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NETHERLANDS:

The Final Tax Reform?

Effects of a Flat Rate Individual Income Tax

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I. INTRODUCTION

Throughout the last couple of decades, the individual income tax systems of most industrialized countries have been (repeatedly) the subject of considerable reform efforts. Many OECD countries have implemented tax reforms characterized by base broadening, reduction of tax rates and flattening of the rate structure. Recently, the focus has also been on lower tax-to-GDP ratios. For example, the German government carried out a major tax reform in 2000; the package implies a tax reduction amounting to EUR 25 billion annually in 2005. The Netherlands has just implemented a major reform.¹ The new Income Tax Act 2001 creates a system with a broader base and lower rates, introduces tax credits and makes a fundamental change in capital taxation.

Remarkably enough, when the plans for this reform were discussed (and enacted) in the parliament, members of parliament were already expressing interest in a new tax reform. Specifically, they asked the government to investigate the possibilities (or impossibilities) of a flat rate individual income tax. Various proposals for a flat tax have been made in other countries, especially in the United States.² The meaning of a "flat tax" is somewhat ambiguous in political debates and in the economic literature, but generally, a flat rate tax system has two key features: a very broad tax base and one fixed rate. Implementing a flat rate individual income tax in the Netherlands seems to be in line with earlier reforms, and could be seen as a major - final? - tax reform.

In this article, we show some of the main effects of such a system. We simulate a very simple flat rate individual income tax system for the Netherlands and compare the distribution of the current individual income tax (including social contributions) to the

¹ See Gerard Meussen, "Income Tax Act 2001", 40 *European Taxation* 11 (2000), p. 490 and Frank P.G. Pötgens and Hans C. Bol, "International Aspects of the 2001 Income Tax Act", 41 *European Taxation* 1 (2001), p. 1.

² See, for example, *The Economist*, *America's Tax Reform*, 13 January 1996, pp. 52-54 and <http://www.senate.gov/comm/jec/general/ftxrept.html>. Earlier proposals for the United States can be found in R.E. Hall and A. Rabushka, *The Flat Tax*, (Stanford: Hoover Institution Press, 1985); A.L. Feld, "Living with the Flat Tax", *National Tax Journal* 1995 (48), at 603-618; A.B. Atkinson, *Public Economics in Action: The Basic Income/Flat Tax Proposal*, (Oxford: Clarendon Press, 1995). See also a European proposal from N.K. Frederiksen, *A Dynamic General Equilibrium Simulation Model for Fiscal Policy Analysis*, (Copenhagen Business School: EPRU Economic Studies 1/1994).

distribution of the simulated flat rate tax.³ Essentially, the effects are simulated of eliminating deductions in exchange for a reduction in tax rates sufficient to keep individual income tax revenue constant. Under "our" flat tax, a uniform proportional rate is levied on a very broad individual income base, while only fixed personal exemptions are deductible from pre-tax incomes (i.e. a tax credit). For our analysis we use an extensive income survey of Statistics Netherlands, which covers 217,000 income recipients. Sample data have been combined with data from the tax administration. As a result, the survey contains the personal distribution of incomes (pre-tax, taxable and after-tax), the distribution of tax liabilities and almost all deductions.

The article is organized as follows. Section II. evaluates the pros and cons of implementing a flat rate individual income tax. In section III. the individual income tax reform in the Netherlands is described briefly. Section IV. presents the characteristics of the simulated flat tax, while the income effects of such a tax are illustrated in section V.

II. DO WE NEED A FLAT TAX?

Proponents argue that a broad base/flat rate tax system generates fewer complexities than most current individual income tax systems, which cause high administrative costs.⁴ Administrative and compliance costs of the current income tax and social contributions in the Netherlands, for example, appear to be 4.8% of corresponding revenues.⁵ The elimination of deductions - base broadening - could decrease these costs significantly.

Secondly, an obvious reason for lower rates is the distortionary effects of high marginal tax rates on, e.g. labour supply and savings.⁶ However, according to the OECD Jobs Study (1994) on tax reforms in the 1980s, the positive effects of lower tax rates on labour supply seem rather small⁷ and in particular the effects on the male labour supply seem to be very low.

Thirdly, a flat rate tax system with a very broad base would both alleviate distortions and reduce the quantity of tax arbitrage options open to taxpayers in the current system. Under current Netherlands income tax law capital income is taxed on average much less than labour income. This is the result of political interests (owner-occupied property), social considerations (pension contributions) and economic reasons (capital flight). The lower tax

3. An earlier version of this paper was presented at the seminar "Tax Reform 2001: Politics and Science in Debate", 10 December 1999, Rotterdam. In an earlier stage of our research project we have benefited from discussions with, and helpful comments from, Wouter Bos, Sybren Crossen, Casper van Ewijk, Flip De Kam, Peter B. Sørensen and Henk Vording.

4. Cf. C.E. McLure Jr, "International Implications of the Flat Tax", 50 *Bulletin for International Fiscal Documentation* 11/12 (1996), pp. 511-515.

5. That is, costs of private households (filing of tax returns), cost of business (withholding), and cost of the Treasury (administration). See M.A. Allers, *Administrative and Compliance Costs of Taxation and Public Transfers in the Netherlands*, (Groningen: Wolters-Noordhoff, 1994).

6. Cf. N.K. Frederiksen, 1996, note 2.

7. OECD, *The OECD Jobs Study: Evidence and Explanations*, Parts 1 and 2, (OECD: Paris, 1994).

burden is visible in the most important forms of capital income: the rental value of owner-occupied property is taxed negatively, pension savings are taxed on a deferred basis, investment income of pension funds is exempt and retained profits are taxed proportionally.⁸ Also, the portfolio allocation of savings and risk-taking is influenced by the tax rules. Individual savings for pension schemes or contributions for life insurance are deductible from pre-tax income, while other savings are (in general) not. The effective tax rate on investment can therefore range from minus 60% to 74% in the Netherlands.⁹ By allowing the size of the tax wedge to vary widely, current taxation violates one of the most fundamental rules of the market, which is that economic considerations instead of tax motives should determine choices regarding the organization, financing and location of activities.

Opponents of the flat tax proposal reject the idea on the basis of equity considerations: higher income groups would pay less tax in a flat rate system than in a progressive tax system. Low and high income earners will be taxed at the same marginal rate. On the basis of the ability-to-pay principle, one could argue in favour of a progressive rate structure.¹⁰ Moreover, some deductions seem to be fair when the ability-to-pay principle is employed: for example, if there are high expenses for sickness, ability to pay will be lower. A deduction therefore seems logical.

Secondly, the elimination of all deductions and allowances conflicts with the taxable income concept mainly because costs of earning income should be deductible from pre-tax income.¹¹

Thirdly, drastic base broadening can have substantial adverse economic effects. For example, elimination of the deduction for pension contributions would no doubt affect savings, and the elimination of the deduction of mortgage interest payments would disturb the housing market. Timing and capitalization problems are also relevant here. Thus, a drastic reform as envisaged in our analysis would in any case require a rather long transition period.

The flat tax to be elaborated for the Netherlands differs to a wide extent from several recent proposals in the United States.¹² Usually, the focus is on a proportional tax rate on labour income, allowing a fixed personal exemption: capital income remains untaxed (the Hall-Rabuska type of flat tax exempts the normal return on capital). Under strict conditions, such a proportional wage tax is equivalent to a proportional spending tax or consumption-

8. Further details can be found in S. Cnossen, "Towards a New Tax Covenant", *De Economist* 1995 (143), pp. 285-315.

9. Distributed profits are taxed highest (74%) as a result of the classical system, while the effective tax rate of capital gains will be minus 60% if the investment is financed by foreign capital.

10. See F.G. van Herwaarden and C.A. De Kam, "An Operational Concept of the Ability to Pay Principle (with an Application for the Netherlands, 1973)", *De Economist* 1983 (131), pp. 55-64.

11. L.G.M. Stevens, "Dual Income Tax Systems: A European Challenge?", *EC Tax Review* 1996 (5), pp. 6-12.

12. See proposals by the Joint Economic Committee <http://www.senate.gov/comm/jec/general/fltxrept.html>.

based tax.¹³ Therefore, one could argue that these proposals are "America-inspired", since they offer an alternative for both the current income tax and for the value added tax (there is no VAT in the United States).¹⁴

A flat tax is distinct from a "dual income tax" as implemented in several Scandinavian countries,¹⁵ and as proposed by Cnossen for the Netherlands.¹⁶ The dual income tax is mainly advocated for efficiency considerations (fewer distortions, less tax arbitrage). It disregards the principle of ability to pay, that is, that all sources of income should be taxed equivalently.¹⁷

Below we outline a flat individual income tax, which includes labour income as well as capital income in the same tax base (as does current Netherlands income tax law).

III. NETHERLANDS TAX REFORM

In September 1999 draft legislation for the new Income Tax Act 2001 was submitted to the Lower House of the parliament together with draft legislation on its implementation.¹⁸ These bills represent the core of a major revision of the Netherlands tax system known as the Revision of Taxation 2001. Both bills were accepted by the Lower House of the parliament on 3 February 2000 and have been ratified by the Upper House. The new Income Tax Act 2001 came into effect on 1 January 2001.

The Income Tax Act 2001 creates a system with a broader base and lower rates. Work is to be made more attractive by the introduction of an employment rebate (fixed tax credit). The reduction in the tax on labour is to be financed by reductions in total public expenditure and by increases in indirect taxes, such as VAT and environmental levies (amounting to EUR 3.6 billion or 1% of GDP). The reform package results in a tax reduction of EUR 2.7 billion (0.8% of GDP).

The system should ensure more stable tax revenues. Under the current system, it is possible to convert some taxable income, for example interest and dividends, into non-taxable capital gains. The new system will restrict the scope and effect of such conversions.

The former income tax system was based on one aggregated taxable income from several sources. Various deductions could be applied. Under the new system, personal

13. J.A. Pechman, "The Future of the Income Tax", *American Economic Review* 1990 (80), pp. 1-20.

14. Cf. A.F. Feld, note 2.

15. P.B. Sørensen, "From the Global Income Tax to the Dual Income Tax: Recent Tax Reforms in the Nordic Countries", *International Tax and Public Finance* 1994 (1), pp. 57-79.

16. S. Cnossen, "Towards a New Tax Covenant", *De Economist* 1995 (143), pp. 285-315.

17. Cf. L.G.M. Stevens, note 11.

18. "Income Tax Reform Act 2001" ("*Voorstel van Wet IB 2001*"). TKstuk 1998-1999, 26 728, No.2, The Hague, 1999.

allowances are replaced by a levy rebate in the form of a uniform individualized tax credit. Three taxable incomes are distinguished, each of which falls into a box. Income is taxed in one box only (no double taxation). Negative income in one box cannot be set off against positive income in other boxes. Each box has its own rate structure:

- Box 1: Taxable income from work and home ownership, to be taxed at progressive rates from 32.35% to 52%;
- Box 2: Taxable income from a substantial (business) interest, to be taxed at one fixed rate of 25%; and
- Box 3: Taxable income from savings and investments, to be taxed at one fixed rate of 30%. The new investment yield tax is levied on capital and assets minus outstanding debts in any one year. Capital and assets include shares and savings deposits, land and property (other than the principal residence), and other (movable) property not in personal use. To derive the “yield assessment base” a fixed fictitious yield of 4% per year will be employed. This fictitious yield is taxed at the rate of 30%.

Almost all taxpayers are subject to taxation in box 1. Box 1 is expected to produce over 95% of individual income tax revenue (including general social security contributions). In 2001 the first income bracket (EUR 14,870) is taxed at 32.35%, i.e. a combination of taxes and social contributions. In the second income bracket – the next EUR 12,139 - the tax rate is set at 37.6%, also including general social security contributions. In the third income bracket - the next EUR 19,300 - the tax rate is set at 42%; taxable income above EUR 46,309 is taxed at 52%. Senior citizens are taxed at a lower rate in the first and the second income brackets (14.45% and 19.7%, respectively), because those over 64 pay less in social contributions.

The new Income Tax Act 2001 became effective on 1 January 2001. However, further reforms are called for. A vast majority of the Lower House of the parliament asked the Ministry of Finance to investigate the possibilities and impossibilities of a flat rate individual income tax.

IV. THE SIMULATED FLAT TAX

Under “our” flat tax, a uniform proportional rate is levied on a broad individual income base, whereby only fixed personal exemptions are deductible from pre-tax income. This is essentially a Bentham system. To derive the “new” broad tax base, we have eliminated almost all deductions for all taxpayers in the sample data.¹⁹

19. The flat individual income tax base is simulated by using data from an Income Survey of Statistics Netherlands. Unfortunately, cross-section data have a time lag of several years. We have therefore used the survey data of the fiscal year 1997, while making some small adjustments to simulate the situation for the year 1998. Some deductions, e.g. pension insurance contributions paid by employees and employers

Table 1 summarizes such a broad tax base for 1998 (upper-right part of the table). Since detailed data about the distribution of deductions are available, we are able to construct the new tax base for various income levels.

Table 1 From Taxable Income to Tax Base of Flat Tax: Magnitude of Deductions

Tax Base 1998 x billion NLG *		Simulated Base Flat Tax x billion NLG	
1 taxable income	417.9	taxable income flat rate tax (1+4)	526.3
2 personal exemptions	100.8	personal exemptions (tax credit)	100.8
tax base (1-2)	317.1	tax base flat rate tax' (1+4-2)	425.5
3 income tax revenue	118.0	revenue neutral (ex ante)	118.0
4 deductions / base-broadening	108.4		
pension insurance contribution	26.0		
mortgage interest -/- fiscal rents home-owners	23.3		
work-related expenses	18.8		
insurance contributions for sickness and unemployment employees	6.5		
contributions for life insurance	5.9		
deduction for self-employed	5.4		
deduction for senior citizens (over 65 years)	5.2		
saving incentive for workers (<i>spaarloon</i>)	4.0		
basic exemption for interest and dividends	3.2		
deduction for exceptional (medical) costs	2.7		
interest on consumer loans	2.6		
deduction for non-workers	2.3		
early retirement scheme contributions employees	1.5		
deductible losses	1.0		
average rate: 3/(1-2)	37.2 %	flat rate: 3/(1+4-2)	27.7%

* 1 Euro = NLG 2.20371

Source: Almost all of the figures in the left part of the table have been taken from the Ministry of Finance (White Paper on Tax Reform 2001 (*Kabinetsverkenning Belastingen in de 21e eeuw*), 1997, p. 19 and p. 37; TKstuk 1997 -1998 25 810 No.2, The Hague); exceptions are early retirement contributions (source: Statistics Netherlands Yearbook) and an updated figure for the (difference in the) deduction for mortgage interest - i.e. the cost of owner-occupied dwellings - and fictitious taxable fiscal rents for home-owners (source: K. Caminada, *Aftrekpost eigen woning: wie profiteert in welke mate?*, Department of Economics Research Memorandum 99.02, Leiden University, The Netherlands, 1999).

As a result of the simulated base broadening, taxable income increases by 25.9%. This is the total of all deductions in the left part of Table 1 under point 4. Two-thirds of this increase is caused by only three large items: pension insurance contributions paid by employees and employers, mortgage interest payments and work-related expenses. As a

and early pension insurance paid by employees, are not included in the Income Survey data. We have therefore distributed these contributions to the relevant socio-economic groups using computation rules.

result of the (extreme) broadening of the tax base the uniform tax rate can be set very low. With a flat rate of 27.7%, the same amount of revenue is generated as in the current system (ex ante). This flat rate is substantially lower compared to the statutory rate in the first bracket (36.35% in 1998; to be lowered to 32.35% in 2001).

It should be mentioned that there are some problems with the concept we have used. The tax base we have constructed is a rather hybrid concept, which is, for example, far from the Haig-Simons definition of income.²⁰ However, this article focuses on real-world tax reform, so we prefer to take actual taxable income as the starting point of our analysis, rather than a theoretical income concept.

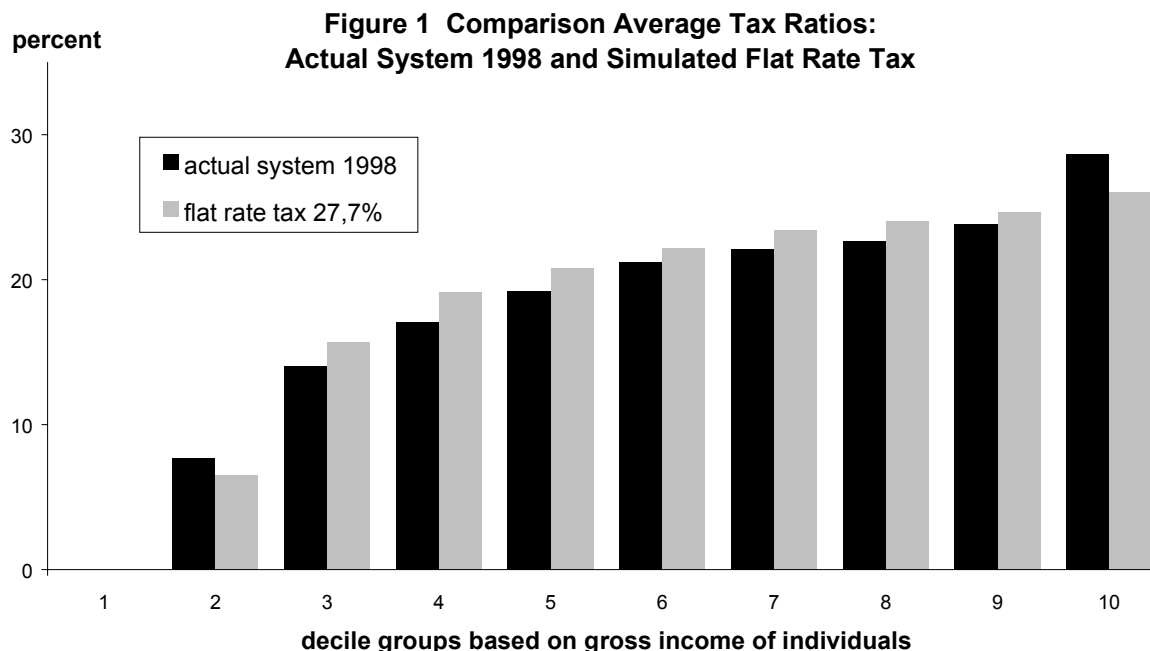
Also, one could argue that the system taxes twice in several ways. For example, pension benefits remain taxable, while the deductibility of pension contributions from gross earnings is eliminated. This is a price to be paid for a low flat rate. Moreover, there are already several examples of two-fold taxes in the present system.

Another complication is that we do not include the corporate tax in our simulations. If the tax regime for the self-employed were to be altered, one could argue that this would also require changes in the corporate tax in order to prevent tax arbitrage. On the other hand, the level of the flat individual tax rate would be closer to the actual corporate tax rate. In general, tax rates on labour and capital would converge. This would substantially reduce the incentives for tax arbitrage. Relative prices rather than tax motives would determine economic behaviour, with clear welfare gains.

V. DISTRIBUTIONAL EFFECTS

Figure 1 shows the effect of the tax reform on the distribution of average tax ratios. Income deciles are derived by dividing the total population deriving income into ten equal-sized groups according to the amount of their gross income. Decile 1 contains the poorest tenth of the population, decile 2 the second poorest and so on, up to the top decile (decile 10), which contains the richest tenth. The black blocks illustrate the simulated flat rate tax, while the distribution of average tax ratios under the current system is represented by grey blocks. In both cases average tax liability by income class is related to the broadly elaborated tax base: gross income (computed as current taxable income plus all applied deductions to be eliminated under a flat tax).

20. Income is defined as the amount an individual can consume in an given period of time without any reduction in wealth. H.C. Simons, *Personal Income Taxation*, (Chicago: University of Chicago Press, 1938).



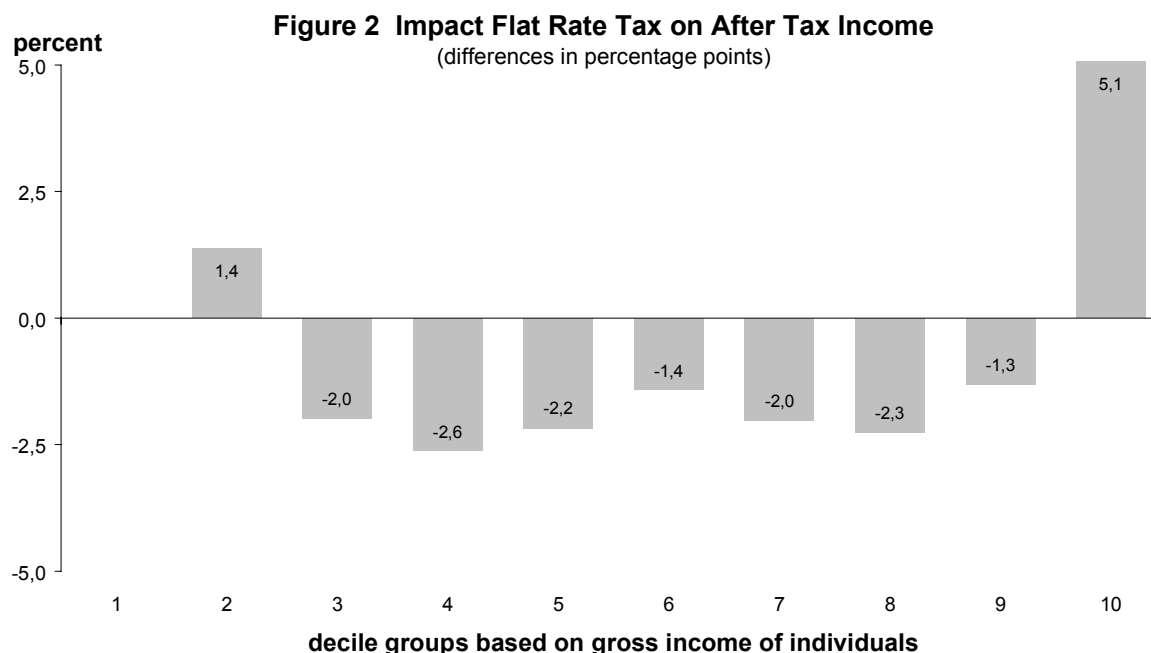
Note: Figures for the first decile are not shown because of specific factors that blur the picture (personal exemptions and statistical bias).

Source: See Table 1 for the specification of current taxable income and the current deductions (to be eliminated in the simulated broad base flat rate tax); aggregated data are taken from the Ministry of Finance (1997); data to distribute these items to income classes are taken from Netherlands Personal Income Distribution 1997 (source: Statistics Netherlands, 2000, The Hague: SDU-uitgeverij) and the authors' own calculations.

The distribution of average tax ratios under current tax law depends on both the rate structure and the distribution of deductions. The distribution of applied deductions (aggregated by deciles) shows quite a bit of income elasticity; the deduction ratio increases sharply with gross income. Furthermore, the tax advantage of deductions shows even more income elasticity, because deductions are valued by the marginal tax rate of taxpayers. Accordingly, the distribution of the average tax ratios appears to be more equally distributed than suggested by the rate structure. Income tax progression is mainly the result of fixed personal exemptions,²¹ which are maintained under the simulated flat rate tax.

Changes in tax liabilities caused by the flat tax can also be illustrated as a percentage of after-tax income before the tax reform). Figure 2 illustrates the income effects of the flat tax.

21. Just as in many other OECD countries. According to J. Owens, most of the progressivity of the income tax derives from the fact that the first slice of income is free of tax; see *Emerging Issues in Tax Reform: the Perspective of an International Administrator*, paper presented at the 53rd IIPF Congress, 25 August 1997, Kyoto, Japan. For a detailed analysis, see K. Caminada and K.P. Goudswaard, "Progression and Revenue Effects of Income Tax Reform", *International Tax and Public Finance* 1996 (3), pp. 57-66.



Source and note: See below figure 1.

Very low income earners are the winners. The income effects around the minimum wage income level (EUR 10,435 after tax for a sole earner) are negligible. A broad range of middle income earners are the losers: after-tax incomes decline 1.4% to 2.6% on average for the income classes between EUR 11,345 and EUR 38,570. These losses for middle income groups could be problematic from a political point of view, but the magnitude of the losses is limited in view of the radical reform. Very high income earners win. The positive income effect around EUR 38,570 after-tax income is estimated to be 5.1%.

Surprisingly, for the vast majority of the taxpayers, effects on after-tax income are within a range of approximately 5%. The range of approximately 5% for income effects was also used as a reference by two committees making proposals on earlier Netherlands tax reforms, and were considered “acceptable”. The dramatic “reform” would not involve dramatic changes in after-tax income. It appears that for most taxpayers the loss of deductions is more or less compensated by the lower rate (see above).²²

Although eight decile groups lose out and only two decile groups win, the tax reform is revenue neutral (ex ante). The explanation for this is rather straightforward: very high

22. One could argue that the personal exemptions should be eliminated as well in order to create further simplicity in the tax system. We did an additional simulation to show the effects. As a result of the additional base broadening, a rate of 22.4% would balance the budget (ex ante). However, the effects on after-tax income would be substantial and would exceed the range of approximately 5% for the majority of taxpayers. The main losers are very low income earners, while very high income earners would gain the most (even more compared to the Bentham variant of the flat tax).

income groups contribute heavily to the income tax. The share of the upper 10% in total tax revenue amounted to 37% in 1998. This would decline substantially (to 34%) under the flat rate tax.

At this point we should, however, stress that we derived averages by income class. The effect on after-tax income for individuals will undoubtedly show variations around these averages. Unfortunately, we are not able to show this diversity because regulations on privacy do not allow Statistics Netherlands to provide more detailed data on deductions. When individual taxpayers make relatively more (or less) use of deductions compared to the average of an income class, income effects will be less negative or more positive, respectively.

The income effects also vary by socio-economic group. The main losers are persons over 64 years (-11.7%), because senior citizens are no longer taxed at a lower rate. The income effects for working people are, on average, small. Civil servants (-2.2%) will face a modest loss. On the other hand, employees in the private sector will face a modest gain (+1.3%). Civil servants lose compared to employees, due to their higher deductions for pension contributions. The negative effect of losing deductions on after-tax income seems - on average - to be of greater value for civil servants compared to the lower tax rate. For the self-employed both effects approximately set each other off (-0.7%). Apparent winners are those receiving unemployment (+3.7%), early retirement (+7.2%) or disability benefits(+4.3%). Their average use of deductions is relatively low (there are other reasons as well).

Table 2 summarizes the effects by socio-economic group.

Table 2 Effect of Flat Rate Tax: Averages Social Groups 1998

	Individuals with pre-tax income x 1 000	level		percentage change			after-tax income
		tax ratio actual	tax ratio flat tax	tax base	tax liability	tax share	
self-employed	745	23.8	24.3	47.4	2.0	0.2	-0.7
employees (a)	5065	24.9	24.1	28.5	-3.0	-1.8	1.3
civil servants	592	24.2	25.4	39.4	5.1	0.5	-2.2
social welfare and unemployed	618	22.2	19.4	9.5	-12.7	-0.4	3.7
disabled	460	24.1	21.2	10.7	-12.1	-0.4	4.3
old-age pensioners	1872	12.4	21.3	15.5	71.6	4.7	-11.7
early retirees (b)	395	28.4	23.7	8.9	-16.5	-0.8	7.2
total / average (c)	11202	23.2	23.2	26.0	0.0	0.0	0.0

(a) including chief executives of firms (*directeuren NV/IBV*).

(b) individuals with early retirement income benefits who are younger than 65 years of age.

(c) including individuals with gross income earned in less than 52 weeks.

Sources: See below figure 1.

Finally, it should be noted that the simulated flat rate individual income tax is revenue-neutral in comparison with the pre-2001 system. Compared to the Revision of Taxation 2001 there would be substantial budgetary room to redress major distributional effects of the income tax reform. The implementation of higher VAT rates and environmental levies, combined with the reform package (tax reduction), would generate an additional 4.3% in terms of after-tax income to make taxpayers better off. For example, one could ask for an even lower flat rate or tax credits to be targeted at specific groups. In this context, one could easily establish the same distributional effects as the Income Tax Act 2001.

VI. CONCLUSIONS

In this article, we simulate a simple broad base/flat rate individual income tax system and we compare the distribution of the current individual income tax including social contributions in the Netherlands to the distribution of the simulated flat rate tax. Our simulations indicate that a proportional rate of 27.7% would be possible (with the same revenue). Such a flat rate causes only relatively small changes in the distribution of average tax ratios. For the majority of taxpayers, the effect on after-tax income lies within a range of approximately 5%. We conclude that the income effects of the broad base/flat rate individual income tax would be relatively small given the scope of the operation.

We should, however, mention that the elimination of large deductions will probably have serious economic consequences associated with behavioural responses, for instance with regard to savings. Also, a drastic reform such as the one envisaged would involve a rather long transition period, partly because of timing and capitalization problems. Nevertheless, the idea of a flat tax can and should be taken seriously in further debates on tax reform.