

Börsch-Supan, Axel H.

Article

Policy Mixes in the Current Pension Reform Process

CESifo DICE Report

Provided in Cooperation with:

Ifo Institute – Leibniz Institute for Economic Research at the University of Munich

Suggested Citation: Börsch-Supan, Axel H. (2012) : Policy Mixes in the Current Pension Reform Process, CESifo DICE Report, ISSN 1613-6373, ifo Institut - Leibniz-Institut für Wirtschaftsforschung an der Universität München, München, Vol. 10, Iss. 4, pp. 9-15

This Version is available at:

<https://hdl.handle.net/10419/167092>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

POLICY MIXES IN THE CURRENT EUROPEAN PENSION REFORM PROCESS¹

AXEL H. BÖRSCH-SUPAN*

Introduction

Public pensions represent a substantial share of GDP. In 2011 Italy and France pensions were Europe's frontrunners, accounting for some 14 percent of GDP, while in Greece, Portugal and Austria, this share was about 12 percent. In terms of fiscal stability in the current debt crisis, pension systems are a scary example of how current programme design, the size of future entitlements and political credibility interact as either virtuous or vicious spirals. This article argues that it is no coincidence that those countries which spend the highest share of GDP on pension entitlements are also the countries currently under the most pressure to offer very high yields to sell their government bonds. Through this mechanism, high pension costs imply high costs of debt service, thereby worsening the fiscal balance and crowding out other spending.

Ironically, in spite of their size, some of the expensive pension programmes nevertheless fail to provide adequate support for certain population groups since they heavily target the middle-class median voter. Greeks aged 65 and over, for example, face a poverty rate of 22.7 percent, a rate that is almost double the OECD average.

¹ An extended and more detailed version of this contribution has appeared as NBER Working Paper No. 18009 and will be chapter 10 of a book edited by Alberto Alesina and Francesco Giavazzi entitled "Fiscal Policy after the Financial Crisis", published by the University of Chicago Press.

* Munich Center for the Economics of Aging (MEA) at the Max Planck Institute for Social Law and Social Policy.

This paper links the causes of current problems to the cures required to make typical pay-as-you-go financed pension programs in Continental Europe sustainable beyond the present financial crisis. There is no such thing as an "optimal pension reform", since current systems vary significantly in terms of the causes of future problems, and no single reform element suffices quantitatively to offset population aging. Country-specific policy mixes are the appropriate solution under these circumstances.

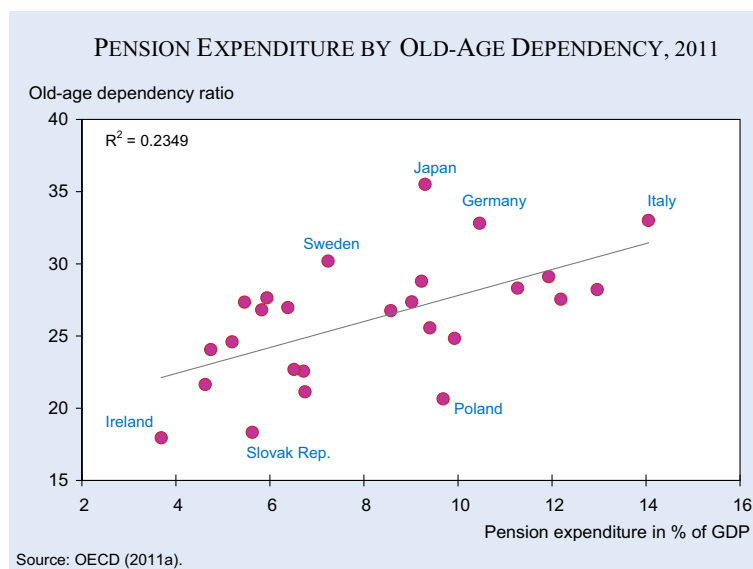


Causes for reform

It is common knowledge that population aging is the number one reason for aligning current entitlements with future fiscal capacity. This has been documented many times (e.g., Economic Policy Committee 2003). As a result, pension and entitlement reform is an ongoing process in virtually all European countries. It may come as more of a surprise, however, to learn how weakly the current demographic structure is linked to the current relative size of European public pension programs (see Figure 1).

This is mainly due to the large number of design differences between European pension systems. Some of these designs are self-stabilizing and thus prevent

Figure 1

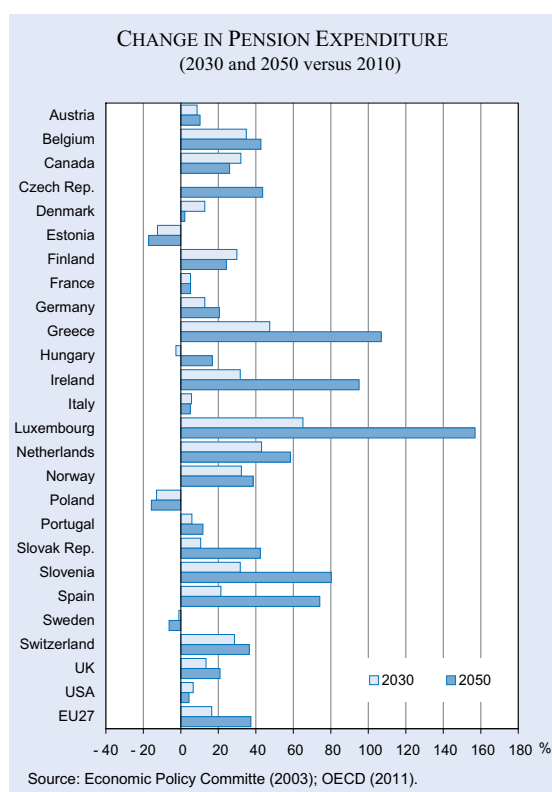


high cost increases. This is the case, for example, with Estonia, Poland and Sweden. Other designs create strong negative incentive effects on labor supply and generate early retirement, which decreases economic capacity and thus threatens fiscal capacity and economic growth in general. This, in turn, increases the burden of population aging on pension expenditure. Figure 2 shows that while almost all European countries face increasing pension costs as a percentage of GDP, there are very large differences between countries. On average across the European Union, the cost share is set to increase by 16 percent by 2030 and by 37 percent by 2050. In Greece and Luxembourg, however, pension expenditure will more than double by 2050, while it is projected to decline in Estonia, Poland and Sweden.

The weak correlation between aging and projected pension costs, and the huge variation in cost increases point to many other reasons for reform in addition to population aging. Most of the reforms required are related to large incentives to retire early. At the same time, some countries fail to provide protection against old-age poverty.

Some entitlement programmes may be considered fair insurance because the expected benefits of the program equal the expected lifetime contributions.

Figure 2



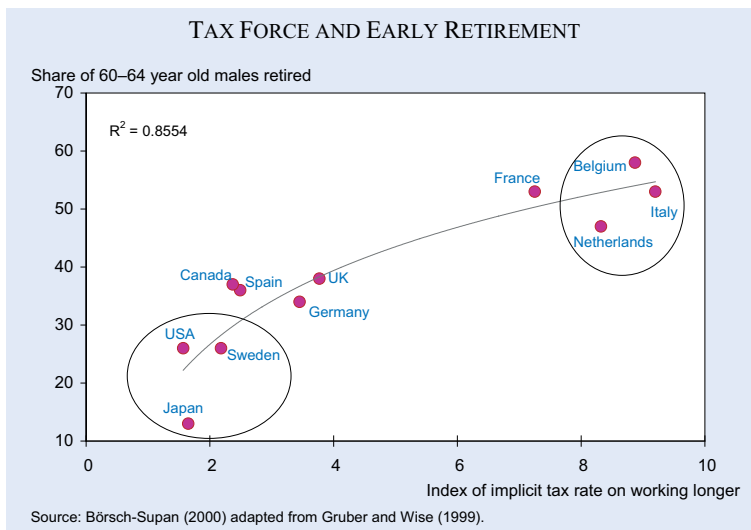
Therefore, according to traditional economic theory at least, one would not expect very large labor supply disincentive effects.² Examples of such programmes are most defined contribution pensions (including notional defined contribution systems) and most private health insurance programmes. Most programmes, however, have strong transfer components such as payroll-tax financed pension programs with flat benefits (in Great Britain, the Netherlands, Switzerland). Such payroll taxes are known to distort the labor supply of the younger generation (Blundell, Duncan and Meghir 1998). Since social insurance contributions constitute a large part of total labor compensation, demand for labor declines, leading to higher unemployment and lower economic growth as a result. Reducing the contribution burden is therefore not only important for the long-run stability and sustainability of the pension system itself, but for fiscal stability and economic performance at large.

There are two additional tax components in pension contributions. Since the implicit return from a mandatory pay-as-you-go system tends to be lower than the explicit return on the voluntary investment in a funded pension, there is an implicit tax in all pay-as-you-go systems, see Börsch-Supan and Reil-Held (2001). Moreover, most public pension systems are not actuarially neutral because they distort the older generation labor supply through early retirement incentives. This creates an implicit tax on working longer, measured, for example, by the Gruber-Wise group and the OECD (Gruber and Wise 1999; Blöndal and Scarpetta 1998). Figure 3 links an index of this implicit tax to the share of those men who are already retired at age 60-64. In countries with a large implicit tax on working longer (like Belgium, France, Italy, and the Netherlands), the share of retirees is much larger than in countries with a low implicit tax (like Sweden, the US and Japan).

The aggregate correlation in Figure 3 permits no causal interpretation. Supplemental analyses, however, have produced convincing evidence for causality (Börsch-Supan and Schnabel 1998; Börsch-Supan 2000; Gruber and Wise 2003). The secular decline in labor supply among individuals aged 50 years and older is not a “natural trend” tied to concurrent secular income growth. Instead, the decline happened exactly when the tax force on working longer increased; and was largely “engineered” by the

² See the implicit tax argument in pay-as-you-go systems below.

Figure 3



incentive effects that are intrinsic to some of the public pension systems, and particularly by the incomplete adjustment of benefits to retirement age. A particularly striking historical example of the exogenous policy change that can be exploited for formal micro-econometric evidence with a causal interpretation is the German pension reform in 1972; and its almost exact reversal with the 1992 reform. The combination of higher life expectancy with an earlier average retirement age since the 1960s has increased pension expenditure by almost 50 percent.

In addition, many European countries have increased the replacement rate of public pensions, especially in the 1970s and 1980s. Many countries also added a minimum pension, either as statutory basic or minimum pension, or effective through social assistance mechanisms.³ As Figure 4 shows, this has kept poverty rates low in most European countries, at least relative to the OECD average and certainly vis-à-vis the United States.

There are, however, three striking exceptions where the old-age poverty rate exceeds 20 percent of individuals aged 65 and more: Greece, Spain, and Ireland. Ireland spends very little on pensions. Greece and Spain, however, both have above average pension replacement rates, but are nevertheless plagued by very high old-age poverty rates, mainly due to poor coverage. While pension systems and/or their associated social assistance systems in most countries dis-

tribute from the rich to the poor, these figures suggest a degree of perverse redistribution in Greece and Spain.

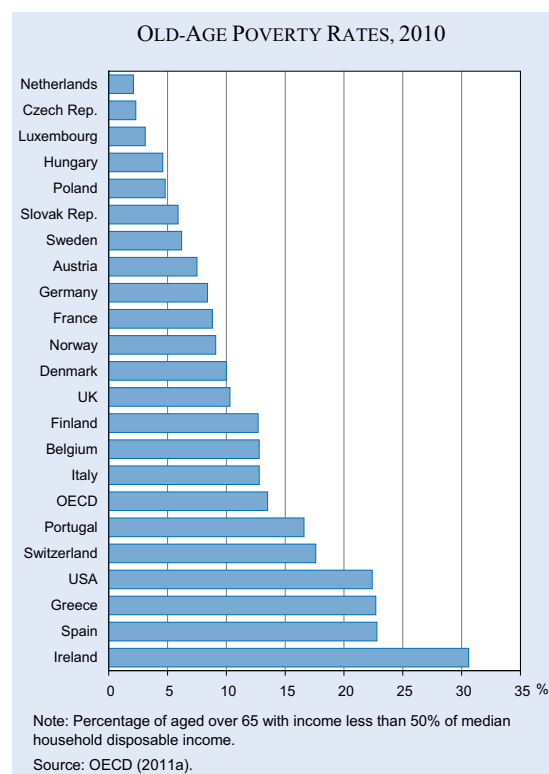
Curing the problems

Reform processes are underway in almost all European countries. Some countries reformed early in the 1980s like Sweden, while most countries started the process much later and some, like Greece, have not implemented reforms at all. Typically, we have experienced “reforms in installments”. These reforms

have combined “parametric” elements (introducing actuarial adjustments, changing the benefits indexation formula, increasing the retirement age) with “fundamental” elements (changing the financial mechanism by moving substantial parts of retirement income from public pensions to private savings). Table 1 presents a synopsis.

The multitude of reform elements in Europe is partly a result of initially different political preferences.

Figure 4



³ E.g. in Germany: the tax-financed “*Grundsicherung im Alter*” which is not part of the German public pension system.

Table 1
Synopsis of pension reform elements in Europe, 1980-2010

| | Retirement age | Link of benefits to contributions | Indexation | More Pre-funding |
|-------------|----------------|-----------------------------------|-----------------|------------------|
| Austria | women → 65 | | | |
| Germany | all → 67 | point system | sustainability | Riester |
| France | all → 62 | point system | | |
| Italy | | NDC | NDC | |
| Spain | | | | |
| Greece | | partially | | |
| Denmark | all → 67 | | | yes |
| Sweden | DI | NDC | NDC | yes |
| Norway | | point system | life expectancy | yes |
| Finland | UI tunnel | scale factors | | |
| Netherlands | EEA, DI | | | yes |
| UK | all → 68 | | price → wage | yes |
| USA | all → 67 | | | yes |

NDC = Notional Defined Contribution System

UI tunnel = Early retirement via Unemployment Insurance

EEA = Early Eligibility Age

DI = Disability Insurance

Source: The author.

It also reflects the fact that there is no single reform measure that can lead to a stable and sustainable system of old-age provision; and that a mix of several reform elements is required instead. If the goal is to restore fiscal sustainability, then reform will require an overhaul of the existing pay-as-you-go systems, as well as the re-introduction of private saving as a major source of future retirement income. Extreme policies are unlikely to work: the public pension system alone cannot provide a sufficient retirement income at reasonable tax and contribution rates, nor can private savings fully substitute for pay-as-you-go pensions.

Relying on public pay-as-you-go financed pensions alone is not possible because the resulting tax and contribution rates from maintaining current levels of generosity will damage economic growth due to the negative labor supply incentive effects described earlier. Further increases in the tax and contribution rates are particularly damaging in those EU countries that already have high total labor costs, and particularly to Germany, Austria, Denmark and Sweden.

Transiting pensions entirely to private saving does not constitute a viable policy option either. One crushing argument opposing such an option is that it is simply too late to adopt it. Saving requires time, and there is no longer enough time left for the baby boomers to accumulate sufficient funds to finance a

full pension by 2030. Time and history is of the essence in pension reform. The baby boom/baby bust transition dictates the time schedule, making reforms that were possible 25 years ago – such as the complete transition to a fully funded system – impossible to envisage today.

There are other reasons for advocating a more subtle, but more complex multi-pillar system, rather than a pure pay-as-you-go or a pure fully funded system. An important reason is diversification. Pay-as-you-go systems carry large demographic and political risks, while fully funded systems carry large capital market risks. Since these

risks are not perfectly correlated, diversification mitigates the risk of poor outcomes.

Hence, in order to achieve long-run fiscal balance, reforms typically need to feature two components: adapting the public system to demographic change under the restriction that taxes and contributions cannot increase much further, and strengthening private savings under the restriction that not much time is left until 2035.

Adapting pay-as-you-go public pension systems

Stabilizing tax and contribution rates implies expenditure cuts if and when demographic change simultaneously reduces the number of contributors to, and increases the number of beneficiaries from, the pay-as-you-go pension systems. Pension expenditure has two dimensions: the level of benefits (via the replacement rate) and the duration of benefits (via the retirement age). Expenditure cuts are easier to shoulder if they involve both dimensions.

Both dimensions are politically difficult. Fortunately, although the demographic change is dramatic, its magnitude is far from absorbing all available resources. The dependency ratio deteriorates at an annual rate of about 0.2–0.5 percent. This is much lower than the average long-run annual rate of productivity growth, which is about 1.5 to 2.5 percent for most European countries. Hence, population aging

absorbs between a seventh and a third of future productivity growth, leaving the bulk for real income growth. Pension benefits can therefore rise in real terms in spite of population aging, provided that the benefits growth rate remains below the growth rate of wages.

The extent to which benefit increases must be dampened depends on the speed and the extent of demographic change in each country relative to its productivity growth. France and Sweden, for example, will require less adaptation than Italy and Germany. Some countries have formalized this link between demographics and benefit level. Sweden and Italy have introduced notional defined contribution (NDC) systems that compute benefits on the basis of the accumulated contributions plus some fictitious interest, which depends on demographic essentials such as life expectancy, dependency ratio and wage growth. Since the labor force growth rate declines as a population ages, a NDC system features a declining replacement rate as a population ages. Moreover, longevity decreases the value of the annuity emanating from the accumulated notional wealth.

Germany has taken an apparently very different approach, preserving the defined benefit structure that has gained so much political acceptance in many countries.⁴ The conventional benefit formula, which indexes benefits to wages/prices, is multiplied by the relative number of contributors to pensioners, the so-called sustainability factor. This augmented indexation formula will lead to decreases in pension benefit levels vis-à-vis the path of wages. Currently, gross benefits are about 50 percent of gross earnings. This corresponds to a net pension level of about 70 percent of net earnings. In 2035, when the population aging ceiling is reached, the gross pension level will be about 43 percent.

The other crucial dimension of pension expenditure is the duration of pension benefits, determined by the difference between the age at which pension benefits are taken up and life expectancy. The two main policy instruments that can be deployed to reduce the duration of benefits are increasing the statutory retirement age and reducing early retirement benefits. Both instruments are extremely unpopular throughout Europe.

In Germany, the 1992 reform succeeded in abolishing most early retirement pathways without actuarial adjustments. This law became effective in 1997, but there is a transition period until 2017. Denmark, Germany, France and the UK have enacted increases in the statutory normal retirement age (e.g. in Denmark and Germany the statutory normal retirement age has increased from 65 to 67 years, in the UK it has risen to 68 years, while in France it has edged upwards from 60 to 62 years). Most increases are slow and gradual. In Germany, the increase started in 2011 with monthly steps, which mean that a retirement age of 67 will be reached in 2029. This increase corresponds to two-thirds of the projected change in life expectancy. This approximately keeps the ratio of time spent in working life to time spent in retirement constant and thus neutralizes, from an expenditure point of view, the effect of longevity increases on pension expenditure.

In some countries, the statutory retirement age is not the primary determinant of actual retirement age, but the number of years worked. In Germany, 45 years of contributions will generate a full pension, even if these service years are worked before the age of 65. In some countries, the number of required contribution years is much lower, notably in France, Greece and Italy, and varies by profession (see the colorful Greek case described by Börsch-Supan and Tinios 2002). With increasing life expectancy, such mechanisms mean that individuals receive pension benefits for a long time, which is very costly. If one follows the above logic, the required number of service years should also be adapted to reflect longer life spans. This idea has proven particularly controversial in France and Italy.

Private saving and pre-funding

Reducing the first pillar of pay-as-you-go financed public pensions creates a gap in retirement income relative to the levels of income that workers have become accustomed to. There are only two mechanisms to fill the gap: working longer and saving more.⁵ A reasonable approach is, of course, to exploit both mechanisms, despite the unpopularity particularly of the first mechanism described in the preceding subsection.

⁴ Börsch-Supan and Wilke (2005) show that the German system almost perfectly mimics a NDC system.

⁵ Higher fertility is only a long-run solution and does not help to offset the fiscal strains generated by the baby-boom generation. Higher migration would help, but net immigration numbers would have to be unrealistically large to offset the domestic aging process, see United Nations Population Division (2001).

The German pension reform 2001-2007 combines a higher retirement age (67 instead of 65) with subsidized private retirement savings, the so-called Riester pensions, at a rate of four percent of gross income from 2009 on. The result is an income level for retirees that is comparable to today's income level, in spite of the reduction in public pillar pensions according to the sustainability formula.

Increasing saving rates by four percent has been feasible in the past, but it naturally hurts consumption. This is the price for reforming too late. Germany started pre-funding about 15 years later than the Netherlands or Sweden. Given the short time period left until the baby boomers retire, for many countries the price will even be higher, and in some, such as Spain, more pre-funding may only be an option for later generations.

Targeting and redistribution

Cutting pay-as-you-go pensions to a sustainable share of GDP will particularly hurt those who have earned very little and whose saving capacity is also low. The reform-driven reduction of replacement rates will drive workers who have earned incomes only slightly above the poverty line into old-age poverty after retirement.

The dilemma between sustainability and old-age poverty can only be addressed by introducing policies targeted at those who are liable to suffer from old-age poverty. One instrument is basic and/or minimum pensions (e.g. Denmark and, effectively, Germany). Another instrument is a non-linear (concave from above) schedule linking benefits to contributions (e.g. via the PIA/AIME conversion in the US social security system). The latter creates an additional element of payroll tax with potentially high distortions for labor supply. In other countries such elements are non-existent or provide income below the poverty line (e.g. Greece and Ireland). Such countries need to redistribute more from rich to poor pensioners if they wish to prevent old-age poverty.

Conclusions

The major European pension systems (France, Germany, Italy, Spain) still have some way to go in order to become financially sustainable. This article has shown that this goal is achievable with a combi-

nation of reasonable policy steps. Italy, for example, has introduced a new entrants system that will stabilize pension expenditure if it is implemented consistently in the future. Sweden with its NDC system has no sustainability gap. Germany has substantially reduced its implicit pension debt through a set of politically accepted gradual steps: increasing retirement age, indexing benefits to the system dependency ratio, and introducing individual-accounts-type private pensions to fill the emerging pension gap.

The recent debt crisis makes pension reform even more urgent. It is no coincidence that Greece and Italy are currently under the highest pressure. These countries have the highest pension expenditure as a share of GDP in Europe. In Italy, this high pension expenditure is at least stable, but it will remain a fiscal challenge as it will not fall in the foreseeable future and its parameters are threatened by political risks. Pension expenditure is still increasing dramatically in Greece. Without pension reform to cut the high share of pension expenditure as a percentage of GDP, no fiscal consolidation appears possible.

There is no single "optimal pension policy" since the initial state (general welfare state design emerged through culture, history, and political preferences) and problems (demographic pressure, design flaws) differs so greatly between countries. Instead, the policy mix of reducing pay-as-you-go benefit levels, increasing the retirement age, introducing actuarial adjustments, and establishing occupational and individual funded pensions has to be different across countries. Moreover, restrictions differ from country to country and building up funded pensions takes time. The feasibility of a transition strategy depends on the time left until the "baby-boom bulge" enters retirement and on the current size of the pay-as-you-go pillars. The higher the current pay-as-you-go share, the harder any transition will prove in the years ahead.

Automatic stabilizers like the NDC systems in Sweden, Italy and Poland, and the indexation of pension benefits to the system dependency ratio in Germany, may help to put pension systems on a long-run fiscally sustainable path by sheltering them from day-to-day political opportunism. It may prove advisable to introduce similar automatic rules for the retirement age, such as a proportionality rule that keeps the ratio of time spent in retirement to time spent working constant. The sheltering effect, of course, can only go so far. In Germany, for example,

the sustainability factor in the benefit formula has been imposed via a “pension benefit guarantee”, which rules out any nominal benefit reduction, and parts of the dynamic increase in the retirement age has been offset by the introduction of new duration-of-service-rules. By and large, however, pension reforms introducing automatic stabilizers have been more successful in achieving long-term fiscal balance than those without such mechanisms.

References

- Blöndal, S. and S. Scarpetta (1998), “The Retirement Decision in OECD Countries”, *OECD Economics Department Working Papers* no. 202.
- Blundell, R., A. Duncan and C. Meghir (1998), “Estimating Labor Supply Responses Using Tax Reforms”, *Econometrica* 66 (4), 827–62.
- Börsch-Supan, A. (2000), “Incentive Effects of Social Security on Labor Force Participation: Evidence in Germany and Across Europe”, *Journal of Public Economics* 78, 25–49.
- Börsch-Supan, A. and A. Reil-Held (2001), “How Much is Transfer and How Much Insurance in a Pay-As-You-Go System? The German Case”, *Scandinavian Journal of Economics* 130 (3), 505–24.
- Börsch-Supan, A. and R. Schnabel (1998), “Social Security and Declining Labor-Force Participation in Germany”, *American Economic Review* 88, 173–78.
- Börsch-Supan, A. and P. Tinios (2002), “The Greek Pension System: Strategic Framework for Reform”, in R. C. Bryant, N. C. Garganas and G. S. Tavlás, eds., *Greece's Economic Performance and Prospects*, Bank of Greece, 361–451.
- Börsch-Supan, A. and C. B. Wilke (2005), “The German Public Pension System: How It Will Become an NDC System Look-Alike”, in: R. Holzmann and E. Palmer, eds., *Pension Reform – Issues and Prospects for Non-Financial Defined Contribution (NDC) Schemes*, World Bank, Washington D.C., 573–610.
- Economic Policy Committee (2003), “The Impact of Aging Populations on Public Finances: Overview of Analysis Carried Out at an EU Level and Proposals for a Future Work Programme”, Document no. EPC/ECFIN/435/03-EN final, Brussels.
- Gruber, J. and D. A. Wise, eds., (1999), *Social Security and Retirement Around the World*, University of Chicago Press, Chicago.
- Gruber, J. and D. A. Wise, eds., (2003), *Incentive Effects of Public Pension Systems: Microeconomic Estimates*, University of Chicago Press, Chicago.
- OECD (2011a), “Pensions at a Glance 2011”, OECD Pensions Statistics (Database), OECD Publishing, Paris.
- OECD (2011b), *Social Expenditure Database (SOEX)*, www.oecd.org/els/social/expenditure (accessed November 2011).
- United Nations Population Division (2001), *Replacement Migration: Is It a Solution to Declining and Ageing Populations?*, United Nations, New York.