DISCUSSION PAPER SERIES

IZA DP No. 6745

Income Distribution among those of 65 Years and Older in Sweden

Gabriella Sjögren Lindquist
Eskil Wadensjö

July 2012

Forschungsinstitut
zur Zukunft der Arbeit
Institute for the Study
of Labor

Income Distribution among those of 65 Years and Older in Sweden

Gabriella Sjögren Lindquist
SOFI, Stockholm University

Eskil Wadensjö
SOFI and SULCIS, Stockholm University and IZA

Discussion Paper No. 6745
July 2012

IZA

P.O. Box 7240
53072 Bonn
Germany

Phone: +49-228-3894-0
Fax: +49-228-3894-180
E-mail: iza@iza.org

IZA Discussion Paper No. 6745
July 2012

ABSTRACT

Income Distribution among those of 65 Years and Older in Sweden*

The population of Sweden is ageing and the number of pensioners is increasing. This means that the incomes of older people and the income differences between older and younger people and among pensioners have become more important in terms of public debate and research. In this paper, we examine the income distribution of those 65 years and older. The income differences among both men and women have increased among those of 65-74 years and older since 1982. Women generally have lower incomes and pensions than men. Foreign born persons generally have lower incomes and pensions compared to natives. This difference has increased, especially with regard to those coming from non-OECD countries. Among those with low pensions, women, the foreign born and those who have been self-employed are overrepresented. Many who retire have large amount of net wealth, especially in the form of property (houses, apartments).

JEL Classification: J14, D31, H55

Keywords: older workers, retirement, pension, income inequality

Corresponding author:

Eskil Wadensjö
Swedish Institute for Social Research
Stockholm University
106 91 Stockholm
Sweden
E-mail: eskil.wadensjo@sofi.su.se

* We will thank participants at the TrefF seminar in Oslo May 31, 2012 and the Swedish Fiscal Policy Council conference in Stockholm June 18, 2012 and Christer Gerdes for helpful comments on earlier versions.

1. Introduction

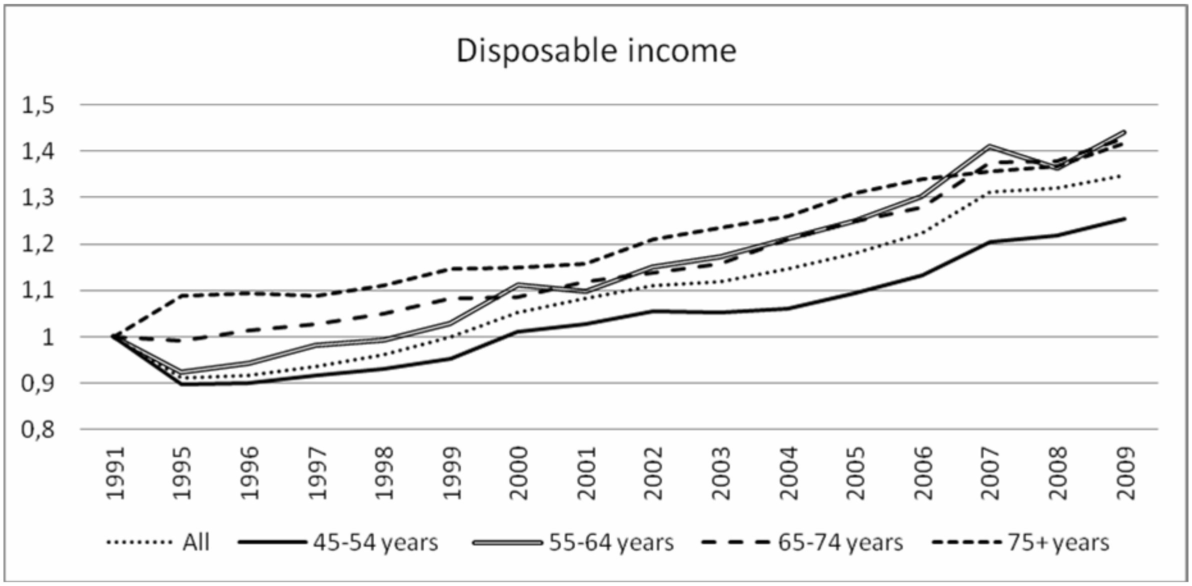
From an international perspective, the poverty rate among pensioners in Sweden is low. This is explained by both the pension system and other parts of the Swedish welfare system. According to a comparative study of 15 European countries (van Vliet et al 2011), Sweden has the lowest proportion of poor among the elderly, along with Luxembourg and the Netherlands. However, in Sweden many retirees have a vulnerable position with a standard only slightly above the guidelines for when social assistance may be granted. The disposable income at the 20th percentile is only slightly above the norm for social assistance. Mainly older retirees (aged 75 and older) are in this group. In the first half of the 1990s more and more people were under the poverty line, which is defined as those who have an income of below 60 per cent of the median income, but since 1998 poverty measured in this way has decreased (Gustafsson et al. 2009).

Thus, even if pensioner poverty is rare, there are good reasons for investigating who are the poor pensioners, how the development has occurred and how they are likely to do in the future. The future development of pensions depends strongly on the transition that Sweden, like many other countries, has gone through from defined benefit to defined contribution pensions in both the social security pension system and the occupational pension system. This means that pensions depend on an individual's work and labour income history to a greater extent than before. To be able to get a high pension working in Sweden for many years is required. Concern for future pensions is also due to the fact that economic development affects defined contribution pensions in different ways. Not least, there is concern about the fate of the pensions that are based on individuals' choices of pension funds. In some other countries this has led to a considerable reduction of the pensions for people who have already left the workforce for retirement and a few have returned to the labour market due to economic necessity.

In the introduction to the paper we will present an outline of the Swedish pension system, the development of employment among those 60 years and older, definitions of retirement, the data used and the measures we use to study income differences. In section 2 we will examine how the income distribution differs between pensioners and those of working age, and whether and how the difference has changed over time. In section 3 we examine the differences in pensioner income distribution among different cohorts, men and women, and natives and the foreign born (comparing those born in different regions), and also why the income gaps between pensioner groups have increased. Pension income is the main source of income for those aged 65 and older, but many also have substantial income from labour or capital, and many have assets primarily in their homes, which we also report on in section 4. In section 5 we study how the level of pension income is influenced by the individual's work history, record of self-employment and number of years in Sweden. In sections 6 and 7 we study in more detail some groups with low pension incomes. In section 8 we summarize and make some conclusions. But first we will give a snapshot of the development of disposable income for different age groups.

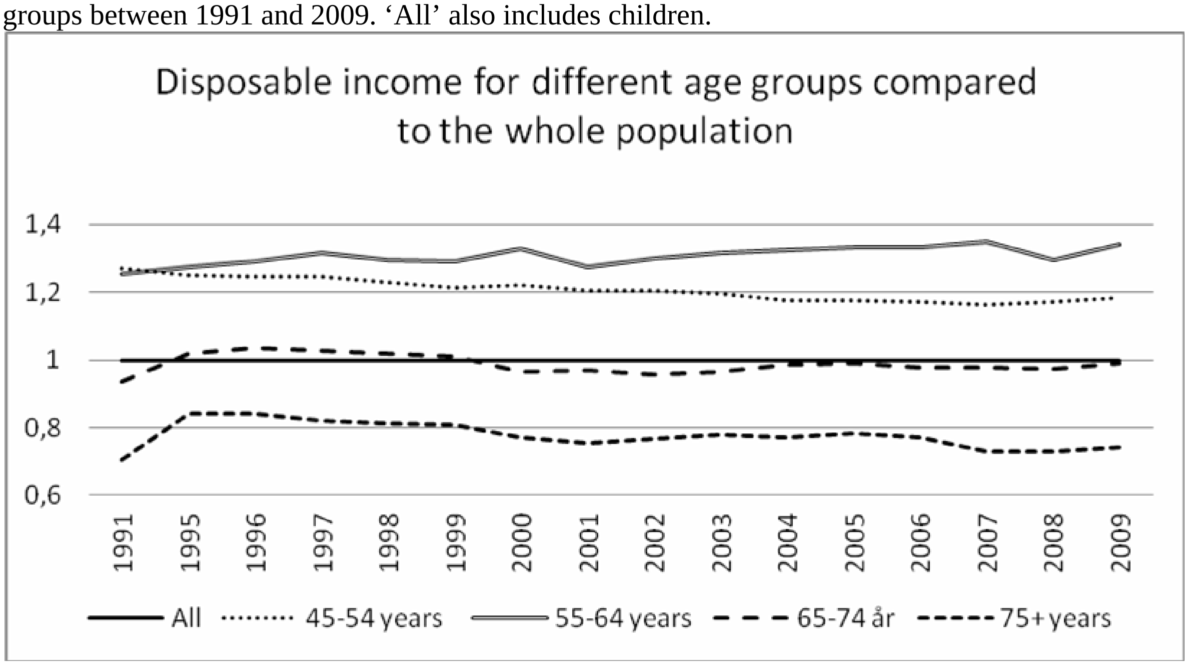
The disposable median income for the population among different subgroups in Sweden has increased considerably since the economic crisis of the early 1990s (Figure 1.1). This is also the case for those of 65 years and older. Of interest are not only differences in the development over time but also differences in median disposable income for various age groups compared to the figures for all. The population aged 65–74 years has a median disposable income per consumption unit[1] corresponding to that of the overall population (Figure 1.2). In contrast, it is considerably lower for those aged 75 years and older. After recovering from the economic crisis in the early 1990s, by 1995 this group had an income corresponding to more than 80 percent of the entire population's median disposable income, but their relative income has since then fallen and is now only slightly above 75 percent. The incomes of the oldest group have increased less since 1995 than the incomes of the population on average, despite that the increase in the average disposable income for the oldest group has been rather good. The explanation is the shift in the population structure among those of working age in the direction of the age groups with high incomes.

[1] In the HEK statistics the weights used for the calculations of disposable income per consumption unit are 1.00 for a single person, 1.51 for a couple, 0.60 for an additional adult person in the household, 0.52 for the first child aged 0–19 years old and 0.42 for each child other than the first one in the household.



Source: HEK.

Figure 1.1 The development of the disposable median income per consumption unit for different age groups between 1991 and 2009. 'All' also includes children.



Source: HEK.

Figure 1.2 The development of the median disposable income per consumption unit for different age groups between 1991 and 2009 compared to that for the total population (children included).

1.1 The Swedish pension system

To understand the income differences and their development over time among retired people in Sweden, it is important to look at the structure of the Swedish pension system. We will give a short introduction below.[2] The Swedish pension system is a three-tier system consisting of social security pensions, occupational pensions and personal pensions. As the pension system has changed much since the 1990s, different cohorts belong to different pension systems and some cohorts have pensions from different generations of pensions systems.

Social security pensions were introduced in Sweden one hundred years ago in 1913. The retirement age then was 67. After some minor changes to the system in the 1920s and 1930s, a major change followed in 1948, when a non-income-tested and non-income dependent pension was introduced. This basic pension (*folkpension*) was the same for everyone except that a pensioner married to another pensioner got a lower pension in comparison to those who were not married. An earnings-related additional pension, ATP, was introduced in 1960. The pension was based on the 15 years with the highest income. There was a ceiling regarding the income included for the calculation of the pension per year in the ATP system. The ATP pension required that a person need to work for at least 30 years in order to obtain a full pension; in other case the pension was proportionally reduced. The normal pension age was lowered from 67 to 65 in 1976, but it was possible to take up a (reduced) pension earlier or postpone the take-up and get an enhanced pension. The ATP pension system was a defined benefit system. The pensions were price-indexed.

A new social security pension system was decided on in two steps by the parliament in 1994 and 1998 and implemented from 1999 onwards. The new pension system is a defined contribution system. The pension fee is 18.5 percent of the labour income up to a ceiling. Of the 18.5 percent, 16 are allocated to a notional defined contribution system and 2.5 for a premium reserve system where each individual can make a choice between many funds. The pension derived from the notional defined contribution is income-indexed. The income pension can be taken up from the age of 61. It is higher the later it is taken up (it is an actuarially fair system). For those who have had no income or a low income there is a guaranteed pension. This is tested against the other social security pensions. To get a full guarantee pension, 40 years residence in Sweden is

[2] See Sjögren Lindquist and Wadensjö (2009) for a more detailed presentation.

necessary; in other case it is proportionally reduced. The guaranteed pension is price indexed. Those who are 65 and have a low pension or other low levels of income and have taken up their entire social security pension might be eligible for a housing allowance.

There has been a gradual change from the old to the new system. Those who were born in 1937 or earlier are totally in the old system. Those who were born in 1938 are 4/20 in the new system, those who were born in 1944 are to 10/20 in the new system and those who were born in 1954 are totally in the new system.

Already when the ATP-system was introduced, those employed in the public sector and white-collar workers in the private sector were covered by occupational pension agreements. These schemes deliver additional income replacements for income parts under the ceiling and a high replacement for income parts over the ceiling in the social security pension system. Blue-collar workers in the private sector achieved an agreement in the 1970s. After the pension reforms in the 1990s the occupational pension schemes were changed to be more of defined contribution systems but there are still important defined benefit elements in all systems with the exception of blue-collar workers in the private sector. Around 90 percent of all wage-earners are employed at workplaces with collective agreements and because of that are covered by occupational pension schemes.

With regard to the social security and occupational pension schemes, it should be added that many people also have personal pensions. There are tax reductions for savings for personal pensions but the maximum tax reduction has gradually been reduced.

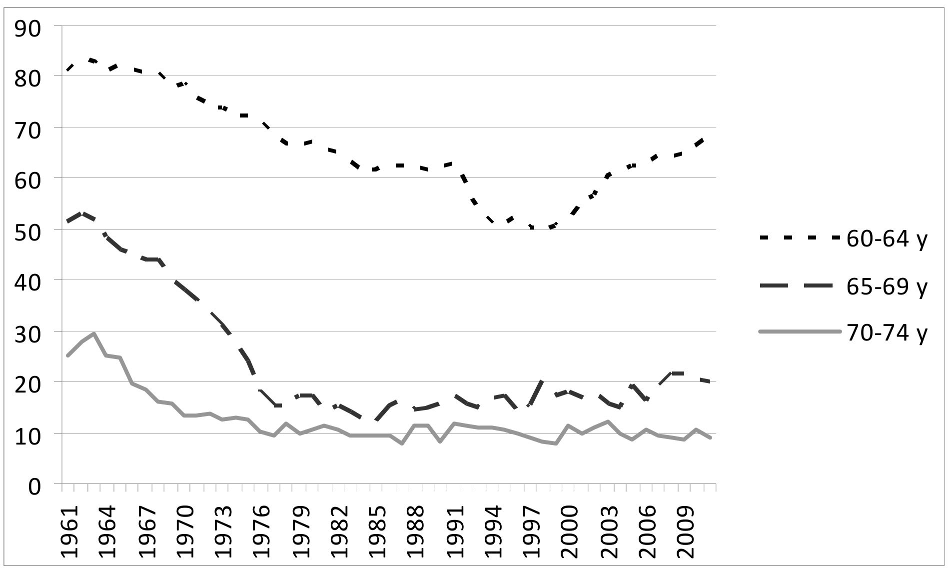
The Law of employment security (LAS) covers people up to the age of 67. Mandatory retirement under the age of 67 has not been allowed since 2003 (before 2003 this age was 65). In some sectors, 67 years is becoming the normal age of retirement.

1.2 The development of employment among older people in Sweden

It is possible to follow the labour force participation and employment in the labour force surveys over 50 years. Statistics Sweden carried out their first Labour force survey in 1961, after the Labour Market Board (AMS) had conducted pilot studies in 1959 and 1960. In 1961 the male employment rate was very high up to the age of 68 and also high for those of 68 and 69 years old but this gradually declined up to mid-1990s for those of 60 years and older. The male employment rate has increased since the mid-1990s for those aged 60–64, and since 2003 for those aged 65 and 66. It is, however, still much lower than it was in the early 1960s. See Figure 1.3.

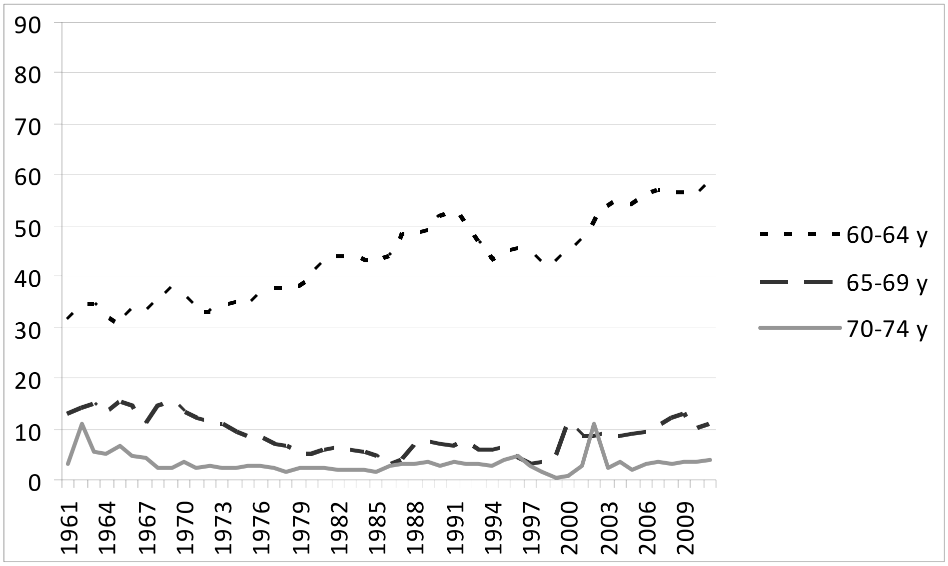
The female employment rate was low in the early 1960s, when it was common for women to be housewives, but for those under 65 years of age it has gradually increased since then with some business cycle variations. See Figure 1.4. The employment rate is still higher among men than women in all age groups, but the difference has gradually decreased with new cohorts and also within each cohort.

Figure 1.3 Employment rate for men 1961–2011 aged 60–64, 65–69 and 70–74 years



Source: Wadensjö (2011; updated).

Figure 1.4 Employment rate for women 1961–2011 aged 60–64, 65–69 and 70–74 years



Source: Wadensjö (2011; updated).

1.3 Who have retired?

This study deals with income distribution among pensioners. The line between being retired and being in the labour force is in many cases unclear and the age of retirement varies widely among individuals. Taking out a pension and retiring is not the same thing. That someone takes out a pension does not mean that he or she leaves the labour force. A pension from the social security system can be taken out whilst working on and the pension is not means-tested against income. One definition is that someone is retired when the pension income of at least a certain percentage exceeds the sum of labour income and unemployment benefit or other social insurance benefits.

The Swedish Pensions Agency uses four different measures of retirement in its analysis (Karlsson and Olsson 2012). The first measure is the Average Exit Age, which is the age when a person leaves the workforce, given that he or she was part of it at 50. The other three measures are different average pension age measures. Average Pension Age I is the average age for taking up an old-age pension (not only the premium pension). Average Pension Age II includes those who get a disability pension (taken up from 30 years of age or older). Average Pension Age III also includes those getting a disability pensions, but only those who received their disability pension when 50 years old or older are included. Average Pension Age III is more in line with the definition of the average exit age that also has 50 as an age limit. Occupational and personal pensions are not included in the definition of pension income.

According to the Swedish Pensions Agency, in 2011, the Average Pension Age I was 64.6 years the Average Pension Age II was 62.5 years, the Average Pension Age III 63.9 years and the Average Exit Age 63.3 years.

Age limits in the pension system and in the Employment Protection Act (LAS) influence when someone leaves the workforce. The social security pension can be claimed from the age of 61. This does not include the guaranteed pension, which cannot be taken up before 65 years of age. In the next few years it is expected that about 25 percent of new retirees will receive a guarantee pension. In 2008, 778 000 individuals had a guarantee pension, of which 180 000 (15 percent) had a full one. Of those who received a guarantee pension, 80 percent were women (Olsson 2011). Nearly half of female pensioners aged 65 to 69 years received a guarantee pension in 2008. Housing allowances for elderly persons may be granted from 65 years of age if the full social security pension is drawn. The Employment Protection Act, on the other hand, covers employees up to the age of 67 years.

In addition to these age limits, there are different age limits in occupational and personal pension plans. Personal pensions and occupational pensions from the private sector (ITP and SAF-LO) and the defined benefit component of municipal and county employees (KAP-KL) can be claimed from age 55. Employees in the public sector can take their pension from age 61. Occupational pensions should, according to collective agreements, be taken out for retirement purposes.

In our analysis we have chosen to draw the line at 65 years of age. The reasoning behind this is that the majority take their pension at age 65, a guarantee pension can first be granted at the age of 65, the age limit for unemployment insurance and disability pension is 65, and special rules apply to those of 65 years and older regarding sickness benefit and compensation from work injury insurance. In the labour market policy programmes there are no formal age limits, but those of 65 years and older are in practice not assigned to labour market programmes. In addition, many (wrongly) think that the retirement age in the social security pension system is 65.

1.4 Measuring income distribution

When studying the income distribution and how it changes, several different kinds of income measures can be used. The most common one is the household's disposable income, i.e. household market income minus taxes plus transfers (see e.g. Björklund and Jäntti 2011). When we compare the income distribution for those who are under 65 years with the incomes of those who are older, we can use both the disposable income per individual in the household and the individual household member's own disposable income. When we look more closely at the income distribution for those aged 65 and older, we can analyze different types of incomes and the distribution of those incomes. Here, in addition to disposable income per person, we will analyse individual disposable income, pension income from the social security and occupational pension systems, and income from capital. We will also study the distribution of wealth. The information on disposable income, pensions and capital income is derived from the database LINDA[3] (Longitudinal Income Database) for the years 1982 through 2009. LINDA consists of the data of a representative sample of the population, including information regarding the person's family. The data on wealth comes from HEK (The incomes of the households)[4], which is an annual telephone survey of a representative sample of the population.

In this study, we use percentile ratios when we look at income inequality and how it has changed over time. We chose this measure rather than the often used Gini coefficient because of its simple interpretation, and that by using percentile ratios we can investigate both the lower and the upper elements of income distribution.[5]

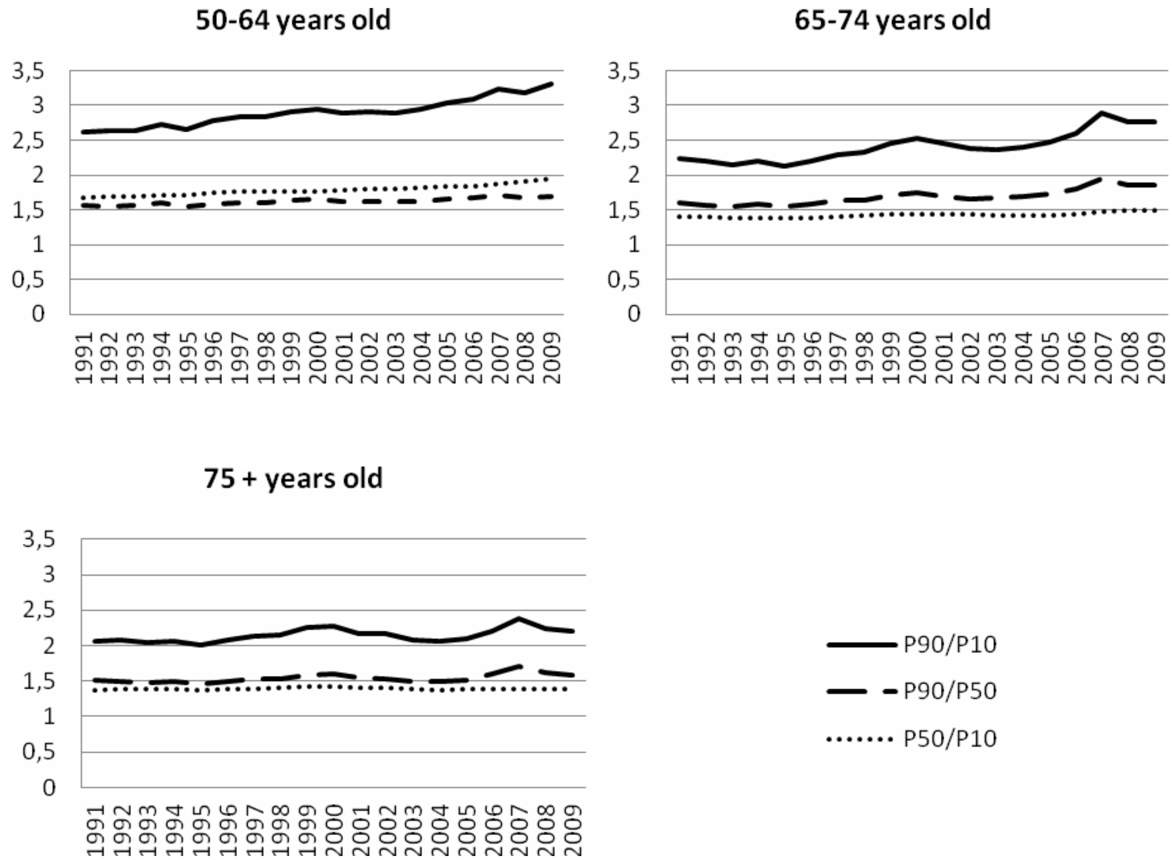
The 90th (10th) percentile income is the income that 10 (90) percent of the sample has a higher income than. The ratio between the 90th percentile and the 10th percentile (P90/P10) shows how many times higher the income of a person with the 90th percentile income is compared to the income of a person who has the 10th percentile income. If the ratio is 2, the person with the 90th percentile income has twice as much in income as the person with the 10th percentile income.[6]

[3] See Kruse (2010).
[4] See Rosén Karlsson (2011).
[5] For a discussion of different measures of income inequality among pensioners see Johnson and Stears (1999).
[6] van Vliet et al (2011) use P80/P20 to measure the income distribution among older people in 15 European countries. They find that the ratio is lowest in the four Nordic countries included in their study – Denmark, Finland, Norway and Sweden.

In order to investigate those with high incomes and those with low incomes, we will compare the 90th and 10th percentile with the median, P90/P50 and P50/P10, respectively. By using percentile ratios as a measurement of wage dispersion, one can examine whether income inequality increases or decreases from year to year. The measure is not influenced by the general income development.

2. Does the distribution of income among the elderly differ from the distribution among those who are younger?

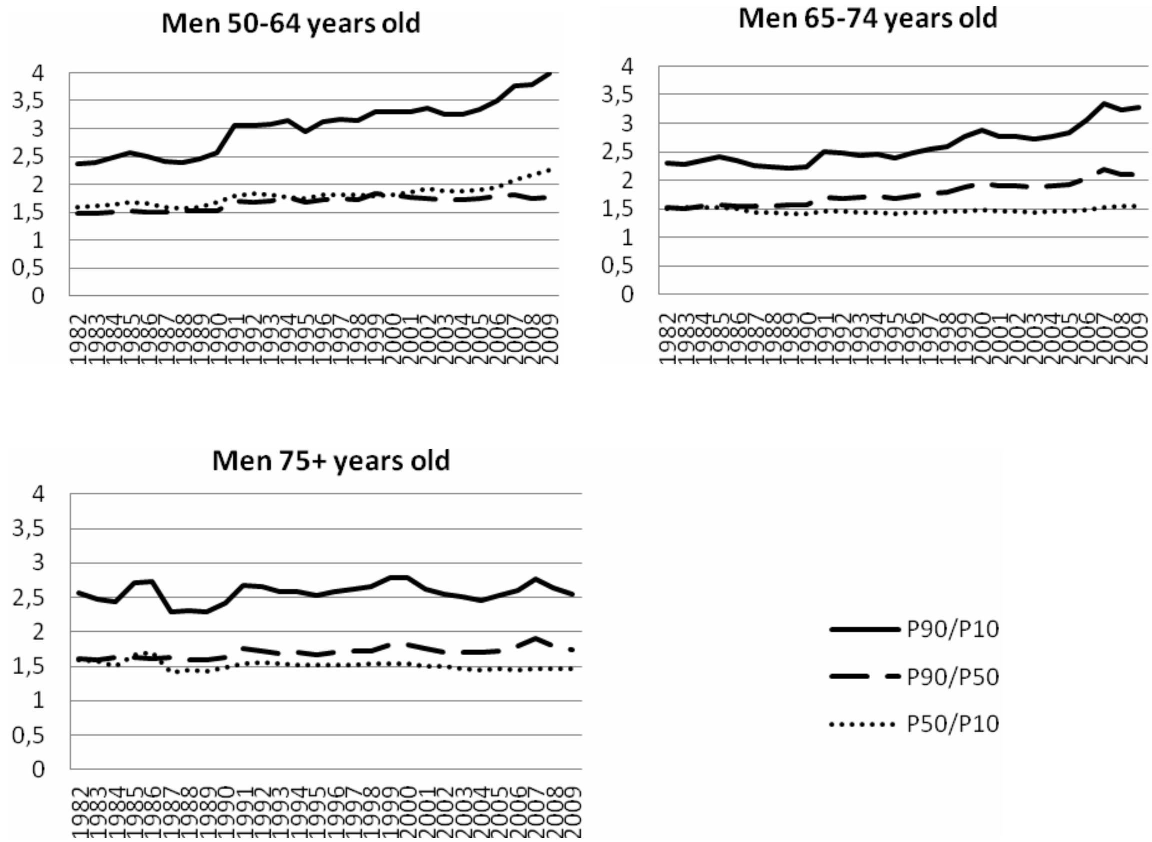
We showed above that disposable incomes are lower for those aged 65 and older than for those aged 55 to 64 years. Those who are 75 years or older have particularly low incomes. Figure 2.1 shows household disposable income per person for different income groups. Income inequality has increased for those who are 50–64 and 65–74 years. For those 75 years and older the income differences have been more or less the same until the last few years. Many in this age group only get only the basic pension from the old pension system, which leads to a compressed income structure. Over the past few years, however, income inequality has first increased and then decreased slightly. The share of this age group with income-related social security pensions and occupational pension systems has increased.



Source: LINDA

Figure 2.1 The development of the disposable income per person in the household between 1991 and 2009.

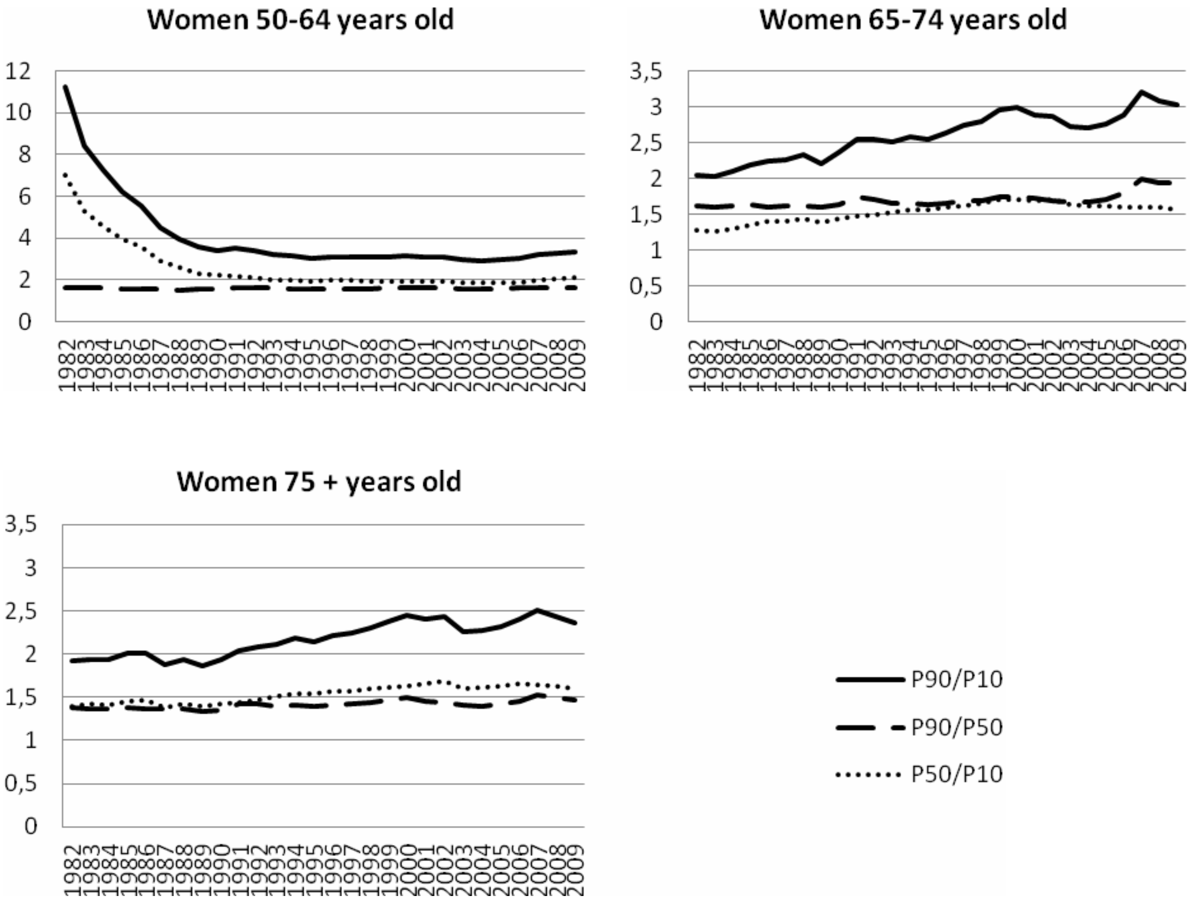
Having already demonstrated the development of income inequality among households, in Figure 2.2 and 2.3, we present the disposable incomes of men and women. Income inequality for men has increased sharply for both those who are 50–64 years and those who are 65–74 years. In recent years the trend has been particularly pronounced among those who are between 50 and 65. For those who are between 65 and 75 years, the income gap has mainly grown in the upper part of the distribution (P90/P50).



Source: LINDA

Figure 2.2 The development of the disposable income for men between 1982 and 2009.

Figure 2.3 shows that income inequality among women aged 50–64 years was very high at the beginning of the 1980s. Many women were not employed and many of those employed worked part-time, often short part-time. As women gradually entered the labour market, income inequality among women aged 50–64 years decreased strongly. Among women 65 and older, by contrast, income inequality increased, especially in the upper part of the distribution. More women now have income-related pensions, but many still have a guarantee pension only or one which is combined with a low income pension.



Source: LINDA

Figure 2.3 The development of the disposable income for women between 1982 and 2009.

Has income inequality increased or decreased? The main tendency is that income inequality has increased significantly among both men and women aged 65–74 years and also among women of 75 years and older. This applies particularly to those with high incomes (P90), who now have much higher incomes than those in the same age with low incomes (P10). In the lower part of income distribution, the changes are much smaller (P50/P10).

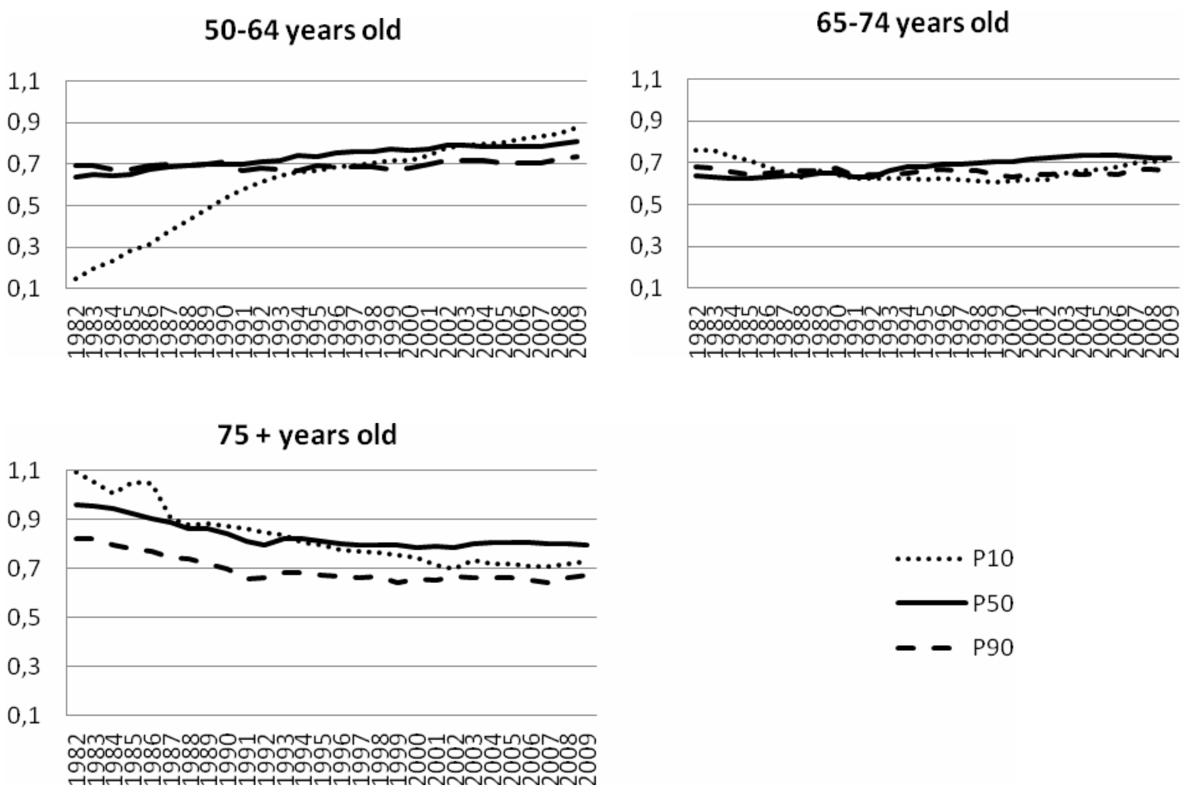
3. The distribution of income among older people in Sweden

We will now compare further the incomes of men and women and foreign born and native people, respectively. Here, we estimate the percentile distribution separately of each of those four groups and then compare them. There are a number of reasons for conducting these two comparisons. Women have had and still have a weaker labour market attachment than men, and pensions are very much based on earned income over the years. In the old pension system, 30 years of earnings were required for a full pension and the best 15 years counted for the calculation of the pension. In the new system the income for all years is counted. Women more often have had career breaks and are more likely than men to have worked part-time. This leads to lower pensions for women than for men in the new system. This means that women often receive a guarantee pension, which unlike the income pension is not indexed to income development in the economy but is price indexed. This situation will probably lead to a gradual reduction of the average economic standard for women compared to that of men.

The foreign born have in many cases a weak labour market attachment. They are more often not in the labour force or unemployed than natives, and many of whose who are employed have low incomes. To come to Sweden as adult can also lead to a low pension – it is often difficult to enter the labour market and many therefore get few years with a contribution to the income pension system. Those who come after 25 years of age cannot reach the 40-years' residence in Sweden needed to get a full guaranteed pension at 65. In this context it is important to emphasize that the foreign born are a very heterogeneous group. Those who come from other Nordic countries and other countries in Western Europe have generally had a much better situation on the labour market before their retirement than those from countries outside Europe. The rules for pensions also differ depending on country of origin due to the existence of various agreements. The rules are different for those coming from other Nordic countries, other EU/EES countries, and other countries with which Sweden has a pension agreement, and countries that Sweden has no agreement with regarding pensions.

3.1 Women and men

We will begin by comparing women's and men's disposable income. Figure 3.1 shows that women's disposable income is lower than men's. This applies to all three age groups – 50–64, 65–74, and 75 and older – and all three percentiles that we report – P10, P50 and P90. However, there are some differences. Women aged 50–64 years in the 10th percentile had very low incomes at the beginning of the period compared to men in the same percentile. It was a period when many women were not employed; housewives were common. Women's relative earnings later increased among those in the 10th percentile. Since the mid-1990s, women's disposable incomes have been 70 to 80 percent of men's incomes in all three percentiles for those aged 50-64 years. For those aged 65-74 years, women's incomes have fluctuated between 65 and 75 percent of men's incomes for the three percentiles over the past 27 years.

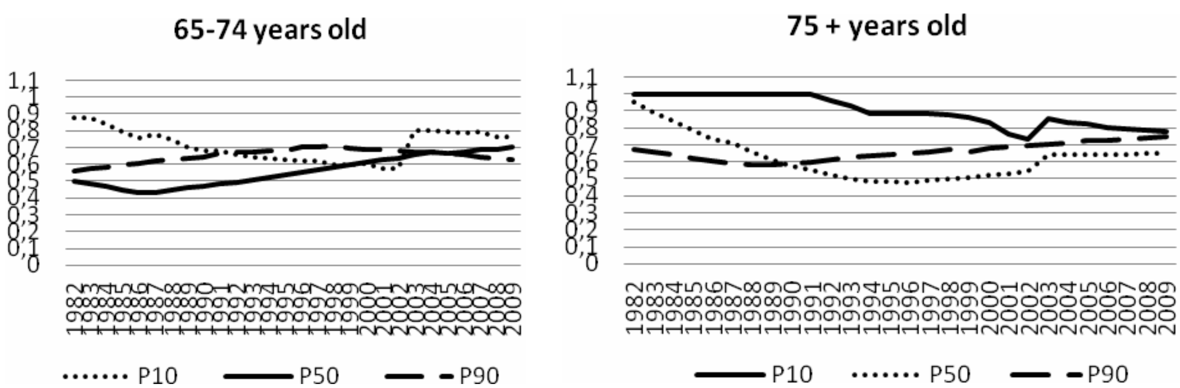


Source: LINDA.

Figure 3.1 The disposable incomes for women as a share of the disposable incomes for men at the 10th, 50th and 90th percentiles 1982–2009.

Among those 75 years and older women's incomes declined relative to those of men throughout the period. During the 1980s, income differences were small in this age group. Among those with the lowest incomes (P10), women even had slightly higher incomes than men. This is explained by that women more often than men are not married (including widows) in this age group and that a single person received a slightly higher pension than a married person according to the rules of the basic social security pension. In the late 00s, the income differences between men and women were large in all three percentile groups. The difference was largest for those with high incomes (P90), where women's income was only about 65 percent of men's income.

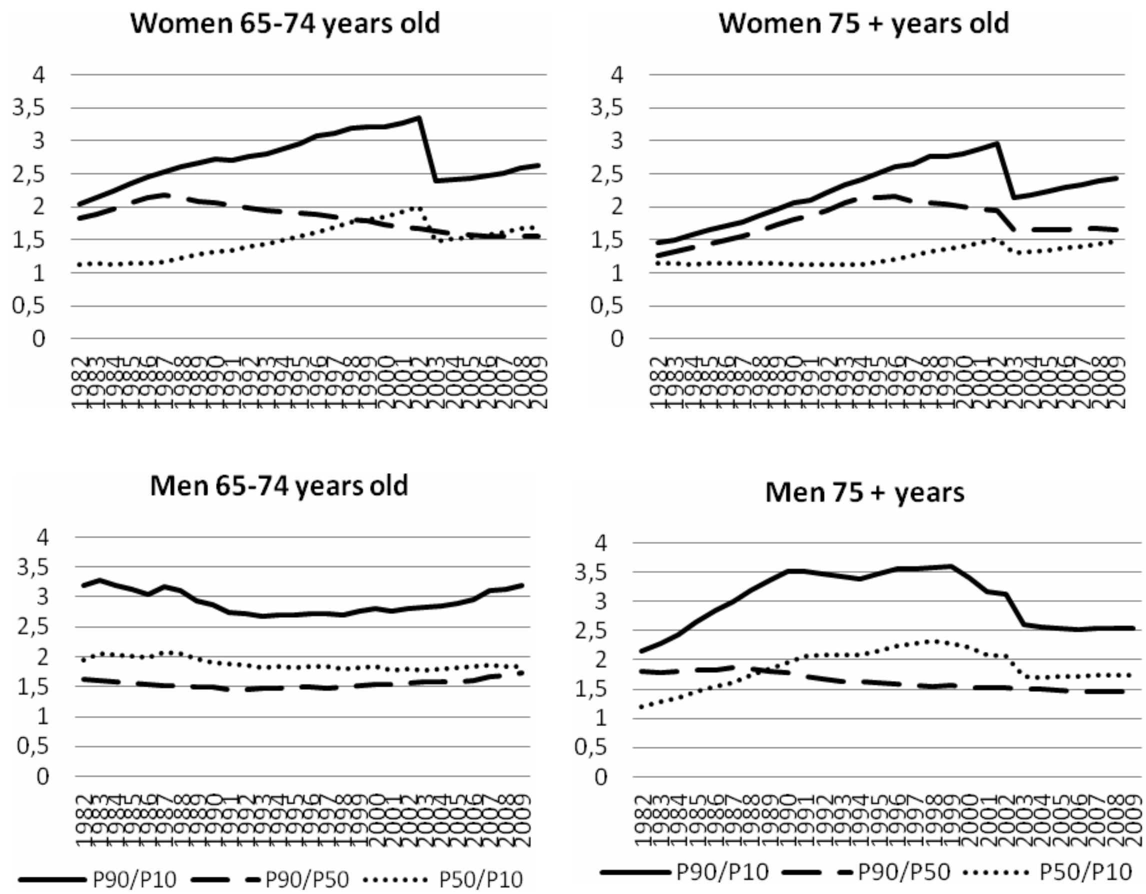
The next step is to compare the pensions of women and men aged 65–74 years and 75 years and older in the same percentiles as before, i.e. P10, P50 and P90. See Figure 3.2. We can see that there was a large sudden change in pensions between 2002 and 2003. This is explained by the fact that payment from the new pension system started in 2003. The basic pension and the pension supplement were replaced by the guaranteed pension in that year. In the statistics for 2002 and earlier years, only the basic pension and the ATP pension, but not the pension supplement, were included as parts of the pension income. The graphs outline disposable income including pension supplements and housing allowances for pensioners. This explains why we do not see large sudden changes in the graphs in Figure 3.1.



Source: LINDA.

Figure 3.2 The pension (social security and occupational) incomes of women as a share of the pension incomes of men at the 10th, 50th and 90th percentiles 1982–2009. Only those with a social security pension are included.

We will finally show the pension income distribution for women and men aged 65–74 and 75 and older. See Figure 3.3. The pension income inequality increased for female pensioners, both for those 65–74 years and for those of 75 years and older, but the differences in pensions are slightly lower for the older group. For women aged 65-74 years, income inequality decreased in the upper part of the distribution.



Source: LINDA.

Figure 3.3 The development of pension incomes (social and occupational) for men and women with a pension in different age groups in 1982-2009.

For the oldest women, pension income inequality increased. At the beginning of the 1980s, a large majority of the oldest women only had a basic pension. Therefore the pension income distribution was very compressed. As more women in that age group received income-related social security pensions and occupational pensions, they pulled away from those with only a basic pension and pension income inequality increased.

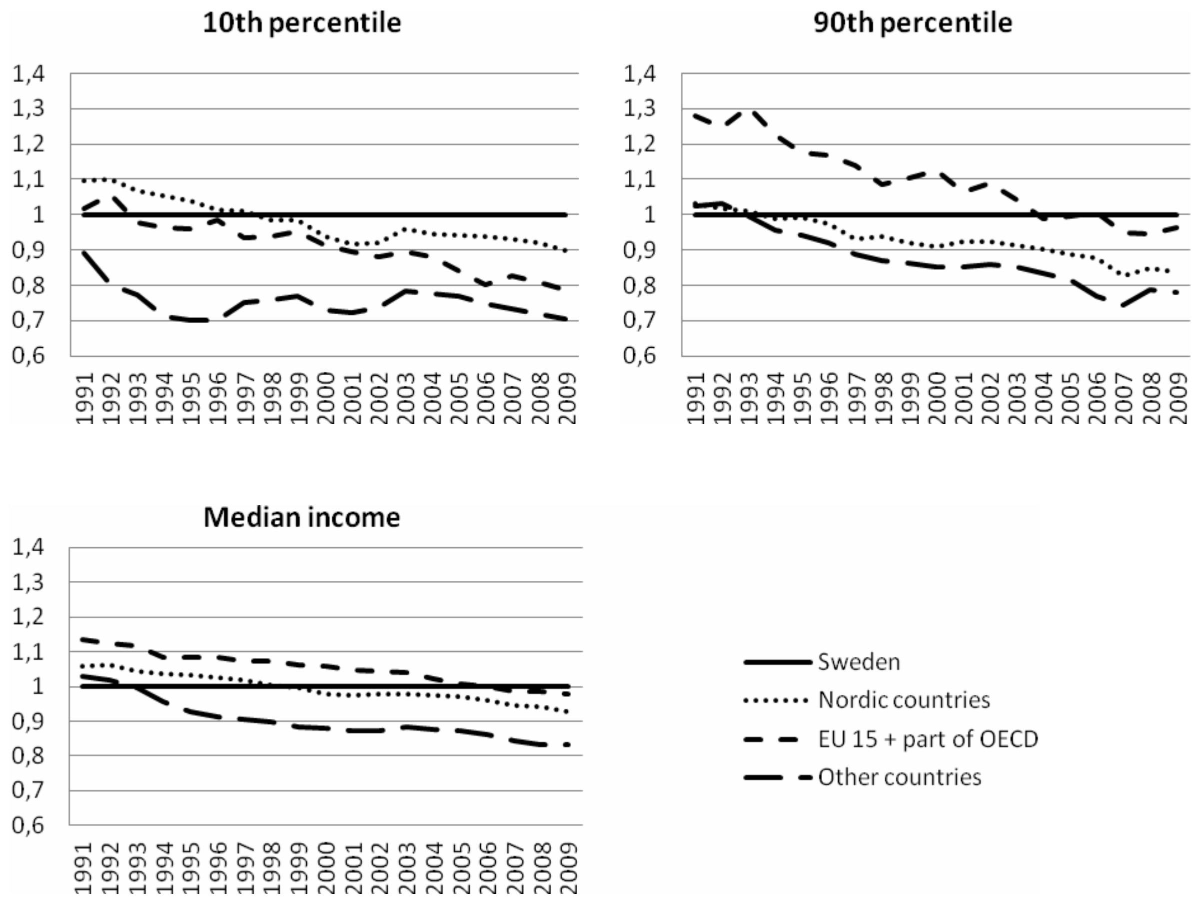
For men aged 65–74 years pension income inequality has remained fairly constant. The exception is the P90/P10 ratio. This ratio first declined for some years and then rose for several years. However, there are larger changes for those aged 75 and over for P90/P10 and P50/P10. A marked rise in the ratio P90/P10 and to a lesser extent P50/P10 is followed by a jump down and then stabilization.

3.2 Natives and the foreign born

Income differences between natives and foreign born 65 years and older have changed greatly over the past 20 years, as shown in Figure 3.4. In the early 1990s, the disposable median income per family member was higher for the foreign born than for natives. This applies even if we split the foreign born after birth regions. At the end of the period, the situation is very different.

The difference in median disposable income per person between those born in the EU15 and six rich OECD countries (Switzerland, Canada, USA, Australia, New Zealand and Japan, which in the rest of the paper we will refer to as OECD6) and natives decreased from the early 1990s and had disappeared by 2009. Incomes are now roughly the same as for natives for the 90^{th} and 50^{th} percentiles, but much lower for the 10^{th} percentile. The result for the 10^{th} percentile could be explained by unrecorded return migration. Many people are registered as living in Sweden but have actually emigrated and have therefore no income recorded for them in the Swedish registers.

The income differences between natives and those born in other Nordic countries were small in the 1990s, but later changed. Previously, those born in other Nordic countries generally had somewhat higher median disposable incomes than natives, but they now tend to have slightly lower incomes in the three percentile groups we present results for.



Source: LINDA.

Figure 3.4 Disposable income per household member for foreign born compared to natives 65 years and older in 1991–2009.

The decline in incomes compared to natives is much more marked for those from other countries apart from the Nordic ones. The median disposable income per person of those who were born outside the Nordic countries, EU15 and OECD6 countries has since 1993 been lower and declining compared to natives. In 2009, this group had a median disposable income per person corresponding to slightly over 80 percent of the median disposable income of natives. An important part of the explanation is the increase in refugee immigration. The refugees have a weaker labour market attachment than labour migrants. Another important part of the explanation is that the economic crisis in the 1990s led to that many foreign born become unemployed (unemployment rose much more among the foreign born than among natives). It is in this context important to note that there are marked differences between different groups of the foreign born. Some groups of the foreign born have a strong position in the labour market, while other groups have a much weaker position.

Those born in other countries than the Nordic countries, such as the EU15 and OECD6 countries, who are at the 10th percentile of the income distribution of disposable incomes per person, had incomes corresponding to between 70 and 80 percent of the income of natives at the same percentile. In the early 1990s, the incomes of the 90th income percentile were about the same or even slightly higher for those born in these countries as for natives. Since then, those with high incomes from ‘other countries’ have gradually received lower incomes compared to native high earners in the 90th percentile. In 2009, the level of their disposable income per person was three-quarters of that for natives. Over the past 20 years, the income differences among those from ‘other countries’ have been greater than the income differences among natives.

The development can be summarized as follows (see Table 3.1). Income inequality measured by P90/P10 was in the early 1990s lower among natives and those who were born in another Nordic country than among other foreign born. Income inequality did not change much in the 1990s for any of the groups. Since the end of the 1990s, income inequality has increased regardless of country of origin. The increase has been of about the same size at the lower (P50/P10) and the upper part (P90/P50) of the distribution (not shown in the table).

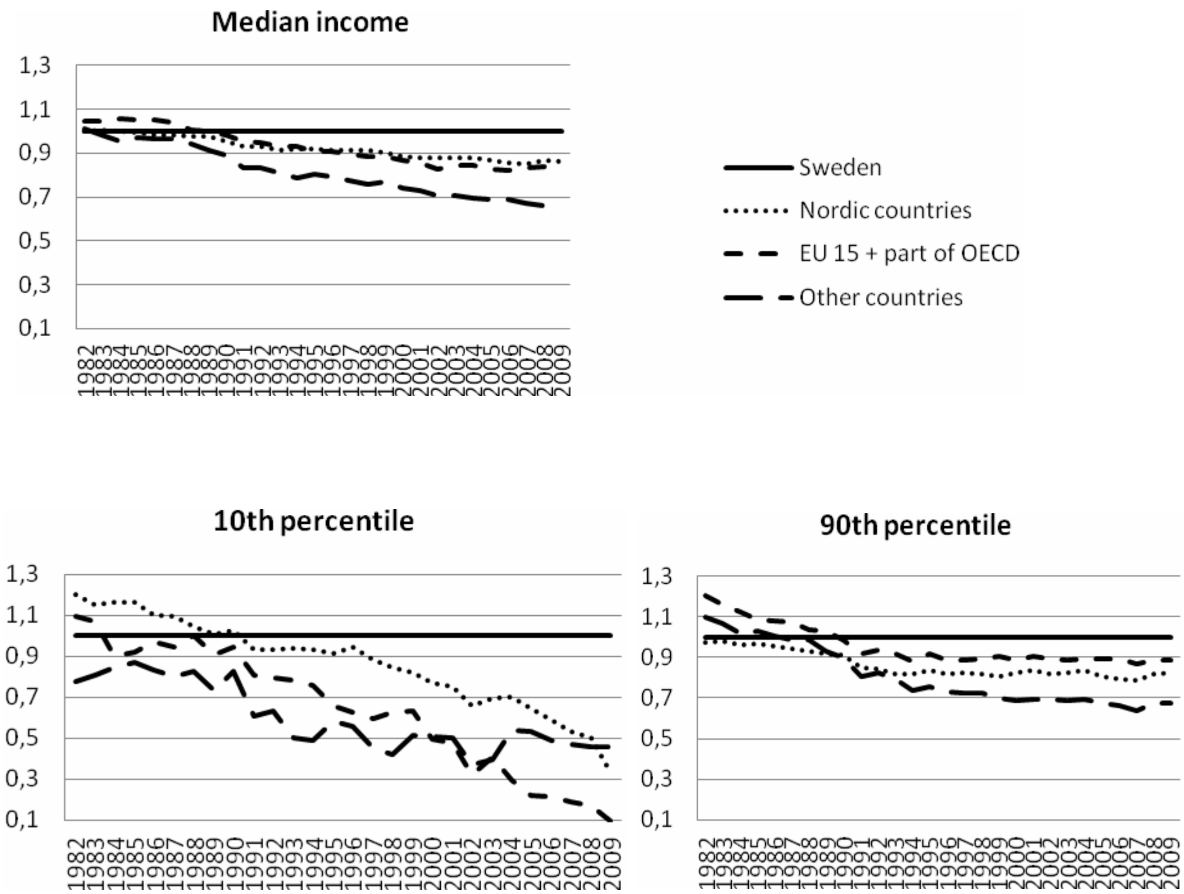
Table 3.1 The development of disposable income inequality in Sweden measured as the ratio between the incomes at the 90th and the 10th percentiles according to country of origin

	Sweden P90/P10	Nordic countries P90/P10	EU15 and OECD6 countries P90/P10	Other countries P90/P10
1991	2,26	2,13	2,85	2,60
1992	2,23	2,06	2,63	2,87
1993	2,15	2,04	2,88	2,77
1994	2,18	2,05	2,77	2,94
1995	2,11	2,02	2,58	2,84
1996	2,18	2,10	2,59	2,86
1997	2,26	2,08	2,77	2,67
1998	2,29	2,18	2,65	2,63
1999	2,42	2,27	2,81	2,71
2000	2,47	2,38	3,04	2,87
2001	2,38	2,40	2,83	2,80
2002	2,35	2,36	2,91	2,75
2003	2,29	2,19	2,67	2,50
2004	2,32	2,20	2,60	2,49
2005	2,38	2,24	2,81	2,53
2006	2,52	2,36	3,16	2,59
2007	2,80	2,49	3,21	2,85
2008	2,66	2,45	3,12	2,90
2009	2,65	2,46	3,24	2,93
Increase of income inequality between 1991 and 2009	17 %	16 %	14%	13 %

Source: LINDA.

Note: The EU15 and OECD6 countries are Australia, Austria, Belgium, Canada, France, Germany, Greece, Ireland, Italy, Japan, Luxembourg, Netherlands, New Zealand, Portugal, Spain, Switzerland, UK and USA.

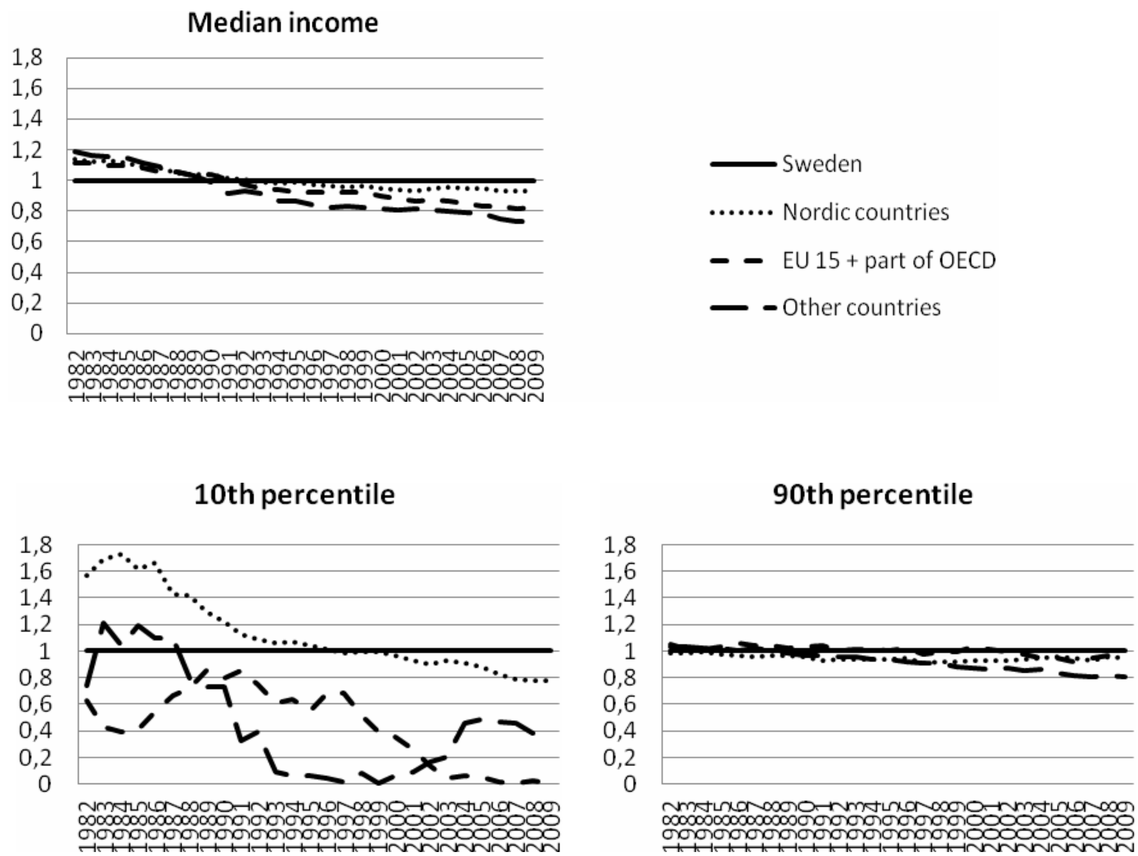
The next step is to compare the disposable individual incomes of the two age groups, 50–64 years and 65 years and older. We start with those aged 50–64 years. See Figure 3.5 for men and Figure 3.6 for women.



Source: LINDA.

Figure 3.5 Disposable income for foreign born compared to natives, men aged 50–64 years in 1982–2009.

For foreign born men it does not matter if they were born in other Nordic countries, the EU15 and OECD6 countries or ‘other countries’. The income for all groups declined compared to those for natives. The strongest decline is for those from ‘other countries’. The development for the 10th percentile should be interpreted with some caution. Non-registered return migration can be an explanation for the very low incomes found in some years.

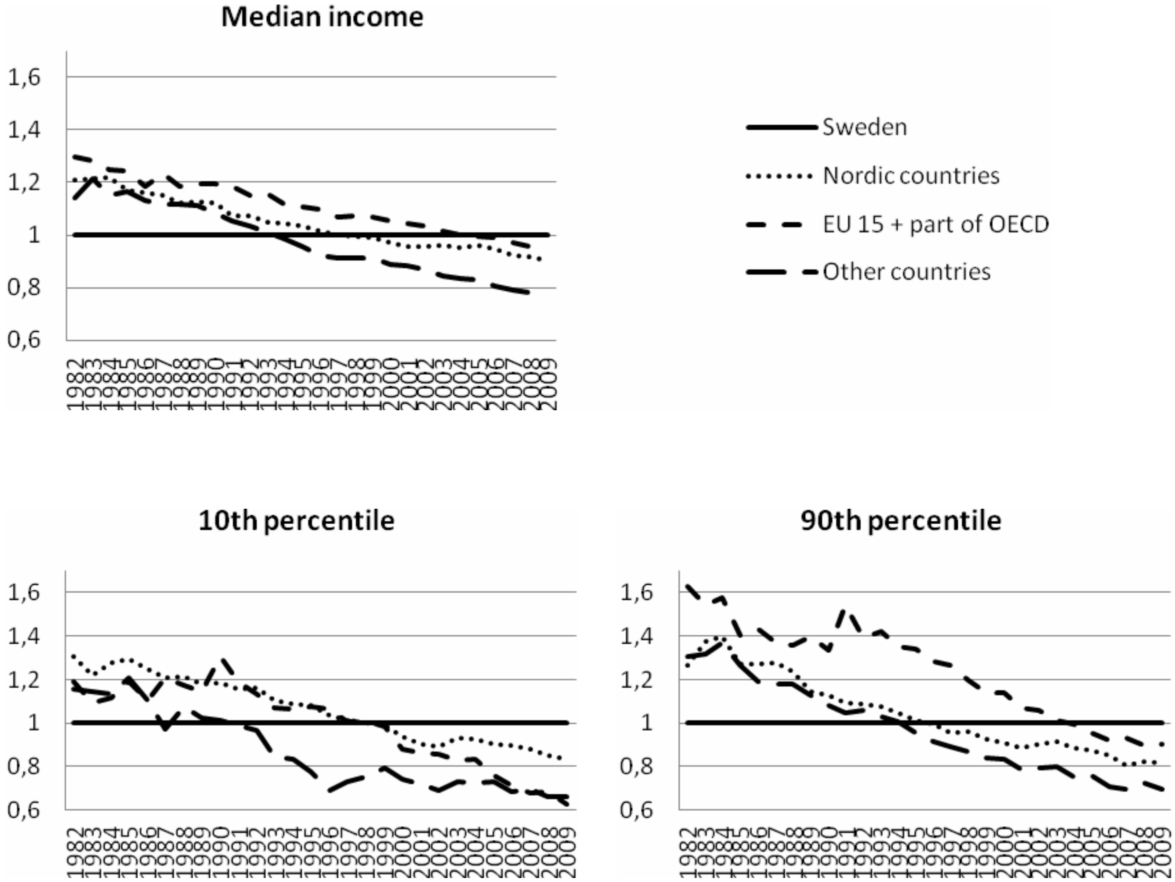


Source: LINDA.

Figure 3.6 Disposable income for foreign born compared to natives, women aged 50–64 years in 1982–2009.

For foreign born women in the same age group, 50–64 years, the changes are small for those in the 50th and 90th percentiles. The decline is, however, somewhat larger for women from 'other countries'. The development for the 10th percentile is difficult to interpret with very large swings in values over time for those who were born in non-Nordic countries. We must remember that these groups were small and that special events therefore may play a larger role than for other groups. One explanation could be that social assistance to newly arrived refugee families is counted as income for the husband and not for the wife leading to very low reported incomes for women.

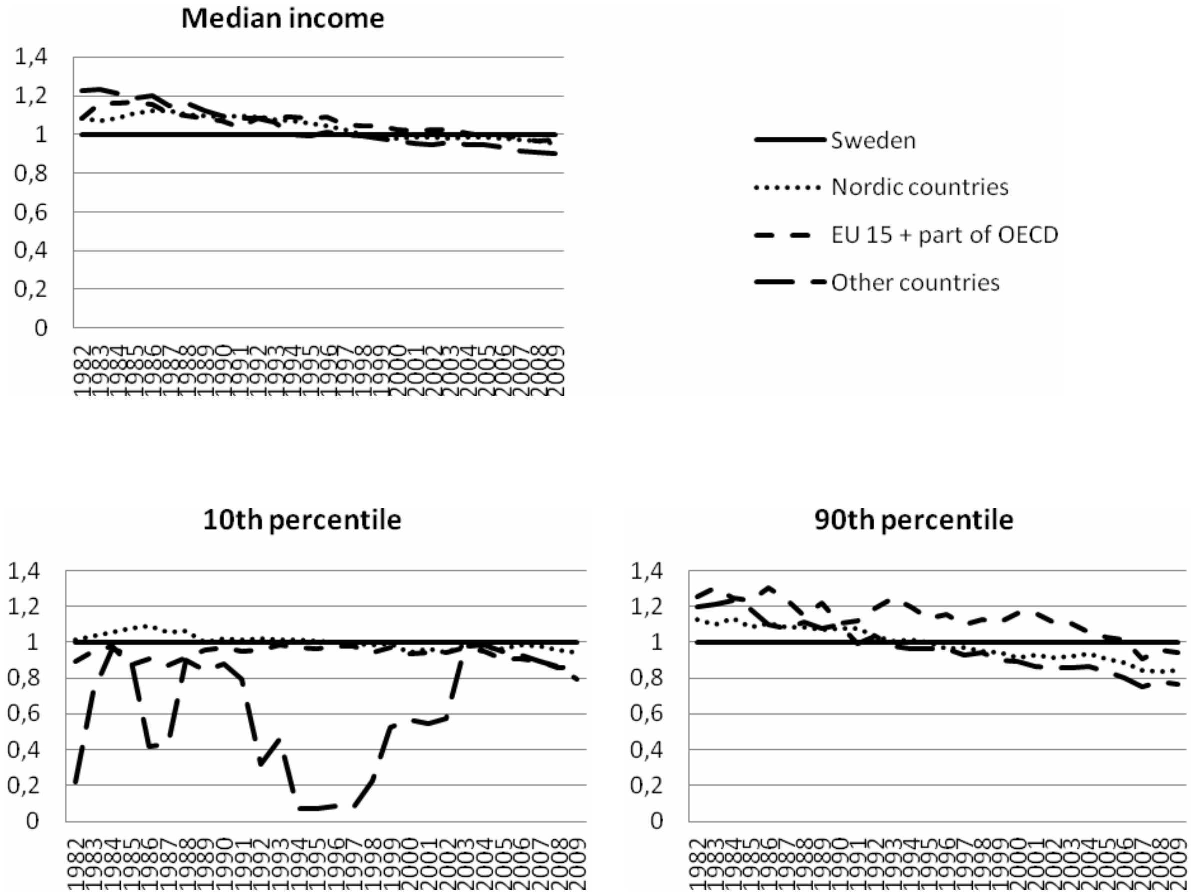
We will finally look at those who are 65 years and older. See Figure 3.7 for men and Figure 3.8 for women. We must be aware of that the age composition within this age group differs much between the groups. The groups have arrived in different years and have been of a different age on arrival. Therefore the average age of those belonging to different age groups differ, as do the incomes they receive.



Source: LINDA.

Figure 3.7 Disposable income for foreign born compared to natives, men aged 65 years and older in 1982–2009.

Figure 3.7, which refers to men aged 65 and older, shows the same pattern as for the younger group. The incomes of foreign born compared to those of natives fell markedly. This trend was strongest for those born in ‘other countries’.



Source: LINDA.

Figure 3.8 Disposable income for foreign born compared to natives, women aged 65 years and older in 1982–2009.

Figure 3.8 shows the corresponding development for women 65 years and older. For the 50th and 90th percentiles, we see a slight decline in incomes compared to those of natives. This is largest for those born in 'other countries'. For the 10th percentile, we see a volatile pattern with very low values in some years. As earlier mentioned regarding those aged 50–64 this could be explained by that social assistance to newly arrived refugee families is counted as income for the husband but not for wife, leading to very low reported incomes for the women.

4. Income from capital

Income from capital has become an increasingly important part of pensioners' income and now represents one-fifth of the income of those aged 65 and older. Income from capital is unevenly distributed between pensioners, and mainly concentrated on those with the highest incomes. The fact that capital income has risen sharply for those with the highest incomes has contributed most to increased income inequality among pensioners (Gustafsson et al 2007).

Those who are 65 and older have on average about the same financial assets but lower debt and higher real assets (property) compared to those under 65 (see Flood 2004). This means that their net wealth is high, especially when compared to those of below 50 years of age. On average, the net wealth is SEK 1.2 million for those 65 years and older, and slightly lower for those 75 years and older. The net wealth of men 65 years and older is on average half a million higher than for women of the same age.

Flood examined the total net assets in different age groups in 2000 and established that wealth is greatest at the age of 56 and remains at a high level to about 65 years of age. Those of 65 years and older had less wealth, and their levels of wealth declined even more as they got older. This corresponds with the theory of redistribution of income over the life cycle – you save when you are of working age and use the savings when you have retired. The differences could also be partly explained by differences in the cohorts' wealth position when they reach retirement age. It is important to note that the data in his study are from a cross-section, and individuals are not followed over several years.

SCB (2004) have also examined wealth distribution among pensioners. The differences in wealth are very large. If households in 2002 are divided into decile groups after net wealth, those in the lowest decile had a negative net wealth of 81 000 SEK, while those in the top decile had a positive net wealth of 4.497 million SEK. The households in the tenth decile had about 48 percent of the total net wealth and over 2.5 times more than those in the ninth decile. The concentration of wealth to those in the highest decile was even greater among those of working age. Those in the 10th decile had 63 percent of total wealth.

If the decile distribution is carried out according to disposable income, it is quite different. Net wealth was positive in all decile groups and the lowest average wealth was held by them in the third decile. Households with the highest disposable income (decile ten) own about 32 percent of the total wealth. The pattern was the same for those of working age. The division between real (property) and financial assets was about the same in the different deciles, and more than half of the assets were real assets. Net wealth at old age was on average almost 5.4 times greater than the disposable income, while among those of working age it was only slightly more than twice as large.

Table 4.1. Real and financial assets, debts and net wealth for women and men in different age groups in 2007. Per cent with assets and debts and the mean value in thousand SEK for people with wealth

	Real assets		Financial assets		Debts		Net wealth	
Gender Age	Share with net wealth, per cent	Mean value for those with a net wealth, thousand SEK	Share with net wealth, per cent	Mean value for those with a net wealth, thousand SEK	Share with net wealth, per cent	Mean value for those with a net wealth, thousand SEK	Share with net wealth, per cent	Mean value for those with a net wealth, thousand SEK
Women and men	44	1 381	77	305	56	423	89	675
0 – 19	0.4	697	66	51	2	20	67	54
20 – 29	24	950	68	127	69	260	90	150
30 – 49	63	1 297	78	223	88	542	97	527
50 – 64	69	1 559	85	504	80	418	98	1 196
65 – 74	64	1 507	87	558	57	276	97	1 340
75 –	49	1 287	91	547	24	197	96	1 132
Women	42	1 260	77	257	53	386	89	580
0 – 19	0.4	676	66	51	2	20	67	54
20 – 29	24	940	67	117	70	263	90	138
30 – 49	62	1 218	77	182	88	510	97	463
50 – 64	66	1 396	85	377	77	347	98	993
65 – 74	56	1 316	87	474	49	221	96	1 090
75 –	41	1 173	91	471	18	177	95	931
Men	46	1 492	77	353	58	456	89	770
0 – 19	0.4	721	67	51	2	21	68	54
20 – 29	24	959	69	136	69	256	91	161
30 – 49	64	1 370	78	261	89	572	97	590
50 – 64	73	1 705	84	631	84	483	98	1 397
65 – 74	73	1 665	87	646	67	320	97	1 603
75 –	61	1 407	92	663	35	213	97	1 435

Source: Statistics Sweden’s wealth statistics.

Table 4.1 shows the share with assets and debts and average value of the different forms of wealth and debt according to age and gender, according to Statistics Sweden’s wealth statistics.

The net wealth was higher depending on age up to the oldest age group for both men and women. Men had assets more often than women and the mean value for those who have assets was higher for men than for women.

Table 4.2. Real assets for women and men in different age groups in 2007. Share who have assets in per cent and average value for those with assets in thousand SEK

Gender Age	Real assets		Of them					
			House[1]		Building society flat		Summer house	
	Share with value, per cent	Mean value for those with a value, thousand SEK	Share with value, per cent	Mean value for those with a value, thousand SEK	Share with value, per cent	Mean value for those with a value, thousand SEK	Share with value, per cent	Mean value for those with a value, thousand SEK
Women and men	44	1 381	29	1 165	12	944	7	761
0 – 19	0.4	697	0.1	677	02	641	0.1	429
20 – 29	24	950	8	730	14	1 017	2	572
30 – 49	63	1 297	46	1 128	15	1 035	8	718
50 – 64	69	1 559	49	1 206	16	951	15	785
65 – 74	64	1 507	41	1 262	18	811	14	785
75 –	49	1 287	24	1 245	21	787	7	804
Women	42	1 260	26	1 132	13	951	7	757
0 – 19	0.4	676	0.1	660	0.2	615	0.1	424
20 – 29	24	940	9	720	14	1 063	1	561
30 – 49	62	1 218	45	1 112	14	1 028	7	703
50 – 64	66	1 396	44	1 173	17	966	15	781
65 – 74	56	1 316	31	1 202	20	828	13	791
75 –	41	1 173	17	1 228	21	824	5	816
Men	46	1 492	31	1 193	12	937	8	765
0 – 19	0.4	721	0.1	694	0.2	676	0.1	434
20 – 29	24	959	7	741	15	978	2	582
30 – 49	64	1 370	46	1 143	15	1 041	8	732
50 – 64	73	1 705	54	1 233	15	935	15	789
65 – 74	73	1 665	51	1 300	16	790	16	780
75 –	61	1 407	36	1 257	20	726	10	795

1) A house with one or two apartments.

Source: Statistics Sweden’s wealth statistics.

Many banks provide ‘senior loans’ with the home of the retirees as security. Homeownership can thus contribute to increased consumption. The share of those who owned a house was almost as great among those of 65–74 years (41 percent) as among those of 30–65 years (46-49 percent) (see Table 4.2). A quarter of those of 75 years and older owed a house. On average, the value of the house was slightly higher for those of 65 years and older than for younger age groups. The share of those 65 years and older who owned a house was higher among men compared to women. The houses men own are also somewhat more valuable than the houses women own.

A fifth of those aged 65 and older owned an apartment, compared to 12 percent of the entire population. The value of an apartment was somewhat lower for older than for younger individuals.

The value of single-family homes and apartments varies widely between different geographical areas in Sweden. This means that the possibility of mortgaging the house to finance consumption also varies regionally. However, those who live in areas with high housing prices can also be more affected by declines in housing prices. The possibility of borrowing may decline rapidly.

The regional differences in the average net wealth among seniors are large (SCB 2004). In 2002, the average net wealth was 647 000 SEK. It was highest in Stockholm County, at 1 007 000 SEK, and lowest in Västernorrland County, at 422 000 SEK. Wealth was significantly higher in Stockholm County than in all other counties and on average was over 30 percent higher than in Uppsala County, the county that came in second place.

Wealth varies even more between municipalities. The average net wealth was highest in Danderyd (a suburb to Stockholm), with 2 676 000 SEK and lowest in Överkalix (in the far north) with 290 000. Net wealth was 50 percent higher in Danderyd than in Lidingö, which comes in second place. Among the ten municipalities with the highest average net wealth, seven were in Stockholm County and the other three were in the Skåne region.

5. Why has the income gap between pensioners increased?

Pension income is the main income of those who are 65 years or older. In this section we will examine the importance of labour income, labour market attachment, disability pension, the sector retired from, self-employment, marital status, sex, country of birth (grouped level) and the age for retirement with regard to the probability of belonging to the groups of low and high income pensioners, respectively. We will investigate the probability of belonging to the 10 and 20 percent with the lowest pension income and the 20 or 10 percent with the highest pension income for those who retire between 2005 and 2008. In this section the estimations are based on the incomes of the members of all groups taken together and not as in section 3 separately for each group. Our measure of pension income includes social security and occupational pensions. Having retired is defined here as receiving a pension income (social security and occupational pension) that exceeds labour income. We use the pension income for the year after retirement when we examine the likelihood of persons being low- or high-income pensioners. The analysis includes only those whom we have information for at least five years before retirement.

Table 5.1 summarizes the results of probit estimates. Marginal effects are reported. Men are less likely to belong to the group of pensioners with the lowest pensions and more likely to belong to the group with the highest pensions. Being married has no effect on the pension income group a pensioner belongs to.

The later a person retires, the lower is the probability of their belonging to the group of pensioners with low incomes. However, the retirement age does not matter for the probability of belonging to those with the highest pension incomes. This is a result of effects working in different directions. Those with high pensions can better afford to take their pensions early, so that many with high pensions leave the workforce early. On the other hand, the pensions for those who leave the workforce late will be higher given their earlier incomes as pensions are based on previous incomes and the incomes will be higher if the pension is taken up at a higher age (fewer years with a pension are expected). The estimates show that the higher the income is five years before retirement the lower is the probability of being among those with a low pension.

One group with low pensions, which we will return to in section 6, is the self-employed. Those who were self-employed five years before retirement belong more often to the group with the lowest pension incomes and are less likely to belong to the group with the highest pensions. Those leaving the labour force with a disability pension are another group with low pensions.

We have also included a variable for those who have a weak labour market attachment five years before retirement. This group includes those who had not any income from work (either as an employee or as self-employed), disability pension or an old age pension (social security or occupational). Among those who belong to this group, some have low pensions and other have high pensions. These mixed results suggest that this group includes both those with a poor labour market attachment, due to difficulties in getting a job, and the wealthy who choose to not work but five years later receive a very good pension.

Table 5.1. The probability of belonging to the group of those with the 10 or 20 percent lowest and highest incomes from pensions (social security and occupational pensions) among those 65 years and older.

	10 % lowest pension	20 % lowest pension	20 % highest pension	10 % highest pension
Man	-0.018*** *0.003*	-0.099*** *0.006*	0.103*** *0.007*	0.036*** *0.004*
Married	-0.003 *0.003*	0.006 *0.006*	0.012 *0.008*	0.009 *0.004*
Age at retirement	-0.013*** *0.001*	-0.021*** *0.001*	0.001 *0.001*	0.001 *0.001*
Annual labour income/10 000 five years before retirement	-0.002*** *0.000*	-0.007*** *0.000*	0.013*** *0.000*	0.004*** *0.000*
Self-employed five years before retirement	0.058*** *0.010*	0.270*** *0.019*	-0.110*** *0.009*	-0.046*** *0.003*
Disability pension	0.061*** *0.006*	0.074*** *0.008*	-0.081*** *0.008*	-0.024*** *0.004*
Weak labour market attachment five years before retirement	0.063*** *0.011*	0.086*** *0.015*	0.357*** *0.030*	0.217*** *0.027*
Born in Sweden	Ref.	Ref.	Ref.	Ref.
Born in another Nordic country	0.017** *0.009*	0.004 *0.013*	-0.064*** *0.012*	-0.015* *0.007*
Born in EU15 and OECD6[1]	0.037*** *0.017*	0.028 *0.023*	-0.032 *0.021*	-0.014 *0.010*
Born in other countries	0.076*** *0.017*	0.166*** *0.028*	-0.030 *0.019*	-0.008 *0.010*
Number of observations	13286	13286	13286	13286
LR chi2(10)	2097.65	3331.56	5064.41	2050.18

Note: The EU15 and OECD6 countries are Australia, Austria, Belgium, Canada, France, Germany, Greece, Ireland, Italy, Japan, Luxembourg, Netherlands, New Zealand, Portugal, Spain, Switzerland, UK and USA.

The risk of being one of those with the 10 percent lowest incomes is higher for those born outside Sweden. Being born in another Nordic country has a negative effect on the probability of belonging to those with the highest pension income. However, there is no difference between natives and those born outside the Nordic countries as regards the probability of being in the group with the highest pensions.

Table 5.2. The probability of belonging to different deciles of disposable income among those 65 years and older

	10 % lowest income	20 % lowest income	20 % highest income	10 % highest income
Man	-0.052***	-0.117***	0.074***	0.023***
	0.004	*0.006*	0.007	*0.005*
Married	0.018***	0.032***	-0.015*	-0.009
	0.003	*0.005*	*0.009*	*0.006*
Age at retirement	-0.002***	-0.003***	0.000	0.000
	0.000	*0.001*	*0.001*	*0.001*
Annual labour income/10 000 five years before retirement	-0.004***	-0.010***	0.011***	0.005***
	0.000	*0.000*	*0.000*	*0.000*
Self-employed five years before retirement	0.030***	0.019**	0.115***	0.054***
	0.007	*0.011*	*0.019*	*0.014*
Weak labour market attachment five years before retirement	-0.007***	-0.058***	0.318***	0.187***
	0.004	*0.006*	*0.026*	*0.024*
Disability pension	-0.015***	-0.018***	-0.038***	-0.016**
	0.003	*0.006*	*0.010*	*0.006*
Born in Sweden	Ref.	Ref.	Ref.	Ref.
Born in another Nordic country	0.005	0.025*	-0.052***	-0.029***
	0.007	*0.014*	*0.015*	*0.009*
Born in EU15 and OECD6[1]	0.017	0.033	-0.006	0.001
	0.013	*0.023*	*0.026*	*0.017*
Born in other countries	0.076***	0.131***	-0.046**	-0.008
	0.017	*0.025*	*0.020*	*0.014*
Number of observations	13286	13286	13286	13286
LR chi2(10)	2040.15	3240.44	3238.41	2050.18

Note: The EU15 and OECD6 countries are Australia, Austria, Belgium, Canada, France, Germany, Greece, Ireland, Italy, Japan, Luxembourg, Netherlands, New Zealand, Portugal, Spain, Switzerland, UK and USA.

Even if the pension income is the main income for pensioners, other sources as other income transfers, labour income and capital income are important parts of the retirees' incomes.[7] The share belonging to the group with the 10 percent lowest pension income who belongs to the group with the 10 percent lowest disposable income is 43 percent. Of those with the 20 percent lowest pension income, 57 percent belong to the group with the 20 percent lowest disposable income. We see a similar pattern for those with the highest pensions. Of those with the 20 percent highest pensions, 61 percent belong to the group with the 20 percent highest disposable incomes, and of those with the 10 percent highest pensions, 53 percent belong to those with the 10 percent highest disposable income. In Table 5.2 we show probit estimates for the probability of belonging to the group of those with the lowest and highest disposable incomes.

Those who have a weak labour market attachment five years before retirement more often belong to the group of those with the lowest pensions but less often to the group of those with the lowest disposable incomes. One explanation may be that those who have had a weak labour market attachment receive other income transfers, and that the group may also contain some of those with a strong economic position who have chosen to stop working early.

Many of those with low and high pensions have low and high disposable incomes, respectively, but there are some differences. The self-employed have low pensions on average, but a higher probability of belonging to the groups of those with the lowest and highest disposable incomes. This reflects the heterogeneity among the self-employed. While some people have been able to save for old age, others have not.

6. Groups at risk of low pensions and income 1: Self-employed

The income differences among self-employed workers are very large. Many have low incomes and many do not have a supplementary pension of the same type of employees tend to have. The number of self-employed is large and growing, making it important to study this group. Many of the self-employed are foreign born.

Employees who become self-employed have different backgrounds. There is an over-representation of those who given characteristics as education have low labour income as

[7] See also Sjöström and Örnhall Ljung (2011) and Klevmarken (2010) for an analysis of who are working after 65.

employees but also of those who have a high labour income as employees (Andersson Joona and Wadensjö, forthcoming). The latter group is doing considerably better than the first one in being self-employed. That indicates that the conditions for being self-employed vary greatly, as do the opportunities and knowledge of how best to prepare financially for life as a pensioner.

More than half of small business owners pay into pensions for themselves, but a quarter of the self-employed have no retirement savings; they save neither privately nor through their firm. Of the self-employed who save, 45 percent save less than 2000 per month. In order to get the same pension as their employees get from occupational pensions, the self-employed have to save 5 percent of their gross income from age 25 until retirement. If they start to save later, the annual savings required are higher (Svärdman, 2011). The main reason the self-employed put forward when asked why they are not saving for a pension for themselves is that they cannot afford it. Other reasons are that they do not see any need as their incomes as retirees is guaranteed by other means, they do not know how it works with occupational pensions, and they do not feel that they have had time to gain an understanding of pension issues (Burreau, 2011).

Today's retirees who have been self-employed have significantly lower pensions than those who have been wage-earners. Both men and women who were self-employed five years before retirement[8] had on average a total pension (social security, occupational and personal) corresponding to about 70 percent of the average total pension for those who were wage-earners five years before retirement in the period 2005 to 2009.

Figure 6.1 and 6.2 show how much the average social security, occupational and personal pensions are for those who were wage-earners or self-employed. We see that those who were wage-earners had higher social security and occupational pensions but lower personal pension than those who were self-employed. The public pensions of the self-employed were about 75 to 80 percent of the public pensions of wage-earners for both men and women. For self-employed women the occupational and personal pensions together constitute about 45 to 55 percent of the pensions of women who are wage-earners, with an exception for self-employed women aged 75 who had occupational and personal pensions that were higher than those for wage-earners. The corresponding figures for men are between 40 and 50 percent.

[8] Retirement is here defined as the first year pension income from social security and occupational pension exceed labour income.

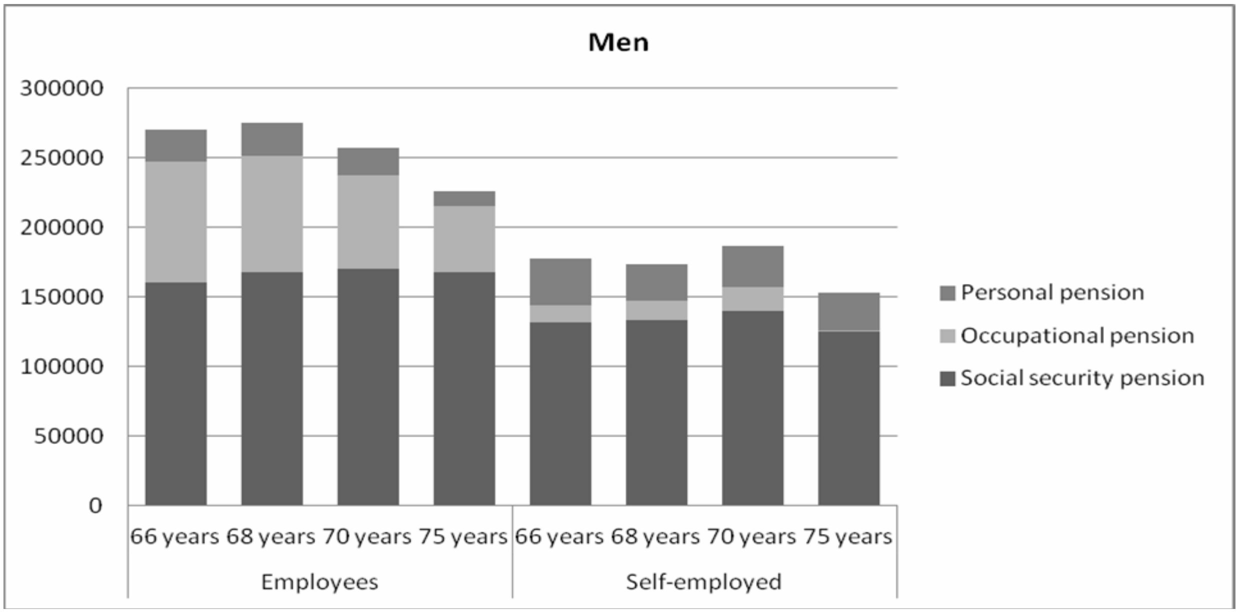


Figure 6.1 The pension income for men in 2005-2009.

Note: Employees are defined as those who had their main income from employment 5 years before retirement. Self-employed are those with their main income from self-employment 5 years before retirement. Someone is defined as retired when pension income from social security and occupational pension exceed labour income.

Source: LINDA

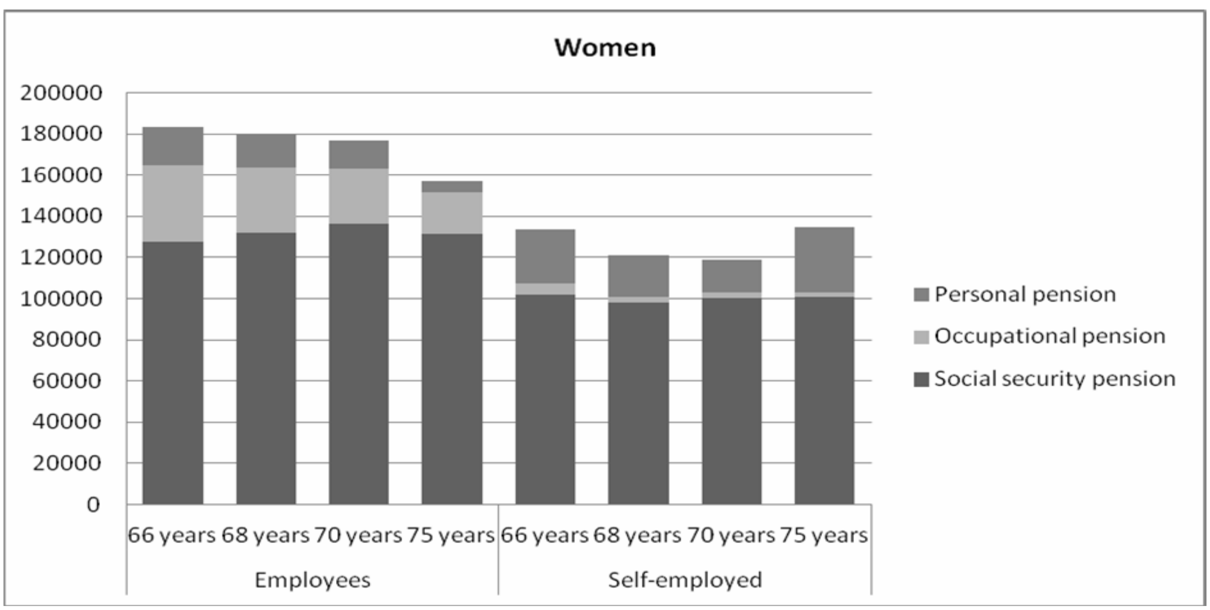


Figure 6.2 The pension income for women in 2005-2009.

Note: Employees are defined as those who had their main income from employment 5 years before retirement. Self-employed are those with their main income from self-employment 5 years before retirement. Someone is defined as retired when pension income from social security and occupational pension exceed labour income.

Source: LINDA.

7. Groups at risk of low pensions and incomes 2: Guarantee pensioners, those without occupational pensions, foreign born

Some other groups than the self-employed have low pensions, for example those who have had low or irregular earnings and therefore get a guarantee pension. The guarantee pension is only price indexed and not income indexed like the income pension. The group may therefore lag behind in income development, compared to those receiving an income pension. For the next few years it is expected that about 25 percent of new retirees will receive a guarantee pension. In 2008, 778 000 individuals received a guarantee pension, of which 180,000 (15 percent) received a full one. Of those who received a guarantee pension, 80 percent were women (Olsson 2011). Nearly half of female pensioners aged 65 to 70 years received a guarantee pension in 2008. Among women aged 70 and older, it is even more common to get a guarantee pension as the older cohorts have had low labour force participation. For example, just less than 60 percent of women aged 70 to 75 years, over 80 percent of those between 80 and 85 years, and over 90 percent of those aged 90 years and older receive a guarantee pension. The proportion of men who receive a guarantee pension is much lower. In the age group of 65 and 70 years, only slightly more than 10 percent get a guarantee pension. Among men between 80 and 85 years a quarter receive a guarantee pension and among those of 90 years and older, half receive a guaranteed pension.

Employees who are not covered by collective agreements are a second group at risk for low pensions. Occupational pension is most important for those who have had incomes above the ceiling in the income pension system, but it is important not just for them. Most receive their occupational pension through a collective agreement. Over 90 percent of employees are employed in workplaces covered by collective bargaining agreements, and thus have occupational pensions. Those who lack an occupational pension are primarily those who work in firms with few employees, those with the highest and lowest wages, the self-employed and unemployed. Only a third of small business owners have signed up for an occupational pension. Employers without a collective agreement may pay for an occupational pension plan for their employees and at the same time for themselves. Of businesses without a collective agreement 40 percent have a pension plan. Among those not covered by a pension but by a collective agreement, approximately 60 percent have signed up for a separate personal pension (Svärdman, 2011).

The foreign born are a third group at risk for low pensions. This is a group with very large income differences and includes many low-income earners. Flood and Mitrut (2010) have written a report for the Social Council on immigrants coming from non-OECD countries and their pensions. The pensions of this group of foreign born are predicted to be very low. The foreign born men's earnings were about 75 percent and foreign born women's earnings about 60 percent of native-born men’s earnings between 1992 and 2007. This can be compared with that the native-born women's earnings, which were about 70 percent of the earnings of native-born men.

The development of earnings has important implications for future pensions. Between 1992 and 2007, this was slower for the foreign born from non-OECD countries than for natives. As an example we can take the cohort born in 1960–1964. The income growth (among those who had earned income) was 62 percent for native men, 72 percent for native women, 47 percent for foreign born men and 49 percent for foreign born women.

Labour force participation among the foreign born is lower than among natives even after taking into account differences in education, age, gender, etc. This will lead to lower pensions for the foreign born than for natives. It should be emphasized that there are significant differences depending on country of origin. Low wages, low labour force participation, high unemployment and fewer years in Sweden lead to lower pensions. Probably only a few foreign born from non-OECD countries have pension rights from their country of origin that can be transferred.

Forecasts of future social security pension show that foreign born people from non-OECD countries will have much lower pensions than natives. Foreign born men born between 1946 and 1970 will receive about 60–65 percent of the native men's social security pension. The corresponding figure for foreign born women is about 55 percent of the native men's social security pension.

The foreign born from non-OECD countries have significantly lower incomes and wealth than natives. Native born men had in 2007 three to four times higher real assets than foreign born men. The same relationship applies between the wealth of native and foreign born women.

Also assets in personal pension savings are much smaller for foreign born from non-OECD countries than for natives. For the cohort born 1945–1949 this amounted to one third for both men and women compared to native men in the same cohort. For younger cohorts, the difference was even greater. For example, for the cohort 1960–1964, the foreign born personal pension wealth was 18 percent of that of native men in the same cohort and for the cohort born 1970–1974 it was only 11 percent.

8. What do we know and what would we like to know more about?

In this section, we summarize our results and mention some areas where we lack essential knowledge and where it is very important to seek new knowledge.

One important result is that there are some groups of 65 and older who have low pensions and other low incomes compared to others of the same age. Women 65 years and older on average have lower incomes and pensions than men of the same age. The main reason for this is that women have had a greater responsibility for unpaid housework when being of an active age than men. This does not mean that all of them live in households with low incomes as they get older. Many are married to men who have high pensions or other forms of income. But older women are often single. Women live longer than men and women are on average younger than the men they marry. This means that women are more likely to be widowed than men. In addition, divorce is common and pension wealth is not distributed in full upon divorce. Many women thus become single with a low pension. The long-run solution is a more equal division of labour between men and women both in the household and in the market. However, it can take a long time before such a change takes effect. Pensions are based on earnings over a lifetime or for many years (some of the occupational pensions). There are good reasons for reviewing the rules on pension schemes.

The foreign born are another group that on average have low pensions. This is because many have a weak labour market attachment and many have lived for less than the forty years in Sweden required at 65 for a full guarantee pension. The long-term solution is a stronger labour market attachment, but there are good reasons to review the rules for pension schemes, particularly the rule about the number of years of residence required for a full guarantee pension.

The self-employed are a third group who often have low pensions. One explanation for many of the self-employed having low pensions is that they have not paid for a pension corresponding to the occupational pensions for employees. Another explanation is that many of the self-employed have low incomes. A solution may be that more information could be given about the pension schemes for self-employed, but there may be other ways of bringing this about.

A fourth group, which largely coincides with the three previously mentioned, consists of those who for various reasons have had a weak attachment to the labour market over a number of years. Also, after 65 years of age they usually have a weak attachment to the labour market, and they receive a low social security income-based pension and a price indexed guarantee pension.

It is important to investigate different ways to improve the situation for those four mentioned groups who often have low incomes and pensions after 65, i.e. to improve the conditions for women, foreign born, self-employed and those who for prolonged periods have had a weak attachment to the labour market. Different types of solutions may be required for the various groups.

References

Andersson Joona, Pernilla and Eskil Wadensjö (forthcoming), “The Best and the Brightest or the Least Successful? Self-Employment Entry among Male Wage-Earners in Sweden”, *Small Business Economics*.

Björklund, Anders and Markus Jäntti (2011), *Inkomstfördelningen i Sverige*, Stockholm: SNS Förlag.

Burreau, Britta (2011), *Småföretagarna väljer bort tjänstepensionen*, Nordea.

Gustafsson, Björn, Asghar Zaid and Eva Franzén (2007), “Financial Poverty”, *International Journal of Social Welfare*, Vol. 16(suppl. 1), pp. 67-90.

Gustafsson, Björn, Mats Johansson and Edward Palmer (2009), “The Welfare of Sweden’s Old-age Pensioners in Times of Bust and Boom from 1990”, *Ageing and Society*, Vol. 29(4), pp. 539–561.

Flood, Lennart (2004), ”Vilka pensioner får framtidens pensionärer?” *Ekonomisk Debatt*, nr 3. pp. 16–30.

Flood, Lennart and Andreea Mitrut (2010), *Ålderspension för invandrare från länder utanför OECD-området*, SOU 2010:105.

Johnson, Paul and Gary Stears (1999), “Pensioner Income Inequality”, *Fiscal Studies*, Vol. 16(4), pp. 69–93.

Karlsson, Hans and Hans Olsson (2012), *Medelpensioneringsålder och utträdesålder 2011*, Pensionsmyndigheten.

Klevmarken, Anders (2010), *Vem arbetar efter 65 års ålder? En statistisk analys*, SOU 2010:85.

Kruse, Daniel (2010), Longitudinell individatabas (LINDA), Beskrivning av statistiken, BV/EV, 2010-08-18.

Olsson, Hans (2011), *Pensionsåldern*, Pensionsmyndigheten, Statistik och utvärdering.

Rosén Karlsson, Karin (2011), Hushållens ekonomi (HEK), Beskrivning av statistiken, BV/EV, 2011-10-28.

Sjögren Lindquist, Gabriella and Eskil Wadensjö (2009), “A viable public-private pension system”, in Bernhard Ebbinghaus (ed.), *Varieties of Pension Governance: Pension Privatization in Europe*, Oxford University Press, Oxford.

Sjöström, Magnus and Sara Örnhall Ljungh (2011), *Efter 65 – inte bara pension. En analys av de äldres ekonomiska situation*, Ds 2011:42.

Svärdman, Håkan (2011), *Småföretagande = små pensioner?* Folksam, Stockholm.

van Vliet, Olaf, Jim Been, Koen Caminada and Kees Goudswaard (2011), “Pension reform and income inequality among the elderly in 15 European countries”, Department of Economics Research Memorandum 2011.3, Leiden University.

Wadensjö, Eskil (2011), ”De äldres återkomst till arbetsmarknaden – ett långsiktigt perspektiv”, i SCB, *Arbetskraftsundersökningarna (AKU) 50 år. Fyra forskarperspektiv på arbetsmarknaden*. Bakgrundsfakta 2011:3