicit tax liability rather than charging the future recipient of pension benefits directly.

Shifting the responsibility for appropriate pension taxation to the pension fund will require administrative provisions there, in particular the obligation to establish and to manage transparent individual accounts for each pension saver. Individual pension accounts should already be the rule within every classified pension fund in order to keep track of a pension saver's history and to inform fund clients swiftly and precisely about their financial status as a pensioner. Extending this obligation by providing tax-proof values of individual pension wealth for all pension schemes would help to manage the portability of pensions. Basing individual pension claims on publicly approved and readily available pension wealth data opens a promising path to guarantee pension claims for workers who intend or are forced to change their pension regime within a state or across national borders. Non-transparency and legal uncertainty of pension claims in case of individual mobility are substantial impediments to free mobility and economic efficiency.

An additional requirement of front-loaded pension taxation is the appropriate calculation of excess returns on pension wealth. Based on the operational availability of individual pension wealth data the pension fund is able to calculate individual excess returns as the difference between total returns and the rate of normal return. This normal rate of return must be fixed by the tax authority for every year. The tax code must define whether individual excess returns are taxed subject to a progressive schedule or to a flat rate under a dual income tax, and whether "negative excess returns" can be carried forward.

If front-loaded income taxation is introduced without adjusting the tax schedule, individual tax burdens will rise because the tax-base smoothing effect is no longer effective (cf. Table 1). Thus, the pension tax reform also requires political decisions on tax equity and socially desirable income tax schedules to meet the targets of poverty avoidance and consumption smoothing over the pension cycle.

For the income tax authority, pre-taxation of pensions implies that the personal circumstances of the income earner before retirement determine the income tax burden. The obligation to withhold income tax must be assigned efficiently to employers and pension funds, ensuring that both have access to all tax-relevant information.

Apart from circumventing the double fairness dilemma without tedious renegotiations of tax treaties, front-loaded pension taxation offers some additional attractive features which should be considered in political disputes on the future of pension taxation.

- Administration and compliance costs of pre-taxing pensions should be lower than under deferred pension taxation because monitoring of deductible pension saving becomes redundant.
- Pre-taxed pension benefits imply that pensioners who do not earn other market income need not file tax returns, which also saves tax compliance and administration costs.
- Monitoring and compliance obligations in source and residence states, which are necessary under E-E-T taxation, become unnecessary.
- Pre-taxation also backs free mobility in the single market since portable pension claims can be linked to national pension wealth data and double taxation is excluded if the pension saver emigrates as a worker (see Genser/Holzmann 2019).
- Finally, pre-taxation of pensions stimulates the labor market by offering pensioners a tax-free income supplement on top of their pension benefits as long as these additional earnings do not exceed the personal income tax allowance.

These additional advantages must be balanced against problems that are created by the pension tax reform. We did already mention the higher tax burden imposed during the working years unless the income tax schedule is adjusted appropriately, in line with tax equity and tax yield objectives. This adjustment must take into account

that a substantial part of the front-loaded individual tax demand can be paid out of gross pension contributions collected by the pension funds. Reducing individual pension wealth accumulation by a tax factor (1-T) causes no income effect as long as wealth accumulation remains sufficient to pay out pension benefits that are equivalent to after-tax pension benefits under E-E-T.

Individual pre-retirement Purchasing power losses can also be prevented if front-loaded income tax liabilities are not paid immediately but can be deferred in the same fiscal way as back-loaded expenditure taxation defers taxation of pension saving. Deferred payment of tax debt is neutral with respect to the intertemporal government budget constraint as long as the present value of deferred tax payments is equal to the present value of the assessed tax liability. In Genser/Holzmann (2018), we propose two options for decoupling pension tax assessment and pension tax payment. Under both options, front-loaded pension tax liabilities are accumulated during the working life. Under the deferred pension tax payment option, payment of the pension tax liability is annuitized upon retirement and withheld by the pension fund when pension benefits are paid out. Under the distributed pension tax payment option, pro-rata tax payments are linked to cash flows over the whole pension cycle, viz. to contribution payments, returns on pension wealth, and pension benefit withdrawals. The latter option requires a recalculation of the relevant pro-rata rate to ensure full repayment of the tax liability over the retirement period. Tax payments are made by the pension fund and directly transferred to the tax authority when contributions flow in, returns accrue, and pensions benefits are paid out. The advantage of expanding payment of tax liabilities over the whole pension cycle is, of course, the low tax rate on pension cash flows, which might alleviate opposition against the front-loaded pension tax reform. Moreover, deferred payment of pension taxes reduces the political pressure on the government to expand budget expenditures that will certainly emerge if income tax revenue increases after the pension tax reform.

CONCLUDING REMARKS

The system of deferred pension taxation is a widely recommended and implemented form of pension taxation across the OECD countries. While deferred pension taxation exhibits attractive features with respect to economic efficiency and administrative simplicity, critical remarks point at national tax revenue losses. Two strands of arguments addressed in this paper question the recommendation of the EU in favor of deferred pension taxation: erosion of income tax progressivity and a lack of fairness and efficiency in a global setting.

The tax-base smoothing effect of deferred pension taxation results in substantial reductions of individual tax burdens and national income tax revenue, and undermines tax equity objectives that the progressive income tax schedule aspires to achieve. The double fairness dilemma of deferred pension taxation gains importance with the increasing international mobility of individuals during their working life and after retirement, and the current practice of taxing cross-border pensions following the OECD model convention. The existing network of bilateral double taxation treaties produces income tax losses in source states that are unable to recoup revenue losses caused by deductible contributions to pension schemes. If source states try to reduce these revenue losses by taxing pensions during pension wealth accumulation, migrants face double taxation because the OECD model tax convention allows for tax credits only on source taxes paid on pension benefits.

This paper proposes front-loaded expenditure taxation of pensions as a tax regime that maintains the attractive properties of expenditure taxation but avoids progressivity erosion and the double fairness dilemma. Considering a move toward front-loaded pension taxation and discussing the pros and cons of its implementation should be worthwhile for Germany, which is highly affected by migration. Moreover, a discussion on such a pension tax reform might be an incentive for the EU to rethink its current position and to scrutinize front-loaded pension taxation and pension portability as a viable reform package to ensure the basic liberties of the European single market and to cope with the economic challenges of globalization.

REFERENCES

Barrios, S., S. Fatica, D. Martinez, and G. Mourre (2016), "The Fiscal Effects of Work-related Tax Expenditures in Europe", *Public Finance Review* 46, 793–820.

Barrios, S., F. Coda Moscarola, F. Figari, and L. Gandullia (2018), "Size and Distributional Pattern of Pension-Related Tax Expenditures in European Countries", *EUROMOD Working Papers* EM15/18.

Caminada, K. and K. Goudswaard (2008), "Revenue Effects of Tax Facilities for Pension Savings", *Atlantic Economic Journal* 36, 233–246.

European Commission (2001), The Elimination of Tax Obstacles to the Cross-Border Provisions of Occupational Pensions, COM(2001)214 final.

European Commission (2014), Tax Expenditures in Direct Taxation in EU Member States, Occasional Paper 207, Brussels.

European Commission (2019), Pension Taxation, Taxation and Customs Union, https:// ec.europa.eu /taxation-customs/individuals/personal-taxation/pension-taxation_en (accessed March 20, 2019).

Genser, B. and R. Holzmann (2016), "The Taxation of Internationally Portable Pensions: An Introduction to Fiscal Issues and Policy Options", *ifo DICE Report* 14(1), 24–29.

Genser, B. and R. Holzmann (2018), "Frontloaded Income Taxation of Old-Age Pensions: For Efficiency and Fairness in a World of International Labor Mobility", *CESifo Working Paper* No. 7423, Munich (forthcoming in CESifo Economic Studies).

Genser, B. and R. Holzmann (2018a), The Taxation of Internationally Portable Pensions: Fiscal Issues and Policy Options, in Holzmann, R. and Piggott, J.(eds.), The Taxation of Pensions, 443–479.

Genser, B. and R. Holzmann (2019), "National Pension Policy and Globalization: A New Approach to Strive for Efficient Portability and Equitable Taxation", *Working Paper Series* 2019-04, Department of Economics, University of Konstanz.

Holzmann, R. and J. Piggott (2018, eds.), The Taxation of Pensions, MIT Press, Cambridge MA.

Johnson, M. (2018), Five Proposals to Simplify Saving, Pointmaker, Centre for Policy Studies, London, August 2018.

Mirrlees, J. (2011), Tax by Design. The Mirrlees Review, Oxford UP. Oxford-New York.

OECD (2015), Stocktaking of the Tax Treatment of Funded Private Pension Plans in OECD and EU Countries, OECD Publishing, Paris.

OECD (2017), Pensions at a Glance 2017, OECD Publishing, Paris.

OECD (2017a), Model Tax Convention on Income and on Capital: Condensed Version 2017, Paris: OECD Publishing.