The Stockholm Agenda: A Welfare Perspective

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With population aging fiscal budgets in the European Union will come under significant strain. To tackle this problem, the Stockholm Agenda prescribes increasing employment rates, accelerating fiscal consolidation, and furthering entitlement reform. Using a generational accounting model with a detailed welfare analysis, this paper assesses this three-pronged strategy. It finds that, to enhance welfare, fiscal adjustment strategies need to be country-specific, taking into account differences in preferences, technology, and the state of public finances. A three-pronged strategy does not appear well-suited for these countries, but increasing labor utilization through higher employment rates is central.

I. INTRODUCTION

In Europe, as in all OECD countries, the population is progressively aging. The baby boom that appeared shortly after World War II is approaching retirement, fertility rates have fallen short of the replacement rate, and life expectancy is at an all-time high. As a result, in the near future, fewer and fewer adults of working age will be around to support a growing number of elderly people. To keep public finances on a sustainable path and to ensure ever-improving living standards for everyone, this change in the age structure will require significant fiscal adjustment. It is widely recognized (see Kotlikoff 2004, for

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example) that, by postponing action, more painful and more abrupt adjustment becomes inevitable.

On March 22 and 23, 2001 the European Council held its Spring meeting in Stockholm. There, a three-pronged strategy was outlined for Europe to address the budgetary challenges of its aging population. The essence of what is now dubbed the Stockholm Agenda is in paragraph 47 of the Council's conclusions (see European Council 2001), which reads:

"Higher employment rates must be promoted, especially for women and older workers. Ambitious policies to reduce the debt burden at a faster pace should be pursued to ensure fiscal sustainability. Public pensions, health care and programmes providing care for the elderly should be reviewed and, when necessary, reformed by Member States, while upholding inter-generational solidarity."

Supporters of this plan argue that greater labor utilization widens the tax base, and that accelerating the pace of public debt reduction allows for a reallocation of public spending from servicing the debt to financing social expenditure. At first sight, this seems like a sensible and obvious solution—get everyone to work a little more to slow the increase in the ratio of beneficiaries to contributors, and improve the government's net asset position to give it more room to run larger primary deficits without undermining fiscal sustainability.

But the three-pronged strategy has its drawbacks. Even though people earn labor income, there is a disutility to working; higher public pensions also accrue, increasing the desire to consume (including leisure). With respect to the debt reduction strategy, it is crucial to know how the necessary budget surpluses will come about. Will they be tax based, and if so which tax margins will be affected? Or will they be expenditure based? To the extent that people value public consumption, for example, welfare may be affected. Current generations, whether inactive or still working, and future generations might not even agree on which is the best adjustment.

This paper argues that, when considering alternative policies to address the budgetary challenge of an aging population, policymakers should adopt a welfare perspective instead of a purely fiscalist point of view. Two fiscally-equivalent adjustments can have quite different effects on the well-being of different generations, depending on the choice

of margins (or instruments), as well as the magnitude and timing of adjustment. On their own, generational accounting exercises typically do not offer the policymaker insight as to which of the alternative policies should in fact be taken.¹ Using an accounting model to evaluate alternative policy strategies, this paper integrates a cross-country generational accounting exercise with an explicit welfare analysis for 13 European Union (EU) countries.

A word of caution is in order. Given that the model used is of an accounting nature and admittedly suffers from a few limitations, the simulation results should be interpreted not as specific targets, but as illustrative. The point of the paper is that countries should design the fiscal adjustment strategy that makes their public finances sustainable in a way that is best suited to their individual circumstances.

The plan of the paper is as follows. Section II presents the accounting framework, and Section III is dedicated to data and parameterization issues. Section IV discusses the design of the simulations, and Section V provides a cursory analysis of the results. Section VI concludes by recapping and highlighting a few caveats of the analysis.

II. THE FRAMEWORK

The accounting model replicates the data for 2002, the base year. All variables are expressed in real terms in 2002 prices, and will be written in lowercase roman letters.

With β as the subjective discount factor (equal to the inverse of the gross subjective discount rate) and $\rho_{a,b+a}$ as the probability of surviving until age *a*, having been born in year *b*, an agent's expected lifetime utility is:

(1.1)
$$U_b = \sum_{a=0}^{100} \beta^a \rho_{a,b+a} u_{a,b+a} \,.$$

The assumption is that agents' maximum lifespans are 100 years.

¹ These exercises often only provide a measure of the implicit public liabilities along with an array of alternative policies that would be sufficient to close the fiscal gap and even out generational burdens. Comparative welfare analyses, in turn, are typically carried out in the context of a general equilibrium model which does not have as many public finance details as a generational accounting model.

Having been born in year b, in year t = b + a this agent is a years old and her instantaneous utility is of the constant returns to scale (CRS) Cobb-Douglas form:

(1.2)
$$u_{a,t} = \left(\overline{h} - h_{a,t}\right)^{\varepsilon} \left(\text{Broad consumption}_{a,t}\right)^{1-\varepsilon}.$$

In year t, she derives utility from a composite of the average number of hours of leisure that her birth cohort enjoys, $(\overline{h} - h_{a,t})$, and broad consumption. Broad consumption is a CRS Cobb-Douglas composite of private consumption and public spending in kind:

(1.3) Broad consumption_{*a,t*} =
$$(c_{a,t})^{\alpha} (e_{a,t}^{\nu_e} \cdot s_{a,t}^{\nu_s} \cdot (\mu g_t)^{1-\nu_e-\nu_s})^{1-\alpha}$$
.

Public spending in kind enters agents' utility through provision of per capita publiclyprovided education, $e_{a,t}$, per capita publicly-provided health care, $s_{a,t}$, and per capita public consumption and general government subsidies, bundled into g_t . This is assumed as non-age specific, and only a proportion $0 \le \mu \le 1$ of which is valued by the agent.² Note that the specification for this bundle allows $e_{a,t}$, $s_{a,t}$, and g_t in effective units, μg_t , to be valued differently.

Written in logs, instantaneous utility is:

$$u_{a,t} = \varepsilon \ln(\overline{h} - h_{a,t}) + (1 - \varepsilon) \Big[\alpha \ln c_{a,t} + (1 - \alpha) \Big(v_e \ln e_{a,t} + v_s \ln s_{a,t} + (1 - v_e - v_s) \ln(\mu g_t) \Big) \Big].$$

As is standard practice in generational accounting exercises (see, for example, Oreopoulos and Kotlikoff 1996, for a comprehensive tutorial), per capita publiclyprovided education and health care are projected according to:

(1.4)
$$e_{a,t} = e_{a,2002} (1+\gamma)^{t-2002} \lambda_t^e$$

and

(1.5)
$$s_{a,t} = s_{a,2002} (1+\gamma)^{t-2002} \lambda_t^s$$

² General government subsidies are actually a source of income for households. Given that these are typically not very significant, classifying them as public spending in kind will not alter much the results.

where $e_{a,2002}$ and $s_{a,2002}$ are the respective age profiles of public spending in kind, pertaining to the base year, and γ is the annual growth of labor productivity. The rationale is that, because these services are labor-intensive, the wage costs dominate and these tend to follow productivity.

Per capita public consumption and government subsidies are modeled as non-age specific and grow with per capita GDP:

(1.6)
$$g_t = g_{2002} \left(1 + \gamma^{GDPpc} \right)^{t-2002} \lambda_t^G$$

In the absence of fiscal consolidation efforts where $\lambda_t^G < 1$, aggregate public consumption and government subsidies will be constant as a percent of GDP.

Per capita general government gross fixed capital formation is similarly projected:

(1.7)
$$inv_t = inv_{2002} \left(1 + \gamma^{GDPpc}\right)^{t-2002} \lambda_t^G.$$

This assumes that public investment activities are not utility-enhancing,.

Disposable income is computed as:

(1.8)
$$y_{a,t}^{d} = n l i_{a,t} + n c i_{a,t} + t r_{a,t} - t_{a,t}^{C} - t_{t}^{LS},$$

and is the sum of net labor income, net capital income, and social protection transfers, minus consumption taxes and non-age-specific general government revenues, t_t^{LS} , which are assumed to grow with GDP per capita:

(1.9)
$$t_t^{LS} = t_{2002}^{LS} (1 + \gamma^{GDPpc})^{t-2002},$$

so that, on aggregate, these lump sum taxes stay constant as a percent of GDP.

Net labor income is age specific and determined according to:

(1.10)
$$nli_{a,t} = (1 - \tau_{2002}^L \lambda_t^L) w_{a,2002}^{TCPH} (1 + \gamma)^{t-2002} \eta_{a,2002} \lambda_{a,t}^\eta h_{2002} \lambda_t^h,$$

where τ_{2002}^{L} is the implicit tax on labor income in 2002, λ_{l}^{L} is a policy lever acting upon this tax margin, and $w_{a,2002}^{TCPH}$ is the total cost to an employer of hiring one hour of labor from someone aged *a* in 2002. This total cost is the average gross hourly wage along with the social security contributions paid by the employer, and is assumed to grow with labor productivity, at the annual rate of γ . Also, changes in labor taxes do not alter the total cost of hiring, but simply reduce net labor income for workers, who thus bear the entire economic incidence.

In this analysis, labor demand is assumed to be perfectly elastic in the long run as other factors of production can easily be substituted and the long-run elasticity of labor supply *at the household level* is assumed to be zero. According to Kimball and Shapiro (2003) this is a regularity observed across households, countries, and time that can be explained by the canceling out of the income and substitution effects of a permanently higher real wage. In such a framework, changes in labor taxes and in social security contributions have no permanent effect on labor utilization. They do, however, have a fiscal impact both directly and indirectly, through consumption taxes, as the household's income is affected.

Note that the average number of hours worked by the cohort aged *a* in year *t*, $h_{a,t}$, is determined by the corresponding employment rate, $\eta_{a,t} = \eta_{2002} \lambda_{a,t}^{\eta}$, times $h_t = h_{2002} \lambda_t^h$, the total number of hours worked in year *t* by every employee. The lambdas here are policy levers on the age-group-specific employment rate $(\lambda_{a,t}^{\eta})$ and the total number of hours worked (λ_t^h) . These levers reflect the impact of structural reforms that raise labor utilization by shifting the vertical labor supply schedule outwards. Such supply-side structural reforms increase both take-home pay and labor income tax revenues.

Per capita labor income taxes, at 2002 prices, include employees' and employers' social security contributions as well as personal income taxes, and are age specific according to:

(1.11)
$$t_{a,t}^{L} = \tau_{2002}^{L} \lambda_{t}^{L} w_{a,2002}^{TCPH} (1+\gamma)^{t-2002} \eta_{a,2002} \lambda_{a,t}^{\eta} h_{2002} \lambda_{t}^{h} .$$

Because λ_t^L , $\lambda_{a,t}^\eta$, and λ_t^h enter multiplicatively in (1.11), from a strictly fiscal perspective, it does not matter which (combination of the) three margins are (is) used in a policy adjustment. However, authorities should *not* be indifferent as each alternative will

have a different impact on the welfare of each birth cohort. Finally, note that the total cost to an employer of hiring one hour of labor from someone aged a in 2002 is determined as

(1.12)
$$w_{a,2002}^{TCPH} = \frac{t_{a,2002}^{L}}{\tau_{2002}^{L}\eta_{a,2002}h_{2002}}.$$

Net capital income is also age specific and is computed as:

(1.13)
$$nci_{a,t} = \frac{1 - \tau_{2002}^{K}}{\tau_{2002}^{K}} t_{a,2002}^{K} (1 + \gamma_{t}^{K})^{t-2002},$$

which is immediate, after knowing that $t_{a,2002}^{K} = \tau_{2002}^{K} \cdot \text{Gross capital income}_{a,2002}$, that $nci_{a,2002} = (1 - \tau_{2002}^{K}) \cdot \text{Gross capital income}_{a,2002}$, and that $t_{a,t}^{K} = t_{a,t-1}^{K}(1 + \gamma_{t}^{K})$. As the capital share in GDP is held constant over time, aggregate gross capital income must grow with GDP, so:

(1.14)
$$1 + \gamma_t^K = \frac{\sum_{a} P_{a,t-1} t_{a,t-1}^K}{\sum_{a} P_{a,t} t_{a,t-1}^K} \left(1 + \gamma_t^{GDP}\right),$$

where $P_{a,t}$ corresponds to the population aged a in year t.

Social protection transfers, in real terms, are simply modeled as:

$$(1.15) tr_{a,t} = \lambda_t^{TR} tr_{a,2002}$$

Choosing such a specification circumvents the need to model the reforms to social protection systems that some EU countries have already launched. Many of these reforms involve complex changes that are scheduled to kick in some decades in the future. For the purposes of evaluating the Stockholm Agenda, however, this analysis needs only to determine where countries should be in the future if they are to achieve sustainable public finances. It is up to each country individually to ascertain the extent to which the already-legislated reforms are sufficient. In short, conditional on the choice of policy

levers and the speed of adjustment that is imposed, a path of maximum social protection transfers that is still affordable can be determined.

Private consumption is determined as an age specific fraction of permanent income according to:

(1.16)
$$c_{a,t} = \theta_{a,2002} \sum_{i=0}^{100-a} (1+r)^{-i} y_{a+i,t+i}^{d},$$

where 1+r is the time-invariant gross market discount rate that applies to households.

Consumption taxes, at an implicit rate of $\tau_{2002}^C \lambda_t^C$, create a wedge between consumption volume, $c_{a,t}$, and real private consumption expenditure, gross of all consumption taxes, $cons_{a,t}$. That is:

(1.17)
$$c_{a,t} = \left(1 - \tau_{2002}^C \lambda_t^C\right) cons_{a,t}$$

and

(1.18)
$$t_{a,t}^C = \tau_{2002}^C \lambda_t^C cons_{a,t} \ .$$

For unchanged expenditure, $cons_{a,t}$, an increase in consumption taxes ($\lambda_t^C > 1$) will lower consumption volume.

Using a backward induction argument, with $y_{a,t} = nli_{a,t} + nci_{a,t} + tr_{a,t} - t_t^{LS}$, real private consumption expenditure, gross of all consumption taxes, is determined as:

$$(1.19) \ cons_{a,t} = \frac{\theta_{a,2002}}{1 + \tau_{2002}^C \lambda_t^C \left(\theta_{a,2002} - 1\right)} \left[y_{a,t} + \sum_{i=1}^{100-a} \left(\frac{y_{a+i,t+i} - \tau_{2002}^C \lambda_{t+i}^C cons_{a+i,t+i}}{(1+r)^i} \right) \right],$$

and the age-specific coefficient is computed as:

(1.20)
$$\theta_{a,2002} = \frac{\left(1 - \tau_{2002}^{C}\right)t_{a,2002}^{C}}{\tau_{2002}^{C}} \left(\sum_{i=0}^{100-a} \frac{y_{a+i,2002+i} - t_{a+i,2002+i}^{C}}{(1+r)^{i}}\right)^{-1}$$

Real growth of GDP, γ_t^{GDP} , is obtained by adding γ_t^H , the growth in the aggregate number of hours worked in a year, to γ , labor productivity growth.

To ensure a constant labor share in GDP:

(1.21)
$$\gamma_t^H = \frac{\sum_{a} h_{a,t} P_{a,t} w_{a,t-1}^{TCPH}}{\sum_{a} h_{a,t-1} P_{a,t-1} w_{a,t-1}^{TCPH}} - 1$$

The general government's intertemporal budget constraint evaluated in 2002 is

$$(1.22)\sum_{t=2002}^{2150} \left(1+r^{PS}\right)^{t-2002} \sum_{a=0}^{100} P_{a,t}\left(t_{a,t}^{L}+t_{a,t}^{K}+t_{a,t}^{C}+t_{t}^{LS}-tr_{a,t}-e_{a,t}-s_{a,t}-g_{t}-inv_{t}\right) = d_{2002}$$

which states that the present value of aggregate taxes net of aggregate primary public expenditures must be sufficient to pay off the stock of aggregate net debt. The discount rate is r^{PS} , and it typically differs from r which applies to households. When the right hand side of (1.22) is larger than the left hand side, public finances are not on a sustainable footing, and the difference is the fiscal gap. To allow cross-country comparability, this measure is usually expressed as a percent of base year GDP.

The public debt-to-GDP ratio, written in nominal terms is computed according to:

(1.23)
$$\frac{D_t}{Y_t} = \frac{1+i}{1+\gamma_t^{\text{Nominal GDP}}} \frac{D_{t-1}}{Y_{t-1}} - \frac{\text{Primary balance}_t}{Y_t}$$

where *i* is the nominal interest rate, and $\gamma^{\text{Nominal GDP}}$ is the growth rate of nominal GDP.

The general government's overall fiscal balance is:

(1.24)
$$\frac{\text{Balance}_{t}}{Y_{t}} = \frac{\text{Primary balance}_{t}}{Y_{t}} - \frac{i}{1 + \gamma_{t}^{\text{Nominal GDP}}} \frac{D_{t-1}}{Y_{t-1}}.$$

This accounting framework is sufficient for a preliminary evaluation of the Stockholm Agenda. For each prong, the following are the policy levers:

- *Further entitlement reform.* The evolution of social protection transfers can be moderated by acting upon λ^{TR} ;
- Increasing labor utilization. Employment rates for mature and for older workers aged 25-54 and 55-64, respectively, can be raised by acting upon λ_a^{η} , and the annual number of hours worked by every employee can be increased through λ^h ;
- Accelerating fiscal consolidation. Budgetary surpluses can be achieved either by raising consumption taxes (acting on the λ^C lever), by increasing labor income taxes (using the λ^L lever), or through retrenchment (using λ^G , λ^e and λ^s). In the latter case public investment, general government subsidies, and public consumption are all equally reduced, but cuts in education and health care are half and a third of this adjustment, respectively. This assumption reflects the reality that electorates, especially in Europe, are often more strongly opposed to such budget cuts.

III. DATA AND PARAMETERS

This section describes the data and sources used and discusses how the parameters were set. A complete data set is available for all EU countries with the exception of Greece, Luxembourg, and the ten new members.

Key demographic information including age-, gender- and year-specific mortality rates, as well as projections for the number of people, are obtained from the Eurostat's New Cronos database. This data comes from the 1995 and the 1999 central population variants provided by Eurostat. The projections go until 2050; from then on an invariant age structure is assumed.

Fiscal data for the general government by economic function, is presented in Table 1 and is also taken from the New Cronos database. The OECD Economic Outlook database (see OECD 2004a) was used for data on GDP, net debt, and net interest payments.³ General

³ Gross debt and interest payments were used when the corresponding numbers in net terms were unavailable.

government gross fixed capital formation comes from the European Commission's AMECO database.

Table 2 presents more microeconomic data for the thirteen countries under analysis. Estimates of implicit tax rates on labor income, capital income, and consumption are taken from Eurostat (2004). Average annual hours worked per person in employment are tabled in the Statistical Annex of the OECD's Employment Outlook (see OECD 2004b). Employment rates for three age groups—15 to 24, 25 to 54, and 55 to 64 years old—are available from Eurostat's New Cronos database. The growth of labor productivity is the decade average from 1991 to 2001, and derives from the OECD Economic Outlook database (see OECD 2004a).

Afonso, Schuknecht, and Tanzi (2003, Table 1) provide estimates of the administrative performance of the public sector, as a composite of indicators taken from various World Competitiveness Reports. This index covers bribery and corruption, bureaucracy (basically red tape), confidence in the administration of justice, and the size of the shadow economy. These estimates are used to set the quality of public consumption or μ which is the fraction of public consumption and general government subsidies that is utility-enhancing for agents.

Finally, the age and gender profiles of public revenues and public expenditures are based on European Commission (1999), a previous generational accounting study, and on Auerbach, Kotlikoff, and Leibfritz (1999) for Portugal.

Turning to parameterization issues, the upper bound on the number of hours worked a year, \overline{h} , is set at 10 hours/day x 6 days/week x (52 - 4) weeks a year, totaling 2880 hours a year. The Cobb-Douglas utility specification allows for a parameterization where the budget shares equal the exponents. Using this approach, the preference parameters for private consumption (α), publicly-provided education (v_e), and publicly-provided health care (v_s) were set using the shares of these expenditure items in GDP. With respect to calibrating ε , which determines how an agent allocates income between leisure and broad consumption, a full income concept is used—defined as broad consumption plus the market value of leisure enjoyed. The market value of leisure in the base year is computed as:

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(1.25)
$$mvl_{2002} = \sum_{a=0}^{100} P_{a,2002}(\overline{h} - h_{a,2002}) w_{a,2002}^{TCPH}(1 - \tau_{2002}^{L}).$$

Given the Cobb-Douglas specification, ε is the corresponding budget share determined by the ratio between the market value of leisure and full income.

James (1994) uses a pure rate of time preference of 3 percent a year, which is the value chosen for the subjective discount rate. The market discount rate that is relevant for the private sector is set at 8 percent, which is the value used by Black, Laxton, Rose, and Tetlow (1994). The discount rate for computing the fiscal gap is 5 percent, consistent with the analysis of the European Commission (1999). This discount rate may seem high but, as Cardarelli, Sefton and Kotlikoff (1999) explain, such a discount rate is justified by the riskiness of the expenditure and revenue flows (the degree to which future net taxes will be higher is itself uncertain) and by the difficulty governments have in credibly committing to run primary surpluses in the long run.

Finally, the nominal interest rate (*i*) used to compute both the public debt and overall balance-to-GDP ratios is set at 5.75 percent when the stock of public debt is positive. This was the average nominal interest rate implicit in the debt service in 2002 for Austria, Belgium, France, Germany, Greece, Italy, the Netherlands, Portugal, Spain, and the United Kingdom. When public debt is negative, it is assumed that the interest rate is 3 percent. This simply reflects the fact that accumulating assets is done conservatively and thus the interest rate earned is lower than interest rate due.

	AT	BE	DK	FI	FR	DE	IE	IT	NL	РТ	ES	SE	UK
Revenues	50.9	50.5	57.4	54.4	50.2	45.0	33.1	45.6	45.9	43.4	39.9	58.1	40.0
Taxes on labor	23.4	25.4	26.7	24.2	22.8	24.4	10.2	20.2	19.2	15.1	16.8	31.6	14.0
Personal income taxes on labor	8.7	10.8	25.0	12.0	6.3	7.4	5.8	7.9	5.3	3.9	4.1	17.0	7.9
Social Security contributions	14.7	14.6	1.7	12.2	16.5	17.0	4.4	12.3	13.9	11.2	12.7	14.6	6.1
Taxes on capital	8.5	9.9	6.2	8.0	9.3	5.6	7.4	11.2	8.5	8.7	9.3	6.0	8.5
Taxes on consumption	12.6	11.3	15.9	13.7	12.1	10.1	11.1	10.3	11.7	12.5	10.0	13.0	13.4
Other taxes	6.4	3.9	8.6	8.5	6.0	4.9	4.4	3.9	6.5	7.1	3.8	7.5	4.1
Outlays	51.3	50.5	55.8	50.1	53.5	48.5	33.3	48.0	47.5	46.1	39.9	58.3	41.5
Social protection	21.6	17.8	24.5	21.3	20.6	22.4	9.3	18.2	17.9	14.0	13.4	24.1	15.7
Health care	6.7	6.7	5.6	6.3	8.4	6.4	6.4	6.5	4.5	6.9	5.3	7.1	6.4
Education	5.7	6.4	8.3	6.6	6.0	4.2	4.3	4.9	4.9	7.0	4.3	7.5	5.0
Net interest payments	2.8	5.8	1.6	0.2	2.8	2.7	0.1	5.3	2.4	3.0	2.5	0.9	1.5
Gross fixed capital formation	1.6	1.8	1.6	3.4	3.1	4.3	1.9	3.3	1.3	3.4	2.9	3.3	1.3
Subsidies and public consumption	13.0	12.1	14.2	12.3	12.6	8.5	11.3	9.8	16.6	11.8	11.5	15.5	11.6
Primary budgetary position	2.4	5.8	3.2	4.5	-0.5	-0.8	-0.1	2.9	0.8	0.3	2.5	0.7	0.0
Net lending	-0.4	0.0	1.6	4.3	-3.3	-3.5	-0.2	-2.4	-1.6	-2.7	0.0	-0.2	-1.5
Net debt	45.0	98.4	7.6	-32.3	39.4	48.5	32.3	94.0	41.9	58.1	39.9	4.8	32.0

Table 1. Fiscal data as a percent of GDP, 2002

Source: Eurostat and OECD

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	AT	BE	DK	FI	FR	DE	IE	IT	NL	PT	ES	SE	UK
Implicit tax rate													
on capital income (Tau_K)	28.5	30.3	28.8	30.3	36.6	20.9	29.3	28.1	29.6	31.7	29.6	31.5	30.8
on labor income (Tau_L)	39.2	43.5	39.9	43.9	41.8	39.9	25.9	41.1	31.9	33.7	30.0	46.6	24.6
on consumption (Tau_C)	22.0	21.7	33.7	28.0	17.4	18.3	25.8	17.1	24.2	20.1	16.3	30.6	21.3
Average annual hours actually worked per person in employment	1567	1547	1462	1686	1459	1443	1666	1599	1338	1697	1664	1581	1692
Employment rate													
of young workers (Eta_15-24)	51.6	29.4	63.5	40.7	29.9	45.4	49.7	25.8	70.0	42.1	33.0	42.8	56.3
of mature workers (Eta_25-54)	83.9	76.5	84.1	81.6	79.5	78.8	76.0	70.1	82.8	81.6	70.1	84.1	80.6
of older workers (Eta_55-64)	29.7	26.6	57.9	47.8	34.7	38.8	47.1	28.9	42.3	50.9	39.7	68.0	53.5
Labor productivity growth, 1991-2001 average (Gamma)	1.81	1.30	2.05	2.68	1.21	1.38	3.37	1.53	1.17	1.71	1.19	2.53	2.13
Preference for													
leisure (Epsilon)	44	49	44	35	40	47	41	44	52	29	45	39	38
private consumption (Alpha)	68	66	61	63	70	70	64	71	64	68	72	56	72
publicly provided education (v_e)	21	24	28	23	20	18	18	20	18	24	18	22	21
publicly provided health care (v_s)	25	25	19	22	28	27	27	27	17	24	22	21	26
Quality of public consumption (Mu)	96.0	57.9	92.1	100.0	57.1	81.0	84.1	41.3	92.1	42.9	61.1	92.1	79.4

Table 2. Other data and parameters, 2002

Source: Eurostat; OECD; Ministerio de Trabajo y Asuntos Sociales (2002); Afonso, Schuknecht and Tanzi (2003); and author's calculations

IV. ON THE DESIGN OF THE SIMULATIONS

A strict interpretation of the Stockholm Agenda is that it prescribes a three-pronged adjustment recipe that every EU member should follow. A looser reading is that countries are free to choose from among the various ingredients: increased labor utilization, accelerated fiscal consolidation, and further entitlement reform. This research adopts a welfare perspective on the Stockholm Agenda to determine whether the reforms to eliminate the fiscal gap should be country-specific (and if so, how would they differ) or if, a common adjustment recipe should be prescribed. This section explains the logic behind the simulations that are specifically designed to answer this question.

The starting point is a reference scenario that is the default adjustment strategy with respect to which alternative policy scenarios can be judged. It should be noted that in all countries the status quo cannot be the reference scenario because it is fiscally unsustainable over the long run. Instead, the reference scenario assumes countries close their fiscal gaps using just lump sum taxes. These taxes impose an equal burden on all those alive at a given point in time. In every case, including the reference scenario, the adjustment goes from 2006 to 2015. A short horizon is warranted on the grounds that if the necessary action is postponed and or if a longer period is assumed, then the measures will have to be more rigorous, making the adjustment even more painful.

Conducting a welfare ranking of the alternative policies requires a discussion of the welfare criterion used. For the cohorts born in or after the base year, 2002, the criterion is expected lifetime utility, as in equation (1.1). For the cohorts born before that date, the standard becomes *remaining* expected lifetime utility, from their present age to 100.⁴ As such, using the reference scenario as the baseline, the welfare criterion will be percentage deviations in (remaining) expected lifetime utility, (RELU). In particular, five birth cohorts are considered: 1916, 1946, 1976, 2006 and 2036, one generation apart. These roughly represent grandparents, parents, children and grandchildren of a young adult today.

⁴ Without this assumption, information on all the public services, taxes paid, incomes received and goods and services consumed since birth would be required, which is clearly not available as the oldest cohort was born in 1902.

Case	Adjustment from 2006 to 2015 through
Case 0	Lump sum taxes (reference scenario)
Case 1	Labor taxes and social security contributions
Case 2	Consumption taxes
Case 3	Public consumption, general government subsidies,
	public investment, education $(1/2x)$, and health care $(1/3x)$
Case 4	Social protection transfers
Case 5	Employment rates of workers aged 25-54 and 55-64 (3x)
Case 6	Aggregate hours worked per year
Case 7	A spending-based Stockholm Agenda (equal combination of Cases 3, 4 and 5)
Case 8	A tax-based Stockholm Agenda (equal combination of Cases 2, 4 and 5)
Case 9	A country-specific welfare-enhanced Stockholm Agenda

Table 3. List of cases considered to close the fiscal gap

Table 3 describes the scenarios. Case 0 is the reference scenario where lump sum taxes are used to close the fiscal gap by 2015. Cases 1 through 6 assume that all of the necessary adjustment is carried out using a single margin. Unrealistic as these cases are individually, they are building blocks of the Stockholm Agenda. Cases 1, 2 and 3 pursue the accelerated fiscal consolidation path, through higher labor taxes and social security contributions, higher consumption taxes, and cutbacks in public consumption (CG), general government subsidies, and public investment (bundled into CG) as well as in publicly provided education (Ed) and in health care (He). As noted earlier, adjustments in CG are three times larger than in He, and twice as large as in Ed. Case 4 involves reducing social protection transfers over the next ten years. Cases 5 and 6 focus on increasing labor utilization, through higher employment rates (the extensive margin) and through a greater number of aggregate hours worked in a year (the intensive margin). As a rule, adjustments in the employment rates of workers aged 55 to 64 are three times

larger that those pertaining to workers aged 25 to 54. It is widely acknowledged that participation rates amongst older workers are low in Europe, while those pertaining to prime-age males are not especially so. Female participation rates can still be boosted, though.

Finally, Cases 7, 8 and 9 are three variants of the Stockholm Agenda. Cases 7 and 8 are strategies that prescribe the use of all three prongs and that differ in the way that the accelerated fiscal consolidation is to be pursued, based on either retrenchment efforts or higher consumption taxes. In each case, the three prongs are accorded equal weight in the fiscal adjustment. Case 9 offers a looser interpretation of the Stockholm strategy in that country-specific agendas for fiscal adjustment are allowed. Here, some prongs are included while others are left out. In this context, subject to a few rules of consistency, the best combination is the one that yields the greatest sum of percentage deviations in remaining expected lifetime utility (RELU) across the 1916, 1946, 1976, 2006 and 2036 birth cohorts.

With respect to the rules of consistency that are imposed, policy instruments have limits with respect to the extent of their use. In the case of employment rates, according to two recent OECD studies, the upper limits are appreciably below 100 percent. Duval (2003) asks how much participation rates for older workers (aged between 55 and 64) would increase if the implicit taxes on working at older ages were fully eliminated. Distortions in pension and social transfer programs (like disability, unemployment, and early retirement) act like an implicit tax on those that keep working. Increases in the participation rate are equated with increases in the corresponding employment rate, in light of the positive correlation between these rates for all workers aged 55-64.⁵ In a similar study that focuses on prime-age females, Jaumotte (2003) asks by how much the labor participation rate for females aged 25 to 54 would increase if certain policy reforms were enacted. She finds that in countries where second earners in married couples (typically women) are taxed more heavily than single individuals, or where public childcare support is lacking, women feel more discouraged from participating in the labor market.

Consistency also requires that there be no conflict between the policy instruments and objectives chosen to carry out the fiscal adjustment. For example, a strategy that aims to

⁵ See data from the OECD Labor Force Statistics cross-plotted as Figure 7 in Elmeskov (2004).

improve labor utilization and that prescribes an increase in the "tax wedge"—e.g., through higher labor taxes or through higher social security contributions—makes little economic sense.

V. DISCUSSION OF THE RESULTS

Projections of age-related public spending as a percent of GDP are often used to assess the readiness of countries' public finances to cope with the forthcoming aging of the population. At least for some countries, this analysis can be misleading given that computing the fiscal gap requires information on all budgetary items, not just those that are sensitive to aging. In some cases, the behavior of tax revenues and of non age-related spending will offset a large burden that is due to population aging. In short, the fiscal gap as a percentage of base year GDP is a better indicator because it is more comprehensive.

Tables 4 and 5 provide simulation results for these two summary indicators. Note that the projections of social protection transfers and health care simply filter the demographics through the age profiles for 2002. As such, no reforms have been modeled, not even those that in 2002 were already planned to kick in at some time in the future. These numbers are simply estimates of where countries would be without the further reforms that may already have been legislated. Thus, without further entitlement reform, Italy, Austria, Spain and Finland are expected to register the largest budgetary burden from aging, whereas Ireland, Sweden, the Netherlands and the United Kingdom would be at the opposite end of the spectrum. Table 5, which, displays estimates of the fiscal gap as a percent of GDP in 2002 gives a different ranking. With a discount rate of 5 percent, the worst cases are Italy and Germany, with estimated fiscal gaps of 240 and 224.8 percent of GDP, respectively. At the lower end of the spectrum, are Spain (51.3 percent of GDP), Belgium (54.9 of GDP), Denmark (69.1 of GDP) and Sweden (73.1 of GDP). The differences between the rankings can be explained by the fact that non age-related budgetary items help to offset the aging burden in Austria, Belgium, Denmark, Finland, and Spain.

	2005	2025	2050	Variation in p.p.
Austria	28.8	36.7	45.9	17.1
Belgium	24.8	31.3	34.8	10.0
Denmark	30.8	37.5	40.2	9.4
Finland	28.7	38.0	40.8	12.1
France	29.1	34.6	38.6	9.5
Germany	22.9	29.0	33.4	10.5
Ireland	9.2	10.5	13.0	3.8
Italy	18.9	26.9	38.0	19.1
Netherlands	18.0	22.3	24.4	6.4
Portugal	20.9	24.4	29.8	8.9
Spain	18.5	22.2	31.5	13.0
Sweden	24.1	27.0	29.3	5.2
United Kingdom	22.1	25.8	29.7	7.6

Table 4. Projections of social protection transfers (TR) and health care (He), percent of GDP

Note: These projections point to where Member States will be without reforms that may already have been legislated

	$r^{PS} = 4\%$	$r^{PS} = 5\%$	$r^{PS} = 6\%$
Austria	273.5	172.6	118.9
Belgium	63.4	54.9	51.4
Denmark	115.0	69.1	44.2
Finland	173.8	78.1	28.8
France	169.9	132.0	107.4
Germany	313.9	224.8	173.5
Ireland	153.2	125.6	97.5
Italy	340.1	240.0	184.5
Netherlands	125.5	101.9	85.4
Portugal	181.0	136.0	109.2
Spain	76.0	51.3	38.0
Sweden	117.7	73.1	49.3
United Kingdom	96.2	79.8	66.7

Table 5. Fiscal gap as a percentage of GDP in 2002, under different discount rates

Next, the simulation results for the 13 European countries are considered. These results are summarized in Tables A.1 through A.14 in the annex. The focus is on the welfare impact of the different cases studied for the five birth cohorts. Notwithstanding the cross-

country differences that exist regarding preferences for leisure, public consumption and private consumption, some common patterns stand out.

First, fiscal adjustments through labor income taxes and social security contributions (Case 1) are preferred to adjusting through consumption taxes (Case 2). For older generations this is not surprising, given that they have stopped working but still consume. For younger generations, it is due to discounting—they only start working at around twenty but they consume over the entire course of their lifetimes.

A second observation is that older generations prefer fiscal adjustment through retrenchment (Case 3) rather than through lump sum taxes. This is because it allows them to benefit from higher pensions while everyone shares the burden of adjusting through lower public consumption, government subsidies, public investment, health care and education. In this scenario, there is a tension between older and younger generations: for most countries the younger generations (already alive or still to be born) are decidedly worse off under Case 3, and would prefer that all of the necessary adjustment be done solely through further entitlement reform (Case 4).

And third, the preferred strategy of adjustment tends to be increased labor utilization. This result holds for all 13 countries. In this case there does not seem to be any generational conflict. Older generations benefit through higher capital income which is a consequence of higher GDP. It is also the preferred alternative of younger generations, despite the loss of leisure time. Note though, that closing the fiscal gap through this margin often requires boosting labor utilization beyond the upper limits indicated by the OECD. Nonetheless, these simulation results suggest that carrying out reforms that aim to boost employment rates, in particular for female and older workers, should be a top priority.

A higher employment rate is modeled as if policymakers could directly influence it directly, which is obviously unrealistic. However, in the data there is a strong correlation between employment rates and labor participation rates, and the higher participation rates, for example, can be achieved through the policy actions highlighted by the two OECD studies, Jaumotte (2003) and Duval (2003). These policy actions—such as providing child care support, addressing the tax discrimination of second earners in married couples, or lowering the implicit taxes on working at older ages—correct distortions in the economy but inevitably entail a resource cost. These public finance

costs could vary depending on the measures involved, e.g., providing more child care support versus reducing unemployment benefits. By increasing employment manually, it is assumed that what is gained by correcting the distortions is just enough to cover the resource cost of the reforms. In reality, a net social benefit could be observed despite the fiscal cost.

Another interesting conclusion is that only for Portugal should adjusting through retrenchment be included in a fiscal consolidation process that is welfare-augmenting. For the remaining countries, such a strategy is hard to justify, in this framework at least, due to the welfare losses it entails.

Having simulated Cases 1 through 6, and getting an idea of the preferred margins of fiscal adjustment in each country, a country-specific welfare-enhanced Stockholm Agenda can be characterized. The key is to determine, through a comparative welfare analysis, whether a country-specific Stockholm strategy (Case 9) is better than a common agenda (Cases 7 and 8). Based on the analysis of this paper, Table 6 provides a summary matrix of which of the three prongs EU countries should focus on. In a very practical sense, this exercise is a first step in making the Stockholm Agenda operational. A few interesting conclusions emerge from the table. First, improving labor utilization is overwhelmingly important and for most countries this should be obtained through the extensive margin, i.e., by increasing employment rates. In 10 countries employment rates should be raised to meet the OECD upper limits. Second, in 10 of the 13 countries, more than one margin of fiscal adjustment is required; most require higher employment rates alongside entitlement reform. This is especially true for countries with more acute longterm fiscal imbalances. Especially in the case of the employment rates of older workers, these two policies reinforce each other. Retrenchment is advisable as a part of the fiscal adjustment strategy only in Portugal. In no country is a Stockholm Agenda-like strategy that features all three prongs recommended. Also, fiscal consolidation seems to be better achieved on the expenditure side than on the revenue side; consumption taxes, in particular, are very penalizing.

But are country-specific adjustment strategies really worth the trouble? Table 7 presents a comparative analysis of the welfare impact for the five birth cohorts considered. The conclusion is that, on average, the sum of percentage deviations in remaining expected lifetime utility across the five birth cohorts is almost three times as large when a country-specific adjustment strategy is pursued. This is a significant difference and should prompt

countries to tailor the Stockholm Agenda's prescription to their specific environment. If the country-specific scenario—which is, by construction, the one which yields the greatest sum of percentage deviations from remaining expected lifetime utility—excludes a certain margin of adjustment then that particular instrument should not be used. In that case, a Stockholm Agenda (like Cases 7 and 8) that prescribes a common-to-all adjustment strategy is comparatively worse from a welfare perspective.

Table 7 also allows for an analysis of which of the three cases (7, 8 and 9) the five birth cohorts would choose, if surveyed. In nine of the 13 countries, the country-specific welfare enhanced strategy would win out against Cases 7 and 8. In Germany and in Italy the older birth cohorts (1916 and 1946) would block Case 9 in favor of Case 8, the common-to-all strategy where fiscal consolidation is achieved through higher consumption taxes. In Sweden and in the United Kingdom, the opposition to Case 9 would be weaker given that only the 1916 cohort would oppose, and even so it would be by a narrow margin. On the whole, these figures are reassuring in the sense that they suggest that implementing a country-specific welfare-enhanced strategy does not necessarily entail a generational conflict. Only in Germany and in Italy does such a conflict appear to exist, probably due to the scale of the adjustment that is required. If so, this would suggest that the longer countries wait before they start their much-needed fiscal adjustment programs the more their fiscal imbalances worsen and, as such, a generational conflict becomes ever more likely.

	Greater lak	oor utilizatio	on	Entitlement reform	Fiscal con	nsolidation
	Aggregate hours worked (H)	Employn (Eta_25-54	nent rates ; Eta_55-64)	Social protection transfers (TR)	Consumption taxes (Tau_C)	Public consumption, health care and education (CG, He, Ed) 2/
Austria		XX	XX	Х		
Belgium		XX	Х			
Denmark	X /3	XX	XX	X		
Finland		XX	Х			
France		XX	XX	Х		
Germany		XX	XX	Х		
Ireland		XX	XX	Х		
Italy		XX	XX	Х		
Netherlands		XX	XX	Х		
Portugal		XX	XX			Х
Spain		Х	Х			
Sweden		XX	XX	Х		
United Kingdom		XX	XX	Х		

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Table 6 Towards a waltare enhanced	Stockholm Aganda a sum	mary matrix of which addiction	nt moraine to uco	to aliminata tha ticcal can
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	Stotimonni i general a sun			to eminate the hotal gap

1/ XX means that the OECD upper limits for employment rates are to be met.

2/ Health care and education adjust respectively 1/3 and 1/2 of what public consumption, general government subsidies and public investment adjust.

3/ Alternative policy.

-

Constant	Strate and	Sum of % deviations	We	lfare im	pact by	birth col	nort
Country	Strategy	in RELU	1916	1946	1976	2006	2036
Austria	Case 7	0.41	0.06	0.06	-0.01	0.15	0.15
	Case 8	0.50	0.07	0.10	0.01	0.17	0.15
	Country-specific	1.24	0.07	0.20	0.17	0.39	0.41
Belgium	Case 7	0.11	0.02	0.02	-0.01	0.04	0.04
-	Case 8	0.15	0.02	0.03	0.00	0.05	0.05
	Country-specific	0.46	0.05	0.11	0.04	0.12	0.14
Denmark	Case 7	0.02	0.01	0.01	-0.02	0.01	0.01
	Case 8	0.09	0.01	0.02	0.00	0.03	0.03
	Country-specific	0.38	0.04	0.09	0.04	0.10	0.11
Finland	Case 7	0.13	0.05	0.01	-0.01	0.04	0.04
	Case 8	0.18	0.05	0.04	0.02	0.04	0.03
	Country-specific	0.83	0.11	0.18	0.12	0.20	0.22
France	Case 7	0.85	0.07	0.10	0.08	0.29	0.31
	Case 8	0.70	0.07	0.10	0.06	0.23	0.24
	Country-specific	2.11	0.18	0.41	0.33	0.57	0.62
Germany	Case 7	0.64	0.10	0.09	0.02	0.21	0.22
5	Case 8	0.83	0.11	0.14	0.06	0.26	0.26
	Country-specific	1.19	0.02	0.06	0.17	0.45	0.49
Ireland	Case 7	0.21	0.06	0.09	0.00	0.03	0.03
	Case 8	0.24	0.06	0.10	0.01	0.04	0.03
	Country-specific	0.91	0.15	0.32	0.06	0.18	0.20

Table 7. A common strategy or a country-specific one: a comparative welfare analysis

Grandens	<u>C</u> 4	Sum of % deviations	We	lfare im	pact by l	birth col	nort
Country	Strategy	in RELU	1916	1946	1976	2006	2036
Italy	Case 7	1.00	0.02	0.05	0.08	0.43	0.42
	Case 8	1.11	0.04	0.12	0.13	0.43	0.39
	Country-specific	1.85	-0.06	0.11	0.28	0.74	0.78
Netherlands	Case 7	0.29	0.04	0.08	0.02	0.07	0.08
	Case 8	0.37	0.04	0.09	0.03	0.10	0.11
	Country-specific	1.43	0.13	0.39	0.21	0.33	0.37
Portugal	Case 7	3.13	1.55	0.44	0.22	0.45	0.47
	Case 8	2.71	1.53	0.40	0.19	0.33	0.26
	Country-specific	4.00	1.90	0.81	0.32	0.48	0.49
Spain	Case 7	0.39	0.07	0.10	0.04	0.10	0.08
	Case 8	0.40	0.07	0.11	0.05	0.10	0.07
	Country-specific	1.32	0.18	0.37	0.21	0.28	0.28
Sweden	Case 7	0.04	0.02	0.02	-0.02	0.01	0.01
	Case 8	0.11	0.02	0.03	0.00	0.03	0.03
	Country-specific	0.19	0.01	0.03	0.02	0.06	0.07
United Kingdom	Case 7	0.23	0.04	0.07	0.02	0.05	0.05
	Case 8	0.15	0.04	0.02	0.00	0.05	0.04
	Country-specific	0.44	0.03	0.09	0.07	0.12	0.13

Table 7. A common strategy or a country-specific one: a comparative welfare analysis (cont'd)

VI. CONCLUDING REMARKS

Most countries in Europe are faced with a significant challenge of placing their public finances on a more sustainable footing. To address this, it would be sensible for policymakers to adopt a welfare perspective to characterize the best strategy of fiscal adjustment. Using a generational accounting model with a detailed welfare analysis, simulation results in this paper suggest that the Stockholm Agenda—which recommends a multi-pronged approach based on increasing labor utilization, furthering entitlement reform, and accelerating fiscal consolidation—is a useful starting point. However, it should be tailored to account for structural differences (relating to preferences, technology and the state of public finances) across countries, and it does not seem advisable for any country to include elements from all three prongs. Boosting labor utilization is the single most important aspect of the strategy for every country and should always be present. In general, the country-specific strategies do not give rise to generational conflict, and such conflict can be avoided by addressing fiscal problems early on.

The customary caveats of the analysis should be mentioned. For a start, the underlying framework suffers from a few limitations and so the simulation results need to be interpreted with caution, in particular when trying to draw firm policy conclusions. Perhaps the most serious limitation is the use of an accounting rather than an economic model with an applied general equilibrium flavor. In such a model, factor prices (such as interest rates and wages) and factor supplies respond endogenously to changes in the economic environment. As a result, tax bases respond to changes in tax rates. Working with an economic model would also allow changes in public investment flows to affect GDP performance. Even though Fehr and Kotlikoff (1997) argue that changes in generational accounts do a reasonable job in tracking the generational incidence of fiscal policy in general equilibrium, it is unclear whether the present assessment of the Stockholm Agenda would still stand if an economic model had instead been used. This is an important issue that future work should address.

Similarly, a comprehensive sensitivity analysis is required to determine how the welfare ranking of the alternative policies changes under different constellations of labor productivity, discount rates, and preference parameters. Improvements in the quality of public expenditure would also change the results.

The remaining caveats that are worth highlighting involve data and parameterization issues. In many countries, the personal income tax base includes not only labor income but also pension income. Here, the assumption is that only people aged 15 to 64 pay personal income taxes, which may be biasing the results, albeit to a limited extent. Furthermore, age- and gender-specific profiles of revenue and public spending need to be updated, as the profiles used are almost ten years old. Also, Eurostat has just provided a new set of demographic projections for the 25 EU members that projects even higher old age dependency rates than before. Revised assumptions on fertility rates, mortality rates, and migration can then be used to project the population in each country until as late as 2150, which is crucial to capture the whole lifetime of the cohort born in 2050.

Despite these shortcomings, this accounting framework offers some interesting insights, and seems to be a useful starting point for further more elaborate work.

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A N N E X

		Per capita consumption	Net debt : balance	Welfare impact	t (% dev. in REL	U vis-à-vis adi.	ump sum taxes)	by birth cohort
	Tau_L (%)	(Adj. lump sum taxes $= 1$)	(% GDP)	1916	1946	1976	2006	2036
2005	39.2	1.00	41.7 ; -0.5	0.16	0.22	-0.05	0.13	0.13
2010	46.2	0.99	28.0; 3.2					
2015	54.5	0.99	-6.9;8.7		Sun	n of % dev. in RI	ELU	
2050	54.5	0.99	-118.3 ; 1.7			0.59		
		Case 2	2. Adjustment through	consumption taxes				
		Per capita consumption	Net debt ; balance	Welfare impact	t (% dev. in REL	U vis-à-vis adj.	ump sum taxes)	by birth cohor
	Tau_C (%)	(Adj. lump sum taxes $= 1$)	(% GDP)	1916	1946	1976	2006	2036
2005	22.0	1.00	41.7;-0.5	0.12	0.03	-0.18	-0.18	-0.29
2010	27.3	0.94	27.9;3.0					
2015	22.0	0.04	40.01		Cum	f 0/ J : DI	71.11	
2015	33.8	0.94	-4.0, 0.1		Sui	1 01 % dev. in Ki	ELU	
2013	33.8 33.8 Case 3. Adjustment th	0.94 0.94 arough public consumption, gener	-4.8; 8.1 -107.3; 1.3 ral government subsidie	s, and public investi	ment (CG), healt	-0.50 h care (He) and d	education (Ed)	
2013	33.8 33.8 Case 3. Adjustment th	0.94 0.94 arough public consumption, gener Per capita consumption	-4.0; 0.1 -107.3; 1.3 ral government subsidie Net debt ; balance	s, and public investi Welfare impact	ment (CG), healt t (% dev. in REL	-0.50 <u>h care (He) and c</u> U vis-à-vis adj.	education (Ed)	by birth cohor
2013 2050	33.8 33.8 Case 3. Adjustment th CG, He, Ed (% GDP)	0.94 0.94 rough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1)	-4.0; 0.1 -107.3; 1.3 ral government subsidie <u>Net debt ; balance</u> (% GDP)	s, and public investr Welfare impact 1916	ment (CG), healt t (% dev. in REL 1946	-0.50 h care (He) and o U vis-à-vis adj. 1976	education (Ed) lump sum taxes) 2006	by birth cohort 2036
2013 2050 2005	35.8 33.8 Case 3. Adjustment th CG, He, Ed (% GDP) 14.5 ; 6.9 ; 5.6	0.94 0.94 Per capita consumption, gener (Adj. lump sum taxes = 1) 1.00	-4.0; 0.1 -107.3; 1.3 ral government subsidie <u>Net debt ; balance</u> (% GDP) 41.7; -0.5	s, and public investr Welfare impact 1916 0.09	ment (CG), healt t (% dev. in REL 1946 -0.16	-0.50 <u>h care (He) and o</u> <u>JU vis-à-vis adj.</u> <u>1976</u> -0.30	education (Ed) lump sum taxes) 2006 -0.30	by birth cohort 2036 -0.37
2013 2050 2005 2010	33.8 33.8 Case 3. Adjustment th CG, He, Ed (% GDP) 14.5 ; 6.9 ; 5.6 11.4 ; 6.7 ; 4.7	0.94 0.94 Per capita consumption, gener (Adj. lump sum taxes = 1) 1.00 1.06	-4.0; 0.1 -107.3; 1.3 ral government subsidie <u>Net debt ; balance</u> (% GDP) 41.7; -0.5 24.0; 4.1	weis, and public investres, and public investres Welfare impact 1916 0.09	ment (CG), healt t (% dev. in REL 1946 -0.16	-0.50 <u>h care (He) and o</u> <u>U vis-à-vis adj.</u> <u>1976</u> -0.30	education (Ed) lump sum taxes) 2006 -0.30	by birth cohort 2036 -0.37
2013 2050 2005 2010 2015	33.8 33.8 Case 3. Adjustment th CG, He, Ed (% GDP) 14.5 ; 6.9 ; 5.6 11.4 ; 6.7 ; 4.7 8.9 ; 6.5 ; 3.9	0.94 0.94 Per capita consumption, gener (Adj. lump sum taxes = 1) 1.00 1.06 1.05	-4.0; 0.1 -107.3; 1.3 ral government subsidie <u>Net debt ; balance</u> (% GDP) 41.7; -0.5 24.0; 4.1 -12.1; 8.5	welfare impact Welfare impact 1916 0.09	ment (CG), healt t (% dev. in REL 1946 -0.16 Sun	-0.50 <u>h care (He) and o</u> <u>U vis-à-vis adj.</u> <u>1976</u> -0.30 n of % dev. in RI	education (Ed) lump sum taxes) 2006 -0.30 ELU	by birth cohort 2036 -0.37
2005 2010 2015 2050	33.8 33.8 Case 3. Adjustment th CG, He, Ed (% GDP) 14.5 ; 6.9 ; 5.6 11.4 ; 6.7 ; 4.7 8.9 ; 6.5 ; 3.9 8.9 ; 10.0 ; 4.1	0.94 0.94 arough public consumption, gener (Adj. lump sum taxes = 1) 1.00 1.06 1.05 1.05	-4.0; 0.1 -107.3; 1.3 ral government subsidie <u>Net debt ; balance</u> (% GDP) 41.7; -0.5 24.0; 4.1 -12.1; 8.5 -121.1; 2.0	es, and public investi Welfare impact 1916 0.09	ment (CG), healt t (% dev. in REL 1946 -0.16 Sun	-0.50 h care (He) and o <u>U vis-à-vis adj.</u> <u>1976</u> -0.30 h of % dev. in RI -1.04	education (Ed) lump sum taxes) 2006 -0.30 ELU	by birth cohort 2036 -0.37
2005 2005 2010 2015 2050	33.8 33.8 Case 3. Adjustment th CG, He, Ed (% GDP) 14.5 ; 6.9 ; 5.6 11.4 ; 6.7 ; 4.7 8.9 ; 6.5 ; 3.9 8.9 ; 10.0 ; 4.1	0.94 0.94 arough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.06 1.05 1.05 1.05 Case 4. Adju	-4.0; 0.1 -107.3; 1.3 ral government subsidie <u>Net debt ; balance</u> (% GDP) 41.7; -0.5 24.0; 4.1 -12.1; 8.5 -121.1; 2.0 ustment through social	welfare impact Welfare impact 1916 0.09	<u>ment (CG), healt</u> t (% dev. in REL 1946 -0.16 Sun (TR)	-0.50 <u>h care (He) and o</u> <u>U vis-à-vis adj.</u> <u>1976</u> -0.30 h of % dev. in RH -1.04	education (Ed) lump sum taxes) 2006 -0.30 ELU	by birth cohort 2036 -0.37
2005 2005 2010 2015 2050	33.8 33.8 Case 3. Adjustment th CG, He, Ed (% GDP) 14.5 ; 6.9 ; 5.6 11.4 ; 6.7 ; 4.7 8.9 ; 6.5 ; 3.9 8.9 ; 10.0 ; 4.1	0.94 0.94 arough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.06 1.05 1.05 1.05 Case 4. Adju	-4.0; 0.1 -107.3; 1.3 ral government subsidie <u>Net debt ; balance</u> (% GDP) 41.7; -0.5 24.0; 4.1 -12.1; 8.5 -121.1; 2.0 ustment through social ; Net debt ; balance	welfare impact Welfare impact 1916 0.09 protection transfers (Welfare impact	ment (CG), healt t (% dev. in REL 1946 -0.16 Sun (TR) t (% dev. in REL	-0.50 <u>h care (He) and o</u> <u>U vis-à-vis adj.</u> <u>1976</u> -0.30 n of % dev. in RI -1.04 <u>JU vis-à-vis adj.</u>	education (Ed) lump sum taxes) 2006 -0.30 ELU lump sum taxes)	by birth cohort 2036 -0.37 by birth cohort
2005 2005 2010 2015 2050	33.8 33.8 Case 3. Adjustment th CG, He, Ed (% GDP) 14.5 ; 6.9 ; 5.6 11.4 ; 6.7 ; 4.7 8.9 ; 6.5 ; 3.9 8.9 ; 10.0 ; 4.1 TR (% GDP)	0.94 0.94 arough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.06 1.05 1.05 Case 4. Adju Per capita consumption (Adj. lump sum taxes = 1)	-4.0; 0.1 -107.3; 1.3 ral government subsidie <u>Net debt ; balance</u> (% GDP) 41.7; -0.5 24.0; 4.1 -12.1; 8.5 -121.1; 2.0 ustment through social <u>Net debt ; balance</u> (% GDP)	vs, and public investr Welfare impact 1916 0.09 protection transfers (Welfare impact 1916	ment (CG), healt t (% dev. in REL 1946 -0.16 Sun (TR) t (% dev. in REL 1946	-0.50 <u>h care (He) and o</u> <u>U vis-à-vis adj.</u> <u>1976</u> -0.30 h of % dev. in RI -1.04 <u>U vis-à-vis adj.</u> <u>1976</u>	education (Ed) lump sum taxes) 2006 -0.30 ELU lump sum taxes) 2006	by birth cohort 2036 -0.37 by birth cohort 2036
2005 2005 2010 2015 2050 2005	33.8 33.8 Case 3. Adjustment th CG, He, Ed (% GDP) 14.5 ; 6.9 ; 5.6 11.4 ; 6.7 ; 4.7 8.9 ; 6.5 ; 3.9 8.9 ; 10.0 ; 4.1 TR (% GDP) 21.9	0.94 0.94 arough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.06 1.05 1.05 Case 4. Adju Per capita consumption (Adj. lump sum taxes = 1) 1.00	-4.6; 0.1 -107.3; 1.3 ral government subsidie <u>Net debt ; balance</u> (% GDP) 41.7; -0.5 24.0; 4.1 -12.1; 8.5 -121.1; 2.0 ustment through social j <u>Net debt ; balance</u> (% GDP) 41.7; -0.5	vs, and public investr Welfare impact 1916 0.09 protection transfers (Welfare impact 1916 -0.18	<u>ment (CG), healt</u> t (% dev. in REL 1946 -0.16 Sun (TR) t (% dev. in REL 1946 -0.30	-0.50 <u>h care (He) and 6</u> <u>U vis-à-vis adj.</u> <u>1976</u> -0.30 h of % dev. in RI -1.04 <u>U vis-à-vis adj.</u> <u>1976</u> -0.08	education (Ed) lump sum taxes) 2006 -0.30 ELU lump sum taxes) 2006 0.18	by birth cohort 2036 -0.37 by birth cohort 2036 0.18
2005 2005 2010 2015 2050 2005 2010	33.8 33.8 Case 3. Adjustment th CG, He, Ed (% GDP) 14.5; 6.9; 5.6 11.4; 6.7; 4.7 8.9; 6.5; 3.9 8.9; 10.0; 4.1 TR (% GDP) 21.9 19.0	0.94 0.94 arough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.06 1.05 1.05 Case 4. Adju Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.00 1.00	-4.0; 0.1 -107.3; 1.3 ral government subsidie <u>Net debt ; balance</u> (% GDP) 41.7; -0.5 24.0; 4.1 -12.1; 8.5 -121.1; 2.0 ustment through social <u>Net debt ; balance</u> (% GDP) 41.7; -0.5 28.7; 2.8	welfare impact Welfare impact 1916 0.09 protection transfers (Welfare impact 1916 -0.18	ment (CG), healt t (% dev. in REL 1946 -0.16 Sun (TR) t (% dev. in REL 1946 -0.30	-0.50 h care (He) and o -0.50 h care (He) and o -0.30 h of % dev. in RI -1.04 -1.04 -1.04 -1.04	education (Ed) lump sum taxes) 2006 -0.30 ELU lump sum taxes) 2006 0.18	by birth cohort 2036 -0.37 by birth cohort 2036 0.18
2005 2005 2010 2015 2050 2005 2010 2015	33.8 33.8 Case 3. Adjustment th CG, He, Ed (% GDP) 14.5; 6.9; 5.6 11.4; 6.7; 4.7 8.9; 6.5; 3.9 8.9; 10.0; 4.1 TR (% GDP) 21.9 19.0 16.4	0.94 0.94 arough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.06 1.05 1.05 Case 4. Adju Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.00 0.99	-4.6; 0.1 -107.3; 1.3 ral government subsidie <u>Net debt ; balance</u> (% GDP) 41.7; -0.5 24.0; 4.1 -12.1; 8.5 -121.1; 2.0 ustment through social <u>Net debt ; balance</u> (% GDP) 41.7; -0.5 28.7; 2.8 0.5; 6.5	welfare impact Welfare impact 1916 0.09 protection transfers (Welfare impact 1916 -0.18	<u>ment (CG), healt</u> <u>t (% dev. in REI</u> <u>1946</u> -0.16 Sun (TR) <u>t (% dev. in REI</u> <u>1946</u> -0.30 Sun	-0.50 <u>h care (He) and 6</u> <u>U vis-à-vis adj.</u> <u>1976</u> -0.30 h of % dev. in RI -1.04 <u>U vis-à-vis adj.</u> <u>1976</u> -0.08 h of % dev. in RI	education (Ed) lump sum taxes) 2006 -0.30 ELU lump sum taxes) 2006 0.18 ELU	by birth cohort 2036 -0.37 by birth cohort 2036 0.18

Table A.1 Simulation results for Austria (adjustment from 2006 to 2015)

		Per capita consumption	Net debt : balance	Welfare impac	t (% dev in RFI	II vis-à-vis adi	lumn sum taxes)	by hirth cohe
	Eta 25-54 : Eta 55-64 (%)	(Adi, lump sum taxes = 1)	(% GDP)	1916	1946	1976	2006	2036
2005	83.9 ; 29.7	1.00	41.7 ; -0.5	0.22	0.48	0.16	0.39	0.42
2010	92.1 : 39.1	0.91	22.4 : 3.1					
2015	101.0 : 51.4	0.88	-6.5 : 6.4		Sur	n of % dev. in R	ELU	
2050	101.0 : 51.4	0.88	-74.6:0.1			1.67		
	OECD limits: 90.2 : 48.0		,					
	,	Case 6. Adjust	tment through aggregate	e hours worked per y	year (H)			
		Per capita consumption	Net debt ; balance	Welfare impac	t (% dev. in REI	LU vis-à-vis adi.	lump sum taxes)	by birth coho
	Н	(Adj. lump sum taxes $= 1$)	(% GDP)	1916	1946	1976	2006	2036
2005	1567	1.00	41.7 ; -0.5	0.22	0.49	0.03	0.18	0.22
2010	1780	0.89	21.1; 3.4					
2015	2021	0.89	-7.0;6.7		Sur	n of % dev. in R	ELU	
2050	2021	0.89	-82.3:0.5			1.14		
Case ?	7. A spending-based Stockholm Agen	da: adjustment through emplo	oyment rates (Etas), soci	ial protection transfe	ers (TR), and put	blic consumptior	n (CG), health ca	re and educat
Case 2	7. A spending-based Stockholm Agen	da: adjustment through emplo	oyment rates (Etas), soci Net debt ; balance	ial protection transfo Welfare impac	ers (TR), and put	blic consumptior	n (CG), health ca lump sum taxes)	re and educat
Case	7. A spending-based Stockholm Agen _25-54 ; _55-64 ; TR ; CG ; He ; Ed	da: adjustment through emploid Per capita consumption (Adj. lump sum taxes = 1)	Net debt ; balance (% GDP)	ial protection transfo Welfare impac 1916	ers (TR), and put t (% dev. in REI 1946	blic consumptior LU vis-à-vis adj. 1976	n (CG), health ca lump sum taxes) 2006	re and education by birth cohor 2036
Case 2	7. A spending-based Stockholm Agen _25-54 ; _55-64 ; TR ; CG ; He ; Ed 83.9 ; 29.7 ; 21.9 ; 14.5 ; 6.9 ; 5.6	da: adjustment through emploid Per capita consumption (Adj. lump sum taxes = 1) 1.00	Net debt ; balance (% GDP) 41.7 ; -0.5	ial protection transfo Welfare impac 1916 0.06	ers (TR), and put t (% dev. in REI 1946 0.06	blic consumption LU vis-à-vis adj. 1976 -0.01	n (CG), health ca lump sum taxes) 2006 0.15	re and education by birth cohor 2036
Case 2005 2010	7. A spending-based Stockholm Agen _25-54 ; _55-64 ; TR ; CG ; He ; Ed 83.9 ; 29.7 ; 21.9 ; 14.5 ; 6.9 ; 5.6 86.8 ; 32.9 ; 20.7 ; 13.6 ; 6.8 ; 4.9	da: adjustment through emploid Per capita consumption (Adj. lump sum taxes = 1) 1.00 0.98	Net debt ; balance (% GDP) 41.7 ; -0.5 25.3 ; 3.2	ial protection transfo Welfare impac 1916 0.06	ers (TR), and put t (% dev. in REI 1946 0.06	blic consumptior LU vis-à-vis adj. 1976 -0.01	n (CG), health ca lump sum taxes) 2006 0.15	re and educat by birth coho 2036 0.14
Case 2005 2010 2015	7. A spending-based Stockholm Agen _25-54 ; _55-64 ; TR ; CG ; He ; Ed 83.9 ; 29.7 ; 21.9 ; 14.5 ; 6.9 ; 5.6 86.8 ; 32.9 ; 20.7 ; 13.6 ; 6.8 ; 4.9 89.9 ; 36.4 ; 19.4 ; 12.7 ; 6.7 ; 4.2	da: adjustment through emploid Per capita consumption (Adj. lump sum taxes = 1) 1.00 0.98 0.97	Net debt ; balance (% GDP) 41.7 ; -0.5 25.3 ; 3.2 -5.5 ; 7.1	ial protection transfo Welfare impac 1916 0.06	ers (TR), and put t (% dev. in REI 1946 0.06 Sur	blic consumption LU vis-à-vis adj. 1976 -0.01 n of % dev. in R	n (CG), health ca lump sum taxes) 2006 0.15 ELU	re and educat by birth cohe 2036 0.14
Case 2005 2010 2015 2050	7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 83.9 ; 29.7 ; 21.9 ; 14.5 ; 6.9 ; 5.6 86.8 ; 32.9 ; 20.7 ; 13.6 ; 6.8 ; 4.9 89.9 ; 36.4 ; 19.4 ; 12.7 ; 6.7 ; 4.2 89.9 ; 36.4 ; 28.1 ; 12.7 ; 10.3 ; 4.4	da: adjustment through emploid Per capita consumption (Adj. lump sum taxes = 1) 1.00 0.98 0.97 0.97	Net debt ; balance (% GDP) 41.7 ; -0.5 25.3 ; 3.2 -5.5 ; 7.1 -89.0 ; 0.7	ial protection transfo Welfare impac 1916 0.06	ers (TR), and put t (% dev. in REI 1946 0.06 Sur	<u>LU vis-à-vis adj.</u> <u>1976</u> -0.01 n of % dev. in R 0.40	n (CG), health ca lump sum taxes) 2006 0.15 ELU	re and educat by birth coho 2036 0.14
Case 2005 2010 2015 2050	7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 83.9 ; 29.7 ; 21.9 ; 14.5 ; 6.9 ; 5.6 86.8 ; 32.9 ; 20.7 ; 13.6 ; 6.8 ; 4.9 89.9 ; 36.4 ; 19.4 ; 12.7 ; 6.7 ; 4.2 89.9 ; 36.4 ; 28.1 ; 12.7 ; 10.3 ; 4.4 Case 8. A tax-based Stockhol	da: adjustment through emploidated emploid employed emplo	Net debt ; balance (% GDP) 41.7 ; -0.5 25.3 ; 3.2 -5.5 ; 7.1 -89.0 ; 0.7 ugh employment rates (H	ial protection transfo Welfare impac 1916 0.06 Etas), social protecti	ers (TR), and put t (% dev. in REI 1946 0.06 Sur on transfers (TR	blic consumption U vis-à-vis adj. 1976 -0.01 n of % dev. in R 0.40 .), and consumpt	n (CG), health ca lump sum taxes) 2006 0.15 ELU ion taxes (Tau_C	re and educat
Case 2005 2010 2015 2050	7. A spending-based Stockholm Agen _25-54 ; _55-64 ; TR ; CG ; He ; Ed 83.9 ; 29.7 ; 21.9 ; 14.5 ; 6.9 ; 5.6 86.8 ; 32.9 ; 20.7 ; 13.6 ; 6.8 ; 4.9 89.9 ; 36.4 ; 19.4 ; 12.7 ; 6.7 ; 4.2 89.9 ; 36.4 ; 28.1 ; 12.7 ; 10.3 ; 4.4 Case 8. A tax-based Stockho	da: adjustment through emploidate Per capita consumption (Adj. lump sum taxes = 1) 1.00 0.98 0.97 0.97 olm Agenda: adjustment throug Per capita consumption	Net debt ; balance (% GDP) 41.7 ; -0.5 25.3 ; 3.2 -5.5 ; 7.1 -89.0 ; 0.7 agh employment rates (H Net debt ; balance	ial protection transfo Welfare impac 1916 0.06 Etas), social protecti Welfare impac	ers (TR), and puint t (% dev. in REI 1946 0.06 Sur on transfers (TR t (% dev. in REI	<u>LU vis-à-vis adj.</u> <u>1976</u> -0.01 n of % dev. in R 0.40), and consumpt LU vis-à-vis adj.	n (CG), health ca lump sum taxes) 2006 0.15 ELU ion taxes (Tau_C lump sum taxes)	re and educat
Case 2005 2010 2015 2050	7. A spending-based Stockholm Agen _25-54 ; _55-64 ; TR ; CG ; He ; Ed 83.9 ; 29.7 ; 21.9 ; 14.5 ; 6.9 ; 5.6 86.8 ; 32.9 ; 20.7 ; 13.6 ; 6.8 ; 4.9 89.9 ; 36.4 ; 19.4 ; 12.7 ; 6.7 ; 4.2 89.9 ; 36.4 ; 28.1 ; 12.7 ; 10.3 ; 4.4 Case 8. A tax-based Stockho _25-54 ; _55-64 ; TR ; Tau_C	da: adjustment through emploidated emploid emploid employed employ	Net debt ; balance (% GDP) 41.7 ; -0.5 25.3 ; 3.2 -5.5 ; 7.1 -89.0 ; 0.7 agh employment rates (H Net debt ; balance (% GDP)	ial protection transfo Welfare impac 1916 0.06 Etas), social protecti Welfare impac 1916	ers (TR), and put t (% dev. in REI 1946 0.06 Sur on transfers (TR t (% dev. in REI 1946	blic consumption LU vis-à-vis adj. 1976 -0.01 n of % dev. in R 0.40 .), and consumpt LU vis-à-vis adj. 1976	n (CG), health ca lump sum taxes) 2006 0.15 ELU ion taxes (Tau_C lump sum taxes) 2006	te and educat by birth coho 2036 0.14 c) by birth coho 2036
Case 2005 2010 2015 2050 2005	7. A spending-based Stockholm Agen _25-54 ; _55-64 ; TR ; CG ; He ; Ed 83.9 ; 29.7 ; 21.9 ; 14.5 ; 6.9 ; 5.6 86.8 ; 32.9 ; 20.7 ; 13.6 ; 6.8 ; 4.9 89.9 ; 36.4 ; 19.4 ; 12.7 ; 6.7 ; 4.2 89.9 ; 36.4 ; 28.1 ; 12.7 ; 10.3 ; 4.4 Case 8. A tax-based Stockho _25-54 ; _55-64 ; TR ; Tau_C 83.9 ; 29.7 ; 21.9 ; 22.0	da: adjustment through emploidated emploid emploid employed employ	Net debt ; balance (% GDP) 41.7 ; -0.5 25.3 ; 3.2 -5.5 ; 7.1 -89.0 ; 0.7 agh employment rates (H Net debt ; balance (% GDP) 41.7 ; -0.5	ial protection transfo Welfare impac 1916 0.06 Etas), social protecti Welfare impac 1916 0.07	ers (TR), and put t (% dev. in REI 1946 0.06 Sur on transfers (TR t (% dev. in REI 1946 0.10	blic consumption <u>U vis-à-vis adj.</u> 1976 -0.01 n of % dev. in R ¹ 0.40 0.40 <u>0.40</u> <u>0.40</u> <u>1976</u> 0.01	n (CG), health ca lump sum taxes) 2006 0.15 ELU ion taxes (Tau_C lump sum taxes) 2006 0.17	te and educat by birth coho 2036 0.14 c) by birth coho 2036 0.15
Case 2005 2010 2015 2050 2005 2005 2010	7. A spending-based Stockholm Agen _25-54 ; _55-64 ; TR ; CG ; He ; Ed 83.9 ; 29.7 ; 21.9 ; 14.5 ; 6.9 ; 5.6 86.8 ; 32.9 ; 20.7 ; 13.6 ; 6.8 ; 4.9 89.9 ; 36.4 ; 19.4 ; 12.7 ; 6.7 ; 4.2 89.9 ; 36.4 ; 28.1 ; 12.7 ; 10.3 ; 4.4 Case 8. A tax-based Stockho _25-54 ; _55-64 ; TR ; Tau_C 83.9 ; 29.7 ; 21.9 ; 22.0 86.8 ; 32.9 ; 20.7 ; 23.9	da: adjustment through emploidated emploid emploid employed employ	Net debt ; balance (% GDP) 41.7 ; -0.5 25.3 ; 3.2 -5.5 ; 7.1 -89.0 ; 0.7 agh employment rates (H Net debt ; balance (% GDP) 41.7 ; -0.5	ial protection transfe Welfare impac 1916 0.06 Etas), social protecti Welfare impac 1916 0.07	ers (TR), and pui t (% dev. in REI 1946 0.06 Sur on transfers (TR t (% dev. in REI 1946 0.10	blic consumption 20 vis-à-vis adj. 1976 -0.01 n of % dev. in R 0.40 2), and consumpt 20 vis-à-vis adj. 1976 0.01	n (CG), health ca lump sum taxes) 2006 0.15 ELU ion taxes (Tau_C lump sum taxes) 2006 0.17	te and educat by birth coho 2036 0.14 c) by birth coho 2036 0.15
Case 2005 2010 2015 2050 2005 2010 2015	7. A spending-based Stockholm Agen _25-54 ; _55-64 ; TR ; CG ; He ; Ed 83.9 ; 29.7 ; 21.9 ; 14.5 ; 6.9 ; 5.6 86.8 ; 32.9 ; 20.7 ; 13.6 ; 6.8 ; 4.9 89.9 ; 36.4 ; 19.4 ; 12.7 ; 6.7 ; 4.2 89.9 ; 36.4 ; 28.1 ; 12.7 ; 10.3 ; 4.4 Case 8. A tax-based Stockho _25-54 ; _55-64 ; TR ; Tau_C 83.9 ; 29.7 ; 21.9 ; 22.0 86.8 ; 32.9 ; 20.7 ; 23.9 89.9 ; 36.4 ; 19.4 ; 26.0	da: adjustment through emploidated employed and the adjustment through emploided employed and the adjustment through adjustment	Net debt ; balance (% GDP) 41.7 ; -0.5 25.3 ; 3.2 -5.5 ; 7.1 -89.0 ; 0.7 ugh employment rates (I Net debt ; balance (% GDP) 41.7 ; -0.5 25.3 ; 3.2 -5.5 ; 7.1 -89.0 ; 0.7 ugh employment rates (I Net debt ; balance (% GDP) 41.7 ; -0.5 25.7 ; 3.1 -4.7 ; 7.0	ial protection transfe Welfare impac 1916 0.06 Etas), social protecti Welfare impac 1916 0.07	ers (TR), and pui t (% dev. in REI 1946 0.06 Sur on transfers (TR t (% dev. in REI 1946 0.10 Sur	blic consumption LU vis-à-vis adj. 1976 -0.01 n of % dev. in R 0.40 (), and consumpt LU vis-à-vis adj. 1976 0.01 n of % dev. in R	n (CG), health ca lump sum taxes) 2006 0.15 ELU ion taxes (Tau_C lump sum taxes) 2006 0.17 ELU	re and educat by birth coho 2036 0.14 c) by birth coho 2036 0.15

		Per capita consumption	Net debt ; balance	Welfare impac	(% dev. in REL	U vis-à-vis adj.	lump sum taxes)	by birth cohort
	Tau_L (%)	(Adj. lump sum taxes $= 1$)	(% GDP)	1916	1946	1976	2006	2036
2005	43.5	1.00	88.7; 0.3	0.06	0.08	-0.02	0.04	0.04
2010	46.2	1.00	69.8;2.0					
2015	49.1	1.00	45.8; 3.9		Sun	n of % dev. in RI	ELU	
2050	49.1	1.00	8.6 ; -1.2			0.20		
		Case 2	2. Adjustment through	consumption taxes				
		Per capita consumption	Net debt ; balance	Welfare impac	(% dev. in REL	.U vis-à-vis adj.	lump sum taxes)	by birth cohort
	Tau_C (%)	(Adj. lump sum taxes $= 1$)	(% GDP)	1916	1946	1976	2006	2036
2005	21.7	1.00	88.7;0.3	0.04	0.01	-0.06	-0.06	-0.09
2010	24.0	0.98	69.7;2.0					
2015	26.6	0.98	46.2;3.7		Sun	n of % dev. in RI	ELU	
2050	26.6 Case 3. Adjustment th	0.98 arough public consumption, gener	10.3 ; -1.2 ral government subsidie	es, and public investi	nent (CG), healt	-0.16 h care (He) and e	education (Ed)	
2050	26.6 Case 3. Adjustment th	0.98 arough public consumption, gener Per capita consumption	10.3 ; -1.2 ral government subsidie Net debt ; balance	es, and public investi Welfare impact	nent (CG), healt : (% dev. in REL	-0.16 h care (He) and d U vis-à-vis adj.	education (Ed) lump sum taxes)	by birth cohort
2050	26.6 Case 3. Adjustment th CG, He, Ed (% GDP)	0.98 arough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1)	10.3 ; -1.2 ral government subsidie <u>Net debt ; balance</u> (% GDP)	es, and public investi Welfare impac 1916	nent (CG), healt : (% dev. in REL 1946	-0.16 h care (He) and d <u>U vis-à-vis adj.</u> 1976	education (Ed) lump sum taxes) 2006	by birth cohort 2036
005	26.6 Case 3. Adjustment th CG, He, Ed (% GDP) 13.8 ; 6.8 ; 6.4	0.98 arough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00	10.3 ; -1.2 ral government subsidie <u>Net debt ; balance</u> (% GDP) 88.7 ; 0.3	es, and public investi Welfare impac 1916 0.03	nent (CG), healt : (% dev. in REL 1946 -0.05	-0.16 h care (He) and o <u>U vis-à-vis adj.</u> 1976 -0.11	education (Ed) lump sum taxes) 2006 -0.11	by birth cohort 2036 -0.13
2050 2005 2010	26.6 Case 3. Adjustment th CG, He, Ed (% GDP) 13.8 ; 6.8 ; 6.4 12.7 ; 6.8 ; 5.9	0.98 arough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.02	10.3 ; -1.2 ral government subsidie <u>Net debt ; balance</u> (% GDP) 88.7 ; 0.3 68.9 ; 2.2	es, and public investi Welfare impac 1916 0.03	nent (CG), healt : (% dev. in REL 1946 -0.05	-0.16 h care (He) and o <u>U vis-à-vis adj.</u> 1976 -0.11	education (Ed) lump sum taxes) 2006 -0.11	by birth cohort 2036 -0.13
2050 2005 2010 2015	26.6 Case 3. Adjustment th CG, He, Ed (% GDP) 13.8 ; 6.8 ; 6.4 12.7 ; 6.8 ; 5.9 11.7 ; 6.9 ; 5.5	0.98 rough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.02 1.02 1.02	10.3 ; -1.2 <u>ral government subsidie</u> <u>Net debt ; balance</u> (% GDP) 88.7 ; 0.3 68.9 ; 2.2 44.6 ; 3.9	es, and public investi Welfare impac 1916 0.03	nent (CG), healt : (% dev. in REL 1946 -0.05 Sun	-0.16 <u>h care (He) and o</u> <u>U vis-à-vis adj.</u> <u>1976</u> -0.11 n of % dev. in RI	education (Ed) lump sum taxes) 2006 -0.11 ELU	by birth cohort 2036 -0.13
2050 2005 2010 2015 2050	26.6 <u>Case 3. Adjustment th</u> <u>CG, He, Ed (% GDP)</u> 13.8 ; 6.8 ; 6.4 12.7 ; 6.8 ; 5.9 11.7 ; 6.9 ; 5.5 11.7 ; 8.7 ; 6.0	0.98 rough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.02 1.02 1.02 1.02	10.3 ; -1.2 <u>ral government subsidie</u> <u>Net debt ; balance</u> (% GDP) 88.7 ; 0.3 68.9 ; 2.2 44.6 ; 3.9 4.4 ; -0.9	welfare impact Welfare impact 1916 0.03	<u>nent (CG), healt</u> : (% dev. in REL 1946 -0.05 Sun	-0.16 <u>h care (He) and o</u> <u>U vis-à-vis adj.</u> <u>1976</u> -0.11 n of % dev. in RH -0.37	education (Ed) lump sum taxes) 2006 -0.11 ELU	by birth cohort 2036 -0.13
2005 2005 2010 2015 2050	26.6 Case 3. Adjustment th CG, He, Ed (% GDP) 13.8 ; 6.8 ; 6.4 12.7 ; 6.8 ; 5.9 11.7 ; 6.9 ; 5.5 11.7 ; 8.7 ; 6.0	0.98 arough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.02 1.02 1.02 1.02 Case 4. Adju	10.3 ; -1.2 ral government subsidie Net debt ; balance (% GDP) 88.7 ; 0.3 68.9 ; 2.2 44.6 ; 3.9 4.4 ; -0.9 ustment through social provided	Welfare impact Welfare impact 1916 0.03	nent (CG), healt (% dev. in REL 1946 -0.05 Sun (TR)	-0.16 <u>h care (He) and o</u> <u>U vis-à-vis adj.</u> <u>1976</u> -0.11 n of % dev. in RH -0.37	education (Ed) lump sum taxes) 2006 -0.11 ELU	by birth cohort 2036 -0.13
20050 2005 2010 2015 2050	26.6 Case 3. Adjustment th CG, He, Ed (% GDP) 13.8 ; 6.8 ; 6.4 12.7 ; 6.8 ; 5.9 11.7 ; 6.9 ; 5.5 11.7 ; 8.7 ; 6.0	0.98 rrough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.02 1.02 1.02 1.02 Case 4. Adju Per capita consumption	10.3 ; -1.2 ral government subsidie <u>Net debt ; balance</u> (% GDP) 88.7 ; 0.3 68.9 ; 2.2 44.6 ; 3.9 4.4 ; -0.9 ustment through social Net debt ; balance	Welfare impact 1916 0.03	<u>ment (CG), healt</u> <u>(% dev. in REL</u> <u>1946</u> -0.05 Sum <u>(TR)</u> (% dev. in REL	-0.16 <u>h care (He) and o</u> <u>U vis-à-vis adj.</u> <u>1976</u> -0.11 n of % dev. in RF -0.37 <u>U vis-à-vis adj.</u>	education (Ed) lump sum taxes) 2006 -0.11 ELU	by birth cohort 2036 -0.13 by birth cohort
20050 20005 2010 2015 2050	26.6 Case 3. Adjustment th CG, He, Ed (% GDP) 13.8 ; 6.8 ; 6.4 12.7 ; 6.8 ; 5.9 11.7 ; 6.9 ; 5.5 11.7 ; 8.7 ; 6.0 TR (% GDP)	0.98 rrough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.02 1.02 1.02 1.02 Case 4. Adju Per capita consumption (Adj. lump sum taxes = 1)	10.3 ; -1.2 ral government subsidie <u>Net debt ; balance</u> (% GDP) 88.7 ; 0.3 68.9 ; 2.2 44.6 ; 3.9 4.4 ; -0.9 ustment through social <u>Net debt ; balance</u> (% GDP)	welfare impac <u>1916</u> 0.03 protection transfers Welfare impac 1916	nent (CG), healt (% dev. in REL 1946 -0.05 Sum (TR) (% dev. in REL 1946	-0.16 <u>h care (He) and o</u> <u>U vis-à-vis adj.</u> <u>1976</u> -0.11 n of % dev. in RF -0.37 <u>U vis-à-vis adj.</u> <u>1976</u>	education (Ed) lump sum taxes) 2006 -0.11 ELU lump sum taxes) 2006	by birth cohort 2036 -0.13 by birth cohort 2036
0005 0005 0010 0015 0050	26.6 <u>Case 3. Adjustment th</u> <u>CG, He, Ed (% GDP)</u> 13.8 ; 6.8 ; 6.4 12.7 ; 6.8 ; 5.9 11.7 ; 6.9 ; 5.5 11.7 ; 8.7 ; 6.0 <u>TR (% GDP)</u> 18.1	0.98 rrough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.02 1.02 1.02 Case 4. Adju Per capita consumption (Adj. lump sum taxes = 1) 1.00	10.3 ; -1.2 ral government subsidie Net debt ; balance (% GDP) 88.7 ; 0.3 68.9 ; 2.2 44.6 ; 3.9 4.4 ; -0.9 ustment through social p Net debt ; balance (% GDP) 88.7 ; 0.3	Welfare impact 1916 0.03 protection transfers Welfare impact 1916 -0.06	<u>ment (CG), healt</u> <u>(% dev. in REL</u> <u>1946</u> -0.05 Sum <u>(TR)</u> <u>(% dev. in REL</u> <u>1946</u> -0.11	-0.16 <u>h care (He) and o</u> <u>U vis-à-vis adj.</u> <u>1976</u> -0.11 h of % dev. in RH -0.37 <u>U vis-à-vis adj.</u> <u>1976</u> -0.03	education (Ed) lump sum taxes) 2006 -0.11 ELU lump sum taxes) 2006 0.05	by birth cohort 2036 -0.13 by birth cohort 2036 0.06
0005 0005 010 015 0050 0005 010	26.6 <u>Case 3. Adjustment th</u> <u>CG, He, Ed (% GDP)</u> 13.8 ; 6.8 ; 6.4 12.7 ; 6.8 ; 5.9 11.7 ; 6.9 ; 5.5 11.7 ; 8.7 ; 6.0 <u>TR (% GDP)</u> 18.1 17.5	0.98 rough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.02 1.02 1.02 Case 4. Adju Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.00 1.00	10.3 ; -1.2 ral government subsidie Net debt ; balance (% GDP) 88.7 ; 0.3 68.9 ; 2.2 44.6 ; 3.9 4.4 ; -0.9 ustment through social Net debt ; balance (% GDP) 88.7 ; 0.3 70.4 ; 1.8	Welfare impact 1916 0.03 protection transfers Welfare impact 1916 -0.06	<u>ment (CG), healt</u> (% dev. in REL 1946 -0.05 Sum (TR) (% dev. in REL 1946 -0.11	-0.16 <u>h care (He) and o</u> <u>JU vis-à-vis adj.</u> 1976 -0.11 n of % dev. in RH -0.37 <u>JU vis-à-vis adj.</u> 1976 -0.03	education (Ed) lump sum taxes) 2006 -0.11 ELU lump sum taxes) 2006 0.05	by birth cohort 2036 -0.13 by birth cohort 2036 0.06
2005 2005 2010 2015 2050 2005 2010 2015	26.6 <u>Case 3. Adjustment th</u> <u>CG, He, Ed (% GDP)</u> 13.8 ; 6.8 ; 6.4 12.7 ; 6.8 ; 5.9 11.7 ; 6.9 ; 5.5 11.7 ; 8.7 ; 6.0 <u>TR (% GDP)</u> 18.1 17.5 17.2	0.98 rrough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.02 1.02 1.02 Case 4. Adju Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.00 0.99	10.3 ; -1.2 ral government subsidie Net debt ; balance (% GDP) 88.7 ; 0.3 68.9 ; 2.2 44.6 ; 3.9 4.4 ; -0.9 ustment through social Net debt ; balance (% GDP) 88.7 ; 0.3 70.4 ; 1.8 48.6 ; 3.3	Welfare impact 1916 0.03 protection transfers Welfare impact 1916 -0.06	<u>ment (CG), healt</u> (% dev. in REL 1946 -0.05 Sum (TR) (% dev. in REL 1946 -0.11 Sum	-0.16 <u>h care (He) and o</u> <u>JU vis-à-vis adj.</u> 1976 -0.11 n of % dev. in RH -0.37 <u>JU vis-à-vis adj.</u> 1976 -0.03 n of % dev. in RH	education (Ed) lump sum taxes) 2006 -0.11 ELU lump sum taxes) 2006 0.05 ELU	by birth cohort 2036 -0.13 by birth cohort 2036 0.06

		Per capita consumption	Net debt : balance	Welfare impac	t (% dev. in REI	LU vis-à-vis adi.	lump sum taxes)	by birth cohort
	Eta_25-54 ; Eta_55-64 (%)	(Adj. lump sum taxes = 1)	(% GDP)	1916	1946	1976	2006	2036
2005	76.5 ; 26.6	1.00	88.7; 0.3	0.08	0.18	0.07	0.16	0.17
2010	79.3 ; 29.6	0.96	65.7;2.1					
2015	82.2;32.9	0.96	40.9;3.4		Sun	n of % dev. in R	ELU	
2050	82.2; 32.9	0.96	14.1;-1.6			0.66		
	OECD limits: 81.5 ; 50.0							
		Case 6. Adjus	tment through aggregate	hours worked per y	vear (H)			
		Per capita consumption	Net debt ; balance	Welfare impac	t (% dev. in REI	LU vis-à-vis adj.	lump sum taxes)	by birth cohort
	Н	(Adj. lump sum taxes $= 1$)	(% GDP)	1916	1946	1976	2006	2036
2005	1547	1.00	88.7; 0.3	0.09	0.18	0.04	0.13	0.15
2010	1622	0.96	65.3;1.8					
		0.06	40.4 + 2.5		C			
2015	1700	0.96	40.4, 5.5		Sun	n of % dev. in K	ELU	
2015 2050 Case 7	1700 1700 7. A spending-based Stockholm Agen	0.96 0.96 da: adjustment through emplo	40.4, 5.5 12.0 ; -1.4 byment rates (Etas), soci	al protection transfe	Sun	0.59 blic consumptior	t (CG), health ca	e and education
2015 2050 Case 7	1700 1700 7. A spending-based Stockholm Agen	0.96 0.96 da: adjustment through emplo	40.4, 5.5 12.0 ; -1.4 oyment rates (Etas), soci	al protection transfo Welfare impac	sun ers (TR), and pul t (% dev. in REI	blic consumption	LLU 1 (CG), health car lump sum taxes)	e and education
2015 2050 Case 7	1700 1700 7. A spending-based Stockholm Agen _25-54 ; _55-64 ; TR ; CG ; He ; Ed	0.96 0.96 <u>da: adjustment through emploid</u> <u>Per capita consumption</u> (Adj. lump sum taxes = 1)	40.4 , 5.5 12.0 ; -1.4 oyment rates (Etas), soci Net debt ; balance (% GDP)	al protection transfo Welfare impac 1916	Sun ers (TR), and pul t (% dev. in REI 1946	U vis-à-vis adj.	u (CG), health cau lump sum taxes) 2006	e and education by birth cohort 2036
2015 2050 Case 7 2005	1700 1700 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 76.5 ; 26.6 ; 18.1 ; 13.8 ; 6.8 ; 6.4	0.96 0.96 <u>da: adjustment through emploid</u> <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00	40.4, 5.5 12.0; -1.4 oyment rates (Etas), soci Net debt ; balance (% GDP) 88.7; 0.3	al protection transfo Welfare impac 1916 0.02	sun ers (TR), and pul t (% dev. in REI 1946 0.02	U vis-à-vis adj. -0.59	u (CG), health cau lump sum taxes) 2006 0.04	e and education by birth cohort 2036 0.04
2015 2050 Case 7 2005 2010	1700 1700 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 76.5 ; 26.6 ; 18.1 ; 13.8 ; 6.8 ; 6.4 77.5 ; 27.6 ; 18.1 ; 13.5 ; 6.8 ; 6.0	0.96 0.96 da: adjustment through emploid Per capita consumption (Adj. lump sum taxes = 1) 1.00 0.99	40.4, 5.3 12.0; -1.4 oyment rates (Etas), soci (% GDP) 88.7; 0.3 68.3; 2.0	al protection transfo Welfare impac 1916 0.02	sun ers (TR), and pul t (% dev. in REI 1946 0.02	blic consumption <u>U vis-à-vis adj.</u> <u>1976</u> -0.01	u (CG), health car lump sum taxes) 2006 0.04	e and education by birth cohort 2036 0.04
2015 2050 Case 7 2005 2010 2015	1700 1700 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 76.5 ; 26.6 ; 18.1 ; 13.8 ; 6.8 ; 6.4 77.5 ; 27.6 ; 18.1 ; 13.5 ; 6.8 ; 6.0 78.4 ; 28.6 ; 18.4 ; 13.1 ; 6.9 ; 5.6	0.96 0.96 <u>da: adjustment through emplo</u> <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00 0.99 0.99	40.4, 5.5 12.0; -1.4 byment rates (Etas), soci (% GDP) 88.7; 0.3 68.3; 2.0 44.7; 3.5	al protection transfe Welfare impac 1916 0.02	Sun ers (TR), and pul t (% dev. in REI 1946 0.02 Sun	blic consumption <u>LU vis-à-vis adj.</u> <u>1976</u> -0.01 n of % dev. in Rl	<u>a (CG), health car</u> lump sum taxes) 2006 0.04 ELU	re and education by birth cohort 2036 0.04
2015 2050 Case 7 2005 2010 2015 2050	1700 1700 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 76.5 ; 26.6 ; 18.1 ; 13.8 ; 6.8 ; 6.4 77.5 ; 27.6 ; 18.1 ; 13.5 ; 6.8 ; 6.0 78.4 ; 28.6 ; 18.4 ; 13.1 ; 6.9 ; 5.6 78.4 ; 28.6 ; 23.7 ; 13.1 ; 8.7 ; 6.1	0.96 0.96 <u>da: adjustment through emploid</u> <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00 0.99 0.99 0.99	40.4, 5.5 12.0; -1.4 oyment rates (Etas), soci (% GDP) 88.7; 0.3 68.3; 2.0 44.7; 3.5 12.1; -1.3	al protection transfo Welfare impac 1916 0.02	Sun ers (TR), and pul t (% dev. in REI 1946 0.02 Sun	<u>blic consumption</u> <u>U vis-à-vis adj.</u> <u>1976</u> -0.01 n of % dev. in Rl 0.11	n (CG), health car lump sum taxes) 2006 0.04 ELU	e and education by birth cohort 2036 0.04
2015 2050 Case 7 2005 2010 2015 2050	1700 1700 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 76.5 ; 26.6 ; 18.1 ; 13.8 ; 6.8 ; 6.4 77.5 ; 27.6 ; 18.1 ; 13.5 ; 6.8 ; 6.0 78.4 ; 28.6 ; 18.4 ; 13.1 ; 6.9 ; 5.6 78.4 ; 28.6 ; 23.7 ; 13.1 ; 8.7 ; 6.1 Case 8. A tax-based Stockhol	0.96 0.96 <u>da: adjustment through emploid</u> <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00 0.99 0.99 0.99 0.99 0.99	40.4, 5.5 12.0; -1.4 oyment rates (Etas), soci (% GDP) 88.7; 0.3 68.3; 2.0 44.7; 3.5 12.1; -1.3 ugh employment rates (H	al protection transfo Welfare impac 1916 0.02 Etas), social protecti	ers (TR), and put t (% dev. in REI 1946 0.02 Sun on transfers (TR	blic consumption <u>LU vis-à-vis adj.</u> <u>1976</u> -0.01 n of % dev. in RI 0.11), and consumpti	n (CG), health can lump sum taxes) 2006 0.04 ELU	re and education by birth cohort 2036 0.04
2015 2050 Case 7 2005 2010 2015 2050	1700 1700 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 76.5 ; 26.6 ; 18.1 ; 13.8 ; 6.8 ; 6.4 77.5 ; 27.6 ; 18.1 ; 13.5 ; 6.8 ; 6.0 78.4 ; 28.6 ; 18.4 ; 13.1 ; 6.9 ; 5.6 78.4 ; 28.6 ; 23.7 ; 13.1 ; 8.7 ; 6.1 Case 8. A tax-based Stockho	0.96 0.96 <u>da: adjustment through emploid</u> <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00 0.99 0.99 0.99 0.99 olm Agenda: adjustment through	40.4, 5.5 12.0; -1.4 <u>oyment rates (Etas), soci</u> <u>(% GDP)</u> 88.7; 0.3 68.3; 2.0 44.7; 3.5 12.1; -1.3 ugh employment rates (H	al protection transfo Welfare impac 1916 0.02 Etas), social protecti Welfare impac	Sun ers (TR), and pul t (% dev. in REI 1946 0.02 Sun on transfers (TR t (% dev. in REI	blic consumption <u>LU vis-à-vis adj.</u> <u>1976</u> -0.01 n of % dev. in Rl 0.11), and consumpti LU vis-à-vis adj.	LLU <u>(CG), health car</u> <u>lump sum taxes)</u> <u>2006</u> 0.04 ELU ELU ton taxes (Tau_C) lump sum taxes)	re and educatio by birth cohort 2036 0.04)) by birth cohort
2015 2050 Case 7 2005 2010 2015 2050	1700 1700 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 76.5 ; 26.6 ; 18.1 ; 13.8 ; 6.8 ; 6.4 77.5 ; 27.6 ; 18.1 ; 13.5 ; 6.8 ; 6.0 78.4 ; 28.6 ; 18.4 ; 13.1 ; 6.9 ; 5.6 78.4 ; 28.6 ; 23.7 ; 13.1 ; 8.7 ; 6.1 Case 8. A tax-based Stockho 25-54 ; _55-64 ; TR ; Tau_C	0.96 0.96 <u>da: adjustment through emploid</u> <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00 0.99 0.99 0.99 0.99 olm Agenda: adjustment throug <u>Per capita consumption</u> (Adj. lump sum taxes = 1)	40.4, 5.5 12.0; -1.4 <u>oyment rates (Etas), soci</u> <u>(% GDP)</u> 88.7; 0.3 68.3; 2.0 44.7; 3.5 12.1; -1.3 ugh employment rates (I <u>Net debt ; balance</u> (% GDP)	al protection transfe Welfare impac 1916 0.02 Etas), social protecti Welfare impac 1916	Sun ers (TR), and pul t (% dev. in REI 1946 0.02 Sun on transfers (TR t (% dev. in REI 1946	<u>blic consumption</u> <u>LU vis-à-vis adj.</u> <u>1976</u> -0.01 n of % dev. in Rl 0.11), and consumpti <u>LU vis-à-vis adj.</u> <u>1976</u>	LLU <u>(CG), health car</u> <u>2006</u> 0.04 ELU ion taxes (Tau_C <u>lump sum taxes)</u> 2006	re and education by birth cohort 2036 0.04) by birth cohort 2036
2015 2050 Case 7 2005 2010 2015 2050 2005	1700 1700 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 76.5 ; 26.6 ; 18.1 ; 13.8 ; 6.8 ; 6.4 77.5 ; 27.6 ; 18.1 ; 13.5 ; 6.8 ; 6.0 78.4 ; 28.6 ; 18.4 ; 13.1 ; 6.9 ; 5.6 78.4 ; 28.6 ; 23.7 ; 13.1 ; 8.7 ; 6.1 Case 8. A tax-based Stockho 25-54 ; _55-64 ; TR ; Tau_C 76.5 ; 26.6 ; 18.1 ; 21.7	0.96 0.96 da: adjustment through emple Per capita consumption (Adj. lump sum taxes = 1) 1.00 0.99 0.99 0.99 olm Agenda: adjustment throughout the consumption Per capita consumption (Adj. lump sum taxes = 1) 1.00	40.4, 5.5 12.0; -1.4 oyment rates (Etas), soci (% GDP) 88.7; 0.3 68.3; 2.0 44.7; 3.5 12.1; -1.3 ugh employment rates (I Net debt; balance (% GDP) 88.7; 0.3	al protection transfe Welfare impac 1916 0.02 Etas), social protecti Welfare impac 1916 0.02	sun ers (TR), and pul <u>t (% dev. in REI</u> 1946 0.02 Sun on transfers (TR t (% dev. in REI 1946 0.03	<u>blic consumption</u> <u>LU vis-à-vis adj.</u> <u>1976</u> -0.01 n of % dev. in Rl 0.11), and consumpti <u>LU vis-à-vis adj.</u> <u>1976</u> 0.00	<u>a (CG), health car</u> <u>lump sum taxes)</u> <u>2006</u> 0.04 ELU ion taxes (Tau_C <u>lump sum taxes)</u> <u>2006</u> 0.05	re and education by birth cohort 2036 0.04) by birth cohort 2036 0.05
2015 2050 Case 7 2005 2010 2015 2050 2005 2005 2010	1700 1700 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 76.5 ; 26.6 ; 18.1 ; 13.8 ; 6.8 ; 6.4 77.5 ; 27.6 ; 18.1 ; 13.5 ; 6.8 ; 6.0 78.4 ; 28.6 ; 18.4 ; 13.1 ; 6.9 ; 5.6 78.4 ; 28.6 ; 23.7 ; 13.1 ; 8.7 ; 6.1 Case 8. A tax-based Stockho 25-54 ; _55-64 ; TR ; Tau_C 76.5 ; 26.6 ; 18.1 ; 21.7 77.5 ; 27.6 ; 18.1 ; 22.5	0.96 0.96 da: adjustment through emploin Per capita consumption (Adj. lump sum taxes = 1) 1.00 0.99 0.99 0.99 0.99 olm Agenda: adjustment throughout the consumption Per capita consumption (Adj. lump sum taxes = 1) 1.00 0.98	40.4, 5.5 12.0; -1.4 oyment rates (Etas), soci (% GDP) 88.7; 0.3 68.3; 2.0 44.7; 3.5 12.1; -1.3 ugh employment rates (I Net debt; balance (% GDP) 88.7; 0.3 68.7; 0.3 68.7; 0.3 68.7; 0.3 68.4; 2.0	al protection transfe Welfare impac 1916 0.02 Etas), social protecti Welfare impac 1916 0.02	sun ers (TR), and pul <u>t (% dev. in REI</u> 1946 0.02 Sun on transfers (TR t (% dev. in REI 1946 0.03	<u>blic consumption</u> <u>LU vis-à-vis adj.</u> <u>1976</u> -0.01 n of % dev. in Rl 0.11), and consumpti <u>LU vis-à-vis adj.</u> <u>1976</u> 0.00	<u>a (CG), health car</u> <u>lump sum taxes)</u> <u>2006</u> 0.04 ELU ion taxes (Tau_C lump sum taxes) <u>2006</u> 0.05	e and education by birth cohort 2036 0.04) by birth cohort 2036 0.05
2015 2050 Case 7 2005 2010 2015 2050 2005 2010 2015	1700 1700 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 76.5 ; 26.6 ; 18.1 ; 13.8 ; 6.8 ; 6.4 77.5 ; 27.6 ; 18.1 ; 13.5 ; 6.8 ; 6.0 78.4 ; 28.6 ; 18.4 ; 13.1 ; 6.9 ; 5.6 78.4 ; 28.6 ; 23.7 ; 13.1 ; 8.7 ; 6.1 Case 8. A tax-based Stockho 25-54 ; _55-64 ; TR ; Tau_C 76.5 ; 26.6 ; 18.1 ; 21.7 77.5 ; 27.6 ; 18.1 ; 22.5 78.4 ; 28.6 ; 18.4 ; 23.3	0.96 0.96 da: adjustment through emple Per capita consumption (Adj. lump sum taxes = 1) 1.00 0.99 0.99 0.99 0.99 olm Agenda: adjustment throughout the consumption (Adj. lump sum taxes = 1) 1.00 0.98 0.98	40.4, 5.5 12.0; -1.4 oyment rates (Etas), soci (% GDP) 88.7; 0.3 68.3; 2.0 44.7; 3.5 12.1; -1.3 ugh employment rates (I Net debt; balance (% GDP) 88.7; 0.3 68.4; 2.0 45.0; 3.5	al protection transfe Welfare impac 1916 0.02 Etas), social protecti Welfare impac 1916 0.02	sun ers (TR), and pul <u>t (% dev. in REI</u> 1946 0.02 Sun on transfers (TR t (% dev. in REI 1946 0.03	<u>blic consumption</u> <u>LU vis-à-vis adj.</u> <u>1976</u> -0.01 n of % dev. in Rl 0.11), and consumpti <u>LU vis-à-vis adj.</u> <u>1976</u> 0.00 n of % dev. in Rl	<u>a (CG), health car</u> <u>lump sum taxes)</u> <u>2006</u> 0.04 ELU ion taxes (Tau_C lump sum taxes) <u>2006</u> 0.05 ELU	e and education by birth cohort 2036 0.04) by birth cohort 2036 0.05

		Per capita consumption	Net debt ; balance	Welfare impac	t (% dev. in REL	U vis-à-vis adj.	lump sum taxes)	by birth cohort
	Tau_L (%)	(Adj. lump sum taxes $= 1$)	(% GDP)	1916	1946	1976	2006	2036
2005	39.9	1.00	0.2;2.1	0.03	0.05	-0.02	0.03	0.04
2010	42.3	1.00	-10.7; 2.5					
2015	44.8	1.00	-22.6;3.3		Sun	n of % dev. in RI	ELU	
2050	44.8	1.00	32.0 ; -4.6			0.13		
		Case 2	2. Adjustment through	consumption taxes				
		Per capita consumption	Net debt ; balance	Welfare impac	t (% dev. in REL	U vis-à-vis adj.	lump sum taxes)	by birth cohort
	Tau_C (%)	(Adj. lump sum taxes $= 1$)	(% GDP)	1916	1946	1976	2006	2036
2005	33.7	1.00	0.2;2.1	0.02	-0.01	-0.05	-0.06	-0.09
2010	35.9	0.98	-10.9; 2.5					
2015	38.3	0.98	-22.5;3.2		Sun	n of % dev. in RI	ELU	
						1 01 /0 00/1 111 10	560	
2050	38.3 Case 3. Adjustment th	0.98 arough public consumption, gener	31.6 ; -4.5 ral government subsidie	es, and public investi	nent (CG), healt	-0.19 h care (He) and	education (Ed)	
2050	38.3 Case 3. Adjustment th	0.98 rough public consumption, gener Per capita consumption	31.6 ; -4.5 ral government subsidie Net debt ; balance	es, and public investi Welfare impac	nent (CG), healt t (% dev. in REL	-0.19 h care (He) and d U vis-à-vis adj.	education (Ed)	by birth cohort
2050	38.3 Case 3. Adjustment th CG, He, Ed (% GDP)	0.98 rough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1)	31.6 ; -4.5 ral government subsidie <u>Net debt ; balance</u> (% GDP)	welfare impact	nent (CG), healt t (% dev. in REL 1946	-0.19 h care (He) and d U vis-à-vis adj. 1976	education (Ed) lump sum taxes) 2006	by birth cohort 2036
050	38.3 Case 3. Adjustment th CG, He, Ed (% GDP) 15.8 ; 5.7 ; 8.5	0.98 rough public consumption, generation Per capita consumption (Adj. lump sum taxes = 1) 1.00	31.6 ; -4.5 ral government subsidie <u>Net debt ; balance</u> (% GDP) 0.2 ; 2.1	es, and public investi Welfare impac 1916 0.01	nent (CG), healt t (% dev. in REL 1946 -0.06	-0.19 h care (He) and o U vis-à-vis adj. 1976 -0.12	education (Ed) lump sum taxes) 2006 -0.12	by birth cohort 2036 -0.13
2050 2005 2010	38.3 Case 3. Adjustment th CG, He, Ed (% GDP) 15.8 ; 5.7 ; 8.5 14.8 ; 5.7 ; 8.5	0.98 rough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.02	31.6 ; -4.5 ral government subsidie <u>Net debt ; balance</u> (% GDP) 0.2 ; 2.1 -11.7 ; 2.8	es, and public investi Welfare impac 1916 0.01	nent (CG), healt t (% dev. in REL 1946 -0.06	-0.19 h care (He) and d U vis-à-vis adj. 1976 -0.12	education (Ed) lump sum taxes) 2006 -0.12	by birth cohort 2036 -0.13
2050 2005 2010 2015	38.3 <u>Case 3. Adjustment th</u> <u>CG, He, Ed (% GDP)</u> 15.8 ; 5.7 ; 8.5 14.8 ; 5.7 ; 8.5 13.8 ; 5.9 ; 8.2	0.98 rough public consumption, generation Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.02 1.02 1.02	31.6 ; -4.5 ral government subsidie <u>Net debt ; balance</u> (% GDP) 0.2 ; 2.1 -11.7 ; 2.8 -24.3 ; 3.4	es, and public investi Welfare impac 1916 0.01	nent (CG), healt t (% dev. in REL 1946 -0.06 Sun	-0.19 h care (He) and o U vis-à-vis adj. 1976 -0.12 h of % dev. in RI	education (Ed) lump sum taxes) 2006 -0.12 ELU	by birth cohort 2036 -0.13
2050 2005 2010 2015 2050	38.3 <u>Case 3. Adjustment th</u> <u>CG, He, Ed (% GDP)</u> 15.8 ; 5.7 ; 8.5 14.8 ; 5.7 ; 8.5 13.8 ; 5.9 ; 8.2 13.8 ; 7.5 ; 8.1	0.98 arough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.02 1.02 1.02 1.02	31.6 ; -4.5 ral government subsidie <u>Net debt ; balance</u> (% GDP) 0.2 ; 2.1 -11.7 ; 2.8 -24.3 ; 3.4 26.7 ; -4.2	es, and public investi Welfare impac 1916 0.01	nent (CG), healt t (% dev. in REL 1946 -0.06 Sun	-0.19 h care (He) and o <u>U vis-à-vis adj.</u> <u>1976</u> -0.12 h of % dev. in RI -0.42	education (Ed) lump sum taxes) 2006 -0.12 ELU	by birth cohort 2036 -0.13
2005 2005 2010 2015 2050	38.3 <u>Case 3. Adjustment th</u> <u>CG, He, Ed (% GDP)</u> 15.8 ; 5.7 ; 8.5 14.8 ; 5.7 ; 8.5 13.8 ; 5.9 ; 8.2 13.8 ; 7.5 ; 8.1	0.98 rough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.02 1.02 1.02 1.02 Case 4. Adj	31.6 ; -4.5 <u>ral government subsidie</u> <u>Net debt ; balance</u> <u>(% GDP)</u> 0.2 ; 2.1 -11.7 ; 2.8 -24.3 ; 3.4 26.7 ; -4.2 <u>ustment through social</u>	es, and public investi Welfare impac 1916 0.01 protection transfers	nent (CG), healt t <u>(% dev. in REL</u> 1946 -0.06 Sun <u>(TR)</u>	-0.19 h care (He) and o <u>U vis-à-vis adj.</u> <u>1976</u> -0.12 h of % dev. in RI -0.42	education (Ed) lump sum taxes) 2006 -0.12 ELU	by birth cohort 2036 -0.13
2005 2005 2010 2015 2050	38.3 <u>Case 3. Adjustment th</u> <u>CG, He, Ed (% GDP)</u> 15.8 ; 5.7 ; 8.5 14.8 ; 5.7 ; 8.5 13.8 ; 5.9 ; 8.2 13.8 ; 7.5 ; 8.1	0.98 rough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.02 1.02 1.02 1.02 Case 4. Adj Per capita consumption	31.6 ; -4.5 ral government subsidie <u>Net debt ; balance</u> (% GDP) 0.2 ; 2.1 -11.7 ; 2.8 -24.3 ; 3.4 26.7 ; -4.2 ustment through social Net debt ; balance	welfare impact Welfare impact 1916 0.01 protection transfers	nent (CG), healt t (% dev. in REL 1946 -0.06 Sun (TR)	-0.19 h care (He) and o <u>U vis-à-vis adj.</u> <u>1976</u> -0.12 h of % dev. in RI -0.42 <u>U vis-à-vis adj.</u>	education (Ed) lump sum taxes) 2006 -0.12 ELU	by birth cohort 2036 -0.13 by birth cohort
20050	38.3 <u>Case 3. Adjustment th</u> <u>CG, He, Ed (% GDP)</u> 15.8 ; 5.7 ; 8.5 14.8 ; 5.7 ; 8.5 13.8 ; 5.9 ; 8.2 13.8 ; 7.5 ; 8.1 TR (% GDP)	0.98 rough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.02 1.02 1.02 1.02 Case 4. Adj Per capita consumption (Adj. lump sum taxes = 1)	31.6 ; -4.5 <u>ral government subsidie</u> <u>Net debt ; balance</u> <u>(% GDP)</u> 0.2 ; 2.1 -11.7 ; 2.8 -24.3 ; 3.4 26.7 ; -4.2 <u>ustment through social</u> <u>Net debt ; balance</u> <u>(% GDP)</u>	es, and public investi Welfare impac 1916 0.01 protection transfers Welfare impac 1916	nent (CG), healt t (% dev. in REL 1946 -0.06 Sun (TR) t (% dev. in REL 1946	-0.19 h care (He) and o <u>U vis-à-vis adj.</u> 1976 -0.12 h of % dev. in RI -0.42 <u>U vis-à-vis adj.</u>	education (Ed) lump sum taxes) 2006 -0.12 ELU lump sum taxes) 2006	by birth cohort 2036 -0.13 by birth cohort 2036
20050 2005 2010 2015 2050 2005	38.3 <u>Case 3. Adjustment th</u> <u>CG, He, Ed (% GDP)</u> 15.8 ; 5.7 ; 8.5 14.8 ; 5.7 ; 8.5 13.8 ; 5.9 ; 8.2 13.8 ; 7.5 ; 8.1 <u>TR (% GDP)</u> 25.2	0.98 rough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.02 1.02 1.02 Case 4. Adj Per capita consumption (Adj. lump sum taxes = 1) 1.00	31.6 ; -4.5 <u>ral government subsidie</u> <u>Net debt ; balance</u> <u>(% GDP)</u> 0.2 ; 2.1 -11.7 ; 2.8 -24.3 ; 3.4 26.7 ; -4.2 <u>ustment through social</u> <u>Net debt ; balance</u> <u>(% GDP)</u> 0.2 ; 2.1	es, and public investi Welfare impac 1916 0.01 protection transfers Welfare impac 1916 -0.05	nent (CG), healt t (% dev. in REL 1946 -0.06 Sun (TR) t (% dev. in REL 1946 -0.07	-0.19 h care (He) and o <u>U vis-à-vis adj.</u> <u>1976</u> -0.12 h of % dev. in RI -0.42 <u>U vis-à-vis adj.</u> <u>1976</u> -0.01	education (Ed) lump sum taxes) 2006 -0.12 ELU lump sum taxes) 2006 0.03	by birth cohort 2036 -0.13 by birth cohort 2036 0.03
2005 2005 2010 2015 2050 2005 2005 2010	38.3 <u>Case 3. Adjustment th</u> <u>CG, He, Ed (% GDP)</u> 15.8 ; 5.7 ; 8.5 14.8 ; 5.7 ; 8.5 13.8 ; 5.9 ; 8.2 13.8 ; 7.5 ; 8.1 <u>TR (% GDP)</u> 25.2 25.0	0.98 rough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.02 1.02 1.02 Case 4. Adj Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.00 1.00	31.6 ; -4.5 ral government subsidie (% GDP) 0.2 ; 2.1 -11.7 ; 2.8 -24.3 ; 3.4 26.7 ; -4.2 ustment through social Net debt ; balance (% GDP) 0.2 ; 2.1 -10.3 ; 2.4	es, and public investi Welfare impac 1916 0.01 protection transfers Welfare impac 1916 -0.05	nent (CG), healt t (% dev. in REL 1946 -0.06 Sun (TR) t (% dev. in REL 1946 -0.07	-0.19 h care (He) and o <u>U vis-à-vis adj.</u> <u>1976</u> -0.12 h of % dev. in RI -0.42 <u>U vis-à-vis adj.</u> <u>1976</u> -0.01	education (Ed) lump sum taxes) 2006 -0.12 ELU lump sum taxes) 2006 0.03	by birth cohort 2036 -0.13 by birth cohort 2036 0.03
2005 2005 2010 2015 2050 2005 2010 2015	38.3 <u>Case 3. Adjustment th</u> <u>CG, He, Ed (% GDP)</u> 15.8 ; 5.7 ; 8.5 14.8 ; 5.7 ; 8.5 13.8 ; 5.9 ; 8.2 13.8 ; 7.5 ; 8.1 <u>TR (% GDP)</u> 25.2 25.0 25.0	0.98 rough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.02 1.02 1.02 Case 4. Adj Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.00 1.00 1.00 1.00	31.6 ; -4.5 ral government subsidie (% GDP) 0.2 ; 2.1 -11.7 ; 2.8 -24.3 ; 3.4 26.7 ; -4.2 ustment through social Net debt ; balance (% GDP) 0.2 ; 2.1 -10.3 ; 2.4 -20.8 ; 2.9	es, and public investi Welfare impact 1916 0.01 protection transfers Welfare impact 1916 -0.05	nent (CG), healt t (% dev. in REL 1946 -0.06 Sun (TR) t (% dev. in REL 1946 -0.07 Sun	-0.19 h care (He) and o <u>U vis-à-vis adj.</u> 1976 -0.12 h of % dev. in RI -0.42 <u>U vis-à-vis adj.</u> 1976 -0.01 h of % dev. in RI	education (Ed) lump sum taxes) 2006 -0.12 ELU lump sum taxes) 2006 0.03 ELU	by birth cohort 2036 -0.13 by birth cohort 2036 0.03

Table A.3 Simulation results for Denmark (adjustment from 2006 to 2015)

		Per capita consumption	Net debt : balance	Welfare impac	t (% dev. in REL	U vis-à-vis adi.	lump sum taxes)	by birth cohort
	Eta_25-54; Eta_55-64 (%)	(Adj. lump sum taxes = 1)	(% GDP)	1916	1946	1976	2006	2036
005	84.1 ; 57.9	1.00	0.2;2.1	0.06	0.13	0.04	0.11	0.12
2010	86.9;63.9	0.96	-11.5; 2.6					
2015	89.8;70.5	0.95	-21.8; 2.9		Sun	n of % dev. in R	ELU	
2050	89.8;70.5	0.95	34.9 ; -4.7			0.46		
	OECD limits: 87.1;71.5							
		Case 6. Adjus	tment through aggregate	hours worked per y	vear (H)			
		Per capita consumption	Net debt ; balance	Welfare impac	t (% dev. in REL	U vis-à-vis adj.	lump sum taxes)	by birth cohort
	Н	(Adj. lump sum taxes $= 1$)	(% GDP)	1916	1946	1976	2006	2036
2005	1462	1.00	0.2;2.1	0.06	0.14	0.03	0.06	0.08
2010	1530	0.95	-11.6;2.6					
		0.05	22.1.2.0		C	C 0/ 1		
2015	1600	0.95	-22.1; 5.0		Sun	n of % dev. in K	ELU	
2015 2050 Case 7	1600 1600 7. A spending-based Stockholm Agen	0.95 0.95 da: adjustment through emple	-22.1 ; 5.0 32.5 ; -4.5 byment rates (Etas), soci	al protection transfe	Sun ers (TR), and pul	0.37	n (CG), health ca	e and education
2015 2050 Case 7	1600 1600 7. A spending-based Stockholm Agen	0.95 0.95 da: adjustment through emple Per capita consumption	-22.1 ; 3.0 32.5 ; -4.5 oyment rates (Etas), soci	al protection transfe 	Sun ers (TR), and pul t (% dev. in REL	0.37 0.37 Dlic consumptior U vis-à-vis adj.	u (CG), health car lump sum taxes)	e and education
2015 2050 Case 7	1600 1600 7. A spending-based Stockholm Agen _25-54 ; _55-64 ; TR ; CG ; He ; Ed	0.95 0.95 <u>da: adjustment through emplo</u> <u>Per capita consumption</u> (Adj. lump sum taxes = 1)	-22.1 ; 3.0 32.5 ; -4.5 oyment rates (Etas), soci Net debt ; balance (% GDP)	al protection transfo Welfare impac 1916	Sun ers (TR), and pul t (% dev. in REL 1946	0.37 Dlic consumption U vis-à-vis adj. 1976	<u>1 (CG), health car</u> lump sum taxes) 2006	e and education by birth cohort 2036
2015 2050 Case 7 2005	1600 1600 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 84.1 ; 57.9 ; 25.2 ; 15.8 ; 5.7 ; 8.5	0.95 0.95 <u>da: adjustment through emploid</u> <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00	-22.1 ; 3.0 32.5 ; -4.5 <u>Net debt ; balance</u> (% GDP) 0.2 ; 2.1	al protection transfo Welfare impac 1916 0.01	Sun ers (TR), and pul t (% dev. in REI 1946 0.01	U vis-à-vis adj. -0.02	u (CG), health cau lump sum taxes) 2006 0.01	e and education by birth cohort 2036 0.01
2015 2050 Case 7 2005 2010	1600 1600 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 84.1 ; 57.9 ; 25.2 ; 15.8 ; 5.7 ; 8.5 85.1 ; 59.9 ; 25.6 ; 15.5 ; 5.7 ; 8.6	0.95 0.95 <u>da: adjustment through emplo</u> <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00 0.99	-22.1; 5.0 32.5; -4.5 <u>Net debt ; balance</u> (% GDP) 0.2; 2.1 -11.1; 2.6	al protection transfe Welfare impac 1916 0.01	Sun ers (TR), and pul t (% dev. in REI 1946 0.01	U vis-à-vis adj. -0.02	<u>u (CG), health cau</u> lump sum taxes) 2006 0.01	e and education by birth cohort 2036 0.01
2015 2050 Case 7 2005 2010 2015	1600 1600 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 84.1 ; 57.9 ; 25.2 ; 15.8 ; 5.7 ; 8.5 85.1 ; 59.9 ; 25.6 ; 15.5 ; 5.7 ; 8.6 86.0 ; 62.0 ; 26.2 ; 15.2 ; 5.9 ; 8.4	0.95 0.95 <u>da: adjustment through emplo</u> Per capita consumption (Adj. lump sum taxes = 1) 1.00 0.99 0.99	-22.1; 3.0 32.5; -4.5 <u>Net debt ; balance</u> (% GDP) 0.2; 2.1 -11.1; 2.6 -22.2; 3.1	al protection transfo Welfare impac 1916 0.01	Sun ers (TR), and pul t (% dev. in REL 1946 0.01 Sun	Dic consumption <u>U vis-à-vis adj.</u> <u>1976</u> -0.02 n of % dev. in R	<u>a (CG), health car</u> lump sum taxes) 2006 0.01 ELU	e and education by birth cohort 2036 0.01
2015 2050 Case 7 2005 2010 2015 2050	1600 1600 7. A spending-based Stockholm Agen <u>25-54</u> ; <u>55-64</u> ; TR ; CG ; He ; Ed 84.1 ; 57.9 ; 25.2 ; 15.8 ; 5.7 ; 8.5 85.1 ; 59.9 ; 25.6 ; 15.5 ; 5.7 ; 8.6 86.0 ; 62.0 ; 26.2 ; 15.2 ; 5.9 ; 8.4 86.0 ; 62.0 ; 30.3 ; 15.2 ; 7.5 ; 8.2	0.95 0.95 <u>da: adjustment through emplo</u> <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00 0.99 0.99 0.99	-22.1; 3.0 32.5; -4.5 <u>Net debt ; balance</u> (% GDP) 0.2; 2.1 -11.1; 2.6 -22.2; 3.1 32.5; -4.5	al protection transfe Welfare impac 1916 0.01	Sun ers (TR), and pul t (% dev. in REI 1946 0.01 Sun	<u>olic consumption</u> <u>U vis-à-vis adj.</u> <u>1976</u> -0.02 n of % dev. in Rl 0.02	n (CG), health car lump sum taxes) 2006 0.01 ELU	e and education by birth cohort 2036 0.01
2015 2050 Case 7 2005 2010 2015 2050	1600 1600 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 84.1 ; 57.9 ; 25.2 ; 15.8 ; 5.7 ; 8.5 85.1 ; 59.9 ; 25.6 ; 15.5 ; 5.7 ; 8.6 86.0 ; 62.0 ; 26.2 ; 15.2 ; 5.9 ; 8.4 86.0 ; 62.0 ; 30.3 ; 15.2 ; 7.5 ; 8.2 Case 8. A tax-based Stockholm	0.95 0.95 <u>da: adjustment through emplo</u> <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00 0.99 0.99 0.99 0.99 0.99	-22.1; 3.0 32.5; -4.5 byment rates (Etas), soci (% GDP) 0.2; 2.1 -11.1; 2.6 -22.2; 3.1 32.5; -4.5 high employment rates (H	<u>Welfare impac</u> <u>1916</u> 0.01 Etas), social protecti	sun ers (TR), and pul t (% dev. in REI 1946 0.01 Sun on transfers (TR	<u>olic consumption</u> <u>U vis-à-vis adj.</u> <u>1976</u> -0.02 n of % dev. in Rl 0.02), and consumpti	n (CG), health can lump sum taxes) 2006 0.01 ELU	re and education by birth cohort 2036 0.01
2015 2050 Case 7 2005 2010 2015 2050	1600 1600 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 84.1 ; 57.9 ; 25.2 ; 15.8 ; 5.7 ; 8.5 85.1 ; 59.9 ; 25.6 ; 15.5 ; 5.7 ; 8.6 86.0 ; 62.0 ; 26.2 ; 15.2 ; 5.9 ; 8.4 86.0 ; 62.0 ; 30.3 ; 15.2 ; 7.5 ; 8.2 Case 8. A tax-based Stockho	0.95 0.95 <u>da: adjustment through emple</u> <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00 0.99 0.99 0.99 0.99 olm Agenda: adjustment through	-22.1; 3.0 32.5; -4.5 <u>Net debt ; balance</u> (% GDP) 0.2; 2.1 -11.1; 2.6 -22.2; 3.1 32.5; -4.5 ugh employment rates (H	<u>Welfare impac</u> <u>1916</u> 0.01 Etas), social protecti	Sun ers (TR), and pul t (% dev. in REL 1946 0.01 Sun on transfers (TR t (% dev. in REL	Dic consumption U vis-à-vis adj. 1976 -0.02 n of % dev. in Rl 0.02), and consumpti LU vis-à-vis adj.	u (CG), health car lump sum taxes) 2006 0.01 ELU ion taxes (Tau_C lump sum taxes)	e and education by birth cohort 2036 0.01) by birth cohort
2015 2050 Case 7 2005 2010 2015 2050	1600 1600 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 84.1 ; 57.9 ; 25.2 ; 15.8 ; 5.7 ; 8.5 85.1 ; 59.9 ; 25.6 ; 15.5 ; 5.7 ; 8.6 86.0 ; 62.0 ; 26.2 ; 15.2 ; 5.9 ; 8.4 86.0 ; 62.0 ; 30.3 ; 15.2 ; 7.5 ; 8.2 Case 8. A tax-based Stockho 25-54 ; _55-64 ; TR ; Tau_C	0.95 0.95 <u>da: adjustment through emple</u> <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00 0.99	-22.1; 3.0 32.5; -4.5 <u>Net debt ; balance</u> (% GDP) 0.2; 2.1 -11.1; 2.6 -22.2; 3.1 32.5; -4.5 ugh employment rates (H <u>Net debt ; balance</u> (% GDP)	tal protection transfo Welfare impac 1916 0.01 Etas), social protecti Welfare impac 1916	Sun ers (TR), and pul t (% dev. in REL 1946 0.01 Sun on transfers (TR t (% dev. in REL 1946	Dic consumption <u>U vis-à-vis adj.</u> <u>1976</u> -0.02 n of % dev. in Rl 0.02), and consumpti <u>U vis-à-vis adj.</u> 1976	LLU <u>(CG), health car</u> <u>2006</u> 0.01 ELU ion taxes (Tau_C <u>lump sum taxes)</u> 2006	re and education by birth cohort 2036 0.01) by birth cohort 2036
2015 2050 Case 7 2005 2010 2015 2050 2005	1600 1600 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 84.1 ; 57.9 ; 25.2 ; 15.8 ; 5.7 ; 8.5 85.1 ; 59.9 ; 25.6 ; 15.5 ; 5.7 ; 8.6 86.0 ; 62.0 ; 26.2 ; 15.2 ; 5.9 ; 8.4 86.0 ; 62.0 ; 30.3 ; 15.2 ; 7.5 ; 8.2 Case 8. A tax-based Stockho 25-54 ; _55-64 ; TR ; Tau_C 84.1 ; 57.9 ; 25.2 ; 33.7	0.95 0.95 <u>da: adjustment through emple</u> <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00 0.99 0.90 0.00	-22.1 ; 3.0 32.5 ; -4.5 <u>Net debt ; balance</u> (% GDP) 0.2 ; 2.1 -11.1 ; 2.6 -22.2 ; 3.1 32.5 ; -4.5 ugh employment rates (I <u>Net debt ; balance</u> (% GDP) 0.2 ; 2.1	tal protection transfo Welfare impac 1916 0.01 Etas), social protecti Welfare impac 1916 0.01	Sun ers (TR), and put <u>t (% dev. in REL</u> 1946 0.01 Sun on transfers (TR t (% dev. in REL 1946 0.02	<u>olic consumption</u> <u>U vis-à-vis adj.</u> <u>1976</u> -0.02 n of % dev. in Rl 0.02), and consumpti <u>U vis-à-vis adj.</u> <u>1976</u> 0.00	<u>(CG), health car</u> <u>lump sum taxes)</u> <u>2006</u> 0.01 ELU ion taxes (Tau_C <u>lump sum taxes)</u> <u>2006</u> 0.03	e and education by birth cohort 2036 0.01) by birth cohort 2036 0.03
2015 2050 Case 7 2005 2010 2015 2050 2005 2005 2010	1600 1600 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 84.1 ; 57.9 ; 25.2 ; 15.8 ; 5.7 ; 8.5 85.1 ; 59.9 ; 25.6 ; 15.5 ; 5.7 ; 8.6 86.0 ; 62.0 ; 26.2 ; 15.2 ; 5.9 ; 8.4 86.0 ; 62.0 ; 30.3 ; 15.2 ; 7.5 ; 8.2 Case 8. A tax-based Stockho 25-54 ; _55-64 ; TR ; Tau_C 84.1 ; 57.9 ; 25.2 ; 33.7 85.1 ; 59.9 ; 25.6 ; 34.5	0.95 0.95 da: adjustment through emple Per capita consumption (Adj. lump sum taxes = 1) 1.00 0.99 0.9	-22.1; 3.0 32.5; -4.5 <u>Net debt ; balance</u> (% GDP) 0.2; 2.1 -11.1; 2.6 -22.2; 3.1 32.5; -4.5 ugh employment rates (I <u>Net debt ; balance</u> (% GDP) 0.2; 2.1 -11.0; 2.5	tal protection transfe Welfare impac 1916 0.01 Etas), social protecti Welfare impac 1916 0.01	Sun ers (TR), and pul <u>t (% dev. in REI</u> 1946 0.01 Sun on transfers (TR t (% dev. in REI 1946 0.02	<u>olic consumption</u> <u>U vis-à-vis adj.</u> <u>1976</u> -0.02 n of % dev. in Rl 0.02), and consumpti <u>U vis-à-vis adj.</u> <u>1976</u> 0.00	<u>a (CG), health car</u> <u>lump sum taxes)</u> <u>2006</u> 0.01 ELU ion taxes (Tau_C lump sum taxes) <u>2006</u> 0.03	e and education by birth cohort 2036 0.01) by birth cohort 2036 0.03
2015 2050 Case 7 2005 2010 2015 2050 2005 2010 2015	1600 1600 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 84.1 ; 57.9 ; 25.2 ; 15.8 ; 5.7 ; 8.5 85.1 ; 59.9 ; 25.6 ; 15.5 ; 5.7 ; 8.6 86.0 ; 62.0 ; 26.2 ; 15.2 ; 5.9 ; 8.4 86.0 ; 62.0 ; 30.3 ; 15.2 ; 7.5 ; 8.2 Case 8. A tax-based Stockho 25-54 ; _55-64 ; TR ; Tau_C 84.1 ; 57.9 ; 25.2 ; 33.7 85.1 ; 59.9 ; 25.6 ; 34.5 86.0 ; 62.0 ; 26.2 ; 35.2	0.95 0.95 da: adjustment through emple Per capita consumption (Adj. lump sum taxes = 1) 1.00 0.99 0.98 0.98	-22.1; 3.0 32.5; -4.5 <u>Net debt ; balance</u> (% GDP) 0.2; 2.1 -11.1; 2.6 -22.2; 3.1 32.5; -4.5 ugh employment rates (I <u>Net debt ; balance</u> (% GDP) 0.2; 2.1 -11.0; 2.5 -21.8; 3.0	tal protection transfor Welfare impac 1916 0.01 Etas), social protecti Welfare impac 1916 0.01	Sun ers (TR), and put <u>t (% dev. in REI</u> 1946 0.01 Sun on transfers (TR t (% dev. in REI 1946 0.02 Sun	<u>olic consumption</u> <u>U vis-à-vis adj.</u> <u>1976</u> -0.02 n of % dev. in Rl 0.02), and consumpti <u>U vis-à-vis adj.</u> <u>1976</u> 0.00 n of % dev. in Rl	<u>(CG), health ca</u> <u>lump sum taxes)</u> <u>2006</u> 0.01 ELU ion taxes (Tau_C lump sum taxes) <u>2006</u> 0.03 ELU	e and education by birth cohort 2036 0.01) by birth cohort 2036 0.03

		Per capita consumption	Net debt ; balance	Welfare impact	t (% dev. in REL	U vis-à-vis adj.	lump sum taxes)	by birth cohort
	Tau_L (%)	(Adj. lump sum taxes $= 1$)	(% GDP)	1916	1946	1976	2006	2036
2005	43.9	1.00	-42.3;4.6	0.08	0.08	-0.02	0.05	0.06
2010	46.6	1.00	-54.8;4.3					
2015	49.5	1.00	-63.3;3.7		Sun	n of % dev. in RI	ELU	
2050	49.5	1.00	46.9 ; -6.8			0.25		
		Case 2	2. Adjustment through	consumption taxes				
		Per capita consumption	Net debt ; balance	Welfare impact	t (% dev. in REL	U vis-à-vis adj.	lump sum taxes)	by birth cohort
	Tau_C (%)	(Adj. lump sum taxes $= 1$)	(% GDP)	1916	1946	1976	2006	2036
2005	28.0	1.00	-42.3;4.6	0.06	0.01	-0.05	-0.12	-0.18
2010	30.3	0.98	-55.0;4.3					
2015	207	0.08	622.26		C	. Co/ 1 DI	71 17	
2015	32.7	0.98	-05.5, 5.0		Suit	1 of % dev. in RI	ELU	
2013	32.7 32.7 Case 3. Adjustment th	0.98 0.98 rrough public consumption, gener	45.8 ; -6.7	s, and public invest	ment (CG), healt	-0.28 h care (He) and	education (Ed)	
2050	32.7 32.7 Case 3. Adjustment th	0.98 0.98 arough public consumption, gener	45.8 ; -6.7 ral government subsidie Net debt ; balance	s, and public investr	ment (CG), healt t (% dev. in REL	-0.28 h care (He) and o U vis-à-vis adj.	education (Ed)	by birth cohort
2050	CG, He, Ed (% GDP)	0.98 0.98 Per capita consumption, gener (Adj. lump sum taxes = 1)	-0.3, 5.0 45.8 ; -6.7 ral government subsidie Net debt ; balance (% GDP)	s, and public investr Welfare impact 1916	nent (CG), healt t (% dev. in REL 1946	-0.28 h care (He) and o U vis-à-vis adj. 1976	education (Ed) lump sum taxes) 2006	by birth cohort 2036
2050	CG, He, Ed (% GDP) 15.7 ; 6.5 ; 6.6	0.98 0.98 Per capita consumption, gener (Adj. lump sum taxes = 1) 1.00	-0.3, 5.0 45.8 ; -6.7 ral government subsidie <u>Net debt ; balance</u> (% GDP) -42.3 ; 4.6	s, and public investr Welfare impact 1916 0.05	ment (CG), healt t (% dev. in REL 1946 -0.07	-0.28 <u>h care (He) and o</u> <u>.U vis-à-vis adj.</u> <u>1976</u> -0.14	education (Ed) lump sum taxes) 2006 -0.13	by birth cohort 2036 -0.15
2015 2050 2005 2010	CG, He, Ed (% GDP) 15.7 ; 6.5 ; 6.6 14.6 ; 6.6 ; 6.1	0.98 0.98 Per capita consumption, gener (Adj. lump sum taxes = 1) 1.00 1.02	-0.3, 5.0 45.8 ; -6.7 ral government subsidie <u>Net debt ; balance</u> (% GDP) -42.3 ; 4.6 -55.7 ; 4.5	s, and public investr Welfare impact 1916 0.05	<u>ment (CG), healt</u> t (% dev. in REL 1946 -0.07	-0.28 <u>h care (He) and o</u> <u>.U vis-à-vis adj.</u> <u>1976</u> -0.14	education (Ed) lump sum taxes) 2006 -0.13	by birth cohort 2036 -0.15
2005 2005 2010 2015	CG, He, Ed (% GDP) 15.7 ; 6.5 ; 6.6 14.6 ; 6.6 ; 6.1 13.6 ; 6.9 ; 5.7	0.98 0.98 Per capita consumption, gener (Adj. lump sum taxes = 1) 1.00 1.02 1.02	-03 , 3.0 45.8 ; -6.7 ral government subsidie <u>Net debt ; balance</u> (% GDP) -42.3 ; 4.6 -55.7 ; 4.5 -64.5 ; 3.7	s, and public investr Welfare impact 1916 0.05	<u>ment (CG), healt</u> <u>t (% dev. in REL</u> 1946 -0.07 Sun	-0.28 <u>h care (He) and o</u> <u>.U vis-à-vis adj.</u> <u>1976</u> -0.14 n of % dev. in RI	education (Ed) lump sum taxes) 2006 -0.13 ELU	by birth cohort 2036 -0.15
2005 2010 2005 2010 2015 2050	CG, He, Ed (% GDP) 15.7; 6.5; 6.6 14.6; 6.6; 6.1 13.6; 6.9; 5.7 13.6; 9.0; 5.7	0.98 0.98 rough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.02 1.02 1.02	-03 , 3.0 45.8 ; -6.7 ral government subsidie <u>Net debt ; balance</u> (% GDP) -42.3 ; 4.6 -55.7 ; 4.5 -64.5 ; 3.7 43.8 ; -6.6	s, and public investr Welfare impact 1916 0.05	<u>ment (CG), healt</u> <u>t (% dev. in REL</u> 1946 -0.07 Sun	-0.28 <u>h care (He) and 0</u> <u>U vis-à-vis adj.</u> <u>1976</u> -0.14 n of % dev. in RI -0.44	education (Ed) lump sum taxes) 2006 -0.13 ELU	by birth cohort 2036 -0.15
2005 2010 2015 2010 2015 2050	32.7 Case 3. Adjustment th CG, He, Ed (% GDP) 15.7; 6.5; 6.6 14.6; 6.6; 6.1 13.6; 6.9; 5.7 13.6; 9.0; 5.7	0.98 0.98 rough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.02 1.02 1.02 1.02 Case 4. Adj	-03 , 3.0 45.8 ; -6.7 ral government subsidie <u>Net debt ; balance</u> (% GDP) -42.3 ; 4.6 -55.7 ; 4.5 -64.5 ; 3.7 43.8 ; -6.6 ustment through social	s, and public investr Welfare impact 1916 0.05	<u>ment (CG), healt</u> <u>t (% dev. in REL</u> <u>1946</u> -0.07 Sun <u>(TR)</u>	-0.28 <u>h care (He) and 0</u> <u>U vis-à-vis adj.</u> <u>1976</u> -0.14 n of % dev. in RI -0.44	education (Ed) lump sum taxes) 2006 -0.13 ELU	by birth cohort 2036 -0.15
2005 2005 2010 2015 2050	32.7 32.7 Case 3. Adjustment th CG, He, Ed (% GDP) 15.7; 6.5; 6.6 14.6; 6.6; 6.1 13.6; 6.9; 5.7 13.6; 9.0; 5.7	0.98 0.98 rough public consumption, generation (Adj. lump sum taxes = 1) 1.00 1.02 1.02 1.02 1.02 Case 4. Adj Per capita consumption	-03 , 3.0 45.8 ; -6.7 ral government subsidie <u>Net debt ; balance</u> (% GDP) -42.3 ; 4.6 -55.7 ; 4.5 -64.5 ; 3.7 43.8 ; -6.6 ustment through social j Net debt ; balance	s, and public investr Welfare impact 1916 0.05 protection transfers (Welfare impact	<u>ment (CG), healt</u> <u>t (% dev. in REL</u> <u>1946</u> -0.07 Sun (TR) t (% dev. in REL	-0.28 <u>h care (He) and 0</u> <u>.U vis-à-vis adj.</u> <u>1976</u> -0.14 n of % dev. in RI -0.44 .U vis-à-vis adj.	education (Ed) lump sum taxes) 2006 -0.13 ELU lump sum taxes)	by birth cohort 2036 -0.15 by birth cohort
2005 2005 2010 2015 2050	32.7 32.7 Case 3. Adjustment th CG, He, Ed (% GDP) 15.7; 6.5; 6.6 14.6; 6.6; 6.1 13.6; 6.9; 5.7 13.6; 9.0; 5.7 TR (% GDP)	0.98 0.98 arough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.02 1.02 1.02 1.02 Case 4. Adj Per capita consumption (Adj. lump sum taxes = 1)	-03.5, 3.0 45.8 ; -6.7 ral government subsidie <u>Net debt ; balance</u> (% GDP) -42.3 ; 4.6 -55.7 ; 4.5 -64.5 ; 3.7 43.8 ; -6.6 ustment through social j <u>Net debt ; balance</u> (% GDP)	s, and public investr Welfare impact 1916 0.05 protection transfers (Welfare impact 1916	<u>ment (CG), healt</u> <u>t (% dev. in REI</u> 1946 -0.07 Sun (TR) t (% dev. in REI 1946	-0.28 <u>h care (He) and 0</u> <u>.U vis-à-vis adj.</u> <u>1976</u> -0.14 n of % dev. in RI -0.44 .U vis-à-vis adj. <u>1976</u>	education (Ed) lump sum taxes) 2006 -0.13 ELU lump sum taxes) 2006	by birth cohort 2036 -0.15 by birth cohort 2036
2005 2005 2010 2015 2050 2005	32.7 Case 3. Adjustment th CG, He, Ed (% GDP) 15.7; 6.5; 6.6 14.6; 6.6; 6.1 13.6; 6.9; 5.7 13.6; 9.0; 5.7 TR (% GDP) 22.2	0.98 0.98 arough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.02 1.02 1.02 1.02 Case 4. Adj Per capita consumption (Adj. lump sum taxes = 1) 1.00	-03.5, 3.0 45.8; -6.7 ral government subsidie (% GDP) -42.3; 4.6 -55.7; 4.5 -64.5; 3.7 43.8; -6.6 ustment through social j Net debt; balance (% GDP) -42.3; 4.6	s, and public investr Welfare impact 1916 0.05 protection transfers (Welfare impact 1916 -0.03	<u>ment (CG), healt</u> <u>t (% dev. in REL</u> <u>1946</u> -0.07 Sun (TR) <u>t (% dev. in REL</u> <u>1946</u> -0.09	-0.28 <u>h care (He) and 0</u> <u>.U vis-à-vis adj.</u> <u>1976</u> -0.14 n of % dev. in RI -0.44 <u>.U vis-à-vis adj.</u> <u>1976</u> -0.01	education (Ed) lump sum taxes) 2006 -0.13 ELU lump sum taxes) 2006 0.05	by birth cohort 2036 -0.15 by birth cohort 2036 0.05
2005 2005 2010 2015 2050 2005 2005 2010	32.7 Case 3. Adjustment th CG, He, Ed (% GDP) 15.7; 6.5; 6.6 14.6; 6.6; 6.1 13.6; 6.9; 5.7 13.6; 9.0; 5.7 TR (% GDP) 22.2 23.0	0.98 0.98 arough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.02 1.02 1.02 Case 4. Adj Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.00 1.00	-03.5, 3.0 45.8; -6.7 ral government subsidie (% GDP) -42.3; 4.6 -55.7; 4.5 -64.5; 3.7 43.8; -6.6 ustment through social j Net debt; balance (% GDP) -42.3; 4.6 -54.2; 4.0	s, and public investr Welfare impact 1916 0.05 protection transfers (Welfare impact 1916 -0.03	<u>ment (CG), healt</u> <u>t (% dev. in REL</u> <u>1946</u> -0.07 Sun (TR) <u>t (% dev. in REL</u> <u>1946</u> -0.09	-0.28 <u>h care (He) and 0</u> <u>.U vis-à-vis adj.</u> <u>1976</u> -0.14 h of % dev. in RI -0.44 <u>.U vis-à-vis adj.</u> <u>1976</u> -0.01	education (Ed) lump sum taxes) 2006 -0.13 ELU lump sum taxes) 2006 0.05	by birth cohort 2036 -0.15 by birth cohort 2036 0.05
2005 2010 2015 2050 2015 2050 2005 2010 2015	32.7 Case 3. Adjustment th CG, He, Ed (% GDP) 15.7; 6.5; 6.6 14.6; 6.6; 6.1 13.6; 6.9; 5.7 13.6; 9.0; 5.7 TR (% GDP) 22.2 23.0 23.9	0.98 0.98 arough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.02 1.02 1.02 Case 4. Adj Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.00 1.00 1.00 1.00	-03, 5.0 45.8; -6.7 ral government subsidie (% GDP) -42.3; 4.6 -55.7; 4.5 -64.5; 3.7 43.8; -6.6 ustment through social j Net debt; balance (% GDP) -42.3; 4.6 -54.2; 4.0 -61.0; 3.2	s, and public investr Welfare impact 1916 0.05 protection transfers (Welfare impact 1916 -0.03	<u>ment (CG), healt</u> <u>t (% dev. in REI</u> <u>1946</u> -0.07 Sun (TR) <u>t (% dev. in REI</u> <u>1946</u> -0.09 Sun	-0.28 <u>h care (He) and 0</u> <u>.U vis-à-vis adj.</u> <u>1976</u> -0.14 n of % dev. in RI -0.44 <u>.U vis-à-vis adj.</u> <u>1976</u> -0.01 n of % dev. in RI	education (Ed) lump sum taxes) 2006 -0.13 ELU lump sum taxes) 2006 0.05 ELU	by birth cohort 2036 -0.15 by birth cohort 2036 0.05

Table A.4 Simulation results for Finland (adjustment from 2006 to 2015)

		Per capita consumption	Net debt ; balance	Welfare impac	t (% dev. in REI	U vis-à-vis adj.	lump sum taxes)	by birth cohort
	Eta_25-54 ; Eta_55-64 (%)	(Adj. lump sum taxes $= 1$)	(% GDP)	1916	1946	1976	2006	2036
2005	81.6 ; 47.8	1.00	-42.3;4.6	0.11	0.19	0.09	0.17	0.19
2010	84.3 ; 52.8	0.95	-53.3;4.2					
2015	87.2 ; 58.2	0.95	-58.4;3.2		Sun	n of % dev. in Rl	ELU	
2050	87.2 ; 58.2	0.95	49.8 ; -6.8			0.75		
	OECD limits: 83.0;71.0							
		Case 6. Adjust	tment through aggregate	hours worked per y	vear (H)			
		Per capita consumption	Net debt ; balance	Welfare impac	t (% dev. in REI	U vis-à-vis adj.	lump sum taxes)	by birth cohort
	Н	(Adj. lump sum taxes $= 1$)	(% GDP)	1916	1946	1976	2006	2036
2005	1686	1.00	-42.3;4.6	0.11	0.19	0.07	0.14	0.16
2010	1764	0.95	-53.4;4.2					
2015	1946	0.95	-586.33		Sur	of % day in Pl	TI	
_015	1840	0.75	-50.0, 5.5		Sui	101 / 0 dev. III K		
2015 2050 Case 7	1840 1846 '. A spending-based Stockholm Agen	0.95 0.95 da: adjustment through emplo	47.4 ; -6.6	al protection transfe	ers (TR), and pul	0.67	(CG), health car	e and educatio
2050 Case 7	1840 1846 /. A spending-based Stockholm Agen	0.95 0.95 da: adjustment through emplo	47.4 ; -6.6 byment rates (Etas), soci	al protection transfe	ers (TR), and put	0.67 Dlic consumption	(CG), health car lump sum taxes)	e and education
2050 Case 7		0.95 da: adjustment through emploid Per capita consumption (Adj. lump sum taxes = 1)	47.4 ; -6.6 byment rates (Etas), soci <u>Net debt ; balance</u> (% GDP) 42.3 : 4.6	al protection transfe Welfare impac 1916	ers (TR), and pul t (% dev. in REI 1946	0.67 Dlic consumption	(CG), health car lump sum taxes) 2006	e and education by birth cohort 2036
2050 <u>Case 7</u> 2005 2010		0.95 0.95 da: adjustment through emploid Per capita consumption (Adj. lump sum taxes = 1) 1.00 0.00	-50.0, 51.5 47.4; -6.6 byment rates (Etas), soci <u>Net debt ; balance</u> (% GDP) -42.3; 4.6 54.2; 4.2	al protection transfe Welfare impac 1916 0.05	ers (TR), and pul t (% dev. in REI 1946 0.01	0.67 Dlic consumption <u>U vis-à-vis adj.</u> 1976 -0.01	(CG), health car lump sum taxes) 2006 0.04	e and education by birth cohort 2036 0.04
2015 2050 Case 7 2005 2010 2015		0.95 0.95 da: adjustment through emploid Per capita consumption (Adj. lump sum taxes = 1) 1.00 0.99 0.90	-50.0, 51.5 47.4; -6.6 byment rates (Etas), soci (% GDP) -42.3; 4.6 -54.3; 4.2 60.9; 3.4	al protection transfe Welfare impac 1916 0.05	ers (TR), and pul t (% dev. in REI 1946 0.01	0.67 olic consumption <u>U vis-à-vis adj.</u> 1976 -0.01 a of % day, in Pl	(CG), health car lump sum taxes) 2006 0.04	e and education by birth cohort 2036 0.04
2005 2005 2005 2010 2015 2050		0.95 0.95 da: adjustment through emploid Per capita consumption (Adj. lump sum taxes = 1) 1.00 0.99 0.99 0.99	-50.0, 5.5 47.4; -6.6 byment rates (Etas), soci (% GDP) -42.3; 4.6 -54.3; 4.2 -60.9; 3.4 49.2; -6.9	Welfare impac Welfare impac 1916 0.05	ers (TR), and pul t (% dev. in REI 1946 0.01 Sun	0.67 <u>olic consumption</u> <u>U vis-à-vis adj.</u> <u>1976</u> -0.01 n of % dev. in RI 0.13	(CG), health car lump sum taxes) 2006 0.04 ELU	e and education by birth cohort 2036 0.04
2005 Case 7 2005 2005 2010 2015 2050	<u></u>	0.95 0.95 <u>da: adjustment through emploid</u> <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00 0.99 0.99 0.99	-50.0, 5.3 47.4 ; -6.6 byment rates (Etas), soci (% GDP) -42.3 ; 4.6 -54.3 ; 4.2 -60.9 ; 3.4 49.2 ; -6.9	Welfare impac <u>Welfare impac</u> 1916 0.05	ers (TR), and pul t (% dev. in REI 1946 0.01 Sun	0.67 <u>olic consumption</u> <u>U vis-à-vis adj.</u> <u>1976</u> -0.01 n of % dev. in RI 0.13) and consumption	(CG), health car lump sum taxes) 2006 0.04 ELU	e and education by birth cohort 2036 0.04
2005 Case 7 2005 2010 2015 2050	1846 1846 <u>* A spending-based Stockholm Agen</u> <u>=25-54</u> ; <u>_55-64</u> ; TR ; CG ; He ; Ed 81.6 ; 47.8 ; 22.2 ; 15.7 ; 6.5 ; 6.6 82.5 ; 49.5 ; 23.5 ; 15.3 ; 6.6 ; 6.3 83.5 ; 51.2 ; 24.9 ; 15.0 ; 6.9 ; 6.1 83.5 ; 51.2 ; 29.4 ; 15.0 ; 9.0 ; 6.0 Case 8. A tax-based Stockhol	0.95 0.95 <u>da: adjustment through employ</u> <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00 0.99 0.99 0.99 0.99 0.99	-50.0, 5.3 47.4 ; -6.6 oyment rates (Etas), soci (% GDP) -42.3 ; 4.6 -54.3 ; 4.2 -60.9 ; 3.4 49.2 ; -6.9 ugh employment rates (Figure 1)	Welfare impac Welfare impac 1916 0.05	ers (TR), and pul t (% dev. in REI 1946 0.01 Sun on transfers (TR	0.67 <u>olic consumption</u> <u>U vis-à-vis adj.</u> <u>1976</u> -0.01 n of % dev. in RI 0.13), and consumpti	LLU (CG), health car lump sum taxes) 2006 0.04 ELU on taxes (Tau_C	e and education by birth cohort 2036 0.04
2005 Case 7 2005 2010 2015 2050	1846 1846 <u>25-54</u> ; <u>55-64</u> ; TR ; CG ; He ; Ed 81.6 ; 47.8 ; 22.2 ; 15.7 ; 6.5 ; 6.6 82.5 ; 49.5 ; 23.5 ; 15.3 ; 6.6 ; 6.3 83.5 ; 51.2 ; 24.9 ; 15.0 ; 6.9 ; 6.1 83.5 ; 51.2 ; 29.4 ; 15.0 ; 9.0 ; 6.0 Case 8. A tax-based Stockho	0.95 0.95 <u>da: adjustment through emploid</u> <u>(Adj. lump sum taxes = 1)</u> 1.00 0.99 0.99 0.99 0.99 0.99 0.99 0.99 0.99 0.99	-50.0, 5.3 47.4 ; -6.6 oyment rates (Etas), soci (% GDP) -42.3 ; 4.6 -54.3 ; 4.2 -60.9 ; 3.4 49.2 ; -6.9 ugh employment rates (F Net debt ; balance	<u>Welfare impac</u> <u>1916</u> 0.05 Etas), social protecti <u>Welfare impac</u>	ers (TR), and pul t (% dev. in REI 1946 0.01 Sun on transfers (TR t (% dev. in REI	0.67 0.67 0.67 0.07 0.01 0.01 0.03 0.13 0.13 0.13 0.13	LLU (CG), health car lump sum taxes) 2006 0.04 ELU on taxes (Tau_C lump sum taxes)	e and education by birth cohort 2036 0.04) by birth cohort
2050 <u>Case 7</u> 2005 2010 2015 2050	1846 1846 <u>25-54 ; _55-64 ; TR ; CG ; He ; Ed</u> 81.6 ; 47.8 ; 22.2 ; 15.7 ; 6.5 ; 6.6 82.5 ; 49.5 ; 23.5 ; 15.3 ; 6.6 ; 6.3 83.5 ; 51.2 ; 24.9 ; 15.0 ; 6.9 ; 6.1 83.5 ; 51.2 ; 29.4 ; 15.0 ; 9.0 ; 6.0 Case 8. A tax-based Stockhor _25-54 ; _55-64 ; TR ; Tau_C	0.95 0.95 <u>da: adjustment through emploid</u> <u>(Adj. lump sum taxes = 1)</u> 1.00 0.99 0.99 0.99 0.99 0.99 0.99 0.99 0.99 0.99 0.99 0.99 0.99 0.99 0.99 0.99	-50.0, 5.3 47.4 ; -6.6 byment rates (Etas), soci (% GDP) -42.3 ; 4.6 -54.3 ; 4.2 -60.9 ; 3.4 49.2 ; -6.9 ugh employment rates (F Net debt ; balance (% GDP)	Use the second s	ers (TR), and pul <u>t (% dev. in REI</u> <u>1946</u> 0.01 Sun <u>on transfers (TR</u> <u>t (% dev. in REI</u> <u>1946</u>	0.67 0.67 0.67 0.07 0.01 0.01 0.03 0.13 0.13 0.13 0.13 0.13 0.13	LLU (CG), health car lump sum taxes) 2006 0.04 ELU on taxes (Tau_C lump sum taxes) 2006	e and education by birth cohort 2036 0.04) by birth cohort 2036
2005 2005 2005 2010 2015 2050 2005	1846 1846 <u>25-54 ; _55-64 ; TR ; CG ; He ; Ed</u> 81.6 ; 47.8 ; 22.2 ; 15.7 ; 6.5 ; 6.6 82.5 ; 49.5 ; 23.5 ; 15.3 ; 6.6 ; 6.3 83.5 ; 51.2 ; 24.9 ; 15.0 ; 6.9 ; 6.1 83.5 ; 51.2 ; 29.4 ; 15.0 ; 9.0 ; 6.0 <u>Case 8. A tax-based Stockho</u> <u>_25-54 ; _55-64 ; TR ; Tau_C</u> 81.6 ; 47.8 ; 22.2 ; 28.0	0.95 0.95 da: adjustment through emploin (Adj. lump sum taxes = 1) 1.00 0.99	-50.0, 5.3 47.4 ; -6.6 byment rates (Etas), soci (% GDP) -42.3 ; 4.6 -54.3 ; 4.2 -60.9 ; 3.4 49.2 ; -6.9 ugh employment rates (F Net debt ; balance (% GDP) -42.3 ; 4.6	tal protection transfe <u>Welfare impac</u> 1916 0.05 Etas), social protecti <u>Welfare impac</u> 1916 0.05	ers (TR), and pul t (% dev. in REI 1946 0.01 Sun on transfers (TR t (% dev. in REI 1946 0.04	0.67 0.67 0.67 0.07 0.07 0.01 0.03 0.13 0.13 0.13 0.13 0.13 0.13 0.13 0.13 0.13	LLU (CG), health car <u>2006</u> 0.04 ELU on taxes (Tau_C lump sum taxes) <u>2006</u> 0.04	e and education by birth cohort 2036 0.04) by birth cohort 2036 0.03
2005 Case 7 2005 2010 2015 2050 2005 2005 2010	<u>1846</u> <u>1846</u> <u>25-54 ; _55-64 ; TR ; CG ; He ; Ed</u> <u>81.6 ; 47.8 ; 22.2 ; 15.7 ; 6.5 ; 6.6</u> <u>82.5 ; 49.5 ; 23.5 ; 15.3 ; 6.6 ; 6.3</u> <u>83.5 ; 51.2 ; 24.9 ; 15.0 ; 6.9 ; 6.1</u> <u>83.5 ; 51.2 ; 29.4 ; 15.0 ; 9.0 ; 6.0</u> <u>Case 8. A tax-based Stockho</u> <u>_25-54 ; _55-64 ; TR ; Tau_C</u> <u>81.6 ; 47.8 ; 22.2 ; 28.0</u> <u>82.5 ; 49.5 ; 23.5 ; 28.8</u>	0.95 0.95 da: adjustment through employ (Adj. lump sum taxes = 1) 1.00 0.99 0.00 0.98	-50.0, 5.3 47.4 ; -6.6 byment rates (Etas), soci (% GDP) -42.3 ; 4.6 -54.3 ; 4.2 -60.9 ; 3.4 49.2 ; -6.9 ugh employment rates (F Net debt ; balance (% GDP) -42.3 ; 4.6 -54.3 ; 4.2	<u>Welfare impac</u> 1916 0.05 Etas), social protecti Welfare impac 1916 0.05	ers (TR), and pul t (% dev. in REI 1946 0.01 Sun on transfers (TR t (% dev. in REI 1946 0.04	0.67 0.67 0.67 0.07 0.07 0.01 0.03 0.13 0.13 0.13 0.13 0.13 0.13 0.13 0.13 0.13 0.13 0.13	LLU (CG), health car <u>2006</u> 0.04 ELU on taxes (Tau_C lump sum taxes) <u>2006</u> 0.04	e and education by birth cohort 2036 0.04) by birth cohort 2036 0.03
2005 Case 7 2005 2010 2015 2050 2005 2010 2015 2010 2015	<u>1846</u> <u>1846</u> <u>25-54 ; _55-64 ; TR ; CG ; He ; Ed</u> <u>81.6 ; 47.8 ; 22.2 ; 15.7 ; 6.5 ; 6.6</u> <u>82.5 ; 49.5 ; 23.5 ; 15.3 ; 6.6 ; 6.3</u> <u>83.5 ; 51.2 ; 24.9 ; 15.0 ; 6.9 ; 6.1</u> <u>83.5 ; 51.2 ; 29.4 ; 15.0 ; 9.0 ; 6.0</u> <u>Case 8. A tax-based Stockho</u> <u>25-54 ; _55-64 ; TR ; Tau_C</u> <u>81.6 ; 47.8 ; 22.2 ; 28.0</u> <u>82.5 ; 49.5 ; 23.5 ; 28.8</u> <u>83.5 ; 51.2 ; 24.9 ; 29.6</u>	0.95 0.95 da: adjustment through emploin (Adj. lump sum taxes = 1) 1.00 0.99 0.98 0.98 0.98	-50.0, 5.3 47.4 ; -6.6 byment rates (Etas), soci (% GDP) -42.3 ; 4.6 -54.3 ; 4.2 -60.9 ; 3.4 49.2 ; -6.9 ugh employment rates (F Net debt ; balance (% GDP) -42.3 ; 4.6 -54.3 ; 4.2 -60.9 ; 3.4 49.2 ; -6.9	<u>Welfare impac</u> 1916 0.05 Etas), social protecti Welfare impac 1916 0.05	ers (TR), and pul t (% dev. in REI 1946 0.01 Sun on transfers (TR t (% dev. in REI 1946 0.04 Sun	0.67 0.67 0.67 0.67 0.01 0.01 0.03 0.13 0.02 0.02 0.01 0.02 0.03 0.02 0.03 0.02 0.03 0.02 0.03 0.03 0.03 0.03 0.03 0.03 0.03 0.03 0.03 0.03 0.03 0.03 0.02 0.03 0.02 0.03 0.02 0.03 0.02 0.03 0.02 0.03 0.02 0.03 0.02 0.03 0.02 0.03 0.02 0.03 0.02 0.03 0.03 0.02 0.03	LLU (CG), health car <u>2006</u> 0.04 ELU on taxes (Tau_C lump sum taxes) <u>2006</u> 0.04 ELU	e and education by birth cohort 2036 0.04) by birth cohort 2036 0.03

Table A.4 Simulation results for Finland (Cont'd)

		Per capita consumption	Net debt ; balance	Welfare impact	t (% dev. in REL	U vis-à-vis adj.	lump sum taxes)	by birth cohor
	Tau_L (%)	(Adj. lump sum taxes $= 1$)	(% GDP)	1916	1946	1976	2006	2036
2005	41.8	1.00	44.4 ; -3.1	0.12	0.21	-0.09	0.20	0.24
2010	48.5	0.99	44.1;-0.1					
2015	56.3	0.99	30.4;3.2		Sum	of % dev. in Rl	ELU	
2050	56.3	0.99	24.7;-3.0			0.68		
		Case 2	2. Adjustment through	consumption taxes				
		Per capita consumption	Net debt ; balance	Welfare impact	t (% dev. in REL	U vis-à-vis adj.	lump sum taxes)	by birth cohor
	Tau_C (%)	(Adj. lump sum taxes $= 1$)	(% GDP)	1916	1946	1976	2006	2036
2005	17.4	1.00	44.4;-3.1	0.08	-0.04	-0.21	-0.20	-0.28
2010	21.7	0.94	43.4;-0.2					
2015	27.1	0.93	310.28		Sum	of % day in Pl		
2015	27.1	0.75	51.0, 2.0		Sui	101 / 0 uev. III K	LU	
2013	27.1 27.1 Case 3. Adjustment th	0.93 0.93 rrough public consumption, gener	28.6 ; -3.1 ral government subsidie	s, and public investi	nent (CG), healt	-0.65 h care (He) and	education (Ed)	
2050	27.1 27.1 Case 3. Adjustment th	0.93 0.93 arough public consumption, gener Per capita consumption	28.6 ; -3.1 ral government subsidie Net debt ; balance	s, and public investr	nent (CG), healt t (% dev. in REL	-0.65 h care (He) and U vis-à-vis adj.	education (Ed)	by birth cohor
2050	27.1 27.1 Case 3. Adjustment th CG, He, Ed (% GDP)	0.93 0.93 Per capita consumption, gener (Adj. lump sum taxes = 1)	Net debt ; balance (% GDP)	s, and public investr Welfare impact 1916	nent (CG), healt t (% dev. in REL 1946	-0.65 h care (He) and U vis-à-vis adj. 1976	education (Ed) lump sum taxes) 2006	by birth cohor 2036
015	27.1 27.1 Case 3. Adjustment th CG, He, Ed (% GDP) 15.7 ; 8.4 ; 5.8	0.93 0.93 Per capita consumption, gener (Adj. lump sum taxes = 1) 1.00	Net debt ; balance (% GDP) 44.4 ; -3.1	s, and public investr Welfare impact 1916 0.06	nent (CG), healt t (% dev. in REL 1946 -0.08	-0.65 h care (He) and U vis-à-vis adj. 1976 -0.17	education (Ed) lump sum taxes) 2006 -0.06	by birth cohor 2036 -0.08
2005	27.1 27.1 Case 3. Adjustment th CG, He, Ed (% GDP) 15.7 ; 8.4 ; 5.8 13.0 ; 8.0 ; 5.1	0.93 0.93 arough public consumption, generic Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.06	Net debt ; balance (% GDP) 44.4 ; -3.1 43.9 ; -0.2	s, and public investi Welfare impact 1916 0.06	nent (CG), healt t (% dev. in REL 1946 -0.08	-0.65 <u>h care (He) and </u> <u>U vis-à-vis adj.</u> <u>1976</u> -0.17	education (Ed) lump sum taxes) 2006 -0.06	by birth cohor 2036 -0.08
2050 2005 2010 2015	27.1 27.1 Case 3. Adjustment th CG, He, Ed (% GDP) 15.7 ; 8.4 ; 5.8 13.0 ; 8.0 ; 5.1 10.7 ; 7.8 ; 4.6	0.93 arough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.06 1.06	Net debt ; balance (% GDP) 44.4 ; -3.1 43.9 ; -0.2 33.3 ; 2.0	s, and public investi Welfare impact 1916 0.06	<u>nent (CG), healt</u> <u>t (% dev. in REL</u> 1946 -0.08 Sun	-0.65 <u>h care (He) and </u> <u>U vis-à-vis adj.</u> <u>1976</u> -0.17 h of % dev. in Rl	education (Ed) lump sum taxes) 2006 -0.06 ELU	by birth cohor 2036 -0.08
2005 2005 2010 2015 2050	27.1 27.1 Case 3. Adjustment th CG, He, Ed (% GDP) 15.7 ; 8.4 ; 5.8 13.0 ; 8.0 ; 5.1 10.7 ; 7.8 ; 4.6 10.7 ; 9.3 ; 4.7	0.93 0.93 rough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.06 1.06 1.06	Net debt ; balance (% GDP) 44.4 ; -3.1 43.9 ; -0.2 33.3 ; 2.0 39.5 ; -3.3	s, and public investi Welfare impact 1916 0.06	<u>nent (CG), healt</u> <u>t (% dev. in REL</u> <u>1946</u> -0.08 Sun	-0.65 h care (He) and - <u>U vis-à-vis adj.</u> <u>1976</u> -0.17 h of % dev. in Rl -0.33	education (Ed) lump sum taxes) 2006 -0.06 ELU	by birth cohor 2036 -0.08
2015 2050 2005 2010 2015 2050	27.1 27.1 Case 3. Adjustment th CG, He, Ed (% GDP) 15.7 ; 8.4 ; 5.8 13.0 ; 8.0 ; 5.1 10.7 ; 7.8 ; 4.6 10.7 ; 9.3 ; 4.7	0.93 0.93 rough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.06 1.06 1.06 1.06 Case 4. Adj	31.0 ; 2.8 28.6 ; -3.1 ral government subsidie Net debt ; balance (% GDP) 44.4 ; -3.1 43.9 ; -0.2 33.3 ; 2.0 39.5 ; -3.3 ustment through social	s, and public investi Welfare impact 1916 0.06	nent (CG), healt t (% dev. in REL 1946 -0.08 Surr (TR)	-0.65 h care (He) and (<u>U vis-à-vis adj.</u> <u>1976</u> -0.17 h of % dev. in Rl -0.33	education (Ed) lump sum taxes) 2006 -0.06 ELU	by birth cohor 2036 -0.08
2005 2005 2010 2015 2050	27.1 27.1 Case 3. Adjustment th CG, He, Ed (% GDP) 15.7 ; 8.4 ; 5.8 13.0 ; 8.0 ; 5.1 10.7 ; 7.8 ; 4.6 10.7 ; 9.3 ; 4.7	0.93 0.93 rough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.06 1.06 1.06 1.06 2.06 Case 4. Adj Per capita consumption	Net debt ; balance (% GDP) 44.4 ; -3.1 43.9 ; -0.2 33.3 ; 2.0 39.5 ; -3.3 ustment through social j Net debt ; balance	s, and public investi Welfare impact 1916 0.06	<u>ment (CG), healt</u> <u>t (% dev. in REL</u> <u>1946</u> -0.08 Sun (TR) t (% dev. in REL	-0.65 <u>h care (He) and 0</u> <u>U vis-à-vis adj.</u> <u>1976</u> -0.17 h of % dev. in Rl -0.33 U vis-à-vis adj.	education (Ed) lump sum taxes) 2006 -0.06 ELU lump sum taxes)	by birth cohor 2036 -0.08 by birth cohor
2005 2005 2010 2015 2050	27.1 27.1 Case 3. Adjustment th CG, He, Ed (% GDP) 15.7 ; 8.4 ; 5.8 13.0 ; 8.0 ; 5.1 10.7 ; 7.8 ; 4.6 10.7 ; 9.3 ; 4.7 TR (% GDP)	0.93 0.93 rough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06	31.0 ; 2.8 28.6 ; -3.1 ral government subsidie Net debt ; balance (% GDP) 44.4 ; -3.1 43.9 ; -0.2 33.3 ; 2.0 39.5 ; -3.3 ustment through social j Net debt ; balance (% GDP)	s, and public investi Welfare impact 1916 0.06 protection transfers (Welfare impact 1916	<u>ment (CG), healt</u> <u>t (% dev. in REL</u> <u>1946</u> -0.08 Sum (TR) t (% dev. in REL <u>1946</u>	-0.65 <u>h care (He) and d</u> <u>U vis-à-vis adj.</u> <u>1976</u> -0.17 h of % dev. in Rl -0.33 <u>U vis-à-vis adj.</u> <u>1976</u>	education (Ed) lump sum taxes) 2006 -0.06 ELU lump sum taxes) 2006	by birth cohor 2036 -0.08 by birth cohor 2036
2005 2005 2010 2015 2050 2005	27.1 27.1 Case 3. Adjustment th CG, He, Ed (% GDP) 15.7 ; 8.4 ; 5.8 13.0 ; 8.0 ; 5.1 10.7 ; 7.8 ; 4.6 10.7 ; 9.3 ; 4.7 TR (% GDP) 20.7	0.93 0.93 rough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.06 1.00 1.00 1.00 1.00 1.00 1.00	31.0 ; 2.8 28.6 ; -3.1 ral government subsidie Net debt ; balance (% GDP) 44.4 ; -3.1 43.9 ; -0.2 33.3 ; 2.0 39.5 ; -3.3 ustment through social j Net debt ; balance (% GDP) 44.4 ; -3.1	s, and public investi Welfare impact 1916 0.06 protection transfers (Welfare impact 1916 -0.14	<u>ment (CG), healt</u> <u>t (% dev. in REL</u> <u>1946</u> -0.08 Sum (TR) <u>t (% dev. in REL</u> <u>1946</u> -0.27	-0.65 h care (He) and o U vis-à-vis adj. 1976 -0.17 h of % dev. in Rl -0.33 U vis-à-vis adj. 1976 -0.05	education (Ed) lump sum taxes) 2006 -0.06 ELU lump sum taxes) 2006 0.19	by birth cohor 2036 -0.08 by birth cohor 2036 0.22
2005 2005 2010 2015 2050 2005 2010	27.1 27.1 Case 3. Adjustment th CG, He, Ed (% GDP) 15.7 ; 8.4 ; 5.8 13.0 ; 8.0 ; 5.1 10.7 ; 7.8 ; 4.6 10.7 ; 9.3 ; 4.7 TR (% GDP) 20.7 17.4	0.93 0.93 rough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.00 1.00 1.00 1.00 1.00 1.00	Net debt ; balance (% GDP) 44.4 ; -3.1 43.9 ; -0.2 33.3 ; 2.0 39.5 ; -3.3 ustment through social j Net debt ; balance (% GDP)	s, and public investi Welfare impact 1916 0.06 protection transfers (Welfare impact 1916 -0.14	<u>ment (CG), healt</u> <u>t (% dev. in REL</u> <u>1946</u> -0.08 Sum (TR) <u>t (% dev. in REL</u> <u>1946</u> -0.27	-0.65 h care (He) and - <u>U vis-à-vis adj.</u> <u>1976</u> -0.17 h of % dev. in Rl -0.33 <u>U vis-à-vis adj.</u> <u>1976</u> -0.05	education (Ed) lump sum taxes) 2006 -0.06 ELU lump sum taxes) 2006 0.19	by birth cohor 2036 -0.08 by birth cohor 2036 0.22
2005 2005 2010 2015 2050 2005 2010 2015 2010 2015	27.1 27.1 Case 3. Adjustment th CG, He, Ed (% GDP) 15.7 ; 8.4 ; 5.8 13.0 ; 8.0 ; 5.1 10.7 ; 7.8 ; 4.6 10.7 ; 9.3 ; 4.7 TR (% GDP) 20.7 17.4 15.4	0.93 0.93 rough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.06 1.06 1.06 1.06 2.06 Case 4. Adj Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.00 0.99	Net debt ; balance (% GDP) 44.4 ; -3.1 43.9 ; -0.2 33.3 ; 2.0 39.5 ; -3.3 ustment through social j Net debt ; balance (% GDP) 44.4 ; -3.1 43.9 ; -0.2 33.3 ; 2.0 39.5 ; -3.3 ustment through social j Net debt ; balance (% GDP) 44.4 ; -3.1 43.9 ; -0.2 33.3 ; 2.0	s, and public investi Welfare impact 1916 0.06 protection transfers (Welfare impact 1916 -0.14	<u>ment (CG), healt</u> <u>t (% dev. in REL</u> <u>1946</u> -0.08 Sum (TR) <u>t (% dev. in REL</u> <u>1946</u> -0.27 Sum	-0.65 h care (He) and - <u>U vis-à-vis adj.</u> <u>1976</u> -0.17 h of % dev. in Rl -0.33 <u>U vis-à-vis adj.</u> <u>1976</u> -0.05 h of % dev. in Rl	education (Ed) lump sum taxes) 2006 -0.06 ELU lump sum taxes) 2006 0.19 ELU	by birth cohor 2036 -0.08 by birth cohor 2036 0.22

Table A.5 Simulation results for France (adjustment from 2006 to 2015)

		Per capita consumption	Nat daht : balanca	Welfare impac	t (% dev in PEI	U vic à vic adi	lump sum taxes)	by hirth coh
	Eta 25-54 · Eta 55-64 (%)	(Adi lumn sum taxes $= 1$)	(% GDP)	1916	1946	1976	2006	2036
2005	79.5 : 34.7	$\frac{1.00}{1.00}$	44.4 : -3.1	0.25	0.52	0.33	0.59	0.66
2010	86.3:44.2	0.91	36.7 : 0.3	0120	0102	0.000	0107	0.000
2015	93.7 : 56.3	0.90	21.7 : 2.3		Sun	n of % dev. in R	ELU	
2050	93.7 : 56.3	0.90	31.5 : -3.3			2.35		
	OECD limits: 86.6 : 60.0		,					
		Case 6. Adjus	tment through aggregate	hours worked per y	vear (H)			
		Per capita consumption	Net debt ; balance	Welfare impac	t (% dev. in REL	LU vis-à-vis adj.	lump sum taxes)	by birth coh
	Н	(Adj. lump sum taxes $= 1$)	(% GDP)	1916	1946	1976	2006	2036
2005	1459	1.00	44.4 ; -3.1	0.25	0.52	0.25	0.52	0.59
2010	1636	0.91	36.0; 0.4					
	1027	0.00	$20.7 \cdot 2.4$		Sun	n of % dev in R	FLU	
2015	1857	0.90	20.7, 2.4		bui		LLC	
2015 2050 Case 7	1837 1837 7. A spending-based Stockholm Agen	0.90 0.90 da: adjustment through emplo	20.7 , 2.4 27.8 ; -3.1 oyment rates (Etas), soc	al protection transfe	ers (TR), and put	2.13 blic consumptior	n (CG), health ca	re and educa
2015 2050 Case 7	1837 1837 7. A spending-based Stockholm Agen	0.90 0.90 da: adjustment through emplo	27.8 ; -3.1 oyment rates (Etas), soc Net debt ; balance	al protection transfe	ers (TR), and pul t (% dev. in REL	2.13 blic consumption	n (CG), health ca lump sum taxes)	re and educated by birth coh
2015 2050 Case 7	1837 1837 7. A spending-based Stockholm Agen _25-54 ; _55-64 ; TR ; CG ; He ; Ed	0.90 0.90 da: adjustment through emploid Per capita consumption (Adj. lump sum taxes = 1)	20.7 , 2.4 27.8 ; -3.1 oyment rates (Etas), soc Net debt ; balance (% GDP)	al protection transfe Welfare impac 1916	ers (TR), and put t (% dev. in REL 1946	2.13 blic consumption LU vis-à-vis adj. 1976	n (CG), health ca lump sum taxes) 2006	re and educat by birth coh 2036
2015 2050 Case 7 2005		0.90 0.90 da: adjustment through emploid Per capita consumption (Adj. lump sum taxes = 1) 1.00	20.7, 2.4 27.8; -3.1 oyment rates (Etas), soc <u>Net debt ; balance</u> (% GDP) 44.4; -3.1	al protection transfe Welfare impac 1916 0.07	ers (TR), and put t (% dev. in REI 1946 0.10	2.13 blic consumption LU vis-à-vis adj. 1976 0.08	n (CG), health ca lump sum taxes) 2006 0.29	re and educat by birth coh 2036 0.31
2015 2050 Case 7 2005 2010		0.90 0.90 da: adjustment through emploid Per capita consumption (Adj. lump sum taxes = 1) 1.00 0.99	20.7, 2.4 27.8; -3.1 oyment rates (Etas), soc Net debt ; balance (% GDP) 44.4; -3.1 40.4; 0.1	al protection transfe Welfare impac 1916 0.07	ers (TR), and put t (% dev. in REI 1946 0.10	2.13 blic consumption LU vis-à-vis adj. 1976 0.08	n (CG), health ca lump sum taxes) 2006 0.29	re and educat by birth coh 2036 0.31
2015 2050 Case 7 2005 2010 2015	1837 1837 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 79.5 ; 34.7 ; 20.7 ; 15.7 ; 8.4 ; 5.8 81.9 ; 37.9 ; 19.0 ; 14.9 ; 8.1 ; 5.2 84.4 ; 41.4 ; 18.3 ; 14.1 ; 7.9 ; 4.9	0.90 0.90 da: adjustment through emploid Per capita consumption (Adj. lump sum taxes = 1) 1.00 0.99 0.98	20.7 , 2.4 27.8 ; -3.1 oyment rates (Etas), soc <u>Net debt ; balance</u> (% GDP) 44.4 ; -3.1 40.4 ; 0.1 26.8 ; 2.5	Welfare impac Welfare impac 1916 0.07	ers (TR), and pul t (% dev. in REI 1946 0.10 Sun	2.13 blic consumption LU vis-à-vis adj. 1976 0.08 n of % dev. in R	n (CG), health ca lump sum taxes) 2006 0.29 ELU	re and educat by birth coh 2036 0.31
2015 2050 Case 7 2005 2010 2015 2050	1837 1837 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 79.5 ; 34.7 ; 20.7 ; 15.7 ; 8.4 ; 5.8 81.9 ; 37.9 ; 19.0 ; 14.9 ; 8.1 ; 5.2 84.4 ; 41.4 ; 18.3 ; 14.1 ; 7.9 ; 4.9 84.4 ; 41.4 ; 23.3 ; 14.1 ; 9.4 ; 4.9	0.90 0.90 da: adjustment through emploid Per capita consumption (Adj. lump sum taxes = 1) 1.00 0.99 0.98 0.98	20.7, 2.4 27.8; -3.1 oyment rates (Etas), soc Net debt; balance (% GDP) 44.4; -3.1 40.4; 0.1 26.8; 2.5 27.4; -2.9	Welfare impac Welfare impac 1916 0.07	ers (TR), and put t (% dev. in REI 1946 0.10 Sun	2.13 blic consumption LU vis-à-vis adj. 1976 0.08 n of % dev. in R 0.85	n (CG), health ca lump sum taxes) 2006 0.29 ELU	re and educa by birth coh 2036 0.31
2015 2050 Case 7 2005 2010 2015 2050	1837 1837 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 79.5 ; 34.7 ; 20.7 ; 15.7 ; 8.4 ; 5.8 81.9 ; 37.9 ; 19.0 ; 14.9 ; 8.1 ; 5.2 84.4 ; 41.4 ; 18.3 ; 14.1 ; 7.9 ; 4.9 84.4 ; 41.4 ; 23.3 ; 14.1 ; 9.4 ; 4.9 Case 8. A tax-based Stockhol	0.90 0.90 <u>da: adjustment through emplo</u> <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00 0.99 0.98 0.98 0.98 plm Agenda: adjustment through	20.7, 2.4 27.8; -3.1 oyment rates (Etas), soc Net debt ; balance (% GDP) 44.4; -3.1 40.4; 0.1 26.8; 2.5 27.4; -2.9 ugh employment rates (I	<u>Welfare impac</u> <u>1916</u> 0.07 Etas), social protecti	ers (TR), and pul <u>t (% dev. in REL</u> <u>1946</u> 0.10 Sun on transfers (TR	2.13 blic consumption <u>LU vis-à-vis adj.</u> <u>1976</u> 0.08 n of % dev. in R 0.85), and consumption	n (CG), health ca lump sum taxes) 2006 0.29 ELU ion taxes (Tau_C	re and educat by birth coh 2036 0.31
2015 2050 Case 7 2005 2010 2015 2050	1837 1837 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 79.5 ; 34.7 ; 20.7 ; 15.7 ; 8.4 ; 5.8 81.9 ; 37.9 ; 19.0 ; 14.9 ; 8.1 ; 5.2 84.4 ; 41.4 ; 18.3 ; 14.1 ; 7.9 ; 4.9 84.4 ; 41.4 ; 23.3 ; 14.1 ; 9.4 ; 4.9 Case 8. A tax-based Stockhol	0.90 0.90 da: adjustment through emploid Per capita consumption (Adj. lump sum taxes = 1) 1.00 0.99 0.98 0.98 0.98 olm Agenda: adjustment through	20.7, 2.4 27.8; -3.1 oyment rates (Etas), soc Net debt ; balance (% GDP) 44.4; -3.1 40.4; 0.1 26.8; 2.5 27.4; -2.9 ugh employment rates (I Net debt ; balance	<u>Welfare impac</u> <u>1916</u> 0.07 Etas), social protecti Welfare impac	ers (TR), and pul <u>t (% dev. in REI</u> <u>1946</u> 0.10 Sun on transfers (TR t (% dev. in REI	2.13 blic consumption <u>LU vis-à-vis adj.</u> <u>1976</u> 0.08 n of % dev. in R 0.85), and consumption LU vis-à-vis adj.	n (CG), health ca lump sum taxes) 2006 0.29 ELU ion taxes (Tau_C lump sum taxes)	re and educa by birth coh 2036 0.31
2015 2050 Case 7 2005 2010 2015 2050	1837 1837 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 79.5 ; 34.7 ; 20.7 ; 15.7 ; 8.4 ; 5.8 81.9 ; 37.9 ; 19.0 ; 14.9 ; 8.1 ; 5.2 84.4 ; 41.4 ; 18.3 ; 14.1 ; 7.9 ; 4.9 84.4 ; 41.4 ; 23.3 ; 14.1 ; 9.4 ; 4.9 Case 8. A tax-based Stockho 25-54 ; _55-64 ; TR ; Tau C	0.90 0.90 da: adjustment through emploid Per capita consumption (Adj. lump sum taxes = 1) 1.00 0.99 0.98 0.98 olm Agenda: adjustment through Per capita consumption (Adj. lump sum taxes = 1)	20.7, 2.4 27.8; -3.1 oyment rates (Etas), soc Net debt ; balance (% GDP) 44.4; -3.1 40.4; 0.1 26.8; 2.5 27.4; -2.9 ugh employment rates (I Net debt ; balance (% GDP)	tal protection transfe Welfare impac 1916 0.07 Etas), social protecti Welfare impac 1916	ers (TR), and put <u>t (% dev. in REL</u> <u>1946</u> 0.10 Sun on transfers (TR <u>t (% dev. in REL</u> <u>1946</u>	2.13 blic consumption <u>LU vis-à-vis adj.</u> <u>1976</u> 0.08 n of % dev. in R. 0.85), and consumpti <u>LU vis-à-vis adj.</u> <u>1976</u>	n (CG), health ca lump sum taxes) 2006 0.29 ELU ion taxes (Tau_C lump sum taxes) 2006	re and educar by birth coh 2036 0.31 c) by birth coh 2036
2015 2050 Case 7 2005 2010 2015 2050 2005	1837 1837 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 79.5 ; 34.7 ; 20.7 ; 15.7 ; 8.4 ; 5.8 81.9 ; 37.9 ; 19.0 ; 14.9 ; 8.1 ; 5.2 84.4 ; 41.4 ; 18.3 ; 14.1 ; 7.9 ; 4.9 84.4 ; 41.4 ; 23.3 ; 14.1 ; 9.4 ; 4.9 Case 8. A tax-based Stockho 25-54 ; _55-64 ; TR ; Tau_C 79.5 ; 34.7 ; 20.7 ; 17.4	0.90 0.90 da: adjustment through emploin (Adj. lump sum taxes = 1) 1.00 0.99 0.98 0.98 0.98 0.98 0.98 0.98 0.98 0.98 0.98	20.7, 2.4 27.8; -3.1 oyment rates (Etas), soc Net debt ; balance (% GDP) 44.4; -3.1 40.4; 0.1 26.8; 2.5 27.4; -2.9 ugh employment rates (I Net debt ; balance (% GDP) 44.4; -3.1	tal protection transfe Welfare impac 1916 0.07 Etas), social protecti Welfare impac 1916 0.07	ers (TR), and pul t (% dev. in REL 1946 0.10 Sun on transfers (TR t (% dev. in REL 1946 0.10	2.13 blic consumption 2.1 vis-à-vis adj. 1976 0.08 n of % dev. in R 0.85), and consumpt 2.1 vis-à-vis adj. 1976 0.06	n (CG), health ca lump sum taxes) 2006 0.29 ELU ion taxes (Tau_C lump sum taxes) 2006 0.23	re and educar by birth coh 2036 0.31 c) by birth coh 2036 0.24
2015 2050 Case 7 2005 2010 2015 2050 2005 2010	1837 1837 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 79.5 ; 34.7 ; 20.7 ; 15.7 ; 8.4 ; 5.8 81.9 ; 37.9 ; 19.0 ; 14.9 ; 8.1 ; 5.2 84.4 ; 41.4 ; 18.3 ; 14.1 ; 7.9 ; 4.9 84.4 ; 41.4 ; 23.3 ; 14.1 ; 9.4 ; 4.9 Case 8. A tax-based Stockho _25-54 ; _55-64 ; TR ; Tau_C 79.5 ; 34.7 ; 20.7 ; 17.4 81.9 ; 37.9 ; 19.0 ; 18.9	0.90 0.90 da: adjustment through emploin (Adj. lump sum taxes = 1) 1.00 0.99 0.98 0.98 0.98 0.98 0.98 0.98 0.98 0.98 0.98 0.98 0.98 0.98 0.98 0.98 0.98 0.98	20.7, 2.4 27.8; -3.1 oyment rates (Etas), soc Net debt ; balance (% GDP) 44.4; -3.1 40.4; 0.1 26.8; 2.5 27.4; -2.9 ugh employment rates (I Net debt ; balance (% GDP) 44.4; -3.1 40.8; 0.0	tal protection transfe Welfare impac 1916 0.07 Etas), social protecti Welfare impac 1916 0.07	ers (TR), and pul t (% dev. in REL 1946 0.10 Sun on transfers (TR t (% dev. in REL 1946 0.10	2.13 blic consumption 2.13 2.13 2.13 2.13 2.13 2.13 2.1976 0.08 n of % dev. in R 0.85), and consumption 2.10 vis-à-vis adj. 1976 0.06	n (CG), health ca <u>lump sum taxes</u>) <u>2006</u> 0.29 ELU ion taxes (Tau_C <u>lump sum taxes</u>) <u>2006</u> 0.23	re and educar by birth coh 2036 0.31 c) by birth coh 2036 0.24
2015 2050 Case 7 2005 2010 2015 2050 2005 2010 2015	1837 1837 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 79.5 ; 34.7 ; 20.7 ; 15.7 ; 8.4 ; 5.8 81.9 ; 37.9 ; 19.0 ; 14.9 ; 8.1 ; 5.2 84.4 ; 41.4 ; 18.3 ; 14.1 ; 7.9 ; 4.9 84.4 ; 41.4 ; 23.3 ; 14.1 ; 9.4 ; 4.9 Case 8. A tax-based Stockho 25-54 ; _55-64 ; TR ; Tau_C 79.5 ; 34.7 ; 20.7 ; 17.4 81.9 ; 37.9 ; 19.0 ; 18.9 84.4 ; 41.4 ; 18.3 ; 20.6	0.90 0.90 da: adjustment through emploin (Adj. lump sum taxes = 1) 1.00 0.99 0.98 0.99 0.98 0.98 0.98 0.98 0.98 0.99 0.98 0.98 0.98 0.98 0.98 0.99 0.98 0.98 0.98 0.98 0.98 0.99 0.98 0.98 0.98 0.98 0.98 0.98 0.98 0.98 0.98 0.98 0.99 0.98 0.98 0.98 0.99 0.98 0.98 0.99 0.98 0.99 0.98 0.99 0.95 0.94	20.7, 2.4 27.8; -3.1 oyment rates (Etas), soc Net debt ; balance (% GDP) 44.4; -3.1 40.4; 0.1 26.8; 2.5 27.4; -2.9 ugh employment rates (I Net debt ; balance (% GDP) 44.4; -3.1 40.8; 0.0 27.7; 2.4	<u>Welfare impac</u> 1916 0.07 Etas), social protecti Welfare impac 1916 0.07	ers (TR), and pul t (% dev. in REL 1946 0.10 Sun on transfers (TR t (% dev. in REL 1946 0.10 Sun	2.13 blic consumption 2.1 vis-à-vis adj. 1976 0.08 n of % dev. in R 0.85), and consumpt 2.1 vis-à-vis adj. 1976 0.06 n of % dev. in R	n (CG), health ca lump sum taxes) 2006 0.29 ELU ion taxes (Tau_C lump sum taxes) 2006 0.23 ELU	re and educar by birth coh 2036 0.31 c) by birth coh 2036 0.24

		Case 1. Adjustme	nt through labor taxes a	nd social security co	ontributions			
		Per capita consumption	Net debt ; balance	Welfare impac	t (% dev. in REL	U vis-à-vis adj.	lump sum taxes)	by birth cohort
	Tau_L (%)	(Adj. lump sum taxes $= 1$)	(% GDP)	1916	1946	1976	2006	2036
2005	39.9	1.00	57.4;-4.7	0.20	0.34	-0.10	0.16	0.19
2010	49.9	1.00	61.0;-0.3					
2015	62.5	1.00	36.7;6.7		Sun	n of % dev. in RI	ELU	
2050	62.5	1.00	-24.7 ; -0.9			0.79		
		Case	2. Adjustment through	consumption taxes				
		Per capita consumption	Net debt ; balance	Welfare impac	t (% dev. in REL	U vis-à-vis adj.	lump sum taxes)	by birth cohort
	Tau_C (%)	(Adj. lump sum taxes $= 1$)	(% GDP)	1916	1946	1976	2006	2036
2005	18.3	1.00	57.4;-4.7	0.14	-0.03	-0.26	-0.27	-0.40
2010	26.0	0.92	62.6;-1.1					
2015	36.9	0.91	43.2;5.7		Sun	n of % dev. in RI	ELU	
2050	36.9	0.91	-24.3 ; -0.3			-0.82		
	Case 3. Adjustment the	rough public consumption, gene	eral government subsidie	es, and public investi	ment (CG), healt	h care (He) and	education (Ed)	
		Per capita consumption	Net debt ; balance	Welfare impact	t (% dev. in REL	U vis-a-vis adj.	lump sum taxes)	by birth cohort
2005	CG, He, Ed (% GDP)	(Adj. lump sum taxes = 1)	(% GDP)	1916	1946	1976	2006	2036
2005	12.8;6.5;4.2	1.00	57.4;-4.7	0.06	-0.40	-0.62	-0.70	-0.82
2010	7.6; 5.8; 3.2	1.10	52.6; 1.8		a		77.77	
2015	4.6; 5.3; 2.4	1.09	24.3; 6.5		Sun	1 of % dev. in Ri	ELU	
2050	4.6; 7.3; 2.6	1.09	-28.7;-0.8			-2.48		
		Case 4. Adj	ustment through social	protection transfers	(TR)			
		Per capita consumption	Net debt ; balance	Welfare impac	t (% dev. in REL	U vis-à-vis adj.	lump sum taxes)	by birth cohort
	TR (% GDP)	(Adj. lump sum taxes $= 1$)	(% GDP)	1916	1946	1976	2006	2036
2005	22.9	1.00	57.4 ; -4.7	-0.25	-0.51	-0.07	0.18	0.20
2010	17.3	1.00	59.9;-0.2					
2015	13,4	0.98	42.2;4.0		Sun	n of % dev. in RI	ELU	
2050	18.2	0.97	-12.5 ; -0.2			-0.45		

Table A.6 Simulation results for Germany (adjustment from 2006 to 2015)

		Per capita consumption	Net debt ; balance	Welfare impac	t (% dev. in REL	U vis-à-vis adj.	lump sum taxes)	by birth cohort
	Eta_25-54; Eta_55-64 (%)	(Adj. lump sum taxes $= 1$)	(% GDP)	1916	1946	1976	2006	2036
2005	78.8 ; 38.8	1.00	57.4 ; -4.7	0.36	0.72	0.16	0.55	0.63
2010	91.7;60.4	0.86	47.9;0.0					
2015	106.8;94.1	0.82	23.5; 4.1		Sun	n of % dev. in Rl	ELU	
2050	106.8;94.1	0.83	-5.8 ; -1.3			2.42		
	OECD limits: 85.6; 70.0							
		Case 6. Adjus	tment through aggregate	hours worked per y	year (H)			
		Per capita consumption	Net debt ; balance	Welfare impac	t (% dev. in REL	LU vis-à-vis adj.	lump sum taxes)	by birth cohort
	Н	(Adj. lump sum taxes $= 1$)	(% GDP)	1916	1946	1976	2006	2036
2005	1443	1.00	57.4;-4.7	0.37	0.75	0.12	0.30	0.39
2010	1765	0.84	47.9;0.0					
2015	2160	0.82	$235 \cdot 41$		Sun	n of % dev in Rl	FLU	
2015	2100	0.02	<i>20.0</i> , 1.1		Dun	101 / 0 ucv. III IG		
2013 2050 Case 7	2160 2160 7. A spending-based Stockholm Agen	0.82 0.82 da: adjustment through emple	-5.8 ; -1.3 oyment rates (Etas), soci	al protection transfe	ers (TR), and pul	1.93	(CG), health car	e and educatio
2013 2050 <u>Case 7</u>	2160 2160 7. A spending-based Stockholm Agen	0.82 0.82 da: adjustment through employ Per capita consumption	-5.8 ; -1.3 oyment rates (Etas), soci	al protection transfo Welfare impac	ers (TR), and pul	1.93 blic consumption	<u>1 (CG), health car</u> lump sum taxes)	e and education
2013 2050 Case 7	2160 2160 7. A spending-based Stockholm Agen _25-54 ; _55-64 ; TR ; CG ; He ; Ed	0.82 <u>da: adjustment through emplo</u> <u>Per capita consumption</u> (Adj. lump sum taxes = 1)	-5.8 ; -1.3 oyment rates (Etas), soci Net debt ; balance (% GDP)	al protection transfo Welfare impac 1916	ers (TR), and put t (% dev. in REL 1946	LU vis-à-vis adj. 1976	<u>(CG), health car</u> lump sum taxes) 2006	e and education by birth cohort 2036
2013 2050 Case 7 2005	2160 2160 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 78.8 ; 38.8 ; 22.9 ; 12.8 ; 6.5 ; 4.2	0.82 <u>da: adjustment through emplo</u> <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00	-5.8 ; -1.3 oyment rates (Etas), soci Net debt ; balance (% GDP) 57.4 ; -4.7	al protection transfo Welfare impac 1916 0.10	ers (TR), and put t (% dev. in REI 1946 0.09	LU vis-à-vis adj. 1976 0.02	u (CG), health car lump sum taxes) 2006 0.21	e and education by birth cohort 2036 0.22
2013 2050 Case 7 2005 2010	2160 2160 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 78.8 ; 38.8 ; 22.9 ; 12.8 ; 6.5 ; 4.2 83.6 ; 46.2 ; 20.1 ; 11.4 ; 6.2 ; 3.6	0.82 <u>da: adjustment through emplo</u> <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00 0.98	-5.8 ; -1.3 oyment rates (Etas), soci Net debt ; balance (% GDP) 57.4 ; -4.7 54.3 ; 0.1	al protection transfe Welfare impac 1916 0.10	ers (TR), and pul t (% dev. in REI 1946 0.09	LU vis-à-vis adj. 1976 0.02	<u>(CG), health car</u> lump sum taxes) 2006 0.21	e and education by birth cohort 2036 0.22
2013 2050 Case 7 2005 2010 2015	2160 2160 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 78.8 ; 38.8 ; 22.9 ; 12.8 ; 6.5 ; 4.2 83.6 ; 46.2 ; 20.1 ; 11.4 ; 6.2 ; 3.6 88.7 ; 55.0 ; 18.1 ; 10.1 ; 5.9 ; 3.0	0.82 <u>0.82</u> <u>da: adjustment through emploid</u> <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00 0.98 0.96	-5.8 ; -1.3 oyment rates (Etas), soci (% GDP) 57.4 ; -4.7 54.3 ; 0.1 31.2 ; 4.8	al protection transfe Welfare impac 1916 0.10	ers (TR), and pul t (% dev. in REL 1946 0.09 Sun	LU vis-à-vis adj. 1976 0.02 n of % dev. in RI	<u>(CG), health car</u> lump sum taxes) 2006 0.21 ELU	e and education by birth cohort 2036 0.22
2013 2050 Case 7 2005 2010 2015 2050	2160 2160 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 78.8 ; 38.8 ; 22.9 ; 12.8 ; 6.5 ; 4.2 83.6 ; 46.2 ; 20.1 ; 11.4 ; 6.2 ; 3.6 88.7 ; 55.0 ; 18.1 ; 10.1 ; 5.9 ; 3.0 88.7 ; 55.0 ; 24.5 ; 10.1 ; 8.2 ; 3.3	0.82 <u>0.82</u> <u>da: adjustment through emploid</u> <u>(Adj. lump sum taxes = 1)</u> 1.00 0.98 0.96 0.96	<u>-5.8</u> ; -1.3 oyment rates (Etas), soci (% GDP) 57.4; -4.7 54.3; 0.1 31.2; 4.8 -15.5; -0.7	al protection transfo Welfare impac 1916 0.10	ers (TR), and pul t (% dev. in REI 1946 0.09 Sun	LU vis-à-vis adj. 1976 0.02 n of % dev. in RI 0.64	<u>(CG), health can lump sum taxes)</u> 2006 0.21 ELU	e and education by birth cohort 2036 0.22
2005 2005 2010 2015 2050	2160 2160 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 78.8 ; 38.8 ; 22.9 ; 12.8 ; 6.5 ; 4.2 83.6 ; 46.2 ; 20.1 ; 11.4 ; 6.2 ; 3.6 88.7 ; 55.0 ; 18.1 ; 10.1 ; 5.9 ; 3.0 88.7 ; 55.0 ; 24.5 ; 10.1 ; 8.2 ; 3.3 Case 8. A tax-based Stockholm	0.82 <u>0.82</u> <u>da: adjustment through emploid</u> <u>(Adj. lump sum taxes = 1)</u> 1.00 0.98 0.96 0.96 0.96 DIm Agenda: adjustment through	-5.8 ; -1.3 oyment rates (Etas), soci (% GDP) 57.4 ; -4.7 54.3 ; 0.1 31.2 ; 4.8 -15.5 ; -0.7 ugh employment rates (I	al protection transfo Welfare impac 1916 0.10 Etas), social protecti	ers (TR), and pul t (% dev. in REL 1946 0.09 Sun on transfers (TR	LU vis-à-vis adj. 1.93 blic consumption LU vis-à-vis adj. 1976 0.02 n of % dev. in RI 0.64), and consumpti	(CG), health can lump sum taxes) 2006 0.21 ELU on taxes (Tau_C	e and education by birth cohort 2036 0.22
2005 2020 2005 2010 2015 2050	2160 2160 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 78.8 ; 38.8 ; 22.9 ; 12.8 ; 6.5 ; 4.2 83.6 ; 46.2 ; 20.1 ; 11.4 ; 6.2 ; 3.6 88.7 ; 55.0 ; 18.1 ; 10.1 ; 5.9 ; 3.0 88.7 ; 55.0 ; 24.5 ; 10.1 ; 8.2 ; 3.3 Case 8. A tax-based Stockhol	0.82 <u>0.82</u> <u>da: adjustment through emplo</u> <u>(Adj. lump sum taxes = 1)</u> 1.00 0.98 0.96 0.96 <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u>	-5.8 ; -1.3 oyment rates (Etas), soci Net debt ; balance (% GDP) 57.4 ; -4.7 54.3 ; 0.1 31.2 ; 4.8 -15.5 ; -0.7 ugh employment rates (I Net debt ; balance	<u>Welfare impac</u> <u>1916</u> 0.10 Etas), social protecti Welfare impac	ers (TR), and pul <u>t (% dev. in REI</u> <u>1946</u> 0.09 Sun on transfers (TR t (% dev. in REI	LU vis-à-vis adj. 1.93 blic consumption LU vis-à-vis adj. 1976 0.02 n of % dev. in Rl 0.64), and consumpti LU vis-à-vis adj.	a (CG), health can lump sum taxes) 2006 0.21 ELU on taxes (Tau_C lump sum taxes)	e and educatio by birth cohort 2036 0.22) by birth cohort
2005 2050 2005 2010 2015 2050	2160 2160 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 78.8 ; 38.8 ; 22.9 ; 12.8 ; 6.5 ; 4.2 83.6 ; 46.2 ; 20.1 ; 11.4 ; 6.2 ; 3.6 88.7 ; 55.0 ; 18.1 ; 10.1 ; 5.9 ; 3.0 88.7 ; 55.0 ; 24.5 ; 10.1 ; 8.2 ; 3.3 Case 8. A tax-based Stockho 25-54 ; _55-64 ; TR ; Tau_C	0.82 <u>0.82</u> <u>da: adjustment through emploid</u> <u>(Adj. lump sum taxes = 1)</u> 1.00 0.98 0.96 0.96 <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u></u>	-5.8 ; -1.3 oyment rates (Etas), soci (% GDP) 57.4 ; -4.7 54.3 ; 0.1 31.2 ; 4.8 -15.5 ; -0.7 ugh employment rates (I Net debt ; balance (% GDP)	Welfare impac 1916 0.10 Etas), social protecti Welfare impac 1916	ers (TR), and put <u>t (% dev. in REL</u> <u>1946</u> 0.09 Sun on transfers (TR <u>t (% dev. in REL</u> <u>1946</u>	LU vis-à-vis adj. 1.93 blic consumption 1976 0.02 n of % dev. in Rl 0.64), and consumpti LU vis-à-vis adj. 1976	a (CG), health can lump sum taxes) 2006 0.21 ELU on taxes (Tau_C lump sum taxes) 2006	e and education by birth cohort 2036 0.22) by birth cohort 2036
2005 2005 2005 2010 2015 2050 2005	2160 2160 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 78.8 ; 38.8 ; 22.9 ; 12.8 ; 6.5 ; 4.2 83.6 ; 46.2 ; 20.1 ; 11.4 ; 6.2 ; 3.6 88.7 ; 55.0 ; 18.1 ; 10.1 ; 5.9 ; 3.0 88.7 ; 55.0 ; 24.5 ; 10.1 ; 8.2 ; 3.3 Case 8. A tax-based Stockho 25-54 ; _55-64 ; TR ; Tau_C 78.8 ; 38.8 ; 22.9 ; 18.3	0.82 0.82 <u>da: adjustment through emplo</u> <u>(Adj. lump sum taxes = 1)</u> 1.00 0.98 0.96 0.96 <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u> <u>0.96</u>	-5.8 ; -1.3 oyment rates (Etas), soci (% GDP) 57.4 ; -4.7 54.3 ; 0.1 31.2 ; 4.8 -15.5 ; -0.7 ugh employment rates (I Net debt ; balance (% GDP) 57.4 ; -4.7	tal protection transfo Welfare impac 1916 0.10 Etas), social protecti Welfare impac 1916 0.11	ers (TR), and put <u>t (% dev. in REI</u> <u>1946</u> 0.09 Sun <u>on transfers (TR</u> <u>t (% dev. in REI</u> <u>1946</u> 0.14	1.93 blic consumption	a (CG), health can <u>lump sum taxes)</u> 2006 0.21 ELU on taxes (Tau_C <u>lump sum taxes)</u> 2006 0.26	e and education by birth cohort 2036 0.22) by birth cohort 2036 0.26
2005 2005 2010 2015 2050 2005 2010	2160 2160 7. A spending-based Stockholm Agen (25-54; _55-64; TR; CG; He; Ed 78.8; 38.8; 22.9; 12.8; 6.5; 4.2 83.6; 46.2; 20.1; 11.4; 6.2; 3.6 88.7; 55.0; 18.1; 10.1; 5.9; 3.0 88.7; 55.0; 24.5; 10.1; 8.2; 3.3 Case 8. A tax-based Stockhol (25-54; _55-64; TR; Tau_C) 78.8; 38.8; 22.9; 18.3 83.6; 46.2; 20.1; 21.2	0.82 0.82 da: adjustment through emploid (Adj. lump sum taxes = 1) 1.00 0.98 0.96 0.93 0.93 0.93 0.93 0.93 0.95 0	-5.8 ; -1.3 oyment rates (Etas), soci (% GDP) 57.4 ; -4.7 54.3 ; 0.1 31.2 ; 4.8 -15.5 ; -0.7 ugh employment rates (I Net debt ; balance (% GDP) 57.4 ; -4.7 55.1 ; -0.2	tal protection transfo Welfare impac 1916 0.10 Etas), social protecti Welfare impac 1916 0.11	ers (TR), and pul t (% dev. in REL 1946 0.09 Sun on transfers (TR t (% dev. in REL 1946 0.14	1.93 blic consumption 2U vis-à-vis adj. 1976 0.02 n of % dev. in RI 0.64), and consumption 2U vis-à-vis adj. 1976 0.02	a (CG), health can <u>lump sum taxes)</u> <u>2006</u> 0.21 ELU on taxes (Tau_C <u>lump sum taxes)</u> <u>2006</u> 0.26	e and education by birth cohort 2036 0.22) by birth cohort 2036 0.26
2005 2005 2010 2015 2050 2005 2010 2015	2160 2160 7. A spending-based Stockholm Agen (25-54; _55-64; TR; CG; He; Ed 78.8; 38.8; 22.9; 12.8; 6.5; 4.2 83.6; 46.2; 20.1; 11.4; 6.2; 3.6 88.7; 55.0; 18.1; 10.1; 5.9; 3.0 88.7; 55.0; 24.5; 10.1; 8.2; 3.3 Case 8. A tax-based Stockho (25-54; _55-64; TR; Tau_C) 78.8; 38.8; 22.9; 18.3 83.6; 46.2; 20.1; 21.2 88.7; 55.0; 18.1; 24.6	0.82 0.82 da: adjustment through emploind (Adj. lump sum taxes = 1) 1.00 0.98 0.96 0.93 0.91	-5.8 ; -1.3 oyment rates (Etas), soci (% GDP) 57.4 ; -4.7 54.3 ; 0.1 31.2 ; 4.8 -15.5 ; -0.7 ugh employment rates (I Net debt ; balance (% GDP) 57.4 ; -4.7 55.1 ; -0.2 32.9 ; 4.6	A protection transformed Welfare impac 1916 0.10 Etas), social protecti Welfare impac 1916 0.11	ers (TR), and pul t (% dev. in REL 1946 0.09 Sun on transfers (TR t (% dev. in REL 1946 0.14 Sun	1.93 blic consumption 2U vis-à-vis adj. 1976 0.02 n of % dev. in RI 0.64), and consumption 2U vis-à-vis adj. 1976 0.064), and consumption 20 vis-à-vis adj. 1976 0.06 n of % dev. in RI	a (CG), health can <u>lump sum taxes)</u> 2006 0.21 ELU on taxes (Tau_C <u>lump sum taxes)</u> 2006 0.26 ELU	e and education by birth cohort 2036 0.22) by birth cohort 2036 0.26

		Per capita consumption	Net debt ; balance	Welfare impact	t (% dev. in REL	U vis-à-vis adj.	ump sum taxes)	by birth cohort
_	Tau_L (%)	(Adj. lump sum taxes $= 1$)	(% GDP)	1916	1946	1976	2006	2036
2005	25.9	1.00	29.9 ; -1.5	0.05	0.09	0.00	0.01	0.01
2010	29.6	1.00	23.1;0.1					
2015	33.9	1.00	12.1;1.6		Sun	n of % dev. in RI	ELU	
2050	33.9	1.00	13.1 ; -3.0			0.16		
		Case 2	2. Adjustment through	consumption taxes				
		Per capita consumption	Net debt ; balance	Welfare impact	t (% dev. in REL	U vis-à-vis adj.	ump sum taxes)	by birth cohort
	Tau_C (%)	(Adj. lump sum taxes $= 1$)	(% GDP)	1916	1946	1976	2006	2036
2005	25.8	1.00	29.9 ; -1.5	0.02	-0.04	-0.07	-0.13	-0.18
2010	28.6	0.97	22.8;0.1					
2015	31.7	0.97	121.15		Sun	of% dev in RI	TI	
-010	51.7	0.97	12.1, 1.0		Dun	101 / 0 ucv. III Ki		
2050	31.7 31.7 Case 3. Adjustment th	0.97 0.97	14.2 ; -3.0 ral government subsidie	es, and public investi	nent (CG), healt	-0.40 h care (He) and e	education (Ed)	
2050	31.7 31.7 Case 3. Adjustment th	0.97 0.97 Per capita consumption	14.2 ; -3.0 ral government subsidie Net debt ; balance	s, and public investi Welfare impact	nent (CG), healt t (% dev. in REL	-0.40 h care (He) and d	education (Ed)	by birth cohort
2050	31.7 31.7 Case 3. Adjustment th CG, He, Ed (% GDP)	0.97 0.97 Per capita consumption, gener (Adj. lump sum taxes = 1)	14.2 ; -3.0 ral government subsidie <u>Net debt ; balance</u> (% GDP)	s, and public investi Welfare impact 1916	nent (CG), healt t (% dev. in REL 1946	-0.40 h care (He) and d U vis-à-vis adj. 1976	education (Ed)	by birth cohort 2036
2050	31.7 31.7 Case 3. Adjustment th CG, He, Ed (% GDP) 13.2 ; 6.3 ; 4.0	0.97 0.97 rough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00	14.2 ; -3.0 ral government subsidie <u>Net debt ; balance</u> (% GDP) 29.9 ; -1.5	s, and public investi Welfare impact 1916 0.02	nent (CG), healt t (% dev. in REL 1946 -0.08	-0.40 h care (He) and d U vis-à-vis adj. 1976 -0.12	education (Ed) lump sum taxes) 2006 -0.16	by birth cohort 2036 -0.18
2005 2005 2010	31.7 31.7 Case 3. Adjustment th CG, He, Ed (% GDP) 13.2 ; 6.3 ; 4.0 12.1 ; 6.2 ; 3.6	0.97 0.97 rough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.02	12.1, 1.0 14.2; -3.0 ral government subsidie Net debt ; balance (% GDP) 29.9; -1.5 22.2; 0.3 29.5	welfare impact Welfare impact 1916 0.02	nent (CG), healt t (% dev. in REL 1946 -0.08	-0.40 h care (He) and d U vis-à-vis adj. 1976 -0.12	ump sum taxes) 2006 -0.16	by birth cohort 2036 -0.18
2005 2010 2015 2015	31.7 31.7 Case 3. Adjustment th CG, He, Ed (% GDP) 13.2 ; 6.3 ; 4.0 12.1 ; 6.2 ; 3.6 11.0 ; 6.3 ; 3.3	0.97 0.97 rough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.02 1.02	12.1, 1.0 14.2; -3.0 ral government subsidie Net debt ; balance (% GDP) 29.9; -1.5 22.2; 0.3 10.9; 1.6	welfare impact Welfare impact 1916 0.02	nent (CG), healt t (% dev. in REL 1946 -0.08 Sun	-0.40 h care (He) and d <u>U vis-à-vis adj.</u> <u>1976</u> -0.12 h of % dev. in RI	ump sum taxes) 2006 -0.16	by birth cohort 2036 -0.18
2005 2005 2010 2015 2050	31.7 31.7 Case 3. Adjustment th CG, He, Ed (% GDP) 13.2 ; 6.3 ; 4.0 12.1 ; 6.2 ; 3.6 11.0 ; 6.3 ; 3.3 11.0 ; 7.5 ; 3.3	0.97 0.97 rough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.02 1.02 1.02	12.1, 1.6 14.2; -3.0 ral government subsidie Net debt ; balance (% GDP) 29.9; -1.5 22.2; 0.3 10.9; 1.6 12.9; -2.9	welfare impact Welfare impact 1916 0.02	nent (CG), healt t (% dev. in REL 1946 -0.08 Sun	-0.40 h care (He) and d <u>U vis-à-vis adj.</u> <u>1976</u> -0.12 h of % dev. in RF -0.52	education (Ed) lump sum taxes) 2006 -0.16 ELU	by birth cohort 2036 -0.18
2005 2010 2010 2015 2050	31.7 31.7 Case 3. Adjustment th CG, He, Ed (% GDP) 13.2 ; 6.3 ; 4.0 12.1 ; 6.2 ; 3.6 11.0 ; 6.3 ; 3.3 11.0 ; 7.5 ; 3.3	0.97 0.97 arough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.02 1.02 1.02 1.02 Case 4. Adji	12.1 ; 15 14.2 ; -3.0 ral government subsidie <u>Net debt ; balance</u> (% GDP) 29.9 ; -1.5 22.2 ; 0.3 10.9 ; 1.6 12.9 ; -2.9 ustment through social	Welfare impact Welfare impact 1916 0.02	nent (CG), healt t (% dev. in REL 1946 -0.08 Sun (TR)	-0.40 h care (He) and d .U vis-à-vis adj. 1976 -0.12 h of % dev. in RH -0.52	education (Ed) lump sum taxes) 2006 -0.16 ELU	by birth cohort 2036 -0.18
2005 2005 2010 2015 2050	31.7 31.7 Case 3. Adjustment th CG, He, Ed (% GDP) 13.2 ; 6.3 ; 4.0 12.1 ; 6.2 ; 3.6 11.0 ; 6.3 ; 3.3 11.0 ; 7.5 ; 3.3	0.97 0.97 rough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.02 1.02 1.02 1.02 Case 4. Adj Per capita consumption	12.1 ; 10 14.2 ; -3.0 ral government subsidie Net debt ; balance (% GDP) 29.9 ; -1.5 22.2 ; 0.3 10.9 ; 1.6 12.9 ; -2.9 ustment through social j Net debt ; balance	Welfare impact 1916 0.02	nent (CG), healt t (% dev. in REL 1946 -0.08 Sun (TR)	-0.40 <u>h care (He) and d</u> <u>U vis-à-vis adj.</u> <u>1976</u> -0.12 h of % dev. in RI -0.52 <u>U vis-à-vis adj.</u>	education (Ed) lump sum taxes) 2006 -0.16 ELU	by birth cohort 2036 -0.18 by birth cohort
2005 2005 2010 2015 2050	31.7 31.7 Case 3. Adjustment th CG, He, Ed (% GDP) 13.2 ; 6.3 ; 4.0 12.1 ; 6.2 ; 3.6 11.0 ; 6.3 ; 3.3 11.0 ; 7.5 ; 3.3 TR (% GDP)	0.97 0.97 rough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.02 1.02 1.02 1.02 Case 4. Adj Per capita consumption (Adj. lump sum taxes = 1)	12.1 ; 10 14.2 ; -3.0 ral government subsidie Net debt ; balance (% GDP) 29.9 ; -1.5 22.2 ; 0.3 10.9 ; 1.6 12.9 ; -2.9 ustment through social j Net debt ; balance (% GDP)	welfare impact Welfare impact 1916 0.02 protection transfers (Welfare impact 1916	nent (CG), healt t (% dev. in REL 1946 -0.08 Sun (TR) t (% dev. in REL 1946	-0.40 h care (He) and d <u>U vis-à-vis adj.</u> 1976 -0.12 h of % dev. in RI -0.52 <u>U vis-à-vis adj.</u> 1976	education (Ed) lump sum taxes) 2006 -0.16 ELU lump sum taxes) 2006	by birth cohort 2036 -0.18 by birth cohort 2036
2005 2010 2015 2050 2005	31.7 31.7 Case 3. Adjustment th CG, He, Ed (% GDP) 13.2 ; 6.3 ; 4.0 12.1 ; 6.2 ; 3.6 11.0 ; 6.3 ; 3.3 11.0 ; 7.5 ; 3.3 TR (% GDP) 9.2	0.97 0.97 rough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.02 1.02 1.02 1.02 Case 4. Adj Per capita consumption (Adj. lump sum taxes = 1) 1.00	12.1 ; 15 14.2 ; -3.0 ral government subsidie <u>Net debt ; balance</u> (% GDP) 29.9 ; -1.5 22.2 ; 0.3 10.9 ; 1.6 12.9 ; -2.9 ustment through social j Net debt ; balance (% GDP) 29.9 ; -1.5	Welfare impact 1916 0.02 Protection transfers (Welfare impact 1916 -0.06	nent (CG), healt t (% dev. in REL 1946 -0.08 Sun (TR) t (% dev. in REL 1946 -0.09	-0.40 h care (He) and d <u>U vis-à-vis adj.</u> <u>1976</u> -0.12 h of % dev. in RI -0.52 <u>U vis-à-vis adj.</u> <u>1976</u> -0.03	education (Ed) lump sum taxes) 2006 -0.16 ELU lump sum taxes) 2006 0.01	by birth cohort 2036 -0.18 by birth cohort 2036 0.01
2005 2010 2015 2050 2005 2005 2010	31.7 31.7 Case 3. Adjustment th CG, He, Ed (% GDP) 13.2 ; 6.3 ; 4.0 12.1 ; 6.2 ; 3.6 11.0 ; 6.3 ; 3.3 11.0 ; 7.5 ; 3.3 TR (% GDP) 9.2 7.9	0.97 0.97 rough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.02 1.02 1.02 Case 4. Adj Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.00 1.00	12.1, 1.0 14.2; -3.0 ral government subsidie Net debt ; balance (% GDP) 29.9; -1.5 22.2; 0.3 10.9; 1.6 12.9; -2.9 ustment through social j Net debt ; balance (% GDP) 29.9; -1.5 23.5; -0.1	Welfare impact 1916 0.02 protection transfers (Welfare impact 1916 -0.06	nent (CG), healt t (% dev. in REL 1946 -0.08 Sun (TR) t (% dev. in REL 1946 -0.09	-0.40 h care (He) and d <u>U vis-à-vis adj.</u> <u>1976</u> -0.12 h of % dev. in RI -0.52 <u>U vis-à-vis adj.</u> <u>1976</u> -0.03	lump sum taxes) 2006 -0.16 ELU lump sum taxes) 2006 0.01	by birth cohort 2036 -0.18 by birth cohort 2036 0.01
2005 2005 2010 2015 2050 2005 2010 2015	31.7 31.7 Case 3. Adjustment th CG, He, Ed (% GDP) 13.2 ; 6.3 ; 4.0 12.1 ; 6.2 ; 3.6 11.0 ; 6.3 ; 3.3 11.0 ; 7.5 ; 3.3 TR (% GDP) 9.2 7.9 7.1	0.97 0.97 rough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.02 1.02 1.02 Case 4. Adj Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.00 1.00 1.00 1.00	12.1, 1.0 14.2; -3.0 ral government subsidie Net debt ; balance (% GDP) 29.9; -1.5 22.2; 0.3 10.9; 1.6 12.9; -2.9 ustment through social j Net debt ; balance (% GDP) 29.9; -1.5 23.5; -0.1 14.6; 0.9	Welfare impact 1916 0.02 protection transfers (Welfare impact 1916 -0.06	nent (CG), healt t (% dev. in REL 1946 -0.08 Sun (TR) t (% dev. in REL 1946 -0.09 Sun	-0.40 h care (He) and d <u>U vis-à-vis adj.</u> <u>1976</u> -0.12 h of % dev. in RI -0.52 <u>U vis-à-vis adj.</u> <u>1976</u> -0.03 h of % dev. in RI	education (Ed) <u>lump sum taxes)</u> 2006 -0.16 ELU <u>lump sum taxes)</u> 2006 0.01 ELU	by birth cohort 2036 -0.18 by birth cohort 2036 0.01

Table A.7 Simulation results for Ireland (adjustment from 2006 to 2015)

		Per capita consumption	Net debt ; balance	Welfare impac	t (% dev. in REI	U vis-à-vis adj.	lump sum taxes)	by birth cohort
	Eta_25-54 ; Eta_55-64 (%)	(Adj. lump sum taxes $= 1$)	(% GDP)	1916	1946	1976	2006	2036
2005	76.0 ; 47.1	1.00	29.9 ; -1.5	0.20	0.40	0.06	0.17	0.20
2010	82.2;59.4	0.90	20.5;0.0					
2015	88.9;74.9	0.90	11.1;0.8		Sun	n of % dev. in Rl	ELU	
2050	88.9;74.9	0.90	23.3;-3.6			1.03		
	OECD limits: 83.0; 83.0							
		Case 6. Adjus	tment through aggregate	hours worked per y	vear (H)			
		Per capita consumption	Net debt ; balance	Welfare impac	t (% dev. in REI	LU vis-à-vis adj.	lump sum taxes)	by birth cohort
	Н	(Adj. lump sum taxes $= 1$)	(% GDP)	1916	1946	1976	2006	2036
2005	1666	1.00	29.9;-1.5	0.21	0.43	0.08	0.12	0.15
2010	1833	0.89	19.8;0.2					
		0.00	0.0.1.0		0			
2015	2017	0.89	9.8;1.0		Sun	n of % dev. in RI	ELU	
2015 2050 Case 7	2017 2017 7. A spending-based Stockholm Agen	0.89 0.89 da: adjustment through emplo	9.8 ; 1.0 20.8 ; -3.4 pyment rates (Etas), soci	al protection transfe	Sun ers (TR), and pul	n of % dev. in RI 0.99 blic consumption	ELU 1 (CG), health car	e and educatio
2015 2050 Case 7	2017 2017 7. A spending-based Stockholm Agen	0.89 0.89 da: adjustment through emplo	9.8 ; 1.0 20.8 ; -3.4 byment rates (Etas), soci	al protection transfe Welfare impac	Sun ers (TR), and pul t (% dev. in REI	n of % dev. in RI 0.99 blic consumption LU vis-à-vis adj.	ELU 1 (CG), health car lump sum taxes)	e and educatio
2015 2050 Case 7	2017 2017 7. A spending-based Stockholm Agen _25-54 ; _55-64 ; TR ; CG ; He ; Ed	0.89 0.89 da: adjustment through emplo da: <u>Per capita consumption</u> (Adj. lump sum taxes = 1)	9.8 ; 1.0 20.8 ; -3.4 oyment rates (Etas), soci Net debt ; balance (% GDP)	al protection transfe Welfare impac 1916	Sun ers (TR), and pul t (% dev. in REI 1946	n of % dev. in RI 0.99 blic consumption LU vis-à-vis adj. 1976	LU (CG), health car lump sum taxes) 2006	e and education by birth cohort 2036
2015 2050 Case 7 2005	2017 2017 7. A spending-based Stockholm Agen 25-54 ;55-64 ; TR ; CG ; He ; Ed 76.0 ; 47.1 ; 9.2 ; 13.2 ; 6.3 ; 4.0	0.89 0.89 <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00	9.8 ; 1.0 20.8 ; -3.4 byment rates (Etas), soci Net debt ; balance (% GDP) 29.9 ; -1.5	al protection transfe Welfare impac 1916 0.06	Sun ers (TR), and pul t (% dev. in REI 1946 0.09	n of % dev. in RI 0.99 blic consumption LU vis-à-vis adj. 1976 0.00	LU (CG), health car lump sum taxes) 2006 0.03	e and educatio by birth cohort 2036 0.03
2015 2050 Case 7 2005 2010	2017 2017 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 76.0 ; 47.1 ; 9.2 ; 13.2 ; 6.3 ; 4.0 78.1 ; 51.2 ; 8.6 ; 12.8 ; 6.1 ; 3.6	0.89 0.89 <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00 1.00	9.8 ; 1.0 20.8 ; -3.4 byment rates (Etas), soci Net debt ; balance (% GDP) 29.9 ; -1.5 22.0 ; 0.0	al protection transfe Welfare impac 1916 0.06	Sun ers (TR), and pul t (% dev. in REI 1946 0.09	n of % dev. in RI 0.99 blic consumption LU vis-à-vis adj. 1976 0.00	LU (CG), health car lump sum taxes) 2006 0.03	e and education by birth cohort 2036 0.03
2015 2050 Case 7 2005 2010 2015	2017 2017 7. A spending-based Stockholm Agen 25-54 ;55-64 ; TR ; CG ; He ; Ed 76.0 ; 47.1 ; 9.2 ; 13.2 ; 6.3 ; 4.0 78.1 ; 51.2 ; 8.6 ; 12.8 ; 6.1 ; 3.6 80.4 ; 55.7 ; 8.2 ; 12.5 ; 6.1 ; 3.3	0.89 0.89 <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00 1.00 0.97	9.8 ; 1.0 20.8 ; -3.4 byment rates (Etas), soci (% GDP) 29.9 ; -1.5 22.0 ; 0.0 12.2 ; 1.1	al protection transfe Welfare impac 1916 0.06	Sun ers (TR), and pul t (% dev. in REI 1946 0.09 Sun	n of % dev. in RI 0.99 <u>blic consumption</u> <u>LU vis-à-vis adj.</u> <u>1976</u> 0.00 n of % dev. in RI	LU (CG), health car lump sum taxes) 2006 0.03 ELU	e and education by birth cohort 2036 0.03
2015 2050 Case 7 2005 2010 2015 2050	2017 2017 7. A spending-based Stockholm Agen 25-54 ;55-64 ; TR ; CG ; He ; Ed 76.0 ; 47.1 ; 9.2 ; 13.2 ; 6.3 ; 4.0 78.1 ; 51.2 ; 8.6 ; 12.8 ; 6.1 ; 3.6 80.4 ; 55.7 ; 8.2 ; 12.5 ; 6.1 ; 3.3 80.4 ; 55.7 ; 11.1 ; 12.5 ; 8.2 ; 3.2	0.89 0.89 da: adjustment through emploid Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.00 0.97 0.97	9.8 ; 1.0 20.8 ; -3.4 byment rates (Etas), soci (% GDP) 29.9 ; -1.5 22.0 ; 0.0 12.2 ; 1.1 18.9 ; -3.3	al protection transfo Welfare impac 1916 0.06	Sun ers (TR), and pul t (% dev. in REI 1946 0.09 Sun	n of % dev. in RI 0.99 blic consumption <u>LU vis-à-vis adj.</u> 1976 0.00 n of % dev. in RI 0.21	LU (CG), health car lump sum taxes) 2006 0.03 ELU	e and educatio by birth cohort 2036 0.03
2015 2050 Case 7 2005 2010 2015 2050	2017 2017 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 76.0 ; 47.1 ; 9.2 ; 13.2 ; 6.3 ; 4.0 78.1 ; 51.2 ; 8.6 ; 12.8 ; 6.1 ; 3.6 80.4 ; 55.7 ; 8.2 ; 12.5 ; 6.1 ; 3.3 80.4 ; 55.7 ; 11.1 ; 12.5 ; 8.2 ; 3.2 Case 8. A tax-based Stockho	0.89 0.89 <u>da: adjustment through emploided in the second second</u>	9.8 ; 1.0 20.8 ; -3.4 byment rates (Etas), soci <u>Net debt ; balance</u> (% GDP) 29.9 ; -1.5 22.0 ; 0.0 12.2 ; 1.1 18.9 ; -3.3 ugh employment rates (F	al protection transfe Welfare impac 1916 0.06	Sun ers (TR), and pul t (% dev. in REI 1946 0.09 Sun on transfers (TR	n of % dev. in RI 0.99 <u>LU vis-à-vis adj.</u> 1976 0.00 n of % dev. in RI 0.21), and consumpti	LU <u>(CG), health car</u> <u>lump sum taxes)</u> <u>2006</u> 0.03 ELU on taxes (Tau_C	e and educatio by birth cohort 2036 0.03
2015 2050 Case 7 2005 2010 2015 2050	2017 2017 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 76.0 ; 47.1 ; 9.2 ; 13.2 ; 6.3 ; 4.0 78.1 ; 51.2 ; 8.6 ; 12.8 ; 6.1 ; 3.6 80.4 ; 55.7 ; 8.2 ; 12.5 ; 6.1 ; 3.3 80.4 ; 55.7 ; 11.1 ; 12.5 ; 8.2 ; 3.2 Case 8. A tax-based Stockhol	0.89 0.89 da: adjustment through emple Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.00 0.97 0.97 olm Agenda: adjustment through	9.8 ; 1.0 20.8 ; -3.4 <u>Net debt ; balance</u> (% GDP) 29.9 ; -1.5 22.0 ; 0.0 12.2 ; 1.1 18.9 ; -3.3 ugh employment rates (H	al protection transfe Welfare impac 1916 0.06 Etas), social protecti Welfare impac	Sun ers (TR), and pul t (% dev. in REI 1946 0.09 Sun on transfers (TR t (% dev. in REI	n of % dev. in RI 0.99 <u>LU vis-à-vis adj.</u> <u>1976</u> 0.00 n of % dev. in RI 0.21), and consumpti	LU (CG), health car lump sum taxes) 2006 0.03 ELU on taxes (Tau_C lump sum taxes)	e and educatio by birth cohort 2036 0.03) by birth cohort
2015 2050 Case 7 2005 2010 2015 2050	2017 2017 2017 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 76.0 ; 47.1 ; 9.2 ; 13.2 ; 6.3 ; 4.0 78.1 ; 51.2 ; 8.6 ; 12.8 ; 6.1 ; 3.6 80.4 ; 55.7 ; 8.2 ; 12.5 ; 6.1 ; 3.3 80.4 ; 55.7 ; 11.1 ; 12.5 ; 8.2 ; 3.2 Case 8. A tax-based Stockho 25-54 ; _55-64 ; TR ; Tau_C	0.89 0.89 0.89 <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00 1.00 0.97 0.97 0.97 olm Agenda: adjustment throw <u>Per capita consumption</u> (Adj. lump sum taxes = 1)	9.8 ; 1.0 20.8 ; -3.4 <u>oyment rates (Etas), soci</u> <u>(% GDP)</u> 29.9 ; -1.5 22.0 ; 0.0 12.2 ; 1.1 18.9 ; -3.3 ugh employment rates (H <u>Net debt ; balance</u> (% GDP)	al protection transfe Welfare impac 1916 0.06 Etas), social protecti Welfare impac 1916	Sun ers (TR), and pul t (% dev. in REI 1946 0.09 Sun on transfers (TR t (% dev. in REI 1946	n of % dev. in RI 0.99 <u>U vis-à-vis adj.</u> <u>1976</u> 0.00 n of % dev. in RI 0.21), and consumpti <u>U vis-à-vis adj.</u> <u>1976</u>	LU (CG), health car lump sum taxes) 2006 0.03 ELU on taxes (Tau_C lump sum taxes) 2006	e and education by birth cohort 2036 0.03) by birth cohort 2036
2015 2050 Case 7 2005 2010 2015 2050 2005	2017 2017 2017 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 76.0 ; 47.1 ; 9.2 ; 13.2 ; 6.3 ; 4.0 78.1 ; 51.2 ; 8.6 ; 12.8 ; 6.1 ; 3.6 80.4 ; 55.7 ; 8.2 ; 12.5 ; 6.1 ; 3.3 80.4 ; 55.7 ; 11.1 ; 12.5 ; 8.2 ; 3.2 Case 8. A tax-based Stockho 25-54 ; _55-64 ; TR ; Tau_C 76.0 ; 47.1 ; 9.2 ; 25.8	0.89 0.89 0.89 <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00 1.00 0.97 0.97 0.97 olm Agenda: adjustment throw <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00	9.8 ; 1.0 20.8 ; -3.4 <u>Net debt ; balance</u> (% GDP) 29.9 ; -1.5 22.0 ; 0.0 12.2 ; 1.1 18.9 ; -3.3 ugh employment rates (H <u>Net debt ; balance</u> (% GDP) 29.9 ; -1.5	al protection transfe Welfare impac 1916 0.06 Etas), social protecti Welfare impac 1916 0.06	Sun ers (TR), and pul t (% dev. in REI 1946 0.09 Sun on transfers (TR t (% dev. in REI 1946 0.10	n of % dev. in RI 0.99 <u>U vis-à-vis adj.</u> <u>1976</u> 0.00 n of % dev. in RI 0.21), and consumpti <u>U vis-à-vis adj.</u> <u>1976</u> 0.01	ELU (CG), health car lump sum taxes) 2006 0.03 ELU on taxes (Tau_C lump sum taxes) 2006 0.04	e and education by birth cohort 2036 0.03) by birth cohort 2036 0.03
2015 2050 Case 7 2005 2010 2015 2050 2005 2005 2010	2017 2017 2017 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 76.0 ; 47.1 ; 9.2 ; 13.2 ; 6.3 ; 4.0 78.1 ; 51.2 ; 8.6 ; 12.8 ; 6.1 ; 3.6 80.4 ; 55.7 ; 8.2 ; 12.5 ; 6.1 ; 3.3 80.4 ; 55.7 ; 11.1 ; 12.5 ; 8.2 ; 3.2 Case 8. A tax-based Stockho 25-54 ; _55-64 ; TR ; Tau_C 76.0 ; 47.1 ; 9.2 ; 25.8 78.1 ; 51.2 ; 8.6 ; 26.7	0.89 0.89 0.89 <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00 1.00 0.97 0.97 0.97 olm Agenda: adjustment throw <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00 0.96	9.8 ; 1.0 20.8 ; -3.4 <u>Dyment rates (Etas), soci</u> (% GDP) 29.9 ; -1.5 22.0 ; 0.0 12.2 ; 1.1 18.9 ; -3.3 ugh employment rates (H <u>Net debt ; balance</u> (% GDP) 29.9 ; -1.5 22.1 ; 0.0	al protection transfe Welfare impac 1916 0.06 Etas), social protecti Welfare impac 1916 0.06	Sun ers (TR), and pul t (% dev. in REI 1946 0.09 Sun on transfers (TR t (% dev. in REI 1946 0.10	n of % dev. in RI 0.99 <u>U vis-à-vis adj.</u> <u>1976</u> 0.00 n of % dev. in RI 0.21), and consumpti <u>U vis-à-vis adj.</u> <u>1976</u> 0.01	ELU (CG), health car lump sum taxes) 2006 0.03 ELU on taxes (Tau_C lump sum taxes) 2006 0.04	e and educatio by birth cohort 2036 0.03) by birth cohort 2036 0.03
2015 2050 Case 7 2005 2010 2015 2050 2005 2010 2015	2017 2017 2017 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 76.0 ; 47.1 ; 9.2 ; 13.2 ; 6.3 ; 4.0 78.1 ; 51.2 ; 8.6 ; 12.8 ; 6.1 ; 3.6 80.4 ; 55.7 ; 8.2 ; 12.5 ; 6.1 ; 3.3 80.4 ; 55.7 ; 11.1 ; 12.5 ; 8.2 ; 3.2 Case 8. A tax-based Stockho 25-54 ; _55-64 ; TR ; Tau_C 76.0 ; 47.1 ; 9.2 ; 25.8 78.1 ; 51.2 ; 8.6 ; 26.7 80.4 ; 55.7 ; 8.2 ; 27.7	0.89 0.89 0.89 <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00 1.00 0.97 0.97 0.97 olm Agenda: adjustment throw <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00 0.96 0.96	9.8 ; 1.0 20.8 ; -3.4 <u>Net debt ; balance</u> (% GDP) 29.9 ; -1.5 22.0 ; 0.0 12.2 ; 1.1 18.9 ; -3.3 ugh employment rates (H <u>Net debt ; balance</u> (% GDP) 29.9 ; -1.5 22.1 ; 0.0 12.3 ; 1.1	al protection transfe Welfare impac 1916 0.06 Etas), social protecti Welfare impac 1916 0.06	Sun ers (TR), and pul t (% dev. in REI 1946 0.09 Sun on transfers (TR t (% dev. in REI 1946 0.10 Sun	n of % dev. in RI 0.99 <u>U vis-à-vis adj.</u> <u>1976</u> 0.00 n of % dev. in RI 0.21), and consumpti <u>U vis-à-vis adj.</u> <u>1976</u> 0.01 n of % dev. in RI	ELU (CG), health car <u>2006</u> 0.03 ELU on taxes (Tau_C <u>1006</u> 0.04 ELU <u>2006</u> 0.04 ELU	e and educatio by birth cohort 2036 0.03) by birth cohort 2036 0.03

		Per capita consumption	Net debt ; balance	Welfare impact	(% dev. in REL	U vis-à-vis adj.	lump sum taxes)	by birth cohort
	Tau_L (%)	(Adj. lump sum taxes $= 1$)	(% GDP)	1916	1946	1976	2006	2036
2005	41.1	1.00	92.9;-3.2	0.21	0.34	-0.14	0.14	0.16
2010	55	0.98	80.8;1.7					
2015	73.7	0.97	38.3;10.3		Sun	n of % dev. in RI	ELU	
2050	73.7	0.97	-56.2 ; -2.8			0.71		
		Case 2	2. Adjustment through a	consumption taxes				
		Per capita consumption	Net debt ; balance	Welfare impact	(% dev. in REL	U vis-à-vis adj.	lump sum taxes)	by birth cohort
	Tau_C (%)	(Adj. lump sum taxes $= 1$)	(% GDP)	1916	1946	1976	2006	2036
2005	17.1	1.00	92.9 ; -3.2	0.14	-0.05	-0.27	-0.39	-0.65
2010	25.2	0.91	81.5;1.0					
2015	37.0	0.90	44.6;8.9		Sun	n of % dev. in RI	ELU	
2050	37.0	0.89	-55.0 ; -1.8			-1.22		
2050	37.0 Case 3. Adjustment th	0.89 rough public consumption, gene Per capita consumption	-55.0 ; -1.8 ral government subsidie Net debt ; balance	es, and public investr Welfare impact	nent (CG), healt	-1.22 h care (He) and d U vis-à-vis adj.	education (Ed)	by birth cohor
2050	37.0 Case 3. Adjustment th CG, He, Ed (% GDP)	0.89 rough public consumption, gene Per capita consumption (Adj. lump sum taxes = 1)	-55.0 ; -1.8 ral government subsidie <u>Net debt ; balance</u> (% GDP)	s, and public investr Welfare impact 1916	nent (CG), healt (% dev. in REL 1946	-1.22 h care (He) and o U vis-à-vis adj. 1976	education (Ed) lump sum taxes) 2006	by birth cohort 2036
2050	37.0 Case 3. Adjustment th CG, He, Ed (% GDP) 13.1 ; 6.6 ; 4.8	0.89 rough public consumption, gene Per capita consumption (Adj. lump sum taxes = 1) 1.00	-55.0 ; -1.8 ral government subsidie <u>Net debt ; balance</u> (% GDP) 92.9 ; -3.2	s, and public investr Welfare impact 1916 0.04	nent (CG), healt (% dev. in REL 1946 -0.54	-1.22 h care (He) and d U vis-à-vis adj. <u>1976</u> -0.71	education (Ed) lump sum taxes) 2006 -0.71	by birth cohort 2036 -0.88
2050	37.0 Case 3. Adjustment th CG, He, Ed (% GDP) 13.1 ; 6.6 ; 4.8 7.2 ; 5.7 ; 3.6	0.89 rough public consumption, gene Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.12	-55.0 ; -1.8 ral government subsidie <u>Net debt ; balance</u> (% GDP) 92.9 ; -3.2 69.4 ; 4.5	welfare impact Welfare impact 1916 0.04	nent (CG), healt (% dev. in REL 1946 -0.54	-1.22 h care (He) and o U vis-à-vis adj. <u>1976</u> -0.71	education (Ed) lump sum taxes) 2006 -0.71	by birth cohor 2036 -0.88
2050 2005 2010 2015	37.0 Case 3. Adjustment th CG, He, Ed (% GDP) 13.1 ; 6.6 ; 4.8 7.2 ; 5.7 ; 3.6 4.0 ; 5.0 ; 2.7	0.89 rough public consumption, gene Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.12 1.10	-55.0 ; -1.8 ral government subsidie <u>Net debt ; balance</u> (% GDP) 92.9 ; -3.2 69.4 ; 4.5 21.8 ; 10.0	wes, and public investres, and public investres Welfare impact 1916 0.04	nent (CG), healt (% dev. in REL 1946 -0.54 Sum	-1.22 h care (He) and o <u>U vis-à-vis adj.</u> <u>1976</u> -0.71 n of % dev. in RI	education (Ed) lump sum taxes) 2006 -0.71 ELU	by birth cohor 2036 -0.88
2050 2005 2010 2015 2050	37.0 <u>Case 3. Adjustment th</u> <u>CG, He, Ed (% GDP)</u> 13.1 ; 6.6 ; 4.8 7.2 ; 5.7 ; 3.6 4.0 ; 5.0 ; 2.7 4.0 ; 6.9 ; 3.0	0.89 rough public consumption, gene Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.12 1.10 1.09	-55.0 ; -1.8 ral government subsidie Net debt ; balance (% GDP) 92.9 ; -3.2 69.4 ; 4.5 21.8 ; 10.0 -52.4 ; -3.0	Welfare impact Welfare impact 1916 0.04	nent (CG), healt (% dev. in REL 1946 -0.54 Sum	-1.22 <u>h care (He) and d</u> <u>U vis-à-vis adj.</u> <u>1976</u> -0.71 n of % dev. in RH -2.80	education (Ed) lump sum taxes) 2006 -0.71 ELU	by birth cohort 2036 -0.88
2005 2005 2010 2015 2050	37.0 <u>Case 3. Adjustment th</u> <u>CG, He, Ed (% GDP)</u> 13.1; 6.6; 4.8 7.2; 5.7; 3.6 4.0; 5.0; 2.7 4.0; 6.9; 3.0	0.89 rough public consumption, gene Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.12 1.10 1.09 Case 4. Adj	-55.0 ; -1.8 ral government subsidie Net debt ; balance (% GDP) 92.9 ; -3.2 69.4 ; 4.5 21.8 ; 10.0 -52.4 ; -3.0 ustment through social	Welfare impact Welfare impact 1916 0.04	nent (CG), healt (% dev. in REL 1946 -0.54 Sum TR)	-1.22 <u>h care (He) and (</u> <u>U vis-à-vis adj.</u> <u>1976</u> -0.71 h of % dev. in RH -2.80	education (Ed) lump sum taxes) 2006 -0.71 ELU	by birth cohort 2036 -0.88
2050 2005 2010 2015 2050	37.0 <u>Case 3. Adjustment th</u> <u>CG, He, Ed (% GDP)</u> 13.1 ; 6.6 ; 4.8 7.2 ; 5.7 ; 3.6 4.0 ; 5.0 ; 2.7 4.0 ; 6.9 ; 3.0	0.89 rough public consumption, gene Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.12 1.10 1.09 Case 4. Adj Per capita consumption	-55.0 ; -1.8 ral government subsidie <u>Net debt ; balance</u> (% GDP) 92.9 ; -3.2 69.4 ; 4.5 21.8 ; 10.0 -52.4 ; -3.0 ustment through social p Net debt ; balance	Welfare impact 1916 0.04	nent (CG), healt (% dev. in REL 1946 -0.54 Sum TR)	-1.22 <u>h care (He) and o</u> <u>U vis-à-vis adj.</u> <u>1976</u> -0.71 n of % dev. in RI -2.80 <u>U vis-à-vis adj.</u>	education (Ed) lump sum taxes) 2006 -0.71 ELU LUU	by birth cohort 2036 -0.88 by birth cohort
2005 2005 2010 2015 2050	37.0 <u>Case 3. Adjustment th</u> <u>CG, He, Ed (% GDP)</u> 13.1 ; 6.6 ; 4.8 7.2 ; 5.7 ; 3.6 4.0 ; 5.0 ; 2.7 4.0 ; 6.9 ; 3.0 <u>TR (% GDP)</u>	0.89 rough public consumption, gene Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.12 1.10 1.09 Case 4. Adj Per capita consumption (Adj. lump sum taxes = 1)	-55.0 ; -1.8 ral government subsidie <u>Net debt ; balance</u> (% GDP) 92.9 ; -3.2 69.4 ; 4.5 21.8 ; 10.0 -52.4 ; -3.0 ustment through social p <u>Net debt ; balance</u> (% GDP)	Welfare impact 1916 0.04 protection transfers (Welfare impact 1916	nent (CG), healt (% dev. in REL 1946 -0.54 Sum TR) (% dev. in REL 1946	-1.22 <u>h care (He) and o</u> <u>U vis-à-vis adj.</u> <u>1976</u> -0.71 n of % dev. in RI -2.80 <u>U vis-à-vis adj.</u> <u>1976</u>	education (Ed) lump sum taxes) 2006 -0.71 ELU LUU lump sum taxes) 2006	by birth cohort 2036 -0.88 by birth cohort 2036
2005 2005 2010 2015 2050 2005	37.0 <u>Case 3. Adjustment th</u> <u>CG, He, Ed (% GDP)</u> 13.1; 6.6; 4.8 7.2; 5.7; 3.6 4.0; 5.0; 2.7 4.0; 6.9; 3.0 <u>TR (% GDP)</u> 18.9	0.89 rough public consumption, generication (Adj. lump sum taxes = 1) 1.00 1.12 1.10 1.09 Case 4. Adj Per capita consumption (Adj. lump sum taxes = 1) 1.00	-55.0 ; -1.8 ral government subsidie <u>Net debt ; balance</u> (% GDP) 92.9 ; -3.2 69.4 ; 4.5 21.8 ; 10.0 -52.4 ; -3.0 ustment through social p <u>Net debt ; balance</u> (% GDP) 92.9 ; -3.2	Welfare impact 1916 0.04 protection transfers (Welfare impact 1916 -0.48	nent (CG), healt (% dev. in REL 1946 -0.54 Sum TR) (% dev. in REL 1946 -0.74	-1.22 <u>h care (He) and o</u> <u>U vis-à-vis adj.</u> <u>1976</u> -0.71 n of % dev. in RI -2.80 <u>U vis-à-vis adj.</u> <u>1976</u> -0.04	education (Ed) lump sum taxes) 2006 -0.71 ELU lump sum taxes) 2006 0.43	by birth cohort 2036 -0.88 by birth cohort 2036 0.45
2005 2005 2010 2015 2050 2005 2005 2010	37.0 <u>Case 3. Adjustment th</u> <u>CG, He, Ed (% GDP)</u> 13.1 ; 6.6 ; 4.8 7.2 ; 5.7 ; 3.6 4.0 ; 5.0 ; 2.7 4.0 ; 6.9 ; 3.0 <u>TR (% GDP)</u> 18.9 14.3	0.89 rough public consumption, generical Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.12 1.10 1.09 Case 4. Adj Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.03	-55.0 ; -1.8 ral government subsidie <u>Net debt ; balance</u> (% GDP) 92.9 ; -3.2 69.4 ; 4.5 21.8 ; 10.0 -52.4 ; -3.0 ustment through social J <u>Net debt ; balance</u> (% GDP) 92.9 ; -3.2 80.4 ; 1.2	Welfare impact 1916 0.04 protection transfers (Welfare impact 1916 -0.48	nent (CG), healt (% dev. in REL 1946 -0.54 Sum TR) (% dev. in REL 1946 -0.74	-1.22 <u>h care (He) and o</u> <u>.U vis-à-vis adj.</u> <u>1976</u> -0.71 n of % dev. in RI -2.80 <u>.U vis-à-vis adj.</u> <u>1976</u> -0.04	education (Ed) lump sum taxes) 2006 -0.71 ELU Lump sum taxes) 2006 0.43	by birth cohort 2036 -0.88 by birth cohort 2036 0.45
2005 2005 2010 2015 2050 2005 2010 2015	37.0 <u>Case 3. Adjustment th</u> <u>CG, He, Ed (% GDP)</u> 13.1 ; 6.6 ; 4.8 7.2 ; 5.7 ; 3.6 4.0 ; 5.0 ; 2.7 4.0 ; 6.9 ; 3.0 <u>TR (% GDP)</u> 18.9 14.3 11.0	0.89 rough public consumption, gene Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.12 1.10 1.09 Case 4. Adj Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.03 1.00	-55.0 ; -1.8 ral government subsidie <u>(% GDP)</u> 92.9 ; -3.2 69.4 ; 4.5 21.8 ; 10.0 -52.4 ; -3.0 ustment through social J <u>Net debt ; balance</u> <u>(% GDP)</u> 92.9 ; -3.2 80.4 ; 1.2 51.0 ; 5.4	Welfare impact 1916 0.04 protection transfers (Welfare impact 1916 -0.48	nent (CG), healt (% dev. in REL 1946 -0.54 Sum TR) (% dev. in REL 1946 -0.74 Sum	-1.22 <u>h care (He) and o</u> <u>.U vis-à-vis adj.</u> <u>1976</u> -0.71 n of % dev. in RI -2.80 <u>.U vis-à-vis adj.</u> <u>1976</u> -0.04 n of % dev. in RI	education (Ed) lump sum taxes) 2006 -0.71 ELU lump sum taxes) 2006 0.43 ELU	by birth cohorn 2036 -0.88 by birth cohorn 2036 0.45

Table A.8 Simulation results for Italy (adjustment from 2006 to 2015)

		Per capita consumption	Net debt ; balance	Welfare impac	t (% dev. in REL	U vis-à-vis adj.	lump sum taxes)	by birth cohort
	Eta_25-54 ; Eta_55-64 (%)	(Adj. lump sum taxes = 1)	(% GDP)	1916	1946	1976	2006	2036
005	70.1 ; 28.9	1.00	92.9 ; -3.2	0.31	0.80	0.24	0.83	0.89
010	83.6;48.1	0.85	62.1;1.8					
015	99.7;80.2	0.81	23.4;6.0		Sun	n of % dev. in Rl	ELU	
2050	99.7;80.2	0.81	-22.2;-2.9			3.07		
	OECD limits: 82.0; 56.0							
		Case 6. Adjust	tment through aggregate	hours worked per y	vear (H)			
		Per capita consumption	Net debt : balance	Welfare impac	t (% dev. in REL	U vis-à-vis adi.	lump sum taxes)	by birth cohort
	Н	(Adj. lump sum taxes = 1)	(% GDP)	1916	1946	1976	2006	2036
2005	1599	1.00	92.9 ; -3.2	0.32	0.81	0.20	0.72	0.79
2010	1993	0.83	59.4 ; 2.3					
2015	2483	0.82	19.5:6.4		Sun	n of % dev. in Rl	ELU	
2015 2050 <u>Case 7</u>	2483 2483 7. A spending-based Stockholm Agen	0.82 0.80 da: adjustment through emplo	19.5 ; 6.4 -23.1 ; -2.7 oyment rates (Etas), soc	al protection transfe	Sun ers (TR), and put	n of % dev. in RI 2.84 blic consumption	ELU (CG), health car	e and educatio
2015 2050 <u>Case 7</u>	2483 2483 7. A spending-based Stockholm Agen	0.82 0.80 da: adjustment through emplo	19.5 ; 6.4 -23.1 ; -2.7 oyment rates (Etas), soc Net debt ; balance	al protection transfo 	Sun ers (TR), and put t (% dev. in REL	n of % dev. in RI 2.84 Dlic consumption .U vis-à-vis adj.	ELU (CG), health car lump sum taxes)	e and educatio
2015 2050 Case 7	2483 2483 7. A spending-based Stockholm Agen _25-54 ; _55-64 ; TR ; CG ; He ; Ed	0.82 0.80 <u>da: adjustment through empto</u> <u>Per capita consumption</u> (Adj. lump sum taxes = 1)	19.5 ; 6.4 -23.1 ; -2.7 oyment rates (Etas), soc Net debt ; balance (% GDP)	al protection transfo Welfare impac 1916	Sun ers (TR), and put t (% dev. in REL 1946	n of % dev. in Rl 2.84 <u>plic consumption</u> <u>LU vis-à-vis adj.</u> 1976	CCG), health car (CG), health car lump sum taxes) 2006	e and educatio by birth cohort 2036
2015 2050 Case 7 2005	2483 2483 7. A spending-based Stockholm Agen 25-54 ;55-64 ; TR ; CG ; He ; Ed 70.1 ; 28.9 ; 18.9 ; 13.1 ; 6.6 ; 4.8	0.82 0.80 <u>da: adjustment through empto</u> <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00	19.5 ; 6.4 -23.1 ; -2.7 oyment rates (Etas), soc Net debt ; balance (% GDP) 92.9 ; -3.2	al protection transfo Welfare impac 1916 0.02	Sun ers (TR), and put t (% dev. in REL 1946 0.05	n of % dev. in RI 2.84 <u>Dic consumption</u> <u>LU vis-à-vis adj.</u> <u>1976</u> 0.08	CG), health car (CG), health car lump sum taxes) 2006 0.43	e and educatio by birth cohort 2036 0.42
2015 2050 <u>Case 7</u> 2005 2010	2483 2483 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 70.1 ; 28.9 ; 18.9 ; 13.1 ; 6.6 ; 4.8 75.1 ; 35.5 ; 17.1 ; 11.5 ; 6.1 ; 4.2	0.82 0.80 <u>da: adjustment through empto</u> <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00 0.99	19.5 ; 6.4 -23.1 ; -2.7 byment rates (Etas), soc Net debt ; balance (% GDP) 92.9 ; -3.2 71.3 ; 2.0	al protection transfo Welfare impac 1916 0.02	Sun ers (TR), and put t (% dev. in REL 1946 0.05	n of % dev. in RI 2.84 <u>Dic consumption</u> <u>.U vis-à-vis adj.</u> <u>1976</u> 0.08	CG), health car (CG), health car lump sum taxes) 2006 0.43	e and educatio by birth cohort 2036 0.42
2015 2050 Case 7 2005 2010 2015	2483 2483 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 70.1 ; 28.9 ; 18.9 ; 13.1 ; 6.6 ; 4.8 75.1 ; 35.5 ; 17.1 ; 11.5 ; 6.1 ; 4.2 80.5 ; 43.6 ; 15.7 ; 10.1 ; 5.7 ; 3.6	0.82 0.80 da: adjustment through emploid Per capita consumption (Adj. lump sum taxes = 1) 1.00 0.99 0.96	19.5 ; 6.4 -23.1 ; -2.7 byment rates (Etas), soc Net debt ; balance (% GDP) 92.9 ; -3.2 71.3 ; 2.0 33.1 ; 7.0	Welfare impac Velfare impac 1916 0.02	Sun ers (TR), and put t (% dev. in REL 1946 0.05 Sun	n of % dev. in Rl 2.84 <u>Dic consumption</u> <u>.U vis-à-vis adj.</u> <u>1976</u> 0.08 n of % dev. in Rl	CCG), health car (CG), health car lump sum taxes) 2006 0.43 ELU	e and educatio by birth cohort 2036 0.42
2015 2050 Case 7 2005 2010 2015 2050	2483 2483 7. A spending-based Stockholm Agen -25-54 ; _55-64 ; TR ; CG ; He ; Ed 70.1 ; 28.9 ; 18.9 ; 13.1 ; 6.6 ; 4.8 75.1 ; 35.5 ; 17.1 ; 11.5 ; 6.1 ; 4.2 80.5 ; 43.6 ; 15.7 ; 10.1 ; 5.7 ; 3.6 80.5 ; 43.6 ; 26.9 ; 10.1 ; 7.8 ; 4.0	0.82 0.80 da: adjustment through emploid Per capita consumption (Adj. lump sum taxes = 1) 1.00 0.99 0.96 0.95	19.5 ; 6.4 -23.1 ; -2.7 byment rates (Etas), soc Net debt ; balance (% GDP) 92.9 ; -3.2 71.3 ; 2.0 33.1 ; 7.0 -37.1 ; -2.1	al protection transfe Welfare impac 1916 0.02	Sun ers (TR), and put t (% dev. in REL 1946 0.05 Sun	n of % dev. in RI 2.84 <u>olic consumption</u> <u>2U vis-à-vis adj.</u> <u>1976</u> 0.08 n of % dev. in RI 1.00	CG), health car (CG), health car lump sum taxes) 2006 0.43 ELU	e and educatio by birth cohort 2036 0.42
2015 2050 <u>Case 7</u> 2005 2010 2015 2050	2483 2483 7. A spending-based Stockholm Agen 25-54 ;55-64 ; TR ; CG ; He ; Ed 70.1 ; 28.9 ; 18.9 ; 13.1 ; 6.6 ; 4.8 75.1 ; 35.5 ; 17.1 ; 11.5 ; 6.1 ; 4.2 80.5 ; 43.6 ; 15.7 ; 10.1 ; 5.7 ; 3.6 80.5 ; 43.6 ; 26.9 ; 10.1 ; 7.8 ; 4.0 Case 8. A tax-based Stockho	0.82 0.80 <u>da: adjustment through emplo</u> <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00 0.99 0.96 0.95 olm Agenda: adjustment throu	19.5 ; 6.4 -23.1 ; -2.7 byment rates (Etas), soc Net debt ; balance (% GDP) 92.9 ; -3.2 71.3 ; 2.0 33.1 ; 7.0 -37.1 ; -2.1 ugh employment rates (I	al protection transfo Welfare impac 1916 0.02 Etas), social protecti	Sun ers (TR), and put t (% dev. in REL 1946 0.05 Sun on transfers (TR	n of % dev. in Rl 2.84 <u>olic consumption</u> <u>LU vis-à-vis adj.</u> <u>1976</u> 0.08 n of % dev. in Rl 1.00), and consumpti	ELU (CG), health car lump sum taxes) 2006 0.43 ELU on taxes (Tau_C	e and educatio by birth cohort 2036 0.42
2015 2050 Case 7 2005 2010 2015 2050	2483 2483 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 70.1 ; 28.9 ; 18.9 ; 13.1 ; 6.6 ; 4.8 75.1 ; 35.5 ; 17.1 ; 11.5 ; 6.1 ; 4.2 80.5 ; 43.6 ; 15.7 ; 10.1 ; 5.7 ; 3.6 80.5 ; 43.6 ; 26.9 ; 10.1 ; 7.8 ; 4.0 Case 8. A tax-based Stockho	0.82 0.80 da: adjustment through emploind Per capita consumption (Adj. lump sum taxes = 1) 1.00 0.99 0.96 0.95 olm Agenda: adjustment throup Per capita consumption	19.5 ; 6.4 -23.1 ; -2.7 byment rates (Etas), soc Net debt ; balance (% GDP) 92.9 ; -3.2 71.3 ; 2.0 33.1 ; 7.0 -37.1 ; -2.1 ugh employment rates (I Net debt ; balance	<u>Welfare impac</u> <u>1916</u> 0.02 Etas), social protecti	Sun ers (TR), and put t (% dev. in REL 1946 0.05 Sun on transfers (TR t (% dev. in REL	n of % dev. in RI 2.84 <u>2.84</u> <u>2.84</u> <u>2.84</u> <u>2.84</u> <u>2.84</u> <u>1.976</u> <u>0.08</u> n of % dev. in RI <u>1.00</u> <u>2.00</u> <u>1.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2</u>	ELU (CG), health car lump sum taxes) 2006 0.43 ELU on taxes (Tau_C lump sum taxes)	e and educatio by birth cohort 2036 0.42) by birth cohort
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2015 2050 Case 7 2005 2010 2015 2050 2005	2483 2483 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 70.1 ; 28.9 ; 18.9 ; 13.1 ; 6.6 ; 4.8 75.1 ; 35.5 ; 17.1 ; 11.5 ; 6.1 ; 4.2 80.5 ; 43.6 ; 15.7 ; 10.1 ; 5.7 ; 3.6 80.5 ; 43.6 ; 26.9 ; 10.1 ; 7.8 ; 4.0 Case 8. A tax-based Stockho 25-54 ; _55-64 ; TR ; Tau_C 70.1 ; 28.9 ; 18.9 ; 17.1	0.82 0.80 da: adjustment through emploind Per capita consumption (Adj. lump sum taxes = 1) 1.00 0.99 0.96 0.95 blm Agenda: adjustment throut Per capita consumption (Adj. lump sum taxes = 1) 1.00	19.5 ; 6.4 -23.1 ; -2.7 byment rates (Etas), soc Net debt ; balance (% GDP) 92.9 ; -3.2 71.3 ; 2.0 33.1 ; 7.0 -37.1 ; -2.1 ugh employment rates (I Net debt ; balance (% GDP) 92.9 ; -3.2	tal protection transfo Welfare impac 1916 0.02 Etas), social protecti Welfare impac 1916 0.04	Sun ers (TR), and put t (% dev. in REL 1946 0.05 Sun on transfers (TR t (% dev. in REL 1946 0.12	n of % dev. in Rl 2.84 <u>2.84</u> <u>2.84</u> <u>2.84</u> <u>2.84</u> <u>2.84</u> <u>1976</u> <u>0.08</u> n of % dev. in Rl 1.00 <u>2.00</u> <u>2.00</u> <u>1.00</u> <u>2.00</u> <u>2.00</u> <u>1.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u>	CCG), health car (CG), health car 2006 0.43 ELU on taxes (Tau_C lump sum taxes) 2006 0.43	e and educatio by birth cohort 2036 0.42) by birth cohort 2036 0.39
2015 2050 Case 7 2005 2010 2015 2050 2005 2005 2010	2483 2483 7. A spending-based Stockholm Agen -25-54 ; _55-64 ; TR ; CG ; He ; Ed 70.1 ; 28.9 ; 18.9 ; 13.1 ; 6.6 ; 4.8 75.1 ; 35.5 ; 17.1 ; 11.5 ; 6.1 ; 4.2 80.5 ; 43.6 ; 15.7 ; 10.1 ; 5.7 ; 3.6 80.5 ; 43.6 ; 26.9 ; 10.1 ; 7.8 ; 4.0 Case 8. A tax-based Stockho _25-54 ; _55-64 ; TR ; Tau_C 70.1 ; 28.9 ; 18.9 ; 17.1 75.1 ; 35.5 ; 17.1 ; 20.1	0.82 0.80 da: adjustment through emploid Per capita consumption (Adj. lump sum taxes = 1) 1.00 0.99 0.96 0.95 blm Agenda: adjustment throut Per capita consumption (Adj. lump sum taxes = 1) 1.00 0.93	19.5 ; 6.4 -23.1 ; -2.7 byment rates (Etas), soc Net debt ; balance (% GDP) 92.9 ; -3.2 71.3 ; 2.0 33.1 ; 7.0 -37.1 ; -2.1 ugh employment rates (I Net debt ; balance (% GDP) 92.9 ; -3.2 72.3 ; 1.7	tal protection transfor Welfare impac 1916 0.02 Etas), social protecti Welfare impac 1916 0.04	Sun ers (TR), and put t (% dev. in REL 1946 0.05 Sun on transfers (TR t (% dev. in REL 1946 0.12	n of % dev. in Rl 2.84 <u>2.84</u> <u>2.84</u> <u>2.84</u> <u>2.84</u> <u>2.84</u> <u>1976</u> <u>0.08</u> n of % dev. in Rl 1.00 <u>2.00</u> <u>2.00</u> <u>1.00</u> <u>2.00</u> <u>2.00</u> <u>1.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u> <u>2.00</u>	(CG), health car lump sum taxes) 2006 0.43 ELU on taxes (Tau_C) lump sum taxes) 2006 0.43	by birth cohort 2036 0.42) by birth cohort 2036 0.39
2015 2050 Case 7 2005 2010 2015 2050 2005 2010 2015	2483 2483 7. A spending-based Stockholm Agen -25-54 ; _55-64 ; TR ; CG ; He ; Ed 70.1 ; 28.9 ; 18.9 ; 13.1 ; 6.6 ; 4.8 75.1 ; 35.5 ; 17.1 ; 11.5 ; 6.1 ; 4.2 80.5 ; 43.6 ; 15.7 ; 10.1 ; 5.7 ; 3.6 80.5 ; 43.6 ; 26.9 ; 10.1 ; 7.8 ; 4.0 Case 8. A tax-based Stockho _25-54 ; _55-64 ; TR ; Tau_C 70.1 ; 28.9 ; 18.9 ; 17.1 75.1 ; 35.5 ; 17.1 ; 20.1 80.5 ; 43.6 ; 15.7 ; 23.7	0.82 0.80 da: adjustment through emploind (Adj. lump sum taxes = 1) 1.00 0.99 0.96 0.95 blm Agenda: adjustment throughout the formation of the	19.5 ; 6.4 -23.1 ; -2.7 byment rates (Etas), soc Net debt ; balance (% GDP) 92.9 ; -3.2 71.3 ; 2.0 33.1 ; 7.0 -37.1 ; -2.1 ugh employment rates (I Net debt ; balance (% GDP) 92.9 ; -3.2 72.3 ; 1.7 35.2 ; 6.8	tal protection transfor Welfare impac 1916 0.02 Etas), social protecti Welfare impac 1916 0.04	Sun ers (TR), and put t (% dev. in REL 1946 0.05 Sun on transfers (TR t (% dev. in REL 1946 0.12 Sun	n of % dev. in Rl 2.84 <u>2.84</u> <u>2.84</u> <u>2.84</u> <u>2.84</u> <u>2.84</u> <u>1976</u> <u>0.08</u> n of % dev. in Rl <u>1.00</u> <u>2.0 vis-à-vis adj.</u> <u>1976</u> <u>0.13</u> n of % dev. in Rl	ELU (CG), health car (CG), health car 2006 0.43 ELU on taxes (Tau_C) 1009 1009 1009 1009 1009 1009 1009 100	by birth cohort 2036 0.42) by birth cohort 2036 0.39

Table A.8 Simulation results for Italy (Cont'd)

		Per capita consumption	Net debt ; balance	Welfare impact	t (% dev. in REL	U vis-à-vis adj.	lump sum taxes)	by birth cohort
	Tau_L (%)	(Adj. lump sum taxes $= 1$)	(% GDP)	1916	1946	1976	2006	2036
2005	31.9	1.00	42.0 ; -1.8	0.09	0.14	-0.02	0.08	0.09
2010	36.6	1.00	37.7;0.0					
2015	42.0	1.00	24.7;2.6		Sun	n of % dev. in RI	ELU	
2050	42.0	1.00	22.6 ; -2.3			0.38		
		Case 2	2. Adjustment through	consumption taxes				
		Per capita consumption	Net debt ; balance	Welfare impact	t (% dev. in REL	U vis-à-vis adj.	lump sum taxes)	by birth cohor
	Tau_C (%)	(Adj. lump sum taxes $= 1$)	(% GDP)	1916	1946	1976	2006	2036
2005	24.2	1.00	42.0 ; -1.8	0.05	-0.05	-0.11	-0.10	-0.14
2010	28.4	0.96	37.7;-0.1					
2015	22.4	0.96	259.23		Sun	n of % dev in RI	TI	
2010	55.4	0.90	23.7, 2.3			101 /0 0000. 111 101		
2050	33.4 33.4 Case 3. Adjustment th	0.96 nrough public consumption, gener	21.9 ; -2.1 ral government subsidie	es, and public investi	nent (CG), healt	-0.35 h care (He) and	education (Ed)	
2050	Case 3. Adjustment th	0.96 arough public consumption, gener Per capita consumption	21.9 ; -2.1 ral government subsidie Net debt ; balance	es, and public investi Welfare impact	nent (CG), healt	-0.35 h care (He) and d U vis-à-vis adj.	education (Ed)	by birth cohort
2050	CG, He, Ed (% GDP)	0.96 arough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1)	21.9; -2.1 ral government subsidie <u>Net debt ; balance</u> (% GDP)	welfare impact	nent (CG), healt t (% dev. in REL 1946	-0.35 h care (He) and d U vis-à-vis adj. 1976	education (Ed) lump sum taxes) 2006	by birth cohort
2005	CG, He, Ed (% GDP) 17.8 ; 4.6 ; 4.9	0.96 nrough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00	21.9 ; -2.1 ral government subsidie <u>Net debt ; balance</u> (% GDP) 42.0 ; -1.8	es, and public investi Welfare impact 1916 0.04	nent (CG), healt t (% dev. in REL 1946 -0.10	-0.35 h care (He) and d U vis-à-vis adj. 1976 -0.20	education (Ed) lump sum taxes) 2006 -0.21	by birth cohort 2036 -0.25
2005 2010 2005 2010	CG, He, Ed (% GDP) 17.8 ; 4.6 ; 4.9 15.5 ; 4.6 ; 4.7	0.96 nrough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.04 1.04	21.9 ; -2.1 ral government subsidie <u>Net debt ; balance</u> (% GDP) 42.0 ; -1.8 35.5 ; 0.6 21.9 ; -2.1	es, and public investi Welfare impact 1916 0.04	nent (CG), healt t (% dev. in REL 1946 -0.10	-0.35 h care (He) and d U vis-à-vis adj. 1976 -0.20	education (Ed) lump sum taxes) 2006 -0.21	by birth cohort 2036 -0.25
2005 2005 2010 2015	CG, He, Ed (% GDP) 17.8 ; 4.6 ; 4.9 15.5 ; 4.6 ; 4.7 13.4 ; 4.5 ; 4.4	0.96 nrough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.04 1.04 1.04	<u>Net debt ; balance</u> (% GDP) 42.0 ; -1.8 35.5 ; 0.6 21.2 ; 2.7	welfare impact Welfare impact 1916 0.04	nent (CG), healt t (% dev. in REL 1946 -0.10 Sun	-0.35 h care (He) and o .U vis-à-vis adj. 1976 -0.20 h of % dev. in RI	education (Ed) lump sum taxes) 2006 -0.21 ELU	by birth cohort 2036 -0.25
2005 2010 2015 2010 2015 2050	CG, He, Ed (% GDP) 17.8 ; 4.6 ; 4.9 15.5 ; 4.6 ; 4.7 13.4 ; 4.5 ; 4.4 13.4 ; 6.0 ; 4.5	0.96 nrough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.04 1.04 1.04	<u>Net debt ; balance</u> (% GDP) 42.0 ; -1.8 35.5 ; 0.6 21.2 ; 2.7 18.1 ; -2.0	es, and public investi Welfare impact 1916 0.04	nent (CG), healt t (% dev. in REL 1946 -0.10 Sun	-0.35 h care (He) and o <u>U vis-à-vis adj.</u> <u>1976</u> -0.20 h of % dev. in RI -0.72	education (Ed) lump sum taxes) 2006 -0.21 ELU	by birth cohort 2036 -0.25
2005 2010 2010 2015 2050	CG, He, Ed (% GDP) 17.8 ; 4.6 ; 4.9 15.5 ; 4.6 ; 4.7 13.4 ; 4.5 ; 4.4 13.4 ; 6.0 ; 4.5	0.96 nrough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.04 1.04 1.04 1.04 Case 4. Adji	21.9 ; -2.1 ral government subsidie Net debt ; balance (% GDP) 42.0 ; -1.8 35.5 ; 0.6 21.2 ; 2.7 18.1 ; -2.0 ustment through social	Welfare impact Welfare impact 1916 0.04	nent (CG), healt t <u>(% dev. in REL</u> 1946 -0.10 Sun <u>(TR)</u>	-0.35 h care (He) and o .U vis-à-vis adj. 1976 -0.20 h of % dev. in RI -0.72	education (Ed) lump sum taxes) 2006 -0.21 ELU	by birth cohort 2036 -0.25
2005 2005 2010 2015 2050	33.4 Case 3. Adjustment th CG, He, Ed (% GDP) 17.8 ; 4.6 ; 4.9 15.5 ; 4.6 ; 4.7 13.4 ; 4.5 ; 4.4 13.4 ; 6.0 ; 4.5	0.96 arough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.04 1.04 1.04 1.04 2.04 1.04 1.04 1.04 1.04 1.04	21.9 ; -2.1 ral government subsidie <u>Net debt ; balance</u> (% GDP) 42.0 ; -1.8 35.5 ; 0.6 21.2 ; 2.7 18.1 ; -2.0 ustment through social Net debt ; balance	es, and public investi Welfare impact 1916 0.04 protection transfers (Welfare impact	nent (CG), healt t (% dev. in REL 1946 -0.10 Sun (TR) t (% dev. in REL	-0.35 h care (He) and o <u>U vis-à-vis adj.</u> <u>1976</u> -0.20 h of % dev. in RI -0.72 <u>U vis-à-vis adj.</u>	education (Ed) lump sum taxes) 2006 -0.21 ELU lump sum taxes)	by birth cohor 2036 -0.25 by birth cohor
2005 2005 2010 2015 2050	33.4 33.4 Case 3. Adjustment th CG, He, Ed (% GDP) 17.8 ; 4.6 ; 4.9 15.5 ; 4.6 ; 4.7 13.4 ; 4.5 ; 4.4 13.4 ; 6.0 ; 4.5 TR (% GDP)	0.96 rough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.04 1.04 1.04 1.04 1.04 Case 4. Adju Per capita consumption (Adj. lump sum taxes = 1)	21.9 ; -2.1 ral government subsidie <u>Net debt ; balance</u> (% GDP) 42.0 ; -1.8 35.5 ; 0.6 21.2 ; 2.7 18.1 ; -2.0 ustment through social <u>Net debt ; balance</u> (% GDP)	es, and public investi Welfare impact 1916 0.04 protection transfers (Welfare impact 1916	nent (CG), healt t (% dev. in REL 1946 -0.10 Sun (TR) t (% dev. in REL 1946	-0.35 h care (He) and o .U vis-à-vis adj. 1976 -0.20 h of % dev. in RI -0.72 .U vis-à-vis adj. 1976	education (Ed) lump sum taxes) 2006 -0.21 ELU lump sum taxes) 2006	by birth cohort 2036 -0.25 by birth cohort 2036
2005 2005 2010 2015 2050 2005	33.4 Case 3. Adjustment th CG, He, Ed (% GDP) 17.8 ; 4.6 ; 4.9 15.5 ; 4.6 ; 4.7 13.4 ; 4.5 ; 4.4 13.4 ; 6.0 ; 4.5 TR (% GDP) 18.0	0.96 arough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.04 1.04 1.04 1.04 Case 4. Adju Per capita consumption (Adj. lump sum taxes = 1) 1.00	21.9 ; -2.1 ral government subsidie (% GDP) 42.0 ; -1.8 35.5 ; 0.6 21.2 ; 2.7 18.1 ; -2.0 ustment through social Net debt ; balance (% GDP)	es, and public investi Welfare impact 1916 0.04 protection transfers (Welfare impact 1916 -0.12	nent (CG), healt t (% dev. in REL 1946 -0.10 Sun (TR) t (% dev. in REL 1946 -0.18	-0.35 h care (He) and o <u>U vis-à-vis adj.</u> <u>1976</u> -0.20 h of % dev. in RI -0.72 <u>U vis-à-vis adj.</u> <u>1976</u> -0.04	education (Ed) lump sum taxes) 2006 -0.21 ELU lump sum taxes) 2006 0.04	by birth cohort 2036 -0.25 by birth cohort 2036 0.05
2005 2005 2010 2015 2050 2005 2005 2010	33.4 Case 3. Adjustment th CG, He, Ed (% GDP) 17.8; 4.6; 4.9 15.5; 4.6; 4.7 13.4; 4.5; 4.4 13.4; 6.0; 4.5	0.96 arough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.04 1.04 1.04 1.04 Case 4. Adji Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.00 1.00	21.9 ; -2.1 ral government subsidie (% GDP) 42.0 ; -1.8 35.5 ; 0.6 21.2 ; 2.7 18.1 ; -2.0 ustment through social Net debt ; balance (% GDP) 42.0 ; -1.8 35.5 ; 0.6 21.2 ; 2.7 18.1 ; -2.0 ustment through social Net debt ; balance (% GDP) 42.0 ; -1.8 38.0 ; -0.1	es, and public investi Welfare impact 1916 0.04 protection transfers (Welfare impact 1916 -0.12	nent (CG), healt t (% dev. in REL 1946 -0.10 Sun (TR) t (% dev. in REL 1946 -0.18	-0.35 h care (He) and o <u>U vis-à-vis adj.</u> <u>1976</u> -0.20 h of % dev. in RI -0.72 <u>U vis-à-vis adj.</u> <u>1976</u> -0.04	education (Ed) lump sum taxes) 2006 -0.21 ELU lump sum taxes) 2006 0.04	by birth cohort 2036 -0.25 by birth cohort 2036 0.05
2005 2005 2010 2015 2050 2005 2010 2015 2010 2015	33.4 33.4 Case 3. Adjustment th CG, He, Ed (% GDP) 17.8 ; 4.6 ; 4.9 15.5 ; 4.6 ; 4.7 13.4 ; 4.5 ; 4.4 13.4 ; 6.0 ; 4.5 TR (% GDP) 18.0 15.8 14.4	0.96 arough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.04 1.04 1.04 1.04 2.04 Case 4. Adji Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.00 0.99	21.9 ; -2.1 ral government subsidie (% GDP) 42.0 ; -1.8 35.5 ; 0.6 21.2 ; 2.7 18.1 ; -2.0 ustment through social Net debt ; balance (% GDP) 42.0 ; -1.8 38.0 ; -0.1 27.2 ; 1.8	es, and public investi Welfare impact 1916 0.04 protection transfers (Welfare impact 1916 -0.12	nent (CG), healt t (% dev. in REL 1946 -0.10 Sun (TR) t (% dev. in REL 1946 -0.18 Sun	-0.35 h care (He) and o .U vis-à-vis adj. 1976 -0.20 h of % dev. in RI -0.72 .U vis-à-vis adj. 1976 -0.04 h of % dev. in RI	education (Ed) lump sum taxes) 2006 -0.21 ELU lump sum taxes) 2006 0.04 ELU	by birth cohor 2036 -0.25 by birth cohort 2036 0.05

Table A.9 Simulation results for the Netherlands (adjustment from 2006 to 2015)

		Per capita consumption	Net debt : balance	Welfare impac	t (% dev. in REI	U vis-à-vis adi.	lump sum taxes)	by birth cohor
	Eta 25-54 ; Eta 55-64 (%)	(Adj. lump sum taxes = 1)	(% GDP)	1916	1946	1976	2006	2036
2005	82.8;42.3	1.00	42.0 ; -1.8	0.16	0.45	0.17	0.29	0.34
2010	89.8 ; 53.8	0.91	31.5; 0.3					
2015	97.5;68.5	0.90	18.0;1.8		Sun	n of % dev. in Rl	ELU	
2050	97.5;68.5	0.90	28.6;-2.8			1.41		
	OECD limits: 89.7; 78.0							
		Case 6. Adjus	tment through aggregate	hours worked per y	vear (H)			
		Der conite consumption	Not dobt a balance	Walfors impos	t (0/ day in DEI	U via è via adi	lumn aum taraa)	by birth achor
	ц	(Adi lump sum taxos = 1)	(% CDP)		1046	1076		2026
2005	11	(Auj. tump sum taxes $= 1$)	(% ODF) 42.0 + 1.8	0.16	0.46	0.11	2000	2030
2005	1338	0.00	42.0, -1.0	0.10	0.40	0.11	0.09	0.14
2010	1499	0.90	31.1, 0.4 $17.2 \cdot 1.0$		Sum			
201.)	1001	11 911				$1 OT W_{2} OT IN PI$		
2050 Case 7	1681 7. A spending-based Stockholm Agen	0.90 0.90 da: adjustment through emple	26.1 ; -2.5 oyment rates (Etas), soci	al protection transfe	ers (TR), and put	0.96 0.96 Dlic consumption	ELU 1 (CG), health car	re and education
2050 Case 7	1681 7. A spending-based Stockholm Agen	0.90 0.90 da: adjustment through emplo Per capita consumption	26.1 ; -2.5 oyment rates (Etas), soci	al protection transfe Welfare impac	ers (TR), and put	0.96 0.96 0.96 0.96 0.96 0.96 0.96 0.96	LLU (CG), health car lump sum taxes)	re and education
2050 Case 7	1681 7. A spending-based Stockholm Agen _25-54 ; _55-64 ; TR ; CG ; He ; Ed	0.90 da: adjustment through emploid Per capita consumption (Adj. lump sum taxes = 1)	Net debt ; balance (% GDP)	al protection transfe <u>Welfare impac</u> 1916	ers (TR), and put t (% dev. in REL 1946	0.96 0.96 0lic consumption 0.0 vis-à-vis adj. 1976	LLU (CG), health car lump sum taxes) 2006	re and education by birth cohor 2036
2050 Case 7 2005	1681 7. A spending-based Stockholm Agen 25-54 ;55-64 ; TR ; CG ; He ; Ed 82.8 ; 42.3 ; 18.0 ; 17.8 ; 4.6 ; 4.9	0.90 da: adjustment through emploid Per capita consumption (Adj. lump sum taxes = 1) 1.00	Net debt ; balance (% GDP) 42.0 ; -1.8	al protection transfe Welfare impac 1916 0.04	ers (TR), and put t (% dev. in REL 1946 0.08	0.96 blic consumption U vis-à-vis adj. 1976 0.02	LLU (CG), health car lump sum taxes) 2006 0.07	re and education by birth cohor 2036 0.08
2050 Case 7 2005 2005 2010	1681 <u>7. A spending-based Stockholm Agen</u> <u>25-54 ;55-64 ; TR ; CG ; He ; Ed</u> 82.8 ; 42.3 ; 18.0 ; 17.8 ; 4.6 ; 4.9 85.3 ; 46.2 ; 17.1 ; 17.1 ; 4.6 ; 4.8	0.90 <u>da: adjustment through emplo</u> <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00 0.98	Net debt ; balance (% GDP) 42.0 ; -1.8 35.0 ; 0.2	al protection transfe Welfare impac 1916 0.04	ers (TR), and put t (% dev. in REL 1946 0.08	0.96 <u>blic consumption</u> <u>U vis-à-vis adj.</u> 1976 0.02	LLU (CG), health car lump sum taxes) 2006 0.07	te and education by birth cohor 2036 0.08
2050 Case 7 2005 2010 2015	1681 <u>7. A spending-based Stockholm Agen</u> <u>25-54 ; _55-64 ; TR ; CG ; He ; Ed</u> 82.8 ; 42.3 ; 18.0 ; 17.8 ; 4.6 ; 4.9 85.3 ; 46.2 ; 17.1 ; 17.1 ; 4.6 ; 4.8 87.9 ; 50.5 ; 16.7 ; 16.4 ; 4.5 ; 4.5	0.90 <u>0.90</u> <u>er capita consumption</u> (Adj. lump sum taxes = 1) 1.00 0.98 0.97	Net debt ; balance (% GDP) 42.0 ; -1.8 35.0 ; 0.2 22.2 ; 2.1	al protection transfe Welfare impac 1916 0.04	ers (TR), and put t (% dev. in REL 1946 0.08 Sun	1 of % dev. in Ri 0.96 <u>blic consumption</u> <u>U vis-à-vis adj.</u> <u>1976</u> 0.02 n of % dev. in Rl	LLU (CG), health car lump sum taxes) 2006 0.07 ELU	te and education by birth cohor 2036 0.08
2005 Case 7 2005 2010 2015 2050	1681 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 82.8 ; 42.3 ; 18.0 ; 17.8 ; 4.6 ; 4.9 85.3 ; 46.2 ; 17.1 ; 17.1 ; 4.6 ; 4.8 87.9 ; 50.5 ; 16.7 ; 16.4 ; 4.5 ; 4.5 87.9 ; 50.5 ; 20.5 ; 16.4 ; 5.9 ; 4.6	0.90 <u>0.90</u> <u>da: adjustment through employ</u> <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00 0.98 0.97 0.97	17.2, 1.9 26.1; -2.5 oyment rates (Etas), soci (% GDP) 42.0; -1.8 35.0; 0.2 22.2; 2.1 22.7; -2.2	Welfare impac Welfare impac 1916 0.04	ers (TR), and put t (% dev. in REL 1946 0.08 Sun	<u>U vis-à-vis adj.</u> <u>1976</u> 0.02 0.29	LLU (CG), health car lump sum taxes) 2006 0.07 ELU	re and education by birth cohor 2036 0.08
2050 Case 7 2005 2010 2015 2050	1681 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 82.8 ; 42.3 ; 18.0 ; 17.8 ; 4.6 ; 4.9 85.3 ; 46.2 ; 17.1 ; 17.1 ; 4.6 ; 4.8 87.9 ; 50.5 ; 16.7 ; 16.4 ; 4.5 ; 4.5 87.9 ; 50.5 ; 20.5 ; 16.4 ; 5.9 ; 4.6 Case 8. A tax-based Stockhol	0.90 <u>0.90</u> <u>da: adjustment through emploid</u> <u>(Adj. lump sum taxes = 1)</u> 1.00 0.98 0.97 0.97 0.97	17.2, 1.9 26.1; -2.5 oyment rates (Etas), soci (% GDP) 42.0; -1.8 35.0; 0.2 22.2; 2.1 22.7; -2.2 ugh employment rates (F	<u>Welfare impac</u> <u>1916</u> 0.04	ers (TR), and put t (% dev. in REL 1946 0.08 Sun on transfers (TR	blic consumption <u>U vis-à-vis adj.</u> <u>1976</u> 0.02 h of % dev. in Rl 0.29), and consumpti	LLU (CG), health car <u>lump sum taxes)</u> 2006 0.07 ELU on taxes (Tau_C	re and education by birth cohor 2036 0.08
2050 Case 7 2005 2010 2015 2050	1681 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 82.8 ; 42.3 ; 18.0 ; 17.8 ; 4.6 ; 4.9 85.3 ; 46.2 ; 17.1 ; 17.1 ; 4.6 ; 4.8 87.9 ; 50.5 ; 16.7 ; 16.4 ; 4.5 ; 4.5 87.9 ; 50.5 ; 20.5 ; 16.4 ; 5.9 ; 4.6 Case 8. A tax-based Stockhol	0.90 <u>0.90</u> <u>da: adjustment through emploid</u> <u>(Adj. lump sum taxes = 1)</u> 1.00 0.98 0.97 0.97 0.97 olm Agenda: adjustment throug <u>Per capita consumption</u>	17.2, 1.9 26.1; -2.5 oyment rates (Etas), soci (% GDP) 42.0; -1.8 35.0; 0.2 22.2; 2.1 22.7; -2.2 ugh employment rates (H Net debt; balance	<u>Welfare impac</u> <u>1916</u> 0.04 Etas), social protecti 	ers (TR), and put <u>t (% dev. in REL</u> <u>1946</u> 0.08 Sun <u>on transfers (TR</u> t (% dev. in REL	<u>olic consumption</u> <u>U vis-à-vis adj.</u> <u>1976</u> 0.02 n of % dev. in RI 0.29), and consumpti	LLU (CG), health car lump sum taxes) 2006 0.07 ELU on taxes (Tau_C lump sum taxes)	te and education by birth cohor 2036 0.08)) by birth cohor
2050 Case 7 2005 2010 2015 2050	1681 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 82.8 ; 42.3 ; 18.0 ; 17.8 ; 4.6 ; 4.9 85.3 ; 46.2 ; 17.1 ; 17.1 ; 4.6 ; 4.8 87.9 ; 50.5 ; 16.7 ; 16.4 ; 4.5 ; 4.5 87.9 ; 50.5 ; 20.5 ; 16.4 ; 5.9 ; 4.6 Case 8. A tax-based Stockho _25-54 ; _55-64 ; TR ; Tau_C	0.90 da: adjustment through emploid Per capita consumption (Adj. lump sum taxes = 1) 1.00 0.98 0.97 0.97 olm Agenda: adjustment through Per capita consumption (Adj. lump sum taxes = 1)	17.2, 1.9 26.1; -2.5 oyment rates (Etas), soci (% GDP) 42.0; -1.8 35.0; 0.2 22.2; 2.1 22.7; -2.2 ugh employment rates (H Net debt; balance (% GDP)	tal protection transfe Welfare impac 1916 0.04 Etas), social protecti Welfare impac 1916	ers (TR), and put <u>t (% dev. in REL</u> 1946 0.08 Sun on transfers (TR t (% dev. in REL 1946	<u>olic consumption</u> <u>U vis-à-vis adj.</u> <u>1976</u> 0.02 n of % dev. in RI 0.29), and consumpti <u>U vis-à-vis adj.</u> <u>1976</u>	LLU (CG), health car <u>lump sum taxes)</u> 2006 0.07 ELU on taxes (Tau_C lump sum taxes) 2006	ee and education by birth cohor 2036 0.08) by birth cohor 2036
2050 <u>Case 7</u> 2005 2010 2015 2050 2050	1681 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 82.8 ; 42.3 ; 18.0 ; 17.8 ; 4.6 ; 4.9 85.3 ; 46.2 ; 17.1 ; 17.1 ; 4.6 ; 4.8 87.9 ; 50.5 ; 16.7 ; 16.4 ; 4.5 ; 4.5 87.9 ; 50.5 ; 20.5 ; 16.4 ; 5.9 ; 4.6 Case 8. A tax-based Stockho 25-54 ; _55-64 ; TR ; Tau_C 82.8 ; 42.3 ; 18.0 ; 24.2	0.90 da: adjustment through emploid Per capita consumption (Adj. lump sum taxes = 1) 1.00 0.98 0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97	17.2, 1.9 26.1; -2.5 oyment rates (Etas), soci (% GDP) 42.0; -1.8 35.0; 0.2 22.2; 2.1 22.7; -2.2 ugh employment rates (H Net debt; balance (% GDP) 42.0; -1.8	tal protection transfe <u>Welfare impac</u> 1916 0.04 Etas), social protecti <u>Welfare impac</u> 1916 0.04	ers (TR), and put <u>t (% dev. in REL</u> <u>1946</u> 0.08 Sun <u>on transfers (TR</u> <u>t (% dev. in REL</u> <u>1946</u> 0.09	<u>U vis-à-vis adj.</u> <u>1976</u> 0.02 1 of % dev. in RI 0.29), and consumpti <u>U vis-à-vis adj.</u> <u>1976</u> 0.03	LLU (CG), health car <u>lump sum taxes</u>) <u>2006</u> 0.07 ELU on taxes (Tau_C <u>lump sum taxes</u>) <u>2006</u> 0.10	ee and education by birth cohor 2036 0.08) by birth cohor 2036 0.11
2005 Case 7 2005 2010 2015 2050 2005 2005 2010	1681 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 82.8 ; 42.3 ; 18.0 ; 17.8 ; 4.6 ; 4.9 85.3 ; 46.2 ; 17.1 ; 17.1 ; 4.6 ; 4.8 87.9 ; 50.5 ; 16.7 ; 16.4 ; 4.5 ; 4.5 87.9 ; 50.5 ; 20.5 ; 16.4 ; 5.9 ; 4.6 Case 8. A tax-based Stockho 25-54 ; _55-64 ; TR ; Tau_C 82.8 ; 42.3 ; 18.0 ; 24.2 85.3 ; 46.2 ; 17.1 ; 25.7	0.90 da: adjustment through emploid Per capita consumption (Adj. lump sum taxes = 1) 1.00 0.98 0.97 0.96 0.96 0.96 0.96 0.96 0.96 0.96 0.96 0.97 0	17.2, 1.9 26.1; -2.5 oyment rates (Etas), soci (% GDP) 42.0; -1.8 35.0; 0.2 22.2; 2.1 22.7; -2.2 ugh employment rates (F Net debt ; balance (% GDP) 42.0; -1.8 35.0; 0.2 22.7; -2.2 ugh employment rates (F Net debt ; balance (% GDP) 42.0; -1.8 35.3; 0.1	tal protection transfe Welfare impac 1916 0.04 Etas), social protecti Welfare impac 1916 0.04	ers (TR), and put <u>t (% dev. in REL</u> <u>1946</u> 0.08 Sun <u>on transfers (TR</u> <u>t (% dev. in REL</u> <u>1946</u> 0.09	<u>U vis-à-vis adj.</u> <u>1976</u> 0.02 n of % dev. in Rl 0.29), and consumpti <u>U vis-à-vis adj.</u> <u>1976</u> 0.03	LLU (CG), health car <u>lump sum taxes</u>) <u>2006</u> 0.07 ELU on taxes (Tau_C <u>lump sum taxes</u>) <u>2006</u> 0.10	e and education by birth cohor 2036 0.08) by birth cohor 2036 0.11
2005 Case 7 2005 2010 2015 2050 2005 2010 2015	1681 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 82.8 ; 42.3 ; 18.0 ; 17.8 ; 4.6 ; 4.9 85.3 ; 46.2 ; 17.1 ; 17.1 ; 4.6 ; 4.8 87.9 ; 50.5 ; 16.7 ; 16.4 ; 4.5 ; 4.5 87.9 ; 50.5 ; 20.5 ; 16.4 ; 5.9 ; 4.6 Case 8. A tax-based Stockho 25-54 ; _55-64 ; TR ; Tau_C 82.8 ; 42.3 ; 18.0 ; 24.2 85.3 ; 46.2 ; 17.1 ; 25.7 87.9 ; 50.5 ; 16.7 ; 27.3	0.90 da: adjustment through emploid Per capita consumption (Adj. lump sum taxes = 1) 1.00 0.98 0.97 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95	17.2, 1.9 26.1; -2.5 oyment rates (Etas), soci (% GDP) 42.0; -1.8 35.0; 0.2 22.2; 2.1 22.7; -2.2 ugh employment rates (F Net debt ; balance (% GDP) 42.0; -1.8 35.3; 0.1 22.9; 2.0	<u>Welfare impac</u> 1916 0.04 Etas), social protecti Welfare impac 1916 0.04	ers (TR), and put <u>t (% dev. in REL</u> <u>1946</u> 0.08 Sun <u>on transfers (TR</u> <u>t (% dev. in REL</u> <u>1946</u> 0.09 Sun	<u>U vis-à-vis adj.</u> <u>1976</u> 0.02 n of % dev. in Rl 0.29), and consumpti <u>U vis-à-vis adj.</u> <u>1976</u> 0.03 n of % dev. in Rl	LLU (CG), health car <u>lump sum taxes</u>) <u>2006</u> 0.07 ELU on taxes (Tau_C <u>lump sum taxes</u>) <u>2006</u> 0.10 ELU	e and education by birth cohor 2036 0.08) by birth cohor 2036 0.11

Table A.9 Simulation results for the Netherlands (Cont'd)

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		Per capita consumption	Net debt ; balance	Welfare impact	(% dev. in REL	U vis-à-vis adj.	ump sum taxes)	by birth cohort
	Tau_L (%)	(Adj. lump sum taxes $= 1$)	(% GDP)	1916	1946	1976	2006	2036
2005	33.7	1.00	57.7 ; -2.8	2.04	0.85	0.08	0.36	0.41
2010	40.7	0.98	50.2;0.0					
2015	49.2	0.98	29.8;3.7		Sun	n of % dev. in RI	ELU	
2050	49.2	0.98	-12.4 ; -1.0			3.74		
		Case 2	2. Adjustment through	consumption taxes				
		Per capita consumption	Net debt ; balance	Welfare impact	(% dev. in REL	U vis-à-vis adj.	ump sum taxes)	by birth cohort
	Tau_C (%)	(Adj. lump sum taxes $= 1$)	(% GDP)	1916	1946	1976	2006	2036
2005	20.1	1.00	57.7 ; -2.8	1.93	0.43	-0.10	-0.29	-0.67
2010	24.6	0.94	49.0;0.2					
2015	20.2	0.94	$29.4 \cdot 3.4$		Sum	of 0/ day in DI		
2015	30.2	0.91	27. 4 , 3. 4		Suit	101% dev. III Ki	LU	
2013	30.2 30.2 Case 3. Adjustment th	0.93 urough public consumption, gener	-13.0 ; -0.8	s, and public investr	nent (CG), healt	1.30 h care (He) and e	education (Ed)	
2050	30.2 30.2 Case 3. Adjustment th	0.93 arough public consumption, gener Per capita consumption	-13.0 ; -0.8 ral government subsidie	s, and public investr	nent (CG), healt	1.30 h care (He) and d U vis-à-vis adj.	education (Ed)	by birth cohort
2050	CG, He, Ed (% GDP)	0.93 rough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1)	-13.0 ; -0.8 ral government subsidie Net debt ; balance (% GDP)	s, and public investr Welfare impact 1916	nent (CG), healt (% dev. in REL 1946	1.30 h care (He) and d U vis-à-vis adj. 1976	education (Ed)	by birth cohort 2036
2050	30.2 30.2 Case 3. Adjustment th CG, He, Ed (% GDP) 15.2 ; 6.9 ; 6.6	0.93 arough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00	-13.0 ; -0.8 ral government subsidie <u>Net debt ; balance</u> (% GDP) 57.7 ; -2.8	s, and public investr Welfare impact 1916 1.96	nent (CG), healt (% dev. in REL 1946 0.51	1.30 h care (He) and o U vis-à-vis adj. 1976 -0.03	education (Ed) lump sum taxes) 2006 0.07	by birth cohort 2036 0.03
2005 2010	CG, He, Ed (% GDP) 15.2 ; 6.9 ; 6.6 12.8 ; 6.6 ; 6.0	0.93 urough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.09	-13.0 ; -0.8 ral government subsidie <u>Net debt ; balance</u> (% GDP) 57.7 ; -2.8 47.1 ; 0.8	s, and public investr Welfare impact 1916 1.96	nent (CG), healt (% dev. in REL 1946 0.51	1.30 h care (He) and o <u>U vis-à-vis adj.</u> <u>1976</u> -0.03	education (Ed) lump sum taxes) 2006 0.07	by birth cohort 2036 0.03
2005 2005 2010 2015	CG, He, Ed (% GDP) 15.2 ; 6.9 ; 6.6 12.8 ; 6.6 ; 6.0 10.9 ; 6.4 ; 5.8	0.93 rough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.09 1.09 1.09	<u>Net debt ; balance</u> (% GDP) 57.7 ; -2.8 47.1 ; 0.8 25.4 ; 3.8	s, and public investr Welfare impact 1916 1.96	<u>nent (CG), healt</u> (% dev. in REL 1946 0.51 Sun	1.30 h care (He) and o <u>U vis-à-vis adj.</u> <u>1976</u> -0.03 h of % dev. in RF	education (Ed) lump sum taxes) 2006 0.07 ELU	by birth cohort 2036 0.03
2005 2010 2015 2010 2015 2050	CG, He, Ed (% GDP) 15.2 ; 6.9 ; 6.6 12.8 ; 6.6 ; 6.0 10.9 ; 6.4 ; 5.8 10.9 ; 8.4 ; 6.1	0.93 nrough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.09 1.09 1.08	<u>Net debt ; balance</u> (% GDP) 57.7 ; -2.8 47.1 ; 0.8 25.4 ; 3.8 -15.4 ; -0.8	s, and public investr Welfare impact 1916 1.96	nent (CG), healt (% dev. in REL 1946 0.51 Sun	1.30 h care (He) and o <u>U vis-à-vis adj.</u> <u>1976</u> -0.03 h of % dev. in RH 2.54	education (Ed) lump sum taxes) 2006 0.07 ELU	by birth cohort 2036 0.03
2005 2005 2010 2015 2050	30.2 30.2 Case 3. Adjustment th CG, He, Ed (% GDP) 15.2 ; 6.9 ; 6.6 12.8 ; 6.6 ; 6.0 10.9 ; 6.4 ; 5.8 10.9 ; 8.4 ; 6.1	0.93 rough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.09 1.09 1.09 1.08 Case 4. Adj	-13.0 ; -0.8 ral government subsidie <u>Net debt ; balance</u> (% GDP) 57.7 ; -2.8 47.1 ; 0.8 25.4 ; 3.8 -15.4 ; -0.8 ustment through social j	s, and public investr Welfare impact 1916 1.96	<u>nent (CG), healt</u> (% dev. in REL 1946 0.51 Sun <u>TR)</u>	1.30 h care (He) and o <u>U vis-à-vis adj.</u> <u>1976</u> -0.03 h of % dev. in RF 2.54	education (Ed) lump sum taxes) 2006 0.07 ELU	by birth cohort 2036 0.03
2005 2005 2010 2015 2050	30.2 30.2 Case 3. Adjustment th CG, He, Ed (% GDP) 15.2 ; 6.9 ; 6.6 12.8 ; 6.6 ; 6.0 10.9 ; 6.4 ; 5.8 10.9 ; 8.4 ; 6.1	0.93 rough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.09 1.09 1.09 1.08 Case 4. Adj Per capita consumption	-13.0 ; -0.8 ral government subsidie <u>Net debt ; balance</u> (% GDP) 57.7 ; -2.8 47.1 ; 0.8 25.4 ; 3.8 -15.4 ; -0.8 ustment through social j	s, and public investr Welfare impact 1916 1.96 protection transfers (Welfare impact	nent (CG), healt (% dev. in REL 1946 0.51 Sun TR)	1.30 <u>h care (He) and 0</u> <u>U vis-à-vis adj.</u> <u>1976</u> -0.03 h of % dev. in RI 2.54 <u>U vis-à-vis adj.</u>	education (Ed) lump sum taxes) 2006 0.07 ELU lump sum taxes)	by birth cohort 2036 0.03 by birth cohort
2005 2005 2010 2015 2050	30.2 30.2 Case 3. Adjustment th CG, He, Ed (% GDP) 15.2 ; 6.9 ; 6.6 12.8 ; 6.6 ; 6.0 10.9 ; 6.4 ; 5.8 10.9 ; 8.4 ; 6.1 TR (% GDP)	0.93 rough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.09 1.09 1.09 1.08 Case 4. Adj Per capita consumption (Adj. lump sum taxes = 1)	-13.0 ; -0.8 ral government subsidie <u>Net debt ; balance</u> (% GDP) 57.7 ; -2.8 47.1 ; 0.8 25.4 ; 3.8 -15.4 ; -0.8 ustment through social j <u>Net debt ; balance</u> (% GDP)	s, and public investr Welfare impact 1916 1.96 protection transfers (Welfare impact 1916	nent (CG), healt (% dev. in REL 1946 0.51 Sun TR) (% dev. in REL 1946	1.30 h care (He) and o <u>U vis-à-vis adj.</u> <u>1976</u> -0.03 h of % dev. in RI 2.54 <u>U vis-à-vis adj.</u> <u>1976</u>	education (Ed) lump sum taxes) 2006 0.07 ELU lump sum taxes) 2006	by birth cohort 2036 0.03 by birth cohort 2036
2005 2005 2010 2015 2050 2005	30.2 30.2 Case 3. Adjustment th CG, He, Ed (% GDP) 15.2 ; 6.9 ; 6.6 12.8 ; 6.6 ; 6.0 10.9 ; 6.4 ; 5.8 10.9 ; 8.4 ; 6.1 TR (% GDP) 14.0	0.93 rough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.09 1.09 1.09 1.08 Case 4. Adj Per capita consumption (Adj. lump sum taxes = 1) 1.00	-13.0 ; -0.8 ral government subsidie <u>Net debt ; balance</u> (% GDP) 57.7 ; -2.8 47.1 ; 0.8 25.4 ; 3.8 -15.4 ; -0.8 ustment through social j <u>Net debt ; balance</u> (% GDP) 57.7 ; -2.8	s, and public investr Welfare impact 1916 1.96 protection transfers (Welfare impact 1916 0.53	<u>nent (CG), healt</u> (% dev. in REL 1946 0.51 Sun TR) (% dev. in REL 1946 -0.71	1.30 h care (He) and o <u>U vis-à-vis adj.</u> <u>1976</u> -0.03 h of % dev. in RI 2.54 <u>U vis-à-vis adj.</u> <u>1976</u> -0.19	education (Ed) lump sum taxes) 2006 0.07 ELU lump sum taxes) 2006 0.26	by birth cohort 2036 0.03 by birth cohort 2036 0.29
2005 2005 2010 2015 2050 2005 2005 2010	30.2 30.2 Case 3. Adjustment th CG, He, Ed (% GDP) 15.2; 6.9; 6.6 12.8; 6.6; 6.0 10.9; 6.4; 5.8 10.9; 8.4; 6.1 TR (% GDP) 14.0 11.1	0.93 rough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.09 1.09 1.09 1.08 Case 4. Adj Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.00 1.02	-13.0 ; -0.8 ral government subsidie <u>Net debt ; balance</u> (% GDP) 57.7 ; -2.8 47.1 ; 0.8 25.4 ; 3.8 -15.4 ; -0.8 ustment through social j <u>Net debt ; balance</u> (% GDP) 57.7 ; -2.8 50.3 ; -0.1	s, and public investr Welfare impact 1916 1.96 protection transfers (Welfare impact 1916 0.53	<u>nent (CG), healt</u> (% dev. in REL 1946 0.51 Sun TR) (% dev. in REL 1946 -0.71	1.30 h care (He) and o <u>U vis-à-vis adj.</u> <u>1976</u> -0.03 h of % dev. in RI 2.54 <u>U vis-à-vis adj.</u> <u>1976</u> -0.19	education (Ed) lump sum taxes) 2006 0.07 ELU lump sum taxes) 2006 0.26	by birth cohort 2036 0.03 by birth cohort 2036 0.29
2005 2005 2010 2015 2050 2005 2010 2015 2010 2015	30.2 30.2 Case 3. Adjustment th CG, He, Ed (% GDP) 15.2 ; 6.9 ; 6.6 12.8 ; 6.6 ; 6.0 10.9 ; 6.4 ; 5.8 10.9 ; 8.4 ; 6.1 TR (% GDP) 14.0 14.0 11.1 8.9	0.93 rough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.09 1.09 1.09 1.08 Case 4. Adj Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.02 1.00	23.4 ; 5.4 -13.0 ; -0.8 ral government subsidie (% GDP) 57.7 ; -2.8 47.1 ; 0.8 25.4 ; 3.8 -15.4 ; -0.8 ustment through social j Net debt ; balance (% GDP) 57.7 ; -2.8 50.3 ; -0.1 33.7 ; 2.3	s, and public investr Welfare impact 1916 1.96 protection transfers (Welfare impact 1916 0.53	<u>nent (CG), healt</u> (% dev. in REL 1946 0.51 Sun TR) (% dev. in REL 1946 -0.71 Sun	1.30 h care (He) and o <u>U vis-à-vis adj.</u> <u>1976</u> -0.03 h of % dev. in RI 2.54 <u>U vis-à-vis adj.</u> <u>1976</u> -0.19 h of % dev. in RI	education (Ed) lump sum taxes) 2006 0.07 ELU lump sum taxes) 2006 0.26 ELU	by birth cohort 2036 0.03 by birth cohort 2036 0.29

Table A.10 Simulation results for Portugal (adjustment from 2006 to 2015)

		Per capita consumption	Net debt : balance	Welfare impac	t (% dev in RFI	II vis-à-vis adi	lump sum taxes)	by hirth coho
	Eta 25-54 : Eta 55-64 (%)	(Adi, lump sum taxes = 1)	(% GDP)	1916	1946	1976	2006	2036
2005	81.6 : 50.9	1.00	57.7 : -2.8	1.79	1.11	0.55	0.79	0.86
2010	90.6 : 69.3	0.92	41.7:0.4					
2015	100.6 : 94.3	0.91	21.4 : 2.5		Sur	n of % dev. in R	ELU	
2050	100.6 : 94.3	0.91	-2.1 : -1.4			5.10		
	OECD limits: 87.7 : 79.0							
		Case 6. Adjust	tment through aggregate	hours worked per y	vear (H)			
		Per capita consumption	Net debt : balance	Welfare impac	t (% dev in RFI	II vis-à-vis adi	lumn sum taxes)	by hirth coho
	н	(Adi lump sum taxes -1)	(% GDP)	1916	1946	1976	2006	2036
2005	1697	1 00	57.7	1.78	1 13	0.56	0.73	0.80
2010	1939	0.91	$40.8 \cdot 0.5$	1.70	1.15	0.50	0.75	0.00
2015	2215	0.91	$20.1 \cdot 2.7$		Sur	n of % dev in R	ELU	
2015	2215	0.91	20.1, 2.7		Sui		LLU	
2050 Case	2215 7. A spending-based Stockholm Agen	0.91 da: adjustment through emplo	-1.3 ; -1.3 oyment rates (Etas), soci	al protection transfe	ers (TR), and pu	5.00 blic consumptior	n (CG), health ca	re and education
2050 Case 1	2215 7. A spending-based Stockholm Agen	0.91 da: adjustment through emplo Per capita consumption	-1.3 ; -1.3 oyment rates (Etas), soci Net debt ; balance	al protection transfe Welfare impac	ers (TR), and put	5.00 blic consumptior LU vis-à-vis adj.	ı (CG), health car lump sum taxes)	re and education
2050 Case 1	2215 7. A spending-based Stockholm Agen _25-54 ; _55-64 ; TR ; CG ; He ; Ed	0.91 da: adjustment through emplo Per capita consumption (Adj. lump sum taxes = 1)	-1.3 ; -1.3 byment rates (Etas), soci Net debt ; balance (% GDP)	al protection transfe Welfare impac 1916	ers (TR), and pu t (% dev. in REI 1946	5.00 blic consumptior LU vis-à-vis adj. 1976	n (CG), health can lump sum taxes) 2006	re and education by birth cohort 2036
2050 Case 2 2005	2215 7. A spending-based Stockholm Agen 25-54 ;55-64 ; TR ; CG ; He ; Ed 81.6 ; 50.9 ; 14.0 ; 15.2 ; 6.9 ; 6.6	0.91 <u>da: adjustment through empto</u> <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00	-1.3 ; -1.3 byment rates (Etas), soci Net debt ; balance (% GDP) 57.7 ; -2.8	al protection transfe Welfare impac 1916 1.55	ers (TR), and put t (% dev. in REI 1946 0.44	5.00 blic consumption LU vis-à-vis adj. 1976 0.22	n (CG), health can lump sum taxes) 2006 0.45	re and education by birth cohor 2036 0.47
2050 Case [^] 2005 2010	2215 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 81.6 ; 50.9 ; 14.0 ; 15.2 ; 6.9 ; 6.6 84.8 ; 57.1 ; 12.7 ; 14.5 ; 6.6 ; 6.1	0.91 <u>da: adjustment through empto</u> <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00 1.01	-1.3 ; -1.3 byment rates (Etas), soci Net debt ; balance (% GDP) 57.7 ; -2.8 46.3 ; 0.3	al protection transfe Welfare impact 1916 1.55	ers (TR), and put t (% dev. in REI 1946 0.44	5.00 blic consumption LU vis-à-vis adj. 1976 0.22	n (CG), health can lump sum taxes) 2006 0.45	te and education by birth cohor 2036 0.47
2050 Case ² 2005 2010 2015	2215 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 81.6 ; 50.9 ; 14.0 ; 15.2 ; 6.9 ; 6.6 84.8 ; 57.1 ; 12.7 ; 14.5 ; 6.6 ; 6.1 88.2 ; 64.1 ; 11.7 ; 13.8 ; 6.3 ; 5.9	0.91 <u>da: adjustment through empto</u> <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00 1.01 1.00	-1.3 ; -1.3 byment rates (Etas), soci Net debt ; balance (% GDP) 57.7 ; -2.8 46.3 ; 0.3 26.8 ; 2.8	al protection transfe Welfare impact 1916 1.55	ers (TR), and put t (% dev. in REI 1946 0.44 Sur	5.00 blic consumption LU vis-à-vis adj. 1976 0.22 n of % dev. in R	n (CG), health can lump sum taxes) 2006 0.45 ELU	te and education by birth cohor 2036 0.47
2050 Case 2 2005 2010 2015 2050	2215 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 81.6 ; 50.9 ; 14.0 ; 15.2 ; 6.9 ; 6.6 84.8 ; 57.1 ; 12.7 ; 14.5 ; 6.6 ; 6.1 88.2 ; 64.1 ; 11.7 ; 13.8 ; 6.3 ; 5.9 88.2 ; 64.1 ; 16.1 ; 13.8 ; 8.3 ; 6.3	0.91 <u>da: adjustment through empto</u> <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00 1.01 1.00 0.99	-1.3 ; -1.3 pyment rates (Etas), soci (% GDP) 57.7 ; -2.8 46.3 ; 0.3 26.8 ; 2.8 -8.0 ; -1.0	al protection transfe Welfare impact 1916 1.55	ers (TR), and put t (% dev. in REI 1946 0.44 Sur	5.00 blic consumption <u>LU vis-à-vis adj.</u> <u>1976</u> 0.22 n of % dev. in R <u>3.13</u>	n (CG), health can lump sum taxes) 2006 0.45 ELU	re and education by birth cohor 2036 0.47
2050 Case ² 2005 2010 2015 2050	2215 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 81.6 ; 50.9 ; 14.0 ; 15.2 ; 6.9 ; 6.6 84.8 ; 57.1 ; 12.7 ; 14.5 ; 6.6 ; 6.1 88.2 ; 64.1 ; 11.7 ; 13.8 ; 6.3 ; 5.9 88.2 ; 64.1 ; 16.1 ; 13.8 ; 8.3 ; 6.3 Case 8. A tax-based Stockholm	0.91 <u>da: adjustment through empto</u> <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00 1.01 1.00 0.99 olm Agenda: adjustment through	-1.3 ; -1.3 byment rates (Etas), soci Net debt ; balance (% GDP) 57.7 ; -2.8 46.3 ; 0.3 26.8 ; 2.8 -8.0 ; -1.0 ugh employment rates (F	al protection transfe Welfare impact 1916 1.55 Etas), social protecti	ers (TR), and pu t (% dev. in REI 1946 0.44 Sur on transfers (TR	5.00 blic consumption <u>LU vis-à-vis adj.</u> 1976 0.22 n of % dev. in R 3.13), and consumpt	n (CG), health can lump sum taxes) 2006 0.45 ELU ion taxes (Tau_C	re and education by birth cohor 2036 0.47
2050 Case 2005 2010 2015 2050	2215 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 81.6 ; 50.9 ; 14.0 ; 15.2 ; 6.9 ; 6.6 84.8 ; 57.1 ; 12.7 ; 14.5 ; 6.6 ; 6.1 88.2 ; 64.1 ; 11.7 ; 13.8 ; 6.3 ; 5.9 88.2 ; 64.1 ; 16.1 ; 13.8 ; 8.3 ; 6.3 Case 8. A tax-based Stockhol	0.91 <u>da: adjustment through emplo</u> <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00 1.01 1.00 0.99 plm Agenda: adjustment throug Per capita consumption	-1.3 ; -1.3 <u>oyment rates (Etas), soci</u> <u>Net debt ; balance</u> (% GDP) 57.7 ; -2.8 46.3 ; 0.3 26.8 ; 2.8 -8.0 ; -1.0 ugh employment rates (H Net debt ; balance	al protection transfe Welfare impace 1916 1.55 Etas), social protection Welfare impace	ers (TR), and put t (% dev. in REI 1946 0.44 Sur on transfers (TR t (% dev. in REI	5.00 <u>blic consumption</u> <u>JU vis-à-vis adj.</u> <u>1976</u> 0.22 n of % dev. in R ¹ 3.13), and consumpt JU vis-à-vis adj.	n (CG), health can lump sum taxes) 2006 0.45 ELU ion taxes (Tau_C lump sum taxes)	te and education by birth cohor 2036 0.47
2050 Case 2 2005 2010 2015 2050	2215 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 81.6 ; 50.9 ; 14.0 ; 15.2 ; 6.9 ; 6.6 84.8 ; 57.1 ; 12.7 ; 14.5 ; 6.6 ; 6.1 88.2 ; 64.1 ; 11.7 ; 13.8 ; 6.3 ; 5.9 88.2 ; 64.1 ; 16.1 ; 13.8 ; 8.3 ; 6.3 Case 8. A tax-based Stockho 25-54 ; _55-64 ; TR ; Tau_C	0.91 <u>da: adjustment through emplo</u> <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00 1.01 1.00 0.99 plm Agenda: adjustment throu <u>Per capita consumption</u> (Adj. lump sum taxes = 1)	-1.3 ; -1.3 <u>oyment rates (Etas), soci</u> <u>Net debt ; balance</u> (% GDP) 57.7 ; -2.8 46.3 ; 0.3 26.8 ; 2.8 -8.0 ; -1.0 ugh employment rates (H <u>Net debt ; balance</u> (% GDP)	al protection transfe Welfare impace 1916 1.55 Etas), social protection Welfare impace 1916	ers (TR), and put t (% dev. in REI 1946 0.44 Sur on transfers (TR t (% dev. in REI 1946	5.00 <u>blic consumption</u> <u>JU vis-à-vis adj.</u> <u>1976</u> 0.22 n of % dev. in R ¹ 3.13), and consumpt <u>JU vis-à-vis adj.</u> <u>1976</u>	n (CG), health can lump sum taxes) 2006 0.45 ELU ion taxes (Tau_C lump sum taxes) 2006	te and education by birth cohor 2036 0.47 0.47 by birth cohor 2036
2050 <u>Case</u> 2005 2010 2015 2050 2005	2215 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 81.6 ; 50.9 ; 14.0 ; 15.2 ; 6.9 ; 6.6 84.8 ; 57.1 ; 12.7 ; 14.5 ; 6.6 ; 6.1 88.2 ; 64.1 ; 11.7 ; 13.8 ; 6.3 ; 5.9 88.2 ; 64.1 ; 16.1 ; 13.8 ; 8.3 ; 6.3 Case 8. A tax-based Stockho 25-54 ; _55-64 ; TR ; Tau_C 81.6 ; 50.9 ; 14.0 ; 20.1	0.91 <u>da: adjustment through emplo</u> <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00 1.01 1.00 0.99 <u>DIM Agenda: adjustment throu</u> <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00	-1.3 ; -1.3 <u>oyment rates (Etas), soci</u> <u>Net debt ; balance</u> (% GDP) 57.7 ; -2.8 46.3 ; 0.3 26.8 ; 2.8 -8.0 ; -1.0 ugh employment rates (H <u>Net debt ; balance</u> (% GDP) 57.7 ; -2.8	al protection transfe Welfare impact 1916 1.55 Etas), social protection Welfare impact 1916 1.53	ers (TR), and put t (% dev. in REI 1946 0.44 Sur on transfers (TR t (% dev. in REI 1946 0.40	5.00 <u>blic consumption</u> <u>1976</u> 0.22 n of % dev. in R 3.13), and consumpt <u>1976</u> 0.19	n (CG), health can lump sum taxes) 2006 0.45 ELU ion taxes (Tau_C lump sum taxes) 2006 0.33	te and education by birth cohor 2036 0.47 0.47 by birth cohor 2036 0.26
2005 2005 2010 2015 2050 2005 2005 2005	2215 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 81.6 ; 50.9 ; 14.0 ; 15.2 ; 6.9 ; 6.6 84.8 ; 57.1 ; 12.7 ; 14.5 ; 6.6 ; 6.1 88.2 ; 64.1 ; 11.7 ; 13.8 ; 6.3 ; 5.9 88.2 ; 64.1 ; 16.1 ; 13.8 ; 8.3 ; 6.3 Case 8. A tax-based Stockho 25-54 ; _55-64 ; TR ; Tau_C 81.6 ; 50.9 ; 14.0 ; 20.1 84.8 ; 57.1 ; 12.7 ; 21.7	0.91 <u>da: adjustment through emple</u> <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00 1.01 1.00 0.99 <u>DIM Agenda: adjustment throu</u> <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00 0.96	-1.3 ; -1.3 <u>oyment rates (Etas), soci</u> <u>(% GDP)</u> 57.7 ; -2.8 46.3 ; 0.3 26.8 ; 2.8 -8.0 ; -1.0 ugh employment rates (H <u>Net debt ; balance</u> <u>(% GDP)</u> 57.7 ; -2.8 46.5 ; 0.2	al protection transfe Welfare impact 1916 1.55 Etas), social protection Welfare impact 1916 1.53	ers (TR), and put t (% dev. in REI 1946 0.44 Sur on transfers (TR t (% dev. in REI 1946 0.40	5.00 <u>blic consumption</u> <u>1976</u> 0.22 n of % dev. in R 3.13), and consumpt <u>1976</u> 0.19	n (CG), health can lump sum taxes) 2006 0.45 ELU ion taxes (Tau_C lump sum taxes) 2006 0.33	te and education by birth cohor 2036 0.47 0.47 by birth cohor 2036 0.26
2005 2005 2010 2015 2050 2005 2005 2010 2015	2215 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 81.6 ; 50.9 ; 14.0 ; 15.2 ; 6.9 ; 6.6 84.8 ; 57.1 ; 12.7 ; 14.5 ; 6.6 ; 6.1 88.2 ; 64.1 ; 11.7 ; 13.8 ; 6.3 ; 5.9 88.2 ; 64.1 ; 16.1 ; 13.8 ; 8.3 ; 6.3 Case 8. A tax-based Stockho 25-54 ; _55-64 ; TR ; Tau_C 81.6 ; 50.9 ; 14.0 ; 20.1 84.8 ; 57.1 ; 12.7 ; 21.7 88.2 ; 64.1 ; 11.7 ; 23.4	0.91 <u>da: adjustment through emple</u> <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00 1.01 1.00 0.99 <u>olm Agenda: adjustment throu</u> <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00 0.96 0.95	-1.3 ; -1.3 <u>oyment rates (Etas), soci</u> <u>(% GDP)</u> 57.7 ; -2.8 46.3 ; 0.3 26.8 ; 2.8 -8.0 ; -1.0 ugh employment rates (H <u>Net debt ; balance</u> <u>(% GDP)</u> 57.7 ; -2.8 46.5 ; 0.2 27.2 ; 2.7	al protection transfe Welfare impact 1916 1.55 Etas), social protection Welfare impact 1916 1.53	ers (TR), and pul t (% dev. in REI 1946 0.44 Sur on transfers (TR t (% dev. in REI 1946 0.40 Sur	5.00 <u>blic consumption</u> <u>1976</u> 0.22 n of % dev. in R 3.13), and consumpt <u>1976</u> 0.19 n of % dev. in R	n (CG), health can lump sum taxes) 2006 0.45 ELU ion taxes (Tau_C lump sum taxes) 2006 0.33 ELU	te and education by birth coho 2036 0.47 0.47 by birth coho 2036 0.26

Table A.10 Simulation results for Portugal (Cont'd)

		Per capita consumption	Net debt ; balance	Welfare impact	(% dev. in REL	U vis-à-vis adj.	lump sum taxes)	by birth cohort
	Tau_L (%)	(Adj. lump sum taxes $= 1$)	(% GDP)	1916	1946	1976	2006	2036
2005	30.0	1.00	32.5;0.9	0.11	0.13	-0.02	0.09	0.07
2010	32.9	1.00	23.4;2.0					
2015	39.7	1.00	7.5;4.0		Sun	n of % dev. in RI	ELU	
2050	39.7	1.00	11.4 ; -6.2			0.38		
		Case 2	2. Adjustment through a	consumption taxes				
		Per capita consumption	Net debt ; balance	Welfare impact	(% dev. in REL	U vis-à-vis adj.	lump sum taxes)	by birth cohort
	Tau_C (%)	(Adj. lump sum taxes $= 1$)	(% GDP)	1916	1946	1976	2006	2036
2005	16.3	1.00	32.5;0.9	0.09	0.04	-0.07	-0.07	-0.15
2010	18.4	0.98	23.2;2.0					
2015	20.9	0.98	2.8;4.5		Sun	n of % dev. in Rl	ELU	
2015 2050	20.9 20.9	0.98 0.98	2.8 ; 4.5 10.8 ; -6.0		Sum	of % dev. in Rl -0.16	ELU	
2015 2050	20.9 20.9 Case 3. Adjustment th	0.98 0.98 rough public consumption, gene Per capita consumption	2.8 ; 4.5 10.8 ; -6.0 ral government subsidie Net debt : balance	s, and public investi Welfare impact	Sum nent (CG), healt	n of % dev. in RI -0.16 h care (He) and U vis-à-vis adi.	ELU education (Ed) lump sum taxes)	by birth cohort
2015 2050	20.9 20.9 Case 3. Adjustment th CG. He. Ed (% GDP)	0.98 0.98 rough public consumption, gene <u>Per capita consumption</u> (Adi, lump sum taxes = 1)	2.8 ; 4.5 10.8 ; -6.0 ral government subsidie <u>Net debt ; balance</u> (% GDP)	s, and public investi Welfare impact 1916	Sun nent (CG), healt : (% dev. in REL 1946	n of % dev. in RI -0.16 h care (He) and <u>U vis-à-vis adj.</u> 1976	ELU education (Ed) lump sum taxes) 2006	by birth cohort 2036
2015 2050 2005	20.9 20.9 Case 3. Adjustment th CG, He, Ed (% GDP) 14.4 ; 5.3 ; 3.9	0.98 0.98 rough public consumption, gene Per capita consumption (Adj. lump sum taxes = 1) 1.00	2.8 ; 4.5 10.8 ; -6.0 ral government subsidie <u>Net debt ; balance</u> (% GDP) 32.5 ; 0.9	s, and public investi Welfare impact 1916 0.08	Sun nent (CG), healt : (% dev. in REL 1946 0.00	n of % dev. in RI -0.16 h care (He) and d .U vis-à-vis adj. 1976 -0.10	ELU education (Ed) lump sum taxes) 2006 -0.07	by birth cohort 2036 -0.11
2015 2050 2005 2010	20.9 20.9 Case 3. Adjustment th CG, He, Ed (% GDP) 14.4 ; 5.3 ; 3.9 13.2 ; 5.6 ; 3.7	0.98 0.98 rough public consumption, gene Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.02	2.8 ; 4.5 10.8 ; -6.0 ral government subsidie <u>Net debt ; balance</u> (% GDP) 32.5 ; 0.9 22.6 ; 2.1	s, and public investi Welfare impact 1916 0.08	Sun nent (CG), healt : (% dev. in REL 1946 0.00	n of % dev. in RI -0.16 h care (He) and d U vis-à-vis adj. 1976 -0.10	ELU education (Ed) lump sum taxes) 2006 -0.07	by birth cohort 2036 -0.11
2015 2050 2005 2010 2015	20.9 20.9 Case 3. Adjustment th CG, He, Ed (% GDP) 14.4 ; 5.3 ; 3.9 13.2 ; 5.6 ; 3.7 12.0 ; 5.5 ; 3.4	0.98 0.98 rough public consumption, gene Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.02 1.02	2.8 ; 4.5 10.8 ; -6.0 ral government subsidie <u>Net debt ; balance</u> (% GDP) 32.5 ; 0.9 22.6 ; 2.1 1.7 ; 4.5	s, and public investi Welfare impact 1916 0.08	Sun nent (CG), healt : (% dev. in REL 1946 0.00 Sun	n of % dev. in RI -0.16 h care (He) and <u>d</u> <u>U vis-à-vis adj.</u> <u>1976</u> -0.10 n of % dev. in RI	ELU education (Ed) <u>lump sum taxes)</u> 2006 -0.07 ELU	by birth cohort 2036 -0.11
2015 2050 2005 2010 2015 2050	20.9 20.9 Case 3. Adjustment th CG, He, Ed (% GDP) 14.4 ; 5.3 ; 3.9 13.2 ; 5.6 ; 3.7 12.0 ; 5.5 ; 3.4 12.0 ; 9.7 ; 3.7	0.98 0.98 rough public consumption, gene Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.02 1.02 1.02	2.8 ; 4.5 10.8 ; -6.0 ral government subsidie <u>Net debt ; balance</u> (% GDP) 32.5 ; 0.9 22.6 ; 2.1 1.7 ; 4.5 10.5 ; -6.0	s, and public investi Welfare impact 1916 0.08	Sun nent (CG), healt : (% dev. in REL 1946 0.00 Sun	n of % dev. in RI -0.16 h care (He) and d U vis-à-vis adj. 1976 -0.10 n of % dev. in RI -0.20	ELU education (Ed) lump sum taxes) 2006 -0.07 ELU	by birth cohort 2036 -0.11
2015 2050 2005 2010 2015 2050	20.9 20.9 Case 3. Adjustment th CG, He, Ed (% GDP) 14.4 ; 5.3 ; 3.9 13.2 ; 5.6 ; 3.7 12.0 ; 5.5 ; 3.4 12.0 ; 9.7 ; 3.7	0.98 0.98 rough public consumption, gene Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.02 1.02 1.02 1.02 Case 4. Adj	2.8 ; 4.5 10.8 ; -6.0 ral government subsidie <u>Net debt ; balance</u> (% GDP) 32.5 ; 0.9 22.6 ; 2.1 1.7 ; 4.5 10.5 ; -6.0 ustment through social p	s, and public investi Welfare impact 1916 0.08	Sun nent (CG), healt : (% dev. in REL 1946 0.00 Sun TR)	n of % dev. in RI -0.16 <u>h care (He) and d</u> <u>U vis-à-vis adj. 1976</u> -0.10 n of % dev. in RI -0.20	ELU education (Ed) lump sum taxes) 2006 -0.07 ELU	by birth cohort 2036 -0.11
2015 2050 2005 2010 2015 2050	20.9 20.9 Case 3. Adjustment th CG, He, Ed (% GDP) 14.4 ; 5.3 ; 3.9 13.2 ; 5.6 ; 3.7 12.0 ; 5.5 ; 3.4 12.0 ; 9.7 ; 3.7	0.98 0.98 rough public consumption, gener Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.02 1.02 1.02 1.02 Case 4. Adj Per capita consumption	2.8 ; 4.5 10.8 ; -6.0 ral government subsidie <u>Net debt ; balance</u> (% GDP) 32.5 ; 0.9 22.6 ; 2.1 1.7 ; 4.5 10.5 ; -6.0 ustment through social J Net debt ; balance	s, and public investi Welfare impact 1916 0.08 protection transfers (Welfare impact	Sun nent (CG), healt (% dev. in REL 1946 0.00 Sun (TR)	n of % dev. in RI -0.16 h care (He) and d U vis-à-vis adj. 1976 -0.10 n of % dev. in RI -0.20	ELU education (Ed) <u>lump sum taxes)</u> 2006 -0.07 ELU LUU	by birth cohort 2036 -0.11 by birth cohort
2015 2050 2005 2010 2015 2050	20.9 20.9 Case 3. Adjustment th CG, He, Ed (% GDP) 14.4 ; 5.3 ; 3.9 13.2 ; 5.6 ; 3.7 12.0 ; 5.5 ; 3.4 12.0 ; 9.7 ; 3.7 TR (% GDP)	0.98 0.98 rough public consumption, gene Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.02 1.02 1.02 Case 4. Adj Per capita consumption (Adj. lump sum taxes = 1)	2.8 ; 4.5 10.8 ; -6.0 ral government subsidie <u>Net debt ; balance</u> (% GDP) 32.5 ; 0.9 22.6 ; 2.1 1.7 ; 4.5 10.5 ; -6.0 ustment through social J <u>Net debt ; balance</u> (% GDP)	s, and public investi Welfare impact 1916 0.08 protection transfers (Welfare impact 1916	Sun nent (CG), healt : (% dev. in REL 1946 0.00 Sun (TR) : (% dev. in REL 1946	n of % dev. in RI -0.16 h care (He) and d U vis-à-vis adj. 1976 -0.10 n of % dev. in RI -0.20 U vis-à-vis adj. 1976	ELU education (Ed) lump sum taxes) 2006 -0.07 ELU lump sum taxes) 2006	by birth cohort 2036 -0.11 by birth cohort 2036
2015 2050 2005 2010 2015 2050 2005	20.9 20.9 Case 3. Adjustment th CG, He, Ed (% GDP) 14.4 ; 5.3 ; 3.9 13.2 ; 5.6 ; 3.7 12.0 ; 5.5 ; 3.4 12.0 ; 9.7 ; 3.7 TR (% GDP) 13.2	0.98 0.98 rough public consumption, generic Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.02 1.02 1.02 Case 4. Adj Per capita consumption (Adj. lump sum taxes = 1) 1.00	2.8 ; 4.5 10.8 ; -6.0 ral government subsidie <u>Net debt ; balance</u> (% GDP) 32.5 ; 0.9 22.6 ; 2.1 1.7 ; 4.5 10.5 ; -6.0 ustment through social J <u>Net debt ; balance</u> (% GDP) 32.5 ; 0.9	s, and public investi Welfare impact 1916 0.08 protection transfers (Welfare impact 1916 -0.07	Sun nent (CG), healt (% dev. in REL 1946 0.00 Sun (TR) (% dev. in REL 1946 -0.11	n of % dev. in RI -0.16 h care (He) and d U vis-à-vis adj. 1976 -0.10 n of % dev. in RI -0.20 U vis-à-vis adj. 1976 -0.04	ELU education (Ed) lump sum taxes) 2006 -0.07 ELU lump sum taxes) 2006 0.06	by birth cohort 2036 -0.11 by birth cohort 2036 0.04
2015 2050 2005 2010 2015 2050 2005 2010	20.9 20.9 Case 3. Adjustment th CG, He, Ed (% GDP) 14.4 ; 5.3 ; 3.9 13.2 ; 5.6 ; 3.7 12.0 ; 5.5 ; 3.4 12.0 ; 9.7 ; 3.7 TR (% GDP) 13.2 12.7	0.98 0.98 rough public consumption, generic Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.02 1.02 1.02 Case 4. Adj Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.00 1.00	2.8 ; 4.5 10.8 ; -6.0 ral government subsidie <u>Net debt ; balance</u> (% GDP) 32.5 ; 0.9 22.6 ; 2.1 1.7 ; 4.5 10.5 ; -6.0 ustment through social J <u>Net debt ; balance</u> (% GDP) 32.5 ; 0.9 23.7 ; 1.8	s, and public investi Welfare impact 1916 0.08 protection transfers Welfare impact 1916 -0.07	Sun nent (CG), healt (% dev. in REL 1946 0.00 Sun (TR) (% dev. in REL 1946 -0.11	n of % dev. in RI -0.16 h care (He) and d U vis-à-vis adj. 1976 -0.10 n of % dev. in RI -0.20 U vis-à-vis adj. 1976 -0.04	ELU education (Ed) lump sum taxes) 2006 -0.07 ELU lump sum taxes) 2006 0.06	by birth cohort 2036 -0.11 by birth cohort 2036 0.04
2015 2050 2005 2010 2015 2050 2005 2010 2015	20.9 20.9 Case 3. Adjustment th CG, He, Ed (% GDP) 14.4 ; 5.3 ; 3.9 13.2 ; 5.6 ; 3.7 12.0 ; 5.5 ; 3.4 12.0 ; 9.7 ; 3.7 TR (% GDP) 13.2 12.7 11.5	0.98 0.98 rough public consumption, generic Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.02 1.02 1.02 Case 4. Adj Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.00 1.00 1.00 1.00 1.00	2.8 ; 4.5 10.8 ; -6.0 ral government subsidie <u>Net debt ; balance</u> (% GDP) 32.5 ; 0.9 22.6 ; 2.1 1.7 ; 4.5 10.5 ; -6.0 <u>ustment through social</u> <u>Net debt ; balance</u> (% GDP) 32.5 ; 0.9 23.7 ; 1.8 4.8 ; 4.0	s, and public investi Welfare impact 1916 0.08 protection transfers (Welfare impact 1916 -0.07	Sun nent (CG), healt (% dev. in REL 1946 0.00 Sun (TR) (% dev. in REL 1946 -0.11 Sun	n of % dev. in RI -0.16 h care (He) and o U vis-à-vis adj. 1976 -0.10 n of % dev. in RI -0.20 U vis-à-vis adj. 1976 -0.04 n of % dev. in RI	ELU education (Ed) lump sum taxes) 2006 -0.07 ELU lump sum taxes) 2006 0.06 .	by birth cohort 2036 -0.11 by birth cohort 2036 0.04

Table A.11 Simulation results for Spain (adjustment from 2006 to 2015)

		Per capita consumption	Net debt ; balance	Welfare impac	t (% dev. in REL	U vis-à-vis adj.	lump sum taxes)	by birth cohort
	Eta_25-54 ; Eta_55-64 (%)	(Adj. lump sum taxes $= 1$)	(% GDP)	1916	1946	1976	2006	2036
005	70.1;39.7	1.00	32.5; 0.9	0.18	0.37	0.21	0.28	0.28
010	73.6;45.8	0.96	20.8;2.0					
015	77.2 ; 52.8	0.95	1.8;3.8		Sun	n of % dev. in Rl	ELU	
2050	77.2;52.8	0.94	13.0 ; -5.7			1.32		
	OECD limits: 80.0; 75.0							
		Case 6. Adjus	tment through aggregate	hours worked per y	rear (H)			
		Per capita consumption	Net debt ; balance	Welfare impac	t (% dev. in REL	U vis-à-vis adj.	lump sum taxes)	by birth cohort
	Н	(Adj. lump sum taxes = 1)	(% GDP)	1916	1946	1976	2006	2036
2005	1664	1.00	32.5;0.9	0.18	0.37	0.18	0.23	0.24
2010	1772	0.95	21.3 ; 2.0					
2015	1916	0.94	1.7;3.9		Sun	n of % dev. in RI	ELU	
2015 2050 Case 7.	1916 1916 . A spending-based Stockholm Agend	0.94 0.94 da: adjustment through emplo	1.7 ; 3.9 13.4 ; -5.7 byment rates (Etas), soci	ial protection transfe	Sun ers (TR), and put	n of % dev. in RI 1.20 blic consumption	ELU (CG), health car	e and educatio
2015 2050 <u>Case 7.</u>	1916 1916 . A spending-based Stockholm Agen	0.94 0.94 da: adjustment through employ Per capita consumption	1.7 ; 3.9 13.4 ; -5.7 oyment rates (Etas), soci	al protection transfe	Sun ers (TR), and put t (% dev. in REL	n of % dev. in RI 1.20 blic consumption LU vis-à-vis adj.	CG), health car	e and educatio
2015 2050 Case 7.	1916 1916 . A spending-based Stockholm Agen _25-54 ; _55-64 ; TR ; CG ; He ; Ed	0.94 0.94 da: adjustment through employ Per capita consumption (Adj. lump sum taxes = 1)	1.7 ; 3.9 13.4 ; -5.7 oyment rates (Etas), soci Net debt ; balance (% GDP)	ial protection transfe Welfare impac 1916	Sun ers (TR), and put t (% dev. in REL 1946	n of % dev. in Rl 1.20 blic consumption U vis-à-vis adj. 1976	CG), health car (CG), health car lump sum taxes) 2006	e and education
2015 2050 Case 7. 2005	1916 1916 . A spending-based Stockholm Agen 	0.94 0.94 <u>da: adjustment through emplo</u> <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00	1.7 ; 3.9 13.4 ; -5.7 oyment rates (Etas), soci Net debt ; balance (% GDP) 32.5 ; 0.9	ial protection transfe Welfare impac 1916 0.07	Sun ers (TR), and put t (% dev. in REL 1946 0.10	n of % dev. in RI 1.20 <u>blic consumption</u> <u>U vis-à-vis adj.</u> <u>1976</u> 0.04	ELU (CG), health car lump sum taxes) 2006 0.10	e and education by birth cohort 2036 0.08
2015 2050 Case 7. 2005 2010	1916 1916 . A spending-based Stockholm Agene 	0.94 0.94 <u>da: adjustment through emplo</u> <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00 0.99 0.98	1.7 ; 3.9 13.4 ; -5.7 oyment rates (Etas), soci Net debt ; balance (% GDP) 32.5 ; 0.9 22.4 ; 2.0 2.8 ; 4.1	ial protection transfe Welfare impac 1916 0.07	Sun ers (TR), and put t (% dev. in REL 1946 0.10	n of % dev. in RI 1.20 <u>blic consumption</u> <u>.U vis-à-vis adj.</u> <u>1976</u> 0.04	ELU (CG), health car lump sum taxes) 2006 0.10	e and education by birth cohort 2036 0.08
2015 2050 Case 7. 2005 2010 2015	1916 1916 . A spending-based Stockholm Agene 	0.94 0.94 da: adjustment through emploid Per capita consumption (Adj. lump sum taxes = 1) 1.00 0.99 0.98 0.98	1.7 ; 3.9 13.4 ; -5.7 byment rates (Etas), soci (% GDP) 32.5 ; 0.9 22.4 ; 2.0 2.8 ; 4.1	ial protection transfe Welfare impac 1916 0.07	Sun ers (TR), and put t (% dev. in REL 1946 0.10 Sun	n of % dev. in RI 1.20 <u>blic consumption</u> <u>JU vis-à-vis adj.</u> <u>1976</u> 0.04 n of % dev. in RI 0.20	ELU (CG), health car lump sum taxes) 2006 0.10 ELU	e and education by birth cohort 2036 0.08
2015 2050 Case 7. 2005 2010 2015 2050	1916 1916 . A spending-based Stockholm Agen 	0.94 0.94 da: adjustment through emploid Per capita consumption (Adj. lump sum taxes = 1) 1.00 0.99 0.98 0.98	1.7 ; 3.9 13.4 ; -5.7 byment rates (Etas), soci Net debt ; balance (% GDP) 32.5 ; 0.9 22.4 ; 2.0 2.8 ; 4.1 11.2 ; -5.7	ial protection transfe Welfare impac 1916 0.07	Sun ers (TR), and put t (% dev. in REL 1946 0.10 Sun	n of % dev. in Rl 1.20 blic consumption <u>LU vis-à-vis adj.</u> 1976 0.04 n of % dev. in Rl 0.39	ELU (CG), health car lump sum taxes) 2006 0.10 ELU	e and education by birth cohort 2036 0.08
2015 2050 Case 7. 2005 2010 2015 2050	1916 1916 . A spending-based Stockholm Agene 225-54 ; _55-64 ; TR ; CG ; He ; Ed 70.1 ; 39.7 ; 13.2 ; 14.4 ; 5.3 ; 3.9 71.3 ; 41.8 ; 13.4 ; 14.0 ; 5.6 ; 3.7 72.5 ; 43.9 ; 12.8 ; 13.6 ; 5.5 ; 3.4 72.5 ; 43.9 ; 18.9 ; 13.6 ; 9.6 ; 3.8 Case 8. A tax-based Stockhol	0.94 0.94 da: adjustment through emploid Per capita consumption (Adj. lump sum taxes = 1) 1.00 0.99 0.98 0.98 0.98	1.7 ; 3.9 13.4 ; -5.7 byment rates (Etas), soci (% GDP) 32.5 ; 0.9 22.4 ; 2.0 2.8 ; 4.1 11.2 ; -5.7 ugh employment rates (H	ial protection transfe Welfare impac 1916 0.07 Etas), social protecti	Sun ers (TR), and put t (% dev. in REL 1946 0.10 Sun on transfers (TR	n of % dev. in RI 1.20 <u>olic consumption</u> <u>U vis-à-vis adj.</u> <u>1976</u> 0.04 n of % dev. in RI 0.39), and consumpti	ELU (CG), health car lump sum taxes) 2006 0.10 ELU on taxes (Tau_C	e and education by birth cohort 2036 0.08
2015 2050 Case 7. 2005 2010 2015 2050	1916 1916 . A spending-based Stockholm Agene 	0.94 0.94 da: adjustment through emploind Per capita consumption (Adj. lump sum taxes = 1) 1.00 0.99 0.98 0.98 0.98 0.98 0.98	1.7 ; 3.9 13.4 ; -5.7 byment rates (Etas), soci Net debt ; balance (% GDP) 32.5 ; 0.9 22.4 ; 2.0 2.8 ; 4.1 11.2 ; -5.7 ugh employment rates (I Net debt ; balance	ial protection transfe Welfare impac 1916 0.07 Etas), social protecti Welfare impac	Sun ers (TR), and put t (% dev. in REL 1946 0.10 Sun on transfers (TR t (% dev. in REL	n of % dev. in Rl 1.20 blic consumption U vis-à-vis adj. 1976 0.04 n of % dev. in Rl 0.39), and consumpti U vis-à-vis adj.	ELU (CG), health car lump sum taxes) 2006 0.10 ELU on taxes (Tau_C lump sum taxes)	e and education by birth cohort 2036 0.08) by birth cohort
2015 2050 Case 7. 2005 2010 2015 2050	1916 1916 . A spending-based Stockholm Agene _25-54 ; _55-64 ; TR ; CG ; He ; Ed 70.1 ; 39.7 ; 13.2 ; 14.4 ; 5.3 ; 3.9 71.3 ; 41.8 ; 13.4 ; 14.0 ; 5.6 ; 3.7 72.5 ; 43.9 ; 12.8 ; 13.6 ; 5.5 ; 3.4 72.5 ; 43.9 ; 18.9 ; 13.6 ; 9.6 ; 3.8 Case 8. A tax-based Stockho _25-54 ; _55-64 ; TR ; Tau_C	0.94 0.94 da: adjustment through emploid Per capita consumption (Adj. lump sum taxes = 1) 1.00 0.99 0.98 0.98 0.98 0lm Agenda: adjustment throug Per capita consumption (Adj. lump sum taxes = 1)	1.7 ; 3.9 13.4 ; -5.7 byment rates (Etas), soci Net debt ; balance (% GDP) 32.5 ; 0.9 22.4 ; 2.0 2.8 ; 4.1 11.2 ; -5.7 ugh employment rates (I Net debt ; balance (% GDP)	ial protection transfe Welfare impac 1916 0.07 Etas), social protecti Welfare impac 1916	Sun ers (TR), and put t (% dev. in REL 1946 0.10 Sun on transfers (TR t (% dev. in REL 1946	n of % dev. in RI 1.20 blic consumption U vis-à-vis adj. 1976 0.04 n of % dev. in RI 0.39), and consumpti U vis-à-vis adj. 1976	ELU (CG), health car lump sum taxes) 2006 0.10 ELU on taxes (Tau_C lump sum taxes) 2006	e and education by birth cohort 2036 0.08) by birth cohort 2036
2015 2050 Case 7. 2005 2010 2015 2050 2005	1916 1916 . A spending-based Stockholm Agenu 25-54 ;55-64 ; TR ; CG ; He ; Ed 70.1 ; 39.7 ; 13.2 ; 14.4 ; 5.3 ; 3.9 71.3 ; 41.8 ; 13.4 ; 14.0 ; 5.6 ; 3.7 72.5 ; 43.9 ; 12.8 ; 13.6 ; 5.5 ; 3.4 72.5 ; 43.9 ; 18.9 ; 13.6 ; 9.6 ; 3.8 Case 8. A tax-based Stockhol 25-54 ;55-64 ; TR ; Tau_C 70.1 ; 39.7 ; 13.2 ; 16.3	0.94 0.94 da: adjustment through emploin Per capita consumption (Adj. lump sum taxes = 1) 1.00 0.99 0.98 0.98 DIM Agenda: adjustment throughout the consumption Per capita consumption (Adj. lump sum taxes = 1) 1.00	1.7 ; 3.9 13.4 ; -5.7 byment rates (Etas), soci Net debt ; balance (% GDP) 32.5 ; 0.9 22.4 ; 2.0 2.8 ; 4.1 11.2 ; -5.7 ugh employment rates (H Net debt ; balance (% GDP) 32.5 ; 0.9	ial protection transfe Welfare impac 1916 0.07 Etas), social protecti Welfare impac 1916 0.07	Sun ers (TR), and put t (% dev. in REL 1946 0.10 Sun on transfers (TR t (% dev. in REL 1946 0.11	n of % dev. in Rl 1.20 blic consumption <u>U vis-à-vis adj.</u> 1976 0.04 n of % dev. in Rl 0.39), and consumpti <u>U vis-à-vis adj.</u> 1976 0.05	ELU (CG), health car lump sum taxes) 2006 0.10 ELU on taxes (Tau_C lump sum taxes) 2006 0.10	e and education by birth cohort 2036 0.08) by birth cohort 2036 0.07
2015 2050 Case 7. 2005 2010 2015 2050 2005 2005 2010	1916 1916 . A spending-based Stockholm Agenu 	0.94 0.94 0.94 da: adjustment through emploin Per capita consumption (Adj. lump sum taxes = 1) 1.00 0.99 0.98 0.98 olm Agenda: adjustment through Per capita consumption (Adj. lump sum taxes = 1) 1.00 0.98	1.7 ; 3.9 13.4 ; -5.7 byment rates (Etas), soci Net debt ; balance (% GDP) 32.5 ; 0.9 22.4 ; 2.0 2.8 ; 4.1 11.2 ; -5.7 ugh employment rates (H Net debt ; balance (% GDP) 32.5 ; 0.9 22.4 ; 1.9	ial protection transfe Welfare impac 1916 0.07 Etas), social protecti Welfare impac 1916 0.07	Sun ers (TR), and put t (% dev. in REL 1946 0.10 Sun on transfers (TR t (% dev. in REL 1946 0.11	n of % dev. in Rl 1.20 blic consumption <u>U vis-à-vis adj.</u> 1976 0.04 n of % dev. in Rl 0.39), and consumpti <u>U vis-à-vis adj.</u> 1976 0.05	ELU (CG), health car lump sum taxes) 2006 0.10 ELU on taxes (Tau_C lump sum taxes) 2006 0.10	e and education by birth cohort 2036 0.08) by birth cohort 2036 0.07
2015 2050 Case 7. 2005 2010 2015 2050 2005 2010 2015	1916 1916 . A spending-based Stockholm Agenu 	0.94 0.94 da: adjustment through emploind Per capita consumption (Adj. lump sum taxes = 1) 1.00 0.99 0.98 0.98 DIM Agenda: adjustment through Per capita consumption (Adj. lump sum taxes = 1) 1.00 0.98 0.98	1.7 ; 3.9 13.4 ; -5.7 byment rates (Etas), soci Net debt ; balance (% GDP) 32.5 ; 0.9 22.4 ; 2.0 2.8 ; 4.1 11.2 ; -5.7 ugh employment rates (H Net debt ; balance (% GDP) 32.5 ; 0.9 22.4 ; 1.9 2.9 ; 4.1	ial protection transfe Welfare impac 1916 0.07 Etas), social protecti Welfare impac 1916 0.07	Sun ers (TR), and put t (% dev. in REL 1946 0.10 Sun on transfers (TR t (% dev. in REL 1946 0.11 Sun	n of % dev. in Rl 1.20 blic consumption <u>U vis-à-vis adj.</u> 1976 0.04 n of % dev. in Rl 0.39), and consumpti <u>U vis-à-vis adj.</u> 1976 0.05 n of % dev. in Rl	ELU (CG), health car lump sum taxes) 2006 0.10 ELU on taxes (Tau_C lump sum taxes) 2006 0.10 ELU	e and education by birth cohort 2036 0.08) by birth cohort 2036 0.07

L (%) 5.6 3.6).7).7).7	Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.00 1.00 1.00 Case 2 Per capita consumption (Adj. lump sum taxes = 1) 1.00	Net debt ; balance (% GDP) 3.3 ; -0.2 -1.0 ; 1.1 -9.0 ; 2.2 34.9 ; -4.9 2. Adjustment through of Net debt ; balance (% GDP) 3.3 ; -0.2	Welfare impact 1916 0.04 consumption taxes Welfare impact 1916	t (% dev. in REL 1946 0.05 Sum t (% dev. in REL	U vis-à-vis adj. 1 1976 -0.01 a of % dev. in RE 0.14 U vis-à-vis adj. 1	lump sum taxes) 2006 0.03 ELU	by birth cohort 2036 0.03 203
L (%) 5.6 3.6).7).7).7	(Adj. lump sum taxes = 1) 1.00 1.00 1.00 1.00 Case 2 Per capita consumption (Adj. lump sum taxes = 1) 1.00	(% GDP) 3.3 ; -0.2 -1.0 ; 1.1 -9.0 ; 2.2 34.9 ; -4.9 2. Adjustment through of Net debt ; balance (% GDP) 3.3 ; -0.2	1916 0.04 consumption taxes Welfare impact 1916	1946 0.05 Sum t (% dev. in REL	1976 -0.01 a of % dev. in RE 0.14 U vis-à-vis adj. l	2006 0.03 ELU	2036 0.03
5.6 3.6).7).7).7	1.00 1.00 1.00 1.00 <u>Case 2</u> <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00	3.3 ; -0.2 -1.0 ; 1.1 -9.0 ; 2.2 34.9 ; -4.9 2. Adjustment through of Net debt ; balance (% GDP) 3.3 ; -0.2	0.04 consumption taxes Welfare impact 1916	0.05 Sum t (% dev. in REL	-0.01 1 of % dev. in RE 0.14 U vis-à-vis adj. l	0.03 ELU	0.03
3.6).7).7 <u>C (%)</u>	1.00 1.00 1.00 Case 2 Per capita consumption (Adj. lump sum taxes = 1) 1.00	-1.0 ; 1.1 -9.0 ; 2.2 34.9 ; -4.9 2. Adjustment through of Net debt ; balance (% GDP) 3.3 ; -0.2	consumption taxes Welfare impact 1916	Surr t (% dev. in REL	of % dev. in RE 0.14 U vis-à-vis adj. l	ELU	ay hirth cohort
0.7).7 <u>C (%)</u>	1.00 1.00 Case 2 Per capita consumption (Adj. lump sum taxes = 1) 1.00	-9.0 ; 2.2 34.9 ; -4.9 2. Adjustment through of Net debt ; balance (% GDP) 3.3 ; -0.2	consumption taxes Welfare impact 1916	Sum t (% dev. in REL	o of % dev. in RE 0.14 U vis-à-vis adj. l	ELU	ay hirth cohort
C (%)	1.00 Case 2 Per capita consumption (Adj. lump sum taxes = 1) 1.00	34.9 ; -4.9 2. Adjustment through a Net debt ; balance (% GDP) 3.3 ; -0.2	consumption taxes Welfare impact 1916	t (% dev. in REL	0.14 U vis-à-vis adj. l	ump sum taxes)	by hirth cohort
C (%)	Case 2 Per capita consumption (Adj. lump sum taxes = 1) 1.00	2. Adjustment through on the other state of the oth	consumption taxes Welfare impact 1916	t (% dev. in REL	U vis-à-vis adj. 1	ump sum taxes)	by hirth cohort
C (%)	Per capita consumption (Adj. lump sum taxes = 1) 1.00	Net debt ; balance (% GDP) 3.3 ; -0.2	Welfare impact 1916	t (% dev. in REL	U vis-à-vis adj. l	ump sum taxes)	by birth cohort
C (%)	(Adj. lump sum taxes = 1) 1.00	(% GDP) 3.3 ; -0.2	1916	1016			5 John conort
)6	1.00	3.3;-0.2		1946	1976	2006	2036
			0.02	-0.02	-0.05	-0.06	-0.07
2.3	0.98	-1.0;1.1					
5.2	0.98	-8.7;2.1		Sum	of % dev. in RE	ELU	
5.2	0.98	36.4 ; -5.0			-0.18		
Adjustment unoug	Per capita consumption	Net debt : balance	Welfare impact	t (% dev. in REL	U vis-à-vis adi.	ump sum taxes)	by birth cohort
d (% GDP)	(Adj. lump sum taxes $= 1$)	(% GDP)	1916	1946	1976	2006	2036
7.1;7.5	1.00	3.3 ; -0.2	0.01	-0.06	-0.11	-0.12	-0.14
7.2:7.1	1.02	-1.7:1.3					
7.3 : 6.5	1.02	-10.1 : 2.3		Sum	of % dev. in RE	ELU	
).3 ; 6.6	1.02	31.9 ; -4.7			-0.42		
	Case 4. Adj	ustment through social	protection transfers ((TR)			
	Per capita consumption	Net debt ; balance	Welfare impact	t (% dev. in REL	U vis-à-vis adj. 1	ump sum taxes)	by birth cohort
	(Adj. lump sum taxes = 1)	(% GDP)	1916	1946	1976	2006	2036
GDP)	1.00	3.3 ; -0.2	-0.03	-0.04	-0.01	0.02	0.02
GDP)		-0.7;1.0					
GDP) I.1 I.6	1.00	-79.20		Sur	of % dev. in RF	ELU	
GDP) 1.1 3.6 1.2	1.00 1.00	1.2.4.0			-0.04		
	DP)	Case 4. Adj DP) Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.00 1.00 1.00 1.00	Case 4. Adjustment through social Per capita consumption Net debt ; balance (Adj. lump sum taxes = 1) (% GDP) 1.00 3.3 ; -0.2 1.00 -0.7 ; 1.0 1.00 -7.9 ; 2.0 0.99 37.6 ; -5.0	$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$		Case 4. Adjustment through social protection transfers (TR) Per capita consumption Net debt ; balance Welfare impact (% dev. in RELU vis-à-vis adj. l DP) (Adj. lump sum taxes = 1) (% GDP) 1916 1946 1976 1.00 3.3 ; -0.2 -0.03 -0.04 -0.01 1.00 -0.7 ; 1.0 1.00 -7.9 ; 2.0 Sum of % dev. in RE 0.99 37.6 ; -5.0 -0.04 -0.04	

Table A.12 Simulation results for Sweden (adjustment from 2006 to 2015)

		Per capita consumption	Net debt ; balance	Welfare impac	t (% dev. in REL	U vis-à-vis adj.	lump sum taxes)	by birth cohort
	Eta_25-54 ; Eta_55-64 (%)	(Adj. lump sum taxes $= 1$)	(% GDP)	1916	1946	1976	2006	2036
2005	84.1;68.0	1.00	3.3 ; -0.2	0.07	0.15	0.05	0.12	0.13
2010	86.3;73.5	0.97	-1.7;1.2					
2015	88.6;79.5	0.96	-8.6;1.9		Sun	n of % dev. in Rl	ELU	
2050	88.6 ; 79.5	0.96	39.3 ; -5.0			0.52		
	OECD limits: 85.9; 72.0							
		Case 6. Adjus	tment through aggregate	hours worked per y	rear (H)			
		Per capita consumption	Net debt ; balance	Welfare impac	t (% dev. in REL	.U vis-à-vis adj.	lump sum taxes)	by birth cohort
	Н	(Adj. lump sum taxes $= 1$)	(% GDP)	1916	1946	1976	2006	2036
2005	1581	1.00	3.3 ; -0.2	0.07	0.16	0.04	0.10	0.11
2010	1643	0.96	-1.9;1.2					
2015	1700	0.06	-91.20		Sun	of % day in Pl	FLI	
2015	1708	0.90	-7.1, 2.0		Sui	10170 dev. III KI	LU	
2015 2050 Case 7	1708 1708 7. A spending-based Stockholm Agen	0.90 0.96 da: adjustment through emplo	36.0 ; -4.9 oyment rates (Etas), soci	al protection transfe	ers (TR), and put	0.48	(CG), health car	re and education
2015 2050 Case 7	1708 1708 7. A spending-based Stockholm Agen	0.90 0.96 da: adjustment through emple Per capita consumption	36.0 ; -4.9 oyment rates (Etas), soci	al protection transfe Welfare impac	ers (TR), and put t (% dev. in REL	0.48 Dic consumption U vis-à-vis adj.	<u>1 (CG), health car</u> lump sum taxes)	e and education
2015 2050 Case 7	1708 1708 7. A spending-based Stockholm Agen _25-54 ; _55-64 ; TR ; CG ; He ; Ed	0.90 0.96 <u>da: adjustment through emplo</u> <u>Per capita consumption</u> (Adj. lump sum taxes = 1)	36.0 ; -4.9 oyment rates (Etas), soci <u>Net debt ; balance</u> (% GDP)	al protection transfe Welfare impac 1916	ers (TR), and put t (% dev. in REL 1946	0.48 Dlic consumption U vis-à-vis adj. 1976	<u>(CG), health car</u> lump sum taxes) 2006	e and education by birth cohort 2036
2015 2050 Case 7 2005	1708 1708 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 84.1 ; 68.0 ; 24.1 ; 18.7 ; 7.1 ; 7.5	0.90 0.96 <u>da: adjustment through emploid</u> <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00	36.0 ; -4.9 oyment rates (Etas), soci Net debt ; balance (% GDP) 3.3 ; -0.2	al protection transfe Welfare impac 1916 0.02	ers (TR), and put t (% dev. in REL 1946 0.02	0.48 Dlic consumption <u>U vis-à-vis adj.</u> 1976 -0.02	<u>(CG), health car</u> lump sum taxes) 2006 0.01	re and education by birth cohort 2036 0.01
2015 2050 Case 7 2005 2010	1708 1708 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 84.1 ; 68.0 ; 24.1 ; 18.7 ; 7.1 ; 7.5 84.9 ; 69.9 ; 24.2 ; 18.4 ; 7.2 ; 7.1	0.90 0.96 <u>da: adjustment through emplo</u> <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00 0.99	36.0 ; -4.9 oyment rates (Etas), soci Net debt ; balance (% GDP) 3.3 ; -0.2 -1.3 ; 1.1	al protection transfe Welfare impac 1916 0.02	ers (TR), and put t (% dev. in REL 1946 0.02	0.48 <u>olic consumption</u> <u>U vis-à-vis adj.</u> <u>1976</u> -0.02	<u>(CG), health car</u> lump sum taxes) 2006 0.01	e and education by birth cohort 2036 0.01
2015 2050 Case 7 2005 2010 2015	1708 1708 7. A spending-based Stockholm Agen 25-54 ;55-64 ; TR ; CG ; He ; Ed 84.1 ; 68.0 ; 24.1 ; 18.7 ; 7.1 ; 7.5 84.9 ; 69.9 ; 24.2 ; 18.4 ; 7.2 ; 7.1 85.6 ; 71.7 ; 24.3 ; 18.1 ; 7.3 ; 6.5	0.90 0.96 <u>da: adjustment through emploid</u> <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00 0.99 0.99	36.0 ; -4.9 oyment rates (Etas), soci (% GDP) 3.3 ; -0.2 -1.3 ; 1.1 -8.8 ; 2.0	al protection transfe Welfare impac 1916 0.02	sun ers (TR), and put t (% dev. in REI 1946 0.02 Sun	0.48 <u>olic consumption</u> <u>U vis-à-vis adj.</u> <u>1976</u> -0.02 n of % dev. in Rl	<u>(CG), health car</u> lump sum taxes) 2006 0.01 ELU	e and education by birth cohort 2036 0.01
2015 2050 Case 7 2005 2010 2015 2050	1708 1708 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 84.1 ; 68.0 ; 24.1 ; 18.7 ; 7.1 ; 7.5 84.9 ; 69.9 ; 24.2 ; 18.4 ; 7.2 ; 7.1 85.6 ; 71.7 ; 24.3 ; 18.1 ; 7.3 ; 6.5 85.6 ; 71.7 ; 27.6 ; 18.1 ; 9.2 ; 6.7	0.96 0.96 <u>da: adjustment through emploid</u> <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00 0.99 0.99 0.99	36.0 ; -4.9 oyment rates (Etas), soci (% GDP) 3.3 ; -0.2 -1.3 ; 1.1 -8.8 ; 2.0 36.3 ; -4.9	al protection transfe Welfare impac 1916 0.02	ers (TR), and pul t (% dev. in REI 1946 0.02 Sun	0.48 <u>olic consumption</u> <u>U vis-à-vis adj.</u> <u>1976</u> -0.02 n of % dev. in RI 0.04	<u>(CG), health can lump sum taxes)</u> 2006 0.01 ELU	e and education by birth cohort 2036 0.01
2005 2005 2005 2010 2015 2050	1708 1708 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 84.1 ; 68.0 ; 24.1 ; 18.7 ; 7.1 ; 7.5 84.9 ; 69.9 ; 24.2 ; 18.4 ; 7.2 ; 7.1 85.6 ; 71.7 ; 24.3 ; 18.1 ; 7.3 ; 6.5 85.6 ; 71.7 ; 27.6 ; 18.1 ; 9.2 ; 6.7 Case 8. A tax-based Stockhol	0.96 0.96 <u>da: adjustment through emploid</u> <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00 0.99 0.99 0.99 0.99 0.99	36.0 ; -4.9 oyment rates (Etas), soci (% GDP) 3.3 ; -0.2 -1.3 ; 1.1 -8.8 ; 2.0 36.3 ; -4.9 ugh employment rates (H	al protection transfe Welfare impac 1916 0.02	ers (TR), and pul t (% dev. in REL 1946 0.02 Sun on transfers (TR	0.48 blic consumption <u>U vis-à-vis adj.</u> 1976 -0.02 n of % dev. in Rl 0.04), and consumpti	(CG), health can lump sum taxes) 2006 0.01 ELU on taxes (Tau_C	e and education by birth cohort 2036 0.01
2015 2050 Case 7 2005 2010 2015 2050	1708 1708 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 84.1 ; 68.0 ; 24.1 ; 18.7 ; 7.1 ; 7.5 84.9 ; 69.9 ; 24.2 ; 18.4 ; 7.2 ; 7.1 85.6 ; 71.7 ; 24.3 ; 18.1 ; 7.3 ; 6.5 85.6 ; 71.7 ; 27.6 ; 18.1 ; 9.2 ; 6.7 Case 8. A tax-based Stockho	0.96 0.96 <u>da: adjustment through emploid</u> <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00 0.99 0.99 0.99 0.99 0.99 DIm Agenda: adjustment through	36.0 ; -4.9 oyment rates (Etas), soci Net debt ; balance (% GDP) 3.3 ; -0.2 -1.3 ; 1.1 -8.8 ; 2.0 36.3 ; -4.9 ugh employment rates (H Net debt ; balance	al protection transfe Welfare impac 1916 0.02 Etas), social protecti Welfare impac	ers (TR), and put <u>t (% dev. in REI</u> <u>1946</u> 0.02 Sun on transfers (TR t (% dev. in REI	0.48 <u>olic consumption</u> <u>U vis-à-vis adj.</u> <u>1976</u> -0.02 n of % dev. in RI 0.04), and consumpti <u>U vis-à-vis adj.</u>	<u>(CG), health car</u> lump sum taxes) 2006 0.01 ELU on taxes (Tau_C lump sum taxes)	e and education by birth cohort 2036 0.01)) by birth cohort
2015 2050 Case 7 2005 2010 2015 2050	1708 1708 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 84.1 ; 68.0 ; 24.1 ; 18.7 ; 7.1 ; 7.5 84.9 ; 69.9 ; 24.2 ; 18.4 ; 7.2 ; 7.1 85.6 ; 71.7 ; 24.3 ; 18.1 ; 7.3 ; 6.5 85.6 ; 71.7 ; 27.6 ; 18.1 ; 9.2 ; 6.7 Case 8. A tax-based Stockho 25-54 ; _55-64 ; TR ; Tau_C	0.96 0.96 <u>da: adjustment through emploid</u> <u>(Adj. lump sum taxes = 1)</u> 1.00 0.99 0.90 0.00 0.0	36.0 ; -4.9 oyment rates (Etas), soci (% GDP) 3.3 ; -0.2 -1.3 ; 1.1 -8.8 ; 2.0 36.3 ; -4.9 ugh employment rates (I Net debt ; balance (% GDP)	al protection transfo Welfare impac 1916 0.02 Etas), social protecti Welfare impac 1916	ers (TR), and put <u>t (% dev. in REI</u> <u>1946</u> 0.02 Sun <u>on transfers (TR</u> t (% dev. in REI <u>1946</u>	0.48 <u>0.48</u> <u>0.48</u> <u>0.48</u> <u>0.48</u> <u>1976</u> -0.02 n of % dev. in RI 0.04 <u>0.04</u> <u>0.04</u> <u>0.04</u> <u>0.04</u> <u>0.04</u> <u>0.04</u> <u>0.04</u> <u>0.04</u> <u>0.04</u> <u>0.04</u> <u>0.04</u> <u>0.04</u> <u>0.04</u> <u>0.04</u> <u>0.04</u> <u>0.04</u> <u>0.04</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u> <u>0.05</u>	a (CG), health car lump sum taxes) 2006 0.01 ELU on taxes (Tau_C lump sum taxes) 2006	e and education by birth cohort 2036 0.01) by birth cohort 2036
2015 2050 Case 7 2005 2010 2015 2050 2005	1708 1708 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 84.1 ; 68.0 ; 24.1 ; 18.7 ; 7.1 ; 7.5 84.9 ; 69.9 ; 24.2 ; 18.4 ; 7.2 ; 7.1 85.6 ; 71.7 ; 24.3 ; 18.1 ; 7.3 ; 6.5 85.6 ; 71.7 ; 27.6 ; 18.1 ; 9.2 ; 6.7 Case 8. A tax-based Stockho 25-54 ; _55-64 ; TR ; Tau_C 84.1 ; 68.0 ; 24.1 ; 30.6	0.96 0.96 <u>da: adjustment through emplo</u> <u>(Adj. lump sum taxes = 1)</u> 1.00 0.99 0.90 0.00	36.0 ; -4.9 36.0 ; -4.9 oyment rates (Etas), soci (% GDP) 3.3 ; -0.2 -1.3 ; 1.1 -8.8 ; 2.0 36.3 ; -4.9 ugh employment rates (I Net debt ; balance (% GDP) 3.3 ; -0.2	al protection transfo Welfare impac 1916 0.02 Etas), social protecti Welfare impac 1916 0.02	ers (TR), and put <u>t (% dev. in REI</u> <u>1946</u> 0.02 Sun <u>on transfers (TR</u> <u>t (% dev. in REI</u> <u>1946</u> 0.03	0.48 <u>olic consumption</u> <u>U vis-à-vis adj.</u> <u>1976</u> -0.02 n of % dev. in Rl 0.04), and consumpti <u>U vis-à-vis adj.</u> <u>1976</u> 0.00	<u>(CG), health car</u> <u>lump sum taxes)</u> <u>2006</u> 0.01 ELU on taxes (Tau_C <u>lump sum taxes)</u> <u>2006</u> 0.03	e and education by birth cohort 2036 0.01 by birth cohort 2036 0.03
2005 2005 2005 2010 2015 2050 2005 2010	1708 1708 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 84.1 ; 68.0 ; 24.1 ; 18.7 ; 7.1 ; 7.5 84.9 ; 69.9 ; 24.2 ; 18.4 ; 7.2 ; 7.1 85.6 ; 71.7 ; 24.3 ; 18.1 ; 7.3 ; 6.5 85.6 ; 71.7 ; 27.6 ; 18.1 ; 9.2 ; 6.7 Case 8. A tax-based Stockho 25-54 ; _55-64 ; TR ; Tau_C 84.1 ; 68.0 ; 24.1 ; 30.6 84.9 ; 69.9 ; 24.2 ; 31.4	0.96 0.96 <u>da: adjustment through emplo</u> <u>(Adj. lump sum taxes = 1)</u> 1.00 0.99	36.0 ; -4.9 36.0 ; -4.9 oyment rates (Etas), soci (% GDP) 3.3 ; -0.2 -1.3 ; 1.1 -8.8 ; 2.0 36.3 ; -4.9 ugh employment rates (I Net debt ; balance (% GDP) 3.3 ; -0.2 -1.3 ; 1.1 -8.8 ; 2.0 36.3 ; -4.9 ugh employment rates (I Net debt ; balance (% GDP) 3.3 ; -0.2 -1.2 ; 1.1	al protection transfo Welfare impac 1916 0.02 Etas), social protecti Welfare impac 1916 0.02	ers (TR), and pul t (% dev. in REI 1946 0.02 Sun on transfers (TR t (% dev. in REI 1946 0.03	0.48 <u>olic consumption</u> <u>U vis-à-vis adj.</u> <u>1976</u> -0.02 n of % dev. in Rl 0.04), and consumpti <u>U vis-à-vis adj.</u> <u>1976</u> 0.00	a (CG), health can <u>lump sum taxes)</u> <u>2006</u> 0.01 ELU on taxes (Tau_C <u>lump sum taxes)</u> <u>2006</u> 0.03	e and education by birth cohort 2036 0.01) by birth cohort 2036 0.03
2005 2005 2010 2015 2050 2005 2010 2015	1708 1708 7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 84.1 ; 68.0 ; 24.1 ; 18.7 ; 7.1 ; 7.5 84.9 ; 69.9 ; 24.2 ; 18.4 ; 7.2 ; 7.1 85.6 ; 71.7 ; 24.3 ; 18.1 ; 7.3 ; 6.5 85.6 ; 71.7 ; 27.6 ; 18.1 ; 9.2 ; 6.7 Case 8. A tax-based Stockho 25-54 ; _55-64 ; TR ; Tau_C 84.1 ; 68.0 ; 24.1 ; 30.6 84.9 ; 69.9 ; 24.2 ; 31.4 85.6 ; 71.7 ; 24.3 ; 32.1	0.96 0.96 <u>da: adjustment through emplo</u> <u>(Adj. lump sum taxes = 1)</u> 1.00 0.99 0.98 0.98	36.0 ; -4.9 36.0 ; -4.9 oyment rates (Etas), soci (% GDP) 3.3 ; -0.2 -1.3 ; 1.1 -8.8 ; 2.0 36.3 ; -4.9 ugh employment rates (I Net debt ; balance (% GDP) 3.3 ; -0.2 -1.2 ; 1.1 -8.5 ; 2.0	al protection transfo Welfare impac 1916 0.02 Etas), social protecti Welfare impac 1916 0.02	ers (TR), and pul t (% dev. in REI 1946 0.02 Sun on transfers (TR t (% dev. in REI 1946 0.03 Sun	0.48 <u>olic consumption</u> <u>U vis-à-vis adj.</u> <u>1976</u> -0.02 n of % dev. in Rl 0.04 <u>), and consumpti</u> <u>U vis-à-vis adj.</u> <u>1976</u> 0.00 n of % dev. in Rl	a (CG), health can <u>lump sum taxes)</u> 2006 0.01 ELU on taxes (Tau_C lump sum taxes) 2006 0.03 ELU	e and education by birth cohort 2036 0.01) by birth cohort 2036 0.03

		Per capita consumption	Net debt ; balance	Welfare impac	t (% dev. in REL	U vis-à-vis adj.	lump sum taxes)	by birth cohor
	Tau_L (%)	(Adj. lump sum taxes $= 1$)	(% GDP)	1916	1946	1976	2006	2036
005	24.6	1.00	33.5 ; -1.8	0.08	0.15	-0.01	0.05	0.05
2010	27.6	1.00	32.0;-0.3					
2015	30.9	1.00	23.1;1.6		Sun	n of % dev. in Rl	ELU	
2050	30.9	1.00	36.7 ; -3.8			0.32		
		Case 2	2. Adjustment through	consumption taxes				
		Per capita consumption	Net debt ; balance	Welfare impac	t (% dev. in REL	.U vis-à-vis adj.	lump sum taxes)	by birth cohor
	Tau_C (%)	(Adj. lump sum taxes $= 1$)	(% GDP)	1916	1946	1976	2006	2036
2005	21.3	1.00	33.5 ; -1.8	0.04	-0.12	-0.16	-0.12	-0.16
2010	23.6	0.96	31.7 ; -0.3					
2015	0.4.1	0.06	$226 \cdot 12$		Sum	of % day in Pl	TIT	
2015	26.1	0.90	23.0, 1.5		Suit	101 / 0 uev. III Ki	JLU	
2015	26.1 26.1 Case 3. Adjustment th	0.90 0.96 arough public consumption, gene	41.1. ; -4.0	s, and public invest	nent (CG), healt	-0.52 h care (He) and	education (Ed)	
2013	26.1 26.1 Case 3. Adjustment th	0.90 0.96 rough public consumption, gene Per capita consumption	41.1.; -4.0 ral government subsidie	s, and public investi Welfare impac	nent (CG), healt	-0.52 <u>h care (He) and</u> <u>U vis-à-vis adj.</u>	education (Ed)	by birth cohor
2050	26.1 26.1 Case 3. Adjustment th CG, He, Ed (% GDP)	0.90 0.96 Per capita consumption, gene (Adj. lump sum taxes = 1)	23.0 ; 1.3 41.1. ; -4.0 ral government subsidie <u>Net debt ; balance</u> (% GDP)	s, and public investi Welfare impac 1916	nent (CG), healt t (% dev. in REL 1946	-0.52 h care (He) and U vis-à-vis adj. 1976	education (Ed) lump sum taxes) 2006	by birth cohor 2036
2050	26.1 26.1 Case 3. Adjustment th CG, He, Ed (% GDP) 12.9 ; 6.4 ; 4.9	0.90 0.96 Per capita consumption, gene (Adj. lump sum taxes = 1) 1.00	23.0 ; 1.3 41.1. ; -4.0 ral government subsidie <u>Net debt ; balance</u> (% GDP) 33.5 ; -1.8	s, and public investi Welfare impac 1916 0.05	nent (CG), healt t (% dev. in REL 1946 -0.01	-0.52 h care (He) and U vis-à-vis adj. 1976 -0.11	education (Ed) lump sum taxes) 2006 -0.13	by birth cohor 2036 -0.15
2013 2050 2005 2010 2015	26.1 26.1 Case 3. Adjustment th CG, He, Ed (% GDP) 12.9 ; 6.4 ; 4.9 11.7 ; 6.2 ; 4.6	0.90 0.96 arough public consumption, gene Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.03 1.02	<u>Net debt ; balance</u> (% GDP) 33.5 ; -1.8 30.9 ; 1.6	s, and public investi Welfare impac 1916 0.05	nent (CG), healt t (% dev. in REL 1946 -0.01	-0.52 h care (He) and U vis-à-vis adj. 1976 -0.11	education (Ed) lump sum taxes) 2006 -0.13	by birth cohor 2036 -0.15
2005 2005 2010 2015	26.1 26.1 Case 3. Adjustment th CG, He, Ed (% GDP) 12.9 ; 6.4 ; 4.9 11.7 ; 6.2 ; 4.6 10.5 ; 5.2 ; 4.2	0.90 0.96 rough public consumption, gene Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.03 1.03 1.03	<u>Net debt ; balance</u> (% GDP) 33.5 ; -1.8 30.9 ; 1.6 21.4 ; 1.6	s, and public investi Welfare impac 1916 0.05	nent (CG), healt t (% dev. in REL 1946 -0.01 Sun	-0.52 h care (He) and <u>U vis-à-vis adj.</u> <u>1976</u> -0.11 h of % dev. in Rl	education (Ed) lump sum taxes) 2006 -0.13 ELU	by birth cohor 2036 -0.15
2005 2005 2010 2015 2050	26.1 26.1 Case 3. Adjustment th CG, He, Ed (% GDP) 12.9 ; 6.4 ; 4.9 11.7 ; 6.2 ; 4.6 10.5 ; 5.2 ; 4.2 10.5 ; 8.0 ; 4.3	0.90 0.96 rough public consumption, gene Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.03 1.03 1.03	<u>Net debt ; balance</u> (% GDP) 33.5 ; -1.8 30.9 ; 1.6 21.4 ; 1.6 32.0 ; -3.5	s, and public investi Welfare impact 1916 0.05	nent (CG), healt t (% dev. in REL 1946 -0.01 Sun	-0.52 h care (He) and (.U vis-à-vis adj. 1976 -0.11 n of % dev. in Rl -0.35	education (Ed) lump sum taxes) 2006 -0.13 ELU	by birth cohor 2036 -0.15
2015 2050 2005 2010 2015 2050	26.1 26.1 Case 3. Adjustment th CG, He, Ed (% GDP) 12.9 ; 6.4 ; 4.9 11.7 ; 6.2 ; 4.6 10.5 ; 5.2 ; 4.2 10.5 ; 8.0 ; 4.3	0.90 0.96 arough public consumption, gene Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.03 1.03 1.03 1.03 Case 4. Adj	23.0; 1.3 41.1.; -4.0 ral government subsidie Net debt ; balance (% GDP) 33.5; -1.8 30.9; 1.6 21.4; 1.6 32.0; -3.5 ustment through social	s, and public investi Welfare impac 1916 0.05	<u>ment (CG), healt</u> t (% dev. in REL 1946 -0.01 Sun (TR)	-0.52 h care (He) and - <u>U vis-à-vis adj.</u> <u>1976</u> -0.11 h of % dev. in Rl -0.35	education (Ed) lump sum taxes) 2006 -0.13 ELU	by birth cohor 2036 -0.15
2015 2050 2005 2010 2015 2050	26.1 26.1 Case 3. Adjustment th CG, He, Ed (% GDP) 12.9 ; 6.4 ; 4.9 11.7 ; 6.2 ; 4.6 10.5 ; 5.2 ; 4.2 10.5 ; 8.0 ; 4.3	0.90 0.96 rough public consumption, gene Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.03 1.03 1.03 1.03 Case 4. Adj Per capita consumption	23.0; 1.3 41.1.; -4.0 ral government subsidie Net debt ; balance (% GDP) 33.5; -1.8 30.9; 1.6 21.4; 1.6 32.0; -3.5 ustment through social	s, and public investi Welfare impact 1916 0.05 protection transfers Welfare impact	<u>ment (CG), healt</u> <u>t (% dev. in REL</u> <u>1946</u> -0.01 Sun (TR)	-0.52 <u>h care (He) and </u> <u>U vis-à-vis adj.</u> <u>1976</u> -0.11 n of % dev. in RI -0.35 .U vis-à-vis adj.	education (Ed) lump sum taxes) 2006 -0.13 ELU lump sum taxes)	by birth cohor 2036 -0.15 by birth cohor
2005	26.1 26.1 Case 3. Adjustment th CG, He, Ed (% GDP) 12.9 ; 6.4 ; 4.9 11.7 ; 6.2 ; 4.6 10.5 ; 5.2 ; 4.2 10.5 ; 8.0 ; 4.3 TR (% GDP)	0.90 0.96 rough public consumption, gene Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.03 1.03 1.03 Case 4. Adj Per capita consumption (Adj. lump sum taxes = 1)	23.0 ; 1.3 41.1. ; -4.0 ral government subsidie <u>Net debt ; balance</u> (% GDP) 33.5 ; -1.8 30.9 ; 1.6 21.4 ; 1.6 32.0 ; -3.5 ustment through social <u>Net debt ; balance</u> (% GDP)	s, and public investi Welfare impact 1916 0.05 protection transfers Welfare impact 1916	<u>ment (CG), healt</u> <u>t (% dev. in REL</u> <u>1946</u> -0.01 Sun (TR) <u>t (% dev. in REL</u> <u>1946</u>	-0.52 <u>h care (He) and </u> <u>1976</u> -0.11 n of % dev. in Rl -0.35 <u>1976</u> <u>1976</u>	education (Ed) lump sum taxes) 2006 -0.13 ELU lump sum taxes) 2006	by birth cohor 2036 -0.15 by birth cohor 2036
2005 2005 2010 2015 2050 2005	26.1 26.1 Case 3. Adjustment th CG, He, Ed (% GDP) 12.9 ; 6.4 ; 4.9 11.7 ; 6.2 ; 4.6 10.5 ; 5.2 ; 4.2 10.5 ; 8.0 ; 4.3 TR (% GDP) 15.7	0.90 0.96 rough public consumption, gene Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.03 1.03 1.03 Case 4. Adj Per capita consumption (Adj. lump sum taxes = 1) 1.00	23.0; 1.3 41.1.; -4.0 ral government subsidie Net debt ; balance (% GDP) 33.5; -1.8 30.9; 1.6 21.4; 1.6 32.0; -3.5 ustment through social Net debt ; balance (% GDP) 33.5; -1.8	s, and public investi Welfare impact 1916 0.05 protection transfers Welfare impact 1916 -0.09	<u>ment (CG), healt</u> <u>t (% dev. in REL</u> <u>1946</u> -0.01 Sun (TR) <u>t (% dev. in REL</u> <u>1946</u> -0.17	-0.52 h care (He) and - .U vis-à-vis adj. 1976 -0.11 h of % dev. in Rl -0.35 .U vis-à-vis adj. 1976 -0.05	education (Ed) lump sum taxes) 2006 -0.13 ELU lump sum taxes) 2006 0.03	by birth cohor 2036 -0.15 by birth cohor 2036 0.03
2005 2005 2010 2015 2050 2005 2010	26.1 26.1 Case 3. Adjustment th CG, He, Ed (% GDP) 12.9 ; 6.4 ; 4.9 11.7 ; 6.2 ; 4.6 10.5 ; 5.2 ; 4.2 10.5 ; 8.0 ; 4.3 TR (% GDP) 15.7 14.3	0.90 0.96 arough public consumption, gene Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.03 1.03 1.03 Case 4. Adj Per capita consumption (Adj. lump sum taxes = 1) 1.00 0.99	23.0; 1.3 41.1.; -4.0 ral government subsidie Net debt ; balance (% GDP) 33.5; -1.8 30.9; 1.6 21.4; 1.6 32.0; -3.5 ustment through social Net debt ; balance (% GDP) 33.5; -1.8 32.0; -3.5	s, and public investi Welfare impact 1916 0.05 protection transfers Welfare impact 1916 -0.09	<u>ment (CG), healt</u> <u>t (% dev. in REL</u> <u>1946</u> -0.01 Sun (TR) <u>t (% dev. in REL</u> <u>1946</u> -0.17	-0.52 h care (He) and - .U vis-à-vis adj. 1976 -0.11 h of % dev. in Rl -0.35 .U vis-à-vis adj. 1976 -0.05	education (Ed) lump sum taxes) 2006 -0.13 ELU lump sum taxes) 2006 0.03	by birth cohor 2036 -0.15 by birth cohor 2036 0.03
2005 2005 2010 2015 2050 2005 2010 2015 2010 2015	26.1 26.1 Case 3. Adjustment th CG, He, Ed (% GDP) 12.9 ; 6.4 ; 4.9 11.7 ; 6.2 ; 4.6 10.5 ; 5.2 ; 4.2 10.5 ; 8.0 ; 4.3 TR (% GDP) 15.7 14.3 13.3	0.90 0.96 rough public consumption, gene Per capita consumption (Adj. lump sum taxes = 1) 1.00 1.03 1.03 1.03 Case 4. Adj Per capita consumption (Adj. lump sum taxes = 1) 1.00 0.99 0.99	23.0; 1.3 41.1.; -4.0 ral government subsidie Net debt ; balance (% GDP) 33.5; -1.8 30.9; 1.6 21.4; 1.6 32.0; -3.5 ustment through social Net debt ; balance (% GDP) 33.5; -1.8 32.7; -0.5 25.6; 1.0	s, and public investi Welfare impact 1916 0.05 protection transfers Welfare impact 1916 -0.09	<u>ment (CG), healt</u> <u>t (% dev. in REL</u> <u>1946</u> -0.01 Sun (TR) <u>t (% dev. in REL</u> <u>1946</u> -0.17 Sun	-0.52 h care (He) and - .U vis-à-vis adj. 1976 -0.11 h of % dev. in Rl -0.35 .U vis-à-vis adj. 1976 -0.05 h of % dev. in Rl	education (Ed) lump sum taxes) 2006 -0.13 ELU lump sum taxes) 2006 0.03 ELU	by birth cohor 2036 -0.15 by birth cohor 2036 0.03

Table A.13 Simulation results for the United Kingdom (adjustment from 2006 to 2015)

		Per capita consumption	Net debt : balance	Welfare impac	t (% dev. in REI	U vis-à-vis adi.	lump sum taxes)	by birth cohort
	Eta 25-54 : Eta 55-64 (%)	(Adi. lump sum taxes $= 1$)	(% GDP)	1916	1946	1976	2006	2036
2005	80.6 ; 53.5	1.00	33.5 ; -1.8	0.15	0.33	0.15	0.19	0.21
2010	85.3;63.3	0.95	28.3;-0.1					
2015	90.3;74.9	0.94	19.1; 1.1		Sun	n of % dev. in Rl	ELU	
2050	90.3;74.9	0.94	43.0 ; -4.1			1.03		
	OECD limits: 85.6; 63.0		,					
	· · · · · · · · · · · · · · · · · · ·	Case 6. Adjus	tment through aggregate	hours worked per y	year (H)			
		Per capita consumption	Net debt ; balance	Welfare impac	t (% dev. in REI	LU vis-à-vis adj.	lump sum taxes)	by birth cohort
	Н	(Adj. lump sum taxes $= 1$)	(% GDP)	1916	1946	1976	2006	2036
2005	1692	1.00	33.5 ; -1.8	0.16	0.35	0.15	0.12	0.14
2010	1823	0.94	27.9;0.0					
2015	1964	0.93	18.3;1.2		Sun	n of % dev. in Rl	ELU	
2050	1964	0.93	40.2;-3.9			0.92		
Case	7. A spending-based Stockholm Agen	da: adjustment through emplo	oyment rates (Etas), soci	al protection transfe	ers (TR), and pul	blic consumption	(CG), health car	re and educatio
Case	7. A spending-based Stockholm Agen	da: adjustment through emplo	oyment rates (Etas), soci Net debt ; balance	al protection transfe	ers (TR), and pul t (% dev. in REI	blic consumption	(CG), health car lump sum taxes)	re and educatio
Case	 A spending-based Stockholm Agen _25-54 ; _55-64 ; TR ; CG ; He ; Ed 	da: adjustment through employed and the second seco	oyment rates (Etas), soci Net debt ; balance (% GDP)	al protection transfe Welfare impac 1916	ers (TR), and pul t (% dev. in REI 1946	blic consumption LU vis-à-vis adj. 1976	(CG), health car lump sum taxes) 2006	re and education by birth cohort 2036
Case 2	7. A spending-based Stockholm Agen _25-54 ; _55-64 ; TR ; CG ; He ; Ed 80.6 ; 53.5 ; 15.7 ; 12.9 ; 6.4 ; 4.9	da: adjustment through emploid Per capita consumption (Adj. lump sum taxes = 1) 1.00	Net debt ; balance (% GDP) 33.5 ; -1.8	al protection transfe Welfare impac 1916 0.04	ers (TR), and put t (% dev. in REI 1946 0.07	blic consumption LU vis-à-vis adj. 1976 0.02	u (CG), health can lump sum taxes) 2006 0.05	re and education by birth cohort 2036 0.05
Case 2005 2010	7. A spending-based Stockholm Agen 25-54 ;55-64 ; TR ; CG ; He ; Ed 80.6 ; 53.5 ; 15.7 ; 12.9 ; 6.4 ; 4.9 82.2 ; 56.8 ; 15.1 ; 12.5 ; 6.2 ; 4.6	da: adjustment through emploid Per capita consumption (Adj. lump sum taxes = 1) 1.00 0.98	Net debt ; balance (% GDP) 33.5 ; -1.8 30.6 ; -0.2	al protection transfe Welfare impac 1916 0.04	ers (TR), and put t (% dev. in REI 1946 0.07	blic consumption LU vis-à-vis adj. 1976 0.02	lump sum taxes) 2006 0.05	re and education by birth cohort 2036 0.05
Case 2005 2010 2015	7. A spending-based Stockholm Agen 25-54 ;55-64 ; TR ; CG ; He ; Ed 80.6 ; 53.5 ; 15.7 ; 12.9 ; 6.4 ; 4.9 82.2 ; 56.8 ; 15.1 ; 12.5 ; 6.2 ; 4.6 83.9 ; 60.3 ; 14.8 ; 12.1 ; 6.2 ; 4.3	da: adjustment through emploid Per capita consumption (Adj. lump sum taxes = 1) 1.00 0.98 0.98	Net debt ; balance (% GDP) 33.5 ; -1.8 30.6 ; -0.2 22.1 ; 1.2	al protection transfe Welfare impac 1916 0.04	ers (TR), and put t (% dev. in REI 1946 0.07 Sun	blic consumption LU vis-à-vis adj. 1976 0.02 n of % dev. in Rl	u (CG), health car lump sum taxes) 2006 0.05 ELU	re and education by birth cohort 2036 0.05
Case 2005 2010 2015 2050	7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 80.6 ; 53.5 ; 15.7 ; 12.9 ; 6.4 ; 4.9 82.2 ; 56.8 ; 15.1 ; 12.5 ; 6.2 ; 4.6 83.9 ; 60.3 ; 14.8 ; 12.1 ; 6.2 ; 4.3 83.9 ; 60.3 ; 18.8 ; 12.1 ; 8.0 ; 4.4	da: adjustment through emploid Per capita consumption (Adj. lump sum taxes = 1) 1.00 0.98 0.98 0.98	Net debt ; balance (% GDP) 33.5 ; -1.8 30.6 ; -0.2 22.1 ; 1.2 40.7 ; -3.9	al protection transfe Welfare impac 1916 0.04	ers (TR), and put t (% dev. in REI 1946 0.07 Sun	blic consumption LU vis-à-vis adj. 1976 0.02 n of % dev. in RI 0.23	ump sum taxes) 2006 0.05	re and educatio by birth cohort 2036 0.05
Case 2005 2010 2015 2050	7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 80.6 ; 53.5 ; 15.7 ; 12.9 ; 6.4 ; 4.9 82.2 ; 56.8 ; 15.1 ; 12.5 ; 6.2 ; 4.6 83.9 ; 60.3 ; 14.8 ; 12.1 ; 6.2 ; 4.3 83.9 ; 60.3 ; 18.8 ; 12.1 ; 8.0 ; 4.4 Case 8. A tax-based Stockholm	da: adjustment through emplo Per capita consumption (Adj. lump sum taxes = 1) 1.00 0.98 0.98 0.98 0.98 olm Agenda: adjustment through	Net debt ; balance (% GDP) 33.5 ; -1.8 30.6 ; -0.2 22.1 ; 1.2 40.7 ; -3.9 ugh employment rates (F	al protection transfe Welfare impac 1916 0.04	ers (TR), and put t (% dev. in REI 1946 0.07 Sun on transfers (TR	blic consumption <u>U vis-à-vis adj.</u> <u>1976</u> 0.02 n of % dev. in RI 0.23), and consumpti	ump sum taxes) 2006 0.05 ELU on taxes (Tau_C	re and education by birth cohort 2036 0.05
Case 2005 2010 2015 2050	7. A spending-based Stockholm Agen _25-54 ; _55-64 ; TR ; CG ; He ; Ed 80.6 ; 53.5 ; 15.7 ; 12.9 ; 6.4 ; 4.9 82.2 ; 56.8 ; 15.1 ; 12.5 ; 6.2 ; 4.6 83.9 ; 60.3 ; 14.8 ; 12.1 ; 6.2 ; 4.3 83.9 ; 60.3 ; 18.8 ; 12.1 ; 8.0 ; 4.4 Case 8. A tax-based Stockhol	da: adjustment through emploid Per capita consumption (Adj. lump sum taxes = 1) 1.00 0.98 0.98 0.98 0.98 0.98 0.98 0.98 0.98	Net debt ; balance (% GDP) 33.5 ; -1.8 30.6 ; -0.2 22.1 ; 1.2 40.7 ; -3.9 agh employment rates (E Net debt ; balance	al protection transfe Welfare impac 1916 0.04 Etas), social protecti Welfare impac	ers (TR), and put t (% dev. in REI 1946 0.07 Sum on transfers (TR t (% dev. in REI	blic consumption LU vis-à-vis adj. 1976 0.02 n of % dev. in Rl 0.23), and consumpti LU vis-à-vis adj.	u (CG), health car lump sum taxes) 2006 0.05 ELU on taxes (Tau_C lump sum taxes)	re and educatio
Case 2005 2010 2015 2050	7. A spending-based Stockholm Agen _25-54 ; _55-64 ; TR ; CG ; He ; Ed 80.6 ; 53.5 ; 15.7 ; 12.9 ; 6.4 ; 4.9 82.2 ; 56.8 ; 15.1 ; 12.5 ; 6.2 ; 4.6 83.9 ; 60.3 ; 14.8 ; 12.1 ; 6.2 ; 4.3 83.9 ; 60.3 ; 18.8 ; 12.1 ; 8.0 ; 4.4 Case 8. A tax-based Stockho _25-54 ; _55-64 ; TR ; Tau_C	da: adjustment through emploidated and a consumption (Adj. lump sum taxes = 1) 1.00 0.98 0.98 0.98 0.98 0.98 0.98 0.98 0.98 0.98 0.98 0.98	Net debt ; balance (% GDP) 33.5 ; -1.8 30.6 ; -0.2 22.1 ; 1.2 40.7 ; -3.9 ugh employment rates (E Net debt ; balance (% GDP)	al protection transfe Welfare impac 1916 0.04 Etas), social protecti Welfare impac 1916	ers (TR), and put t (% dev. in REI 1946 0.07 Sun on transfers (TR t (% dev. in REI 1946	blic consumption LU vis-à-vis adj. 1976 0.02 n of % dev. in Rl 0.23), and consumpti LU vis-à-vis adj. 1976	Lump sum taxes) 2006 0.05 ELU on taxes (Tau_C) lump sum taxes) 2006	re and education by birth cohort 2036 0.05 0.05 0.05
Case 7 2005 2010 2015 2050 2005	7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 80.6 ; 53.5 ; 15.7 ; 12.9 ; 6.4 ; 4.9 82.2 ; 56.8 ; 15.1 ; 12.5 ; 6.2 ; 4.6 83.9 ; 60.3 ; 14.8 ; 12.1 ; 6.2 ; 4.3 83.9 ; 60.3 ; 18.8 ; 12.1 ; 8.0 ; 4.4 Case 8. A tax-based Stockho 25-54 ; _55-64 ; TR ; Tau_C 80.6 ; 53.5 ; 15.7 ; 21.3	da: adjustment through emploidated and a consumption (Adj. lump sum taxes = 1) 1.00 0.98	Net debt ; balance (% GDP) 33.5 ; -1.8 30.6 ; -0.2 22.1 ; 1.2 40.7 ; -3.9 ugh employment rates (E Net debt ; balance (% GDP)	al protection transfe Welfare impac 1916 0.04 Etas), social protecti Welfare impac 1916 0.04	ers (TR), and put t (% dev. in REI 1946 0.07 Sum on transfers (TR t (% dev. in REI 1946 0.02	blic consumption LU vis-à-vis adj. 1976 0.02 n of % dev. in Rl 0.23), and consumpti LU vis-à-vis adj. 1976 0.00	a (CG), health car lump sum taxes) 2006 0.05 ELU on taxes (Tau_C lump sum taxes) 2006 0.05	te and education by birth cohort 2036 0.05 0.05 by birth cohort 2036 0.04
Case 7 2005 2010 2015 2050 2005 2005 2010	7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 80.6 ; 53.5 ; 15.7 ; 12.9 ; 6.4 ; 4.9 82.2 ; 56.8 ; 15.1 ; 12.5 ; 6.2 ; 4.6 83.9 ; 60.3 ; 14.8 ; 12.1 ; 6.2 ; 4.3 83.9 ; 60.3 ; 18.8 ; 12.1 ; 8.0 ; 4.4 Case 8. A tax-based Stockho 25-54 ; _55-64 ; TR ; Tau_C 80.6 ; 53.5 ; 15.7 ; 21.3 82.2 ; 56.8 ; 15.1 ; 22.1	da: adjustment through emploidated at adjustment through emploided at a consumption (Adj. lump sum taxes = 1) 1.00 0.98 0.99 0.99 0.00 0.0	Net debt ; balance (% GDP) 33.5 ; -1.8 30.6 ; -0.2 22.1 ; 1.2 40.7 ; -3.9 ugh employment rates (E Net debt ; balance (% GDP) 33.5 ; -1.8	al protection transfe Welfare impac 1916 0.04 Etas), social protecti Welfare impac 1916 0.04	ers (TR), and put t (% dev. in REI 1946 0.07 Sum on transfers (TR t (% dev. in REI 1946 0.02	blic consumption LU vis-à-vis adj. 1976 0.02 n of % dev. in Rl 0.23), and consumpti LU vis-à-vis adj. 1976 0.00	a (CG), health car lump sum taxes) 2006 0.05 ELU on taxes (Tau_C lump sum taxes) 2006 0.05	re and educatio
Case 2005 2010 2015 2050 2005 2005 2010 2015	7. A spending-based Stockholm Agen 25-54 ; _55-64 ; TR ; CG ; He ; Ed 80.6 ; 53.5 ; 15.7 ; 12.9 ; 6.4 ; 4.9 82.2 ; 56.8 ; 15.1 ; 12.5 ; 6.2 ; 4.6 83.9 ; 60.3 ; 14.8 ; 12.1 ; 6.2 ; 4.3 83.9 ; 60.3 ; 18.8 ; 12.1 ; 8.0 ; 4.4 Case 8. A tax-based Stockho 25-54 ; _55-64 ; TR ; Tau_C 80.6 ; 53.5 ; 15.7 ; 21.3 82.2 ; 56.8 ; 15.1 ; 22.1 83.9 ; 60.3 ; 14.8 ; 22.9	da: adjustment through emploidated at a adjustment through emploided at a adjustment through emploided at a adjustment through a adjust	Net debt ; balance (% GDP) 33.5 ; -1.8 30.6 ; -0.2 22.1 ; 1.2 40.7 ; -3.9 ugh employment rates (E Net debt ; balance (% GDP) 33.5 ; -1.8 30.6 ; -0.2 22.1 ; 1.2 40.7 ; -3.9 ugh employment rates (E Net debt ; balance (% GDP) 33.5 ; -1.8 30.8 ; -0.3 22.5 ; 1.1	al protection transfe Welfare impac 1916 0.04 Etas), social protecti Welfare impac 1916 0.04	ers (TR), and put t (% dev. in REI 1946 0.07 Sum on transfers (TR t (% dev. in REI 1946 0.02 Sum	blic consumption LU vis-à-vis adj. 1976 0.02 n of % dev. in Rl 0.23), and consumpti LU vis-à-vis adj. 1976 0.00 n of % dev. in Rl	a (CG), health car lump sum taxes) 2006 0.05 ELU on taxes (Tau_C lump sum taxes) 2006 0.05 ELU	re and education by birth cohort 2036 0.05 0.05 by birth cohort 2036 0.04

Table A.13 Simulation results for the United Kingdom (Cont'd)

Table A.14 Simulation results for Case 9, a country-specific welfare-enhanced Stockholm Agenda (adjustment from 2006 to 2015)

		Per capita consumption	Net debt : balance	Welfare impac	t (% dev. in REI	LU vis-à-vis adi.	lump sum taxes) l	by birth cohort
	Eta 25-54 ; Eta 55-64 ; TR	(Adj. lump sum taxes $= 1$)	(% GDP)	1916	1946	1976	2006	2036
2005	83.9; 29.7; 21.9	1.00	41.7 ; -0.5	0.07	0.20	0.17	0.39	0.41
2010	87.0; 37.8; 20.0	0.95	25.4;2.8					
2015	90.2;48.0;17.9	0.92	-2.9;6.3	Sun	n of % dev. in RI	ELU 1-	48% better than t	he
2050	90.2 ; 48.0 ; 27.7	0.92	-71.7;0.0		1.24	bes	st Stockholm Age	enda
	Belgium - Adjustment through	higher employment rates ages	25-54 (to the OECD limit	ts) and through high	er employment r	ates ages 55-64	to close the fiscal	gap
		Per capita consumption	Net debt ; balance	Welfare impac	t (% dev. in REI	LU vis-à-vis adj.	lump sum taxes) l	by birth cohor
	Eta_25-54 ; Eta_55-64	(Adj. lump sum taxes $= 1$)	(% GDP)	1916	1946	1976	2006	2036
2005	76.5 ; 26.6	1.00	88.7;0.3	0.05	0.11	0.04	0.12	0.14
2010	79.0 ; 28.4	0.97	66.7;2.0					
2015	915.202	0.07	$125 \cdot 31$	Sun	n of % dev in RI	FLU 2	07% better than t	he
-010	81.5; 30.2	0.97	+2.J , J.+	Suit	101 / 0 ucv. III KI	LLU 2	0770 Detter than t	110
2050 	81.5 ; 30.2 81.5 ; 30.2 nmark - Adjustment through higher	0.97 0.97 employment rates (to the OEC	14.5 ; -1.5 D limits) and through soc	ial protection transf	0.46	fiscal gap, <i>or</i> just	t through more ho	enda ours worked
2050 Der	81.5 ; 30.2 81.5 ; 30.2 nmark - Adjustment through higher	0.97 0.97 employment rates (to the OEC Per capita consumption	14.5 ; -1.5 D limits) and through soc	ial protection transf	0.46 ers to close the f	fiscal gap, <i>or</i> just	t through more ho	by birth cohort
2050 Der	81.5 ; 30.2 81.5 ; 30.2 nmark - Adjustment through higher Eta_25-54 ; Eta_55-64 ; TR 84.1 : 57.9 : 25.2	0.97 0.97 employment rates (to the OEC Per capita consumption (Adj. lump sum taxes = 1)	$\frac{14.5 ; .1.4}{14.5 ; -1.5}$ D limits) and through soc <u>Net debt ; balance</u> (% GDP) 0.2 : 2.1	ial protection transf Welfare impac 1916	0.46 ers to close the f t (% dev. in REI 1946 0.09	fiscal gap, <i>or</i> just	t through more ho lump sum taxes) l 2006	by birth cohort 2036
2050 Der 2005 2005	81.5 ; 30.2 81.5 ; 30.2 nmark - Adjustment through higher Eta_25-54 ; Eta_55-64 ; TR 84.1 ; 57.9 ; 25.2 85.6 : 64.3 : 25.3	0.97 0.97 employment rates (to the OEC Per capita consumption (Adj. lump sum taxes = 1) 1.00 0.97	<u>14.5</u> ; -1.5 <u>D limits) and through soc</u> <u>Net debt ; balance</u> (% GDP) 0.2 ; 2.1 -11 2 : 2 5	ial protection transf Welfare impac 1916 0.04	0.46 <u>iers to close the f</u> <u>t (% dev. in REI</u> <u>1946</u> 0.09	fiscal gap, <i>or</i> just LU vis-à-vis adj. 1976 0.04	t through more ho ump sum taxes) t 2006 0.10	by birth cohort 2036 0.11
2050 Der 2005 2005 2010 2015	81.5 ; 30.2 81.5 ; 30.2 nmark - Adjustment through higher Eta_25-54 ; Eta_55-64 ; TR 84.1 ; 57.9 ; 25.2 85.6 ; 64.3 ; 25.3 87.1 : 71.5 : 25.5	0.97 0.97 employment rates (to the OEC Per capita consumption (Adj. lump sum taxes = 1) 1.00 0.97 0.96	14.5; -1.5 D limits) and through soc Net debt; balance (% GDP) 0.2; 2.1 -11.2; 2.5 21.4 - 2.9	ial protection transf Welfare impac 1916 0.04	$\frac{1000}{2}$	fiscal gap, <i>or</i> just LU vis-à-vis adj. 1976 0.04	t through more ho t through more ho lump sum taxes) l 2006 0.10	by birth cohort 2036 0.11
2005 Der 2005 2010 2015 2050	81.5 ; 30.2 81.5 ; 30.2 <u>nmark - Adjustment through higher</u> <u>Eta_25-54 ; Eta_55-64 ; TR</u> 84.1 ; 57.9 ; 25.2 85.6 ; 64.3 ; 25.3 87.1 ; 71.5 ; 25.5 87.1 : 71.5 ; 29.5	0.97 0.97 employment rates (to the OEC Per capita consumption (Adj. lump sum taxes = 1) 1.00 0.97 0.96 0.96	14.5; -1.5 D limits) and through soc Net debt; balance (% GDP) 0.2; 2.1 -11.2; 2.5 -21.4; 2.9 26 1: 47	ial protection transf Welfare impac 1916 0.04 Sun	0.46 <u>iers to close the f</u> <u>t (% dev. in REI</u> <u>1946</u> 0.09 n of % dev. in RI	fiscal gap, <i>or</i> just fiscal gap, <i>or</i> just LU vis-à-vis adj. 1976 0.04 ELU 3:	t through more ho t through more ho lump sum taxes) l 2006 0.10 22% better than t	by birth cohort 2036 0.11
2005 Der 2005 2010 2015 2050	81.5 ; 30.2 81.5 ; 30.2 nmark - Adjustment through higher Eta_25-54 ; Eta_55-64 ; TR 84.1 ; 57.9 ; 25.2 85.6 ; 64.3 ; 25.3 87.1 ; 71.5 ; 25.5 87.1 ; 71.5 ; 29.5	0.97 0.97 employment rates (to the OEC Per capita consumption (Adj. lump sum taxes = 1) 1.00 0.97 0.96 0.96	14.5; -1.5 D limits) and through soce (% GDP) 0.2; 2.1 -11.2; 2.5 -21.4; 2.9 36.1; -4.7	ial protection transf Welfare impac 1916 0.04 Sun	0.46 <u>ers to close the f</u> <u>t (% dev. in REI</u> <u>1946</u> 0.09 n of % dev. in RF 0.38	tiscal gap, <i>or</i> just <u>LU vis-à-vis adj.</u> <u>1976</u> 0.04 ELU 3 bes	t through more has t through more has ump sum taxes) l 2006 0.10 22% better than t st Stockholm Age	by birth cohort 2036 0.11 he enda
2005 Dei 2005 2010 2015 2050	81.5 ; 30.2 81.5 ; 30.2 nmark - Adjustment through higher Eta_25-54 ; Eta_55-64 ; TR 84.1 ; 57.9 ; 25.2 85.6 ; 64.3 ; 25.3 87.1 ; 71.5 ; 25.5 87.1 ; 71.5 ; 29.5 Finland - Adjustment through	0.97 0.97 employment rates (to the OEC Per capita consumption (Adj. lump sum taxes = 1) 1.00 0.97 0.96 0.96 higher employment rates ages 2	14.5; -1.5 D limits) and through soce (% GDP) 0.2; 2.1 -11.2; 2.5 -21.4; 2.9 36.1; -4.7	ial protection transf Welfare impac 1916 0.04 Sun s) and through high	0.46 <u>Ters to close the f</u> <u>t (% dev. in REI</u> <u>1946</u> 0.09 n of % dev. in RI 0.38 er employment ra	tiscal gap, <i>or</i> just <u>LU vis-à-vis adj.</u> <u>1976</u> 0.04 ELU 3 bes ates ages 55-64 t	t through more has t through more has lump sum taxes) l 2006 0.10 22% better than t st Stockholm Age o close the fiscal	by birth cohort 2036 0.11 he enda gap
2005 Der 2005 2010 2015 2050	81.5 ; 30.2 81.5 ; 30.2 nmark - Adjustment through higher Eta_25-54 ; Eta_55-64 ; TR 84.1 ; 57.9 ; 25.2 85.6 ; 64.3 ; 25.3 87.1 ; 71.5 ; 25.5 87.1 ; 71.5 ; 29.5 Finland - Adjustment through	0.97 0.97 employment rates (to the OEC Per capita consumption (Adj. lump sum taxes = 1) 1.00 0.97 0.96 0.96 higher employment rates ages 2 Per capita consumption	14.5 ; -1.5 D limits) and through soce (% GDP) 0.2 ; 2.1 -11.2 ; 2.5 -21.4 ; 2.9 36.1 ; -4.7 25-54 (to the OECD limit Net debt ; balance	ial protection transf Welfare impac 1916 0.04 Sun s) and through high Welfare impac	0.46 <u>ers to close the f</u> <u>tt (% dev. in REI</u> <u>1946</u> 0.09 n of % dev. in RI 0.38 <u>er employment ra</u> tt (% dev. in REI	ELU vis-à-vis adj. LU vis-à-vis adj. 1976 0.04 ELU 3 bes ates ages 55-64 t LU vis-à-vis adj.	t through more has t through more has ump sum taxes) I 2006 0.10 22% better than t st Stockholm Age o close the fiscal lump sum taxes) I	by birth cohort 2036 0.11 he enda gap by birth cohort
2005 Der 2005 2010 2015 2050	81.5 ; 30.2 81.5 ; 30.2 <u>nmark - Adjustment through higher</u> <u>Eta_25-54 ; Eta_55-64 ; TR</u> 84.1 ; 57.9 ; 25.2 85.6 ; 64.3 ; 25.3 87.1 ; 71.5 ; 25.5 87.1 ; 71.5 ; 29.5 <u>Finland - Adjustment through</u> Eta_25-54 ; Eta_55-64	0.97 0.97 employment rates (to the OEC Per capita consumption (Adj. lump sum taxes = 1) 1.00 0.97 0.96 0.96 higher employment rates ages 2 Per capita consumption (Adj. lump sum taxes = 1)	14.5 ; -1.5 D limits) and through soce (% GDP) 0.2 ; 2.1 -11.2 ; 2.5 -21.4 ; 2.9 36.1 ; -4.7 25-54 (to the OECD limit Net debt ; balance (% GDP)	ial protection transf Welfare impac 1916 0.04 Sun s) and through high Welfare impac 1916	0.46 <u>ers to close the f</u> <u>tt (% dev. in REI</u> <u>1946</u> 0.09 n of % dev. in RI 0.38 <u>er employment ra</u> <u>tt (% dev. in REI</u> <u>1946</u>	ELU vis-à-vis adj. LU vis-à-vis adj. 1976 0.04 ELU 3 bes ates ages 55-64 t LU vis-à-vis adj. 1976	t through more has t through more has ump sum taxes) I 2006 0.10 22% better than t st Stockholm Age o close the fiscal lump sum taxes) I 2006	by birth cohort 2036 0.11 he enda gap by birth cohort 2036
2005 2005 2005 2010 2015 2050 2005	81.5 ; 30.2 81.5 ; 30.2 nmark - Adjustment through higher Eta_25-54 ; Eta_55-64 ; TR 84.1 ; 57.9 ; 25.2 85.6 ; 64.3 ; 25.3 87.1 ; 71.5 ; 25.5 87.1 ; 71.5 ; 29.5 Finland - Adjustment through Eta_25-54 ; Eta_55-64 81.6 ; 47.8	0.97 0.97 employment rates (to the OEC Per capita consumption (Adj. lump sum taxes = 1) 1.00 0.97 0.96 0.96 higher employment rates ages 2 Per capita consumption (Adj. lump sum taxes = 1) 1.00	14.5 ; -1.5 D limits) and through soce (% GDP) 0.2 ; 2.1 -11.2 ; 2.5 -21.4 ; 2.9 36.1 ; -4.7 25-54 (to the OECD limit Net debt ; balance (% GDP) -42.3 ; 4.6	ial protection transf Welfare impac 1916 0.04 Sun s) and through high Welfare impac 1916 0.11	0.46 ers to close the f 1946 0.09 n of % dev. in REI 0.38 er employment ra t (% dev. in REI 1946 0.18	ELU vis-à-vis adj. 1976 0.04 ELU 3 bes ates ages 55-64 t LU vis-à-vis adj. 1976 0.12	t through more has t through more has 2006 0.10 22% better than t st Stockholm Age o close the fiscal lump sum taxes) l 2006 0.20	by birth cohort 2036 0.11 he enda gap by birth cohort 2036 0.22
2005 2005 2005 2010 2015 2050 2005 2005	81.5 ; 30.2 81.5 ; 30.2 nmark - Adjustment through higher Eta_25-54 ; Eta_55-64 ; TR 84.1 ; 57.9 ; 25.2 85.6 ; 64.3 ; 25.3 87.1 ; 71.5 ; 25.5 87.1 ; 71.5 ; 29.5 Finland - Adjustment through Eta_25-54 ; Eta_55-64 81.6 ; 47.8 82.3 ; 57.0	0.97 0.97 employment rates (to the OEC Per capita consumption (Adj. lump sum taxes = 1) 1.00 0.97 0.96 0.96 higher employment rates ages 2 Per capita consumption (Adj. lump sum taxes = 1) 1.00 0.95	14.5; -1.5 D limits) and through soce (% GDP) 0.2; 2.1 -11.2; 2.5 -21.4; 2.9 36.1; -4.7 25-54 (to the OECD limit Net debt; balance (% GDP) -42.3; 4.6 -53.2; 4.2	ial protection transf Welfare impac 1916 0.04 Sun s) and through high Welfare impac 1916 0.11	0.46 ers to close the f 1946 0.09 n of % dev. in REI 0.38 er employment ra t (% dev. in REI 1946 0.18	ELU vis-à-vis adj. 1976 0.04 ELU 3 bes ates ages 55-64 t LU vis-à-vis adj. 1976 0.12	t through more has t through more has 2006 0.10 22% better than t st Stockholm Age o close the fiscal lump sum taxes) I 2006 0.20	by birth cohort 2036 0.11 he enda gap by birth cohort 2036 0.22
2005 2005 2010 2015 2050 2005 2010 2015 2010 2015	81.5 ; 30.2 81.5 ; 30.2 nmark - Adjustment through higher Eta_25-54 ; Eta_55-64 ; TR 84.1 ; 57.9 ; 25.2 85.6 ; 64.3 ; 25.3 87.1 ; 71.5 ; 25.5 87.1 ; 71.5 ; 29.5 Finland - Adjustment through Eta_25-54 ; Eta_55-64 81.6 ; 47.8 82.3 ; 57.0 83.0 ; 67.9	0.97 0.97 employment rates (to the OEC Per capita consumption (Adj. lump sum taxes = 1) 1.00 0.97 0.96 0.96 higher employment rates ages 2 Per capita consumption (Adj. lump sum taxes = 1) 1.00 0.95 0.95	14.5 ; -1.5 D limits) and through soce (% GDP) 0.2 ; 2.1 -11.2 ; 2.5 -21.4 ; 2.9 36.1 ; -4.7 25-54 (to the OECD limit Net debt ; balance (% GDP) -42.3 ; 4.6 -53.2 ; 4.2 -58.1 ; 3.2	ial protection transf Welfare impac 1916 0.04 Sun s) and through high Welfare impac 1916 0.11 Sun	0.46 <u>ers to close the f</u> <u>1946</u> 0.09 n of % dev. in RE 0.38 <u>er employment ra</u> <u>t (% dev. in REI</u> <u>1946</u> 0.18 n of % dev. in RI	ELU vis-à-vis adj. 1976 0.04 ELU 3 bes ates ages 55-64 t LU vis-à-vis adj. 1976 0.12 ELU 3	t through more has t through more has a through more has a through more has a consection of the through more has a consection of the a consection	by birth cohort 2036 0.11 he enda gap by birth cohort 2036 0.22 he

France - Adjustment through higher employment rates (to the OECD limits) and through social protection transfers to close the fiscal gap Per capita consumption Net debt ; balance Welfare impact (% dev. in RELU vis-à-vis adj. lump sum taxes) by birth cohort (Adj. lump sum taxes = 1) 1946 Eta_25-54 ; Eta_55-64 ; TR (% GDP) 1916 1976 2006 2036 2005 79.5; 34.7; 20.7 44.4 ; -3.1 0.18 0.41 0.33 0.57 0.62 1.00 2010 83.0:45.6:18.6 0.93 38.3:0.1 0.92 24.3;2.2 2015 86.6;60.0;17.4 Sum of % dev. in RELU 148% better than the 2050 86.6;60.0;22.0 0.92 34.8;-3.4 2.11 best Stockholm Agenda Germany - Adjustment through higher employment rates (to the OECD limits) and through social protection transfers to close the fiscal gap Net debt ; balance Welfare impact (% dev. in RELU vis-à-vis adj. lump sum taxes) by birth cohort Per capita consumption Eta_25-54 ; Eta_55-64 ; TR (Adj. lump sum taxes = 1) (% GDP) 1916 1946 1976 2006 2036 2005 0.02 0.06 0.17 0.45 0.49 78.8; 38.8; 22.9 1.00 57.4; -4.7 55.5 ; -0.3 2010 82.1; 52.1; 18.5 0.96 2015 85.6;70.0;15.1 0.92 34.7;4.0 Sum of % dev. in RELU 43% better than the 2050 85.6;70.0;20.4 0.92 -8.6; -0.7 1.19 best Stockholm Agenda Ireland - Adjustment through higher employment rates (to the OECD limits) and through social protection transfers to close the fiscal gap Per capita consumption Net debt ; balance Welfare impact (% dev. in RELU vis-à-vis adj. lump sum taxes) by birth cohort (Adj. lump sum taxes = 1) (% GDP) 1916 1946 1976 2006 2036 Eta_25-54 ; Eta_55-64 ; TR 2005 76.0;47.1;9.2 1.00 29.9; -1.5 0.15 0.32 0.06 0.18 0.20 2010 79.4;62.5;8.5 0.93 21.3;-0.1 2015 83.0;83.0;8.0 0.92 12.3;0.7 Sum of % dev. in RELU 279% better than the 2050 83.0;83.0;10.7 0.91 24.1;-3.6 0.91 best Stockholm Agenda Italy - Adjustment through higher employment rates (to the OECD limits) and through social protection transfers to close the fiscal gap Per capita consumption Net debt ; balance Welfare impact (% dev. in RELU vis-à-vis adj. lump sum taxes) by birth cohort Eta_25-54 ; Eta_55-64 ; TR (Adj. lump sum taxes = 1) (% GDP) 1916 1946 1976 2006 2036 2005 70.1;28.9;18.9 92.9;-3.2 -0.06 0.28 0.74 1.00 0.11 0.78 2010 0.94 71.1:1.4 75.8:40.2:15.6 2015 82.0; 56.0; 13.1 0.91 36.1;5.7 Sum of % dev. in RELU 67% better than the 2050 82.0; 56.0; 22.3 0.89 -29.6; -1.8 1.85 best Stockholm Agenda

Table A.14 Simulation results for Case 9, a country-specific welfare-enhanced Stockholm Agenda (cont'd)

Table A.14	Simulation	results for Case 9	, a country-specific	welfare-enhanced	Stockholm Agenda (cont'd)
					0 (

		Per capita consumption	Net debt ; balance	Welfare impact (% dev. in RELU vis-à-vis adj. lump sum taxes) by birth cohor				
	Eta_25-54 ; Eta_55-64 ; TR	(Adj. lump sum taxes $= 1$)	(% GDP)	1916	1946	1976	2006	2036
2005	82.8;42.3;18.0	1.00	42.0 ; -1.8	0.13	0.39	0.21	0.33	0.37
2010	86.2;57.4;16.8	0.93	32.7;0.2					
2015	89.7; 78.0; 15.9	0.91	19.6 ; 1.8	Sun	n of % dev. in RE	LU 2	86% better than t	the
2050	89.7 ; 78.0 ; 19.5	0.92	29.5 ; -2.8		1.43	best Stockholm Agenda		enda
Portu	gal - Adjustment through higher empl	oyment rates (OECD limits) a	and through public consu	mp., gen. gov't subs	idies, public inv.,	health care and	education to clos	e the fiscal gap
		Per capita consumption	Net debt ; balance	Welfare impac	t (% dev. in REL	U vis-à-vis adj.	lump sum taxes)	by birth cohor
	Eta_25-54 ; Eta_55-64 ; CG, He, Ed	(Adj. lump sum taxes = 1)	(% GDP)	1916	1946	1976	2006	2036
2005	81.6; 50.9; 15.2; 6.9; 6.6	1.00	57.7 ; -2.8	1.90	0.81	0.32	0.48	0.49
2010	84.6;63.4;14.0;6.4;5.9	1.01	45.0;0.4					
2015	87.7:79.0:12.9:6.0:5.6	1.00	24.4;3.0	Sum of % dev. in RELU 28% better than the				he
2015	o,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,							
2013	87.7 ; 79.0 ; 12.9 ; 7.9 ; 5.9	0.99 n - Adjustment just through h	-9.0 ; -1.1 igher employment rates (under the OECD lin	4.00 nits) to close the f	be fiscal gap	st Stockholm Age	enda
2013	87.7 ; 79.0 ; 12.9 ; 7.9 ; 5.9	0.99 n - Adjustment just through h Per capita consumption	-9.0 ; -1.1 igher employment rates (Net debt ; balance	under the OECD lin	4.00 nits) to close the f	be fiscal gap .U vis-à-vis adj.	st Stockholm Age	enda by birth cohor
2013	Eta_25-54 ; Eta_55-64	0.99 n - Adjustment just through h Per capita consumption (Adj. lump sum taxes = 1)	-9.0 ; -1.1 igher employment rates (<u>Net debt ; balance</u> (% GDP)	under the OECD lin Welfare impac 1916	4.00 nits) to close the f et (% dev. in REL 1946	be fiscal gap <u>U vis-à-vis adj.</u> 1976	st Stockholm Age lump sum taxes) 2006	enda by birth cohor 2036
2013 2050 2005	Eta_25-54 ; Eta_55-64 70.1 ; 39.7	0.99 n - Adjustment just through h Per capita consumption (Adj. lump sum taxes = 1) 1.00	-9.0 ; -1.1 igher employment rates (<u>Net debt ; balance</u> (% GDP) 32.5 ; 0.9	under the OECD lin Welfare impac 1916 0.18	4.00 nits) to close the f tt (% dev. in REL 1946 0.37	be fiscal gap <u>U vis-à-vis adj.</u> 1976 0.21	st Stockholm Age lump sum taxes) 2006 0.28	enda by birth cohor 2036 0.28
2013 2050 2005 2010	Eta_25-54 ; Eta_55-64 70.1 ; 39.7 73.6 ; 45.8	0.99 <u>n - Adjustment just through h</u> Per capita consumption (Adj. lump sum taxes = 1) 1.00 0.96	-9.0 ; -1.1 igher employment rates (<u>Net debt ; balance</u> (% GDP) 32.5 ; 0.9 20.8 ; 2.0	under the OECD lin Welfare impac 1916 0.18	4.00 nits) to close the f et (% dev. in REL 1946 0.37	be fiscal gap <u>U vis-à-vis adj.</u> 1976 0.21	st Stockholm Age lump sum taxes) 2006 0.28	enda by birth cohor 2036 0.28
2005 2005 2010 2015	Eta_25-54 ; Eta_55-64 70.1 ; 39.7 73.6 ; 45.8 77.2 ; 52.8	0.99 <u>n - Adjustment just through h</u> <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00 0.96 0.95	-9.0 ; -1.1 igher employment rates (<u>Net debt ; balance</u> (% GDP) 32.5 ; 0.9 20.8 ; 2.0 1.8 ; 3.8	under the OECD lin Welfare impac 1916 0.18 Sun	4.00 nits) to close the f et (% dev. in REL 1946 0.37 n of % dev. in RE	be fiscal gap <u>U vis-à-vis adj.</u> 1976 0.21 ELU 2	st Stockholm Age lump sum taxes) 2006 0.28 230% better than t	enda by birth cohor 2036 0.28 the
2005 2010 2005 2010 2015 2050	Eta_25-54 ; Eta_55-64 70.1 ; 39.7 73.6 ; 45.8 77.2 ; 52.8 77.2 ; 52.8	0.99 <u>n - Adjustment just through h</u> Per capita consumption (Adj. lump sum taxes = 1) 1.00 0.96 0.95 0.94	-9.0 ; -1.1 igher employment rates (Net debt ; balance (% GDP) 32.5 ; 0.9 20.8 ; 2.0 1.8 ; 3.8 13.0 ; -5.7	Welfare impac Welfare impac 1916 0.18 Sun	4.00 <u>nits) to close the f</u> <u>st (% dev. in REL</u> <u>1946</u> 0.37 n of % dev. in RE 1.32	be fiscal gap <u>U vis-à-vis adj.</u> 1976 0.21 LU 2 be	st Stockholm Age lump sum taxes) 2006 0.28 230% better than t st Stockholm Age	enda by birth cohor 2036 0.28 the enda
2005 2005 2010 2015 2050	Eta_25-54 ; Eta_55-64 70.1 ; 39.7 73.6 ; 45.8 77.2 ; 52.8 Sweden - Adjustment	0.99 <u>n - Adjustment just through h</u> <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00 0.96 0.95 0.94 t through higher employment	-9.0 ; -1.1 igher employment rates (<u>Net debt ; balance</u> (% GDP) 32.5 ; 0.9 20.8 ; 2.0 1.8 ; 3.8 13.0 ; -5.7 rates (to the OECD limit:	Welfare impac <u>Welfare impac</u> <u>1916</u> 0.18 Sun s) and through socia	4.00 nits) to close the f t (% dev. in REL 1946 0.37 n of % dev. in RE 1.32 l protection trans	be fiscal gap <u>U vis-à-vis adj.</u> 1976 0.21 LU 2 be fers to close the	st Stockholm Age lump sum taxes) 2006 0.28 230% better than t st Stockholm Age e fiscal gap	enda by birth cohor 2036 0.28 the enda
2005 2005 2010 2015 2050	Eta_25-54 ; Eta_55-64 70.1 ; 39.7 73.6 ; 45.8 77.2 ; 52.8 Sweden - Adjustment	0.99 <u>n - Adjustment just through h</u> <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00 0.96 0.95 0.94 <u>t through higher employment</u> <u>Per capita consumption</u>	-9.0 ; -1.1 igher employment rates (<u>Net debt ; balance</u> (% GDP) 32.5 ; 0.9 20.8 ; 2.0 1.8 ; 3.8 13.0 ; -5.7 rates (to the OECD limit Net debt ; balance	<u>under the OECD lin</u> <u>Welfare impac</u> 1916 0.18 Sun s) and through socia <u>Welfare impac</u>	4.00 nits) to close the f t (% dev. in REL 1946 0.37 n of % dev. in RE 1.32 Il protection trans tt (% dev. in REL	be fiscal gap U vis-à-vis adj. 1976 0.21 ELU 2 be fers to close the U vis-à-vis adj.	st Stockholm Age lump sum taxes) 2006 0.28 230% better than t st Stockholm Age e fiscal gap lump sum taxes)	enda by birth cohor 2036 0.28 the enda by birth cohor
2005 2005 2010 2015 2050	Eta_25-54 ; Eta_55-64 70.1 ; 39.7 73.6 ; 45.8 77.2 ; 52.8 77.2 ; 52.8 Sweden - Adjustment Eta_25-54 ; Eta_55-64 ; TR	0.99 <u>n - Adjustment just through h</u> <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00 0.96 0.95 0.94 <u>t through higher employment</u> <u>Per capita consumption</u> (Adj. lump sum taxes = 1)	-9.0 ; -1.1 igher employment rates (<u>Net debt ; balance</u> (% GDP) 32.5 ; 0.9 20.8 ; 2.0 1.8 ; 3.8 13.0 ; -5.7 rates (to the OECD limit: <u>Net debt ; balance</u> (% GDP)	<u>under the OECD lin</u> <u>Welfare impac</u> 1916 0.18 Sun s) and through socia <u>Welfare impac</u> 1916	4.00 nits) to close the f t (% dev. in REL 1946 0.37 n of % dev. in RE 1.32 l protection trans t (% dev. in REL 1946	be fiscal gap U vis-à-vis adj. 1976 0.21 ELU 2 be fers to close the U vis-à-vis adj. 1976	st Stockholm Age lump sum taxes) 2006 0.28 230% better than t st Stockholm Age c fiscal gap lump sum taxes) 2006	enda by birth cohor 2036 0.28 the enda by birth cohor 2036
2005 2005 2010 2015 2050 2005	Eta_25-54 ; Eta_55-64 70.1 ; 39.7 73.6 ; 45.8 77.2 ; 52.8 77.2 ; 52.8 Sweden - Adjustment Eta_25-54 ; Eta_55-64 ; TR 84.1 ; 68.0 ; 24.1	0.99 <u>n - Adjustment just through h</u> <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00 0.96 0.95 0.94 <u>t through higher employment</u> <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00	-9.0 ; -1.1 igher employment rates (<u>Net debt ; balance</u> (% GDP) 32.5 ; 0.9 20.8 ; 2.0 1.8 ; 3.8 13.0 ; -5.7 rates (to the OECD limit: <u>Net debt ; balance</u> (% GDP) 3.3 ; -0.2	Welfare impac <u>Welfare impac</u> <u>1916</u> 0.18 Sun s) and through socia <u>Welfare impac</u> <u>1916</u> 0.01	4.00 nits) to close the f t (% dev. in REL 1946 0.37 n of % dev. in RE 1.32 l protection trans t (% dev. in REL 1946 0.03	be fiscal gap U vis-à-vis adj. 1976 0.21 ELU 2 be fers to close the U vis-à-vis adj. 1976 0.02	st Stockholm Age lump sum taxes) 2006 0.28 230% better than t st Stockholm Age e fiscal gap lump sum taxes) 2006 0.06	enda by birth cohor 2036 0.28 the enda by birth cohor 2036 0.07
2005 2005 2010 2015 2050 2005 2005 2010	Eta_25-54 ; Eta_55-64 70.1 ; 39.7 73.6 ; 45.8 77.2 ; 52.8 77.2 ; 52.8 Sweden - Adjustment Eta_25-54 ; Eta_55-64 ; TR 84.1 ; 68.0 ; 24.1 85.0 ; 70.0 ; 23.8	0.99 <u>n - Adjustment just through h</u> <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00 0.96 0.95 0.94 <u>t through higher employment</u> <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00 0.99	-9.0 ; -1.1 igher employment rates (<u>Net debt ; balance</u> (% GDP) 32.5 ; 0.9 20.8 ; 2.0 1.8 ; 3.8 13.0 ; -5.7 rates (to the OECD limit: <u>Net debt ; balance</u> (% GDP) 3.3 ; -0.2 -1.1 ; 1.1	Welfare impac 1916 0.18 Sun s) and through socia Welfare impac 1916 0.01	4.00 nits) to close the f t (% dev. in REL 1946 0.37 n of % dev. in RE 1.32 l protection trans t (% dev. in REL 1946 0.03	be fiscal gap U vis-à-vis adj. 1976 0.21 ELU 2 be fers to close the U vis-à-vis adj. 1976 0.02	st Stockholm Age lump sum taxes) 2006 0.28 230% better than t st Stockholm Age e fiscal gap lump sum taxes) 2006 0.06	enda by birth cohor 2036 0.28 the enda by birth cohor 2036 0.07
2005 2005 2010 2015 2050 2005 2010 2015	Eta_25-54 ; Eta_55-64 70.1 ; 39.7 73.6 ; 45.8 77.2 ; 52.8 77.2 ; 52.8 77.2 ; 52.8 Sweden - Adjustment Eta_25-54 ; Eta_55-64 ; TR 84.1 ; 68.0 ; 24.1 85.0 ; 70.0 ; 23.8 85.9 ; 72.0 ; 23.5	0.99 <u>n - Adjustment just through h</u> <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00 0.96 0.95 0.94 <u>t through higher employment</u> <u>Per capita consumption</u> (Adj. lump sum taxes = 1) 1.00 0.99 0.98	-9.0 ; -1.1 igher employment rates (Net debt ; balance (% GDP) 32.5 ; 0.9 20.8 ; 2.0 1.8 ; 3.8 13.0 ; -5.7 rates (to the OECD limit: Net debt ; balance (% GDP) 3.3 ; -0.2 -1.1 ; 1.1 -8.2 ; 2.0	<u>under the OECD lin</u> <u>Welfare impac</u> 1916 0.18 Sun s) and through socia <u>Welfare impac</u> 1916 0.01 Sun	4.00 nits) to close the f t (% dev. in REL 1946 0.37 n of % dev. in RE 1.32 d protection trans t (% dev. in REL 1946 0.03 n of % dev. in RE	be fiscal gap U vis-à-vis adj. 1976 0.21 ELU 2 be fers to close the U vis-à-vis adj. 1976 0.02 ELU	st Stockholm Age lump sum taxes) 2006 0.28 230% better than t st Stockholm Age 230% better than t st Stockholm Age 230% better than t 2006 0.06 73% better than t	enda by birth cohor 2036 0.28 the enda by birth cohor 2036 0.07 the

		Per capita consumption	Net debt ; balance	Welfare impact (% dev. in RELU vis-à-vis adj. lump sum taxes) by birth coho					
	Eta_25-54 ; Eta_55-64 ; TR	(Adj. lump sum taxes $= 1$)	(% GDP)	1916	1946	1976	2006	2036	
2005	80.6; 53.5; 15.7	1.00	33.5 ; -1.8	0.03	0.09	0.07	0.12	0.13	
2010	83.1 ; 58.1 ; 14.7	0.97	30.4 ; -0.3						
2015	85.6;63.0;13.9	0.96	22.2;1.0	Sum of % dev. in RELU 91% better than the					
2050	85.6; 63.0; 17.7	0.96	44.6;-4.1	0.44		be	best Stockholm Agenda		

Table A.14 Simulation results for Case 9, a country-specific welfare-enhanced Stockholm Agenda (cont'd)

The United Kingdom - Adjustment through higher employment rates (to the OECD limits) and through social protection transfers to close the fiscal gap