# Sweden

# Sweden: Pension system in 2016

The national retirement pension consists of a pay-as-you-go notional accounts system and a mandatory funded defined contribution pension and a defined benefit pension-income-tested topup. Occupational pension plans with defined benefit and defined contribution elements have broad coverage.

		Sweden	OECD
Average worker earnings (AW)	SEK	423 065	333 530
	USD	46 453	36 622
Public pension spending	% of GDP	7.7	8.2
Life expectancy	at birth	82.7	80.9
	at age 65	20.5	19.7
Population over age 65	% of working- age population	33.8	27.9

Key indicators: Sweden

StatLink and http://dx.doi.org/10.1787/888933636282

## **Qualifying conditions**

The earnings-related national pensions can be withdrawn from the age of 61. Eligibility for the guarantee pension requires three years' residency and the guarantee pension benefit is available from the age of 65. A maximum guarantee pension benefit requires 40 years' of residency and shorter periods are reduced proportionally.

#### **Benefit calculation**

Contributions of 18.5% of pensionable pay are credited and then uprated in line with a three-year moving average of economy-wide average earnings. Pensionable pay is defined as earnings less the employee contribution to the pension system (*i.e.* to both the notional accounts system and the defined contribution system) of 7% of gross earnings, giving an effective contribution rate on gross earnings of 17.21%, 14.88% to the notional-accounts system and 2.33% to the defined contribution funded pensions. Contributions are only levied when annual earnings exceed a small floor of SEK 18 739 in 2016, just over 4% of average earnings, although they are due on the whole of earnings for all people earning above the floor. There is a ceiling to benefits calculated in terms of pensionable earnings of SEK 444 750 in 2016, giving an effective ceiling relative to gross earnings of SEK 478 551 in 2016 (just over 113% of average worker earnings). Employer contributions are also paid only up to the ceiling. There is an additional tax on earnings above the ceiling for persons up to the age of 65 and this tax has the same percentage as the pension contribution.

# Earnings-related

The earnings-related scheme uses notional accounts. The notional accounts are increased every year by the distribution of the pension balances of deceased individual of the same age as the survivors (inheritance gains). The inheritance gains from people who die before the earliest possible retirement age (61 years) are relevant. After this age the inheritance gains factor is estimated on the basis of the mortality observed for an earlier period (computed from five year unisex mortality tables).

At retirement, the accumulated notional capital will be converted into an annuity. This calculation will use a coefficient depending on individual retirement age and contemporaneous life expectancy (based on the previous five year unisex mortality tables). A real discount rate of 1.6% a year is also included in the calculation of the annuity.

After retirement, pension benefits are uprated with the increase in nominal average earnings less the imputed interest rate in the annuity divisor of 1.6%. There is also a "balance mechanism": if assets (the buffer fund plus the estimated value of assets in the form of contribution revenues) fall below liabilities (accrued notional pension capital and capital value of outgoing pensions), then indexation of pensions in

payment and returns credited to notional accounts are reduced by the ratio of assets to liabilities. The balance ratio for year *t* is used to calculate the balance number or the need for activating the balancing mechanism in year t+2. An activated balancing mechanism would mean lower replacement rates from the national system but will produce higher results when the pension system recovers and the balance figure increases (the balance index can exceed the income index during the recovery period). The balancing ratio for 2014 and the balance number for 2016 is 1.0375.

	2014	2013	2012	2011	2010	2009	2008	2007
Balancing ratio	1.0375	1.004	0.9873	1.0198	1.0024	0.9549	0.9826	1.0026

For modelling purposes, the annuity coefficients are calculated using the above rules and the relevant mortality data from the UN population database. It is assumed that the balance mechanism does not affect the uprating of benefits.

# **Basic** (Guarantee pension)

The basic "guarantee pension" is an income-tested top-up pension benefit for individuals with low levels of benefit from notional accounts. For a single person, the full guaranteed benefit in 2015 was SEK 94 788 for a single pensioner born after 1938 or 22% of gross average earnings.

The guarantee pension is withdrawn at 100% against the first SEK 56 064 in 2015 of income, for a single person, from the earnings-related pension, thereafter at 48%. This threshold is equivalent to 13% of average earnings. Only when earnings-related pension exceeds SEK 136 728 - 32% of average earnings – is entitlement to the guarantee exhausted. The guarantee level is price indexed.

There is also a housing benefit that covers 95% of housing costs up to a maximum of SEK 5 000 per month for a single pensioner. From 1 January 2012 an amount of SEK 170 per person was added to the housing allowance. From 1 January 1 2013 an amount of 340 SEK per household is added. The benefit is an important part of the minimum living standard for Swedish pensioners. This means-tested benefit is not included in the modelled calculations.

# **Defined** contribution

A further 2.5% of pensionable income (giving an effective contribution rate against gross earnings of 2.33%) is paid into personal pension accounts in the mandatory funded defined contribution system where individuals have a broad choice of where these funds are invested.

At retirement, individual have a choice over the way benefits are withdrawn. The accumulated pension account can convert into an annuity to avoid investment risk. Alternatively, it is possible to choose a variable annuity, where funds continue to be invested by the chosen fund manager. These annuities do not have a guaranteed value. The principle of the pension benefit calculation in this case is that the value of the account is divided by an annuity divisor (based on estimated average life expectancy) and the pension benefit is credited with an estimated future interest rate of 3% minus administrative costs. If returns exceed 3%, then either an additional payment is made or the balance of the account is higher and so, therefore, is the base for calculating the annual pension.

# Quasi-mandatory occupational

Occupational pension benefit schemes are estimated to cover almost 90% of employees. There are only four major occupational schemes. The modelling has used the ITP scheme for white-collar workers, which is a funded defined contribution scheme for those born 1979 or later.

# ITP1

From 1 January 2007, salaried employees born in or after 1979 began to accrue a retirement pension under the new ITP1 plan from the age of 25. It is a complete defined contribution plan. The contribution is 4.5% of salary portions up to 7.5 income base amounts (SEK 435 750 for 2015). For salary portions in excess of 7.5 income base amounts (divided by 12 for one month) the contribution is 30%. The pensionable salary becomes the gross salary paid out in cash, excluding reimbursement of expenses. Premiums are paid from the first Swedish krona of salary.

The employee can choose the form of the savings and the fund manager. However, at least half the contribution is invested in traditional pension insurance. The employee can also choose repayment cover and family cover of 1, 2, 3 or 4 price base amounts per year over 5, 10, 15 or 20 years. The contributions of those who do not specify a choice are invested in traditional pension insurance with no repayment cover or family cover. This default choice is the one that is modelled.

Employees whose yearly salary exceeds ten income base amounts (SEK 581 000 in 2015) may choose to be covered under the new plan upon agreement with their employer. This applies regardless of whether the employee has a traditional ITP2 plan or has taken out an alternative ITP.

## Variant careers

#### Early retirement

Earnings-related pension benefit withdrawal is possible from age 61 in the national pension scheme. There is no fixed retirement age. The notional-accounts and annuity calculations provide an automatic actuarial reduction depending on the age of retirement.

The income-tested guarantee pension benefit cannot be claimed before 65. If the notional-accounts pension is withdrawn before or after age 65, the guarantee pension is still calculated as if the pension had been withdrawn at age 65.

In the new ITP1 plan, pension benefits are normally paid from the age of 65, but may be taken out from the age of 55. Pensions are life-long but can be paid in full or in part for a limited period of at least five years. The annuity is modelled as one that gives lifelong payments. The size of the pension is determined by the amount of premiums paid, the return, fees and taxes, and for how long the pension is to be disbursed.

# Late retirement

It is possible to defer the notional accounts and premium pension with no upper age limit, again with automatic actuarial adjustments. It is also possible to combine work and pension receipt. Finally, pensions can be withdrawn partially (at 25, 50 or 75% of the full pension). The guarantee pension is adjusted against other pensions from the Swedish old-age pension system and from comparable foreign national pensions, but is not reduced by wage income, capital income, occupational pension or private pension insurance. Thus, it is also possible to combine work with receipt of the guarantee pension.

It is possible to defer the ITP1 occupational pension after age 65. No additional pension rights can be accrued after age 65, unless you have reached a special agreement with your employer.

# Childcare

Years are credited under the public pension scheme for any period when you have and live with children aged four or below. In a household with two parents the credits go to the parent with the lowest income if an active choice is not made. Individuals receive the best of three different ways of calculating the credit. First, if income is zero or lower than previous earnings, then the credits are based on the

earnings the year before the child was born. Secondly, for low-income workers or people who were not working before childcare responsibilities started, the credits are based on 75% of economy-wide average earnings. Thirdly, if income actually rises or does not decrease to a great extent as childcare responsibilities begin, then the credit is set at one income base amount. In all three cases, the government makes the total contributions to the earnings-related national pension system (covering both notional accounts and funded defined contribution scheme).

Furthermore, parental benefits paid are also considered as pensionable income. The beneficiary pays the employee pension contribution of 7% on benefit income. The government makes all the "employer contributions" of 10.21% for incomes from social security including parental benefits.

The parental benefit is payable for 480 days as follows:

- 390 days at 80% of the parent's annual income up to a ceiling of 10 price base amounts (equivalent to an annual salary of SEK 445 000 in 2015)
- 90 days at a universally applicable flat rate of SEK 180 per day

The parental benefit is computed daily. Parents on low income or no income at all receive a minimum guaranteed benefit of SEK 180/day. The 480 cash benefit days are divided equally between the parents (i.e. 240 days to each parent). A parent may also transfer up to 180 of his or her days to the other parent.

Under the ITP occupational plan, there is a recommendation that the employer contributes, through insurance, to an employee's pension during periods of up to 13 months for parental leave (and most do so).

## Unemployment

Unemployment benefits and activity grant paid to the unemployed taking up labour-market programmes count as pensionable income, with the government paying the "employer" contribution. Income-related unemployment benefits equal 80% of previous earnings for the first two hundred days. From day 201 up to day 300 the benefit is 70% of previous earnings. Thereafter the benefit period is ended unless the benefit recipient is a parent of a child below the age of 18. If so, the unemployment benefits are disbursed up to a ceiling of SEK 910 per day for the first 100 benefit days and SEK 760 thereafter and subject to a minimum payment of SEK 365 per day (applies only if the unemployed person has worked full time during 12 months preceding unemployment).

After the receipt of days in unemployment the beneficiary is entitled to be enrolled within the job and development guarantee programme. A participant in the job and development guarantee programme is entitled to activity grant or development benefits. If the jobseeker has had an unemployment benefit before enrolment in the jobs and development guarantee then this benefit will equal 65% of earnings from the time before unemployment (max SEK 760 per day). If the jobseeker has not previously been entitled to unemployment benefits he or she will receive the daily benefit of SEK 223 per day.

## Personal income tax and social security contributions

Individuals that are 65 years or older at the beginning of the year receive an additional basic allowance. The basic allowance varies with assessed income. Table 1 to 2 describe the basic allowance in terms of assessed income and basic price amount for persons younger than 65 years and for persons that are 65 years or older. The additional basic amount is given independent of source of income. For work-income the in work-tax credit is larger for individuals that are 65 years or older.

#### Table 1. 2016 Basic allowance for persons younger than 65 years

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Assessed income (AI)	Basic allowance

Up to 0.99 PBA	0.423 PBA
0.99 PBA to 2.72 PBA	0.423 PBA + 0.2 AI
2.72 PBA to 3.11 PBA	0.770 PBA
3.11 PBA to 7.88 PBA	0.770 PBA - 0.1 AI
7.88 PBA and above	0.293 PBA

# Table 2. 2016 Basic allowance for persons that are 65 years or older

Assessed income (AI)	Basic allowance
Up to 1.11 PBA	1.11 PBA
1.11 PBA to 2.72 PBA	1.1 PBA +0.249 AI
2.72 PBA to 3.77 PBA	1.511 PBA
3.77 PBA to 5.4 PBA	1.511 PBA-0.1 AI
5.4 PBA to 12.43 PBA	1.348 PBA - 0.09 AI
12.43 PBA and above	0.715 PBA

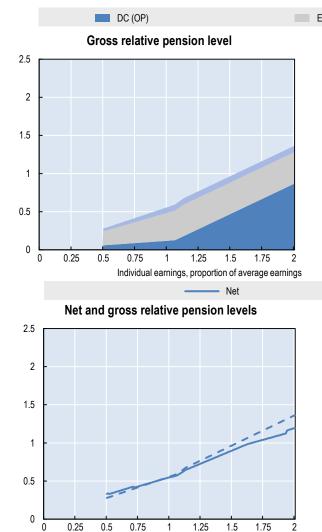
Note: PBA = Price Base Amount. In 2016 PBA was SEK 44 300. AI=Assessed income.

## Taxation of pension income

There is no special relief for pension income.

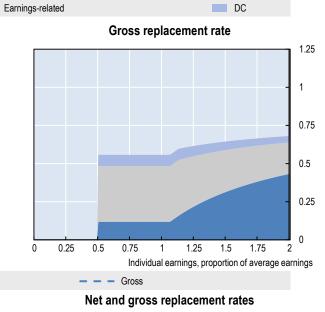
# Social security contributions paid by pensioners

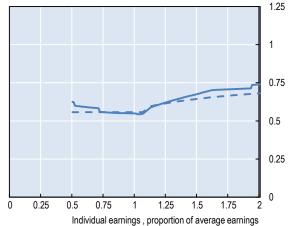
Social security contributions are not levied on pension income. Employers' contribution for workincome for persons born between 1938 and 1943 is equal to 10.21(the ordinary contribution of 31.42 percent). For persons that are born before 1938 no social security contributions are levied on work-income.



Individual earnings, proportion of average earnings







Men	Individual earnings, multiple of average					
Women (where different)	0.5	0.75	1	1.5	2	3
Gross relative pension level	27.9	41.8	55.8	96.7	136.2	215.1
(% average gross earnings)						
Net relative pension level	33.2	42.9	54.9	90.0	119.4	165.8
(% net average earnings)						
Gross replacement rate	55.8	55.8	55.8	64.5	68.1	71.7
(% individual gross earnings)						
Net replacement rate	62.4	55.7	54.9	67.6	73.9	75.9
(% individual net earnings)						
Gross pension wealth	10.4	10.4	10.4	12.2	12.9	13.7
(multiple of individual gross earnings)	11.1	11.1	11.1	13.0	13.8	14.6
Net pension wealth	11.7	10.4	10.3	12.8	14.0	14.5
(multiple of individual net earnings)	12.4	11.1	10.9	13.6	15.0	15.4

Assumptions: Real rate of return 3%, real earnings growth 1.25%, inflation 2%, and real discount rate 2%. All systems are modelled and indexed according to what is legislated. Transitional rules apply where relevant. DC conversion rate equal 90%. Labour market entry occurs at age 20 in 2016. Tax system latest available: 2015.

StatLink and http://dx.doi.org/10.1787/888933636301