ACTIVE AGEING AND MATERIAL DEPRIVATION
OF OLDER GENERATIONS
IN EUROPE AND IN POLAND:
HOW DO THEY INTERPLAY?

The active ageing concept includes domain of independent, healthy and secure living which includes financial aspects, measured by risk of poverty and material deprivation. The key questions of this paper are: how are the poverty indicators related to each other in the Active Ageing Index?; in what ways are they related to some of the other indicators included in the index (such as employment)? And which countries in Europe are “winners” and which are “losers” in this particular financial aspects based on the Active Ageing Index? Besides of this, the example of sub-national application of Active Ageing Index for Poland was presented with showing relation of these financial indicators in the analysis.

Keywords: active ageing, material deprivation, Poland

INTRODUCTION

The concept of active ageing became a part of wider European public discourse in 2012 during the European Year for Active Ageing and Solidarity between Generations (EY2012), yet there is no precise, universally acceptable definition of the concept (Walker and Maltby 2012). In the gerontological literature successful ageing is recognized (Rowe and Kahn 1987), while more dominant in public policy discourse, it has been understood from the economic perspective of extending working lives (OECD, 1998, 2006). In this approach the focus was on employment and being productive in the labour market, and the debate was somehow dominated by issues related to pension reforms and prolonging working lives (Ervik and Linden 2013). However, the wider scope was also discussed and it was clearly expressed in the ‘active’ approach to ageing with matching the gerontological approach and public policy demand (Walker and Maltby 2012; Walker and Foster 2013). But age-friendly environments,
capacity for ageing, social infrastructure that enables active and healthy senior citizens to remain active within the society – besides various forms of activity – all these issues are important as the concept of active ageing is taken into account.

In the context of analysis of why the traditional paradigm is no longer valid, reference could be made to the age-integrated paradigm (Reday-Mulvey 2005; Riley and Riley 1986; Walker and Maltby 2012), where in a horizontal way parallel over the whole life course, education and training, work and family, leisure and community are considered. And while the age-integrated paradigm is discussed, within the framework of EY 2012, the Active Ageing Index (AAI) has been constructed as a tool to measure the untapped potential of older people for active and healthy ageing across the EU countries (Zaidi et al. 2013, see also the web page of AAI: Active Ageing Index 2014). It demonstrates the level to which older people can have independent lives and participate in paid employment and social activities, as well as their capacity to actively age with dignity. In this overall concept of the Active Ageing Index the following domains are included: employment; participation in society; independent, healthy and secure living; and capacity and enabling environment for active ageing. When the overall AAI index including all domains is taken into account, Poland scored very low values in 2012 (see Fig. 1).

![Figure 1. AAI – Ranking of countries, 2013](source: Policy Brief: Introducing the Active Ageing Index and Zaidi et al. 2013)
In this approach, besides the many issues which are agreed to be conceptually important, the independent, secure, healthy and dignified living of older generations seems to be especially crucial. It is important to notice that the age-integrated paradigm is valid at certain constraints, like those related to the financial situation. Including economic aspects of active ageing the following questions arise:

1) How are the financial indicators (including material deprivation) included in the Active Ageing Index?

2) How are the poverty indicators related to each other in this index?

3) In what ways are they related to some of the other indicators included in the index and in the age-integrated paradigm (such as employment)?

4) Which countries in Europe are “winners” and which are “losers” in this particular financial domain of this Active Ageing Index?

Additionally, the end of the paper will briefly consider whether and how the analysis of active ageing and the financial aspects could be used in Polish/regional extension of the active ageing index.

MATERIAL DEPRIVATION AND OTHER POVERTY INDICATORS IN THE ACTIVE AGEING INDEX

There are quite a lot of analyses and studies on material deprivation and poverty of older generations (Jehoel-Gijbers and Vrooman 2008; Zaidi 2010; Fusco et al. 2010, Fusco et al. 2011; Atkinson 2010; Iacovou, Skew 2010; Goedemé 2010). The EU’s definition is often invoked: “material deprivation can be defined as the inability to possess the goods and services and/or engage in activities that are ordinary in the society or that are socially perceived as »necessities«” (Fusco et al. 2010: 7). The material deprivation indicator was formally accepted as an EU indicator of social inclusion in 2009 but even as early as 2004 it was being measured. How to define material deprivation, what to include and how to measure it was already well-known (see Guio 2009; Guio at al. 2009). As example of older generations, the percentage of people aged 65 years and older who are not severely materially deprived is usually presented. Severe material deprivation refers to a state of economic and durable strain, defined as the enforced inability (rather than the choice not to do so) to afford at least four out of the following nine items:

1) to pay rent, mortgage or utility bills,
2) to keep the home adequately warm,
3) to face unexpected expenses,
4) to eat meat or proteins regularly,
5) to go on holiday,
6) to own a television set,
7) to own a washing machine,
8) to own a car,
9) to own a telephone.
The key concept is related to show if lacking specific "basic" commodities or not being engaged in certain "basic" activities is due to lack of financial resources.

On the other hand, active ageing refers to the social ageing phenomenon in which, while life expectancy increasing, people are expected and allowed to continue to participate longer in the formal labour market as well as in unpaid productive activities (such as care provision to family members and volunteering) and live healthy, independent and autonomous lives in older age with a sufficient level of income which allows for full social participation. In this way, the aspects in monitoring independent, secure and healthy ageing (under the sub-topic: financial situation in this domain) are included (among others not only related to poverty) in Table 1:

- relative median income,
- no risk of poverty,
- no severe material deprivation.

**Table 1.** Indicators related to financial situation in the “Independent, Healthy and Secure Living” domain of the original Active Ageing Index (1st Edition, 2012)

<table>
<thead>
<tr>
<th>Original indicator</th>
<th>Source</th>
<th>Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relative median income (65+)</td>
<td>EU-SILC(^1) 2010 / 2009</td>
<td>The relative median income ratio is defined as the ratio of the median equivalised disposable income of people aged over 65 to the median equivalised disposable income of those aged under 65. Independent and autonomous living also incorporates the concept of financial security, which is captured by three indicators, including the relative median income ratio. Comparing the median income of the elderly with the rest of the population as an indicator aims to measure the adequacy of retirement incomes for older people to maintain their living standard after retirement and to ensure financial security in old age. This indicator becomes particularly important for estimating relative poverty, because the distribution of economic resources (pension systems can play an important role in addressing poverty amongst the elderly) may have a direct bearing on the extent and depth of poverty. Household disposable income is established by summing up all monetary income received from any source by each member of the household (including income from work, investment and social benefits) – plus income received at the household level – and deducting taxes and social contributions paid. In order to reflect differences in household size and composition standard (equivalence) scale, the so-called ‘modified OECD’ scale is used.</td>
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</tbody>
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\(^1\) European Union – Survey on Income and Living Conditions.
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Table 1 cont.

| No poverty risk (65+) | EU-SILC 2010 / 2009 | Percentage of people aged 65 years and older who are not at risk of poverty (people at risk of poverty are defined as those with an equivalised disposable income after social transfers below the at-risk-of-poverty threshold, which is set at 50% of the national median equivalised disposable income after social transfers). This indicator is one of three that aim to measure financial security. Low income is known to have a significant impact on people's health and well-being, for it may limit access to basic goods and services and impede independent living. Poverty risk using the 50% poverty threshold is assumed to capture the extreme poverty risk for older people. Initially, the 40% poverty threshold was used, but it captured a very small share of the population in many countries, and there have also been income non-sampling error issues. |
| No severe material deprivation (65+) | EU-SILC 2010 | Percentage of people aged 65 years and older who are not severely materially deprived. Severe material deprivation refers to a state of long-term economic strain, defined as the enforced inability (rather than the choice not to do so) to afford at least four out of the following nine items: 1) to pay their rent, mortgage or utility bills 2) to keep their home adequately warm 3) to face unexpected expenses 4) to eat meat or other proteins regularly 5) to go on holiday 6) to own a television set 7) to own a washing machine 8) to own a car 9) to own a telephone. Data on the material items mentioned above is collected using direct questions at the household level. |

Source: based on AAI, see: Zaidi et al. 2013

The material deprivation indicator is one of the three indicators that aim to measure financial security. The indicator shows the proportion of individuals and households who cannot afford certain goods considered by most people to be necessary. It measures exclusion by directly capturing people’s actual standard of living in the country where they live. Moreover, whereas indicators based on current income (like risk-of-poverty rate) are affected by transitory shocks, indicators on material deprivation can compensate for such limitations because they tend to be more stable over time and reflect the underlying circumstances of individuals and households.
ANALYSIS OF COUNTRIES BASED ON RELATION OF MATERIAL DEPRIVATION AND POVERTY INDICATORS IN THE DOMAIN OF INDEPENDENT, SECURE AND HEALTHY LIVING OF THE ACTIVE AGEING INDEX

Taking into account the relative median income, poverty and material deprivation indicators included in the Active Ageing Index as key indicators in monitoring policies towards older people in Europe, we will identify those countries in Europe which most differ in these fields (Fig. 2).

![Figure 2. No severe material deprivation (EU-SILC, 2010)](source: based on data EU-SILC 2010 (survey year), 2009 (income year))

Remark: Percentage of people aged 65 years and older who are not severely materially deprived. Severe material deprivation refers to a state of long-term economic strain, defined as the enforced inability (rather than the choice not to do so) to afford at least four out of the mentioned in the text nine items.

It is readily evident that Bulgaria and Romania are the countries where older people (65+) are considered to be most materially deprived. The same is noticed in the analysis of no poverty and material deprivation (Fig. 3), although here it is evident that although the impact of the economic crisis in Cyprus placed the country in a position far from the rest, even in the overall material deprivation it was not so harmful.

Figure 4 shows that Latvia should be considered as being in a worse situation regarding financial indicators like median income and material deprivation than other countries, aside from Bulgaria.
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**Figure 3.** Relation between no poverty and no material deprivation (EU-SILC 2010)

Source: based on data EU-SILC 2010 (survey year), 2009 (income year)

**Figure 4.** Relationship between relative median income and no material deprivation (EU-SILC 2010)

Source: based on data EU-SILC 2010 (survey year), 2009 (income year)
The paradigm of active ageing in the past was mostly (even exclusively) focused on the "productive" face of active ageing (Activage 2005). Now active ageing concept is much more widely discussed (Walker 2002; Walker and Maltby 2012) than as was presented above. It has even been claimed that some people will be unable to follow the "working longer" imperative and must rely on various social benefits until they qualify for a pension. If so, the analysis of social exclusion and employment activity can provide further explanation regarding what causes differences between countries in analysis of financial situation and active ageing. If unemployment benefits are limited, preretirement benefits are less and less often available (see example of Poland, Ruzik, Perek-Bialas and Turek 2013), and the older people without work and income (as they are not eligible to receive even minimum pension benefits) are at risk of being poor (see, EMIN project, 2014–2015).

To view the relationship between employment rates of 65–69-year-olds and two indicators of poverty, such as no poverty risk and no material deprivation, see Figures 5 and 6. The situation of older people in Portugal and Romania is difficult as they are not at risk of poverty but about 25% of 65–69 year-olds in these countries are working not because they would like to but because their material situation demands it. Looking at Figures 6 and 7 it is evident that almost 25% of Portuguese as well Romanian older persons are employed, and while looking at the no poverty risk indicator it is impossible to see a difference; in the case of Romania many of them are still at risk of material deprivation. The exception is Bulgaria, where many older persons have experienced material deprivation but not as many of them are employed.

Figure 6. Relationship between employment rates of 65–69-year-olds and no poverty risk
Source: own based on data from the AAI

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2 European Minimum Income Network.
WHY DOES THE ACTIVE AGEING INDEX AT THE REGIONAL LEVEL IN POLAND MATTER IN THIS RELATIONSHIP BETWEEN ACTIVE AGEING AND POVERTY?

The lack of an active ageing policy in Poland was underlined before 2012 (for comparison of Poland and the Czech Republic in active ageing policies, see Perek-Białas, Ruzik and Vidovicova 2006; Ruzik et al. 2013) and so for Poland EY2012 is considered as an obvious starting point for various governmental initiatives in the area of an active ageing policy for senior citizens at the national level.

However, many polices are undertaken at regional and local levels so in the Polish regional extension of the Active Ageing Index (Perek-Białas and Mysińska 2013) the aim was to present the main differences between AAI scores not only at the national level but mostly at regional ones. This is important, as in Poland’s 16 voivodeships the regional governments are responsible for many aspects of the various policies on seniors and active ageing. The objective of the study was also to determine if the output of such analysis could be somehow used in better planning of interventions in the domains of the active ageing concept at the regional level and be used by regional policy makers. Here, we would like to only briefly
show how difficult it was to make a link between material deprivation, which is crucial to
the Active Ageing Index as shown above in the international comparison, and in monitoring
an active ageing policy in a specific country, like Poland. Analysis of the Active Ageing
Index across countries needs to take into account different welfare regimes, which can lead
to differences between countries. If we make such an analysis for only one country within the
same welfare regime, the differences between regions should not be so apparent.

The idea behind regional AAI for Poland was to identify those regions where active
ageing is weakly supported in order to encourage regional and local authorities to intervene
and possibly make changes within the policy. The Polish research project of preparing the
regional Active Ageing Index in Poland followed the original approach of the Active Ageing
Index and was also composed of four domains (Perek-Biański and Mysińska 2013).

The research showed that in some areas specific data (indicators the same as in the original
approach) is not available and that is why the final concept differs from the original approach
– for instance data on employment rates of citizens over 70 are not included. The research
was mainly based on data from the Central Statistical Office or nationwide representative
surveys such as Social Diagnosis (Diagnoza Społeczna). The data used was mostly from 2010
and 2011 as in the original index to create a baseline year before EY 2012. This could then be
treated as a starting point for monitoring changes in domains over one, two, or more years,
especially after interventions which began in EY2012. The monitoring work could also be
used to identify innovative policies and programmes that promote active and healthy ageing.

As evident from the above table, in the Polish version there was no opportunity to use
the same indicators as in the AAI, which is a disadvantage of the overall regional use of the
AAI in Poland. This is mostly due to the fact that even though in Poland the EU-SILC (which
could be the best source of data) is frequently conducted, the results for the NUTS-2 (regions/
voivodeship) level are biased. It is because of the small sample size of people 65+ included
in the sample, and thus other techniques for collecting this information should be tested in
future (such as Small Area Estimation).

Nevertheless, analysis of employment rates of people over 60 and evaluation of the
financial situation of persons over 65 confirms that it is difficult to discern a clear pattern
between regions (for both 2011 and 2013, Figures 8 and 9). However, there are some regions
that have a low employment rate of those over 60, but show higher rates of their financial
satisfaction, for example Silesia, where the coal mining industry has many retired miners with
relatively higher pension benefits than the national average. It confirms that if the financial
situation is evaluated positively, fewer people are working as they do not have an incentive to
work. Being active over 60+ is dependent on one’s financial situation (in the case of Poland,
but similar to what is observed in other countries presented above).

It has to be underlined that this presentation of the Polish extension of the Active Ageing Index in a regional
perspective refers to the first analyses which were prepared on data from 2011. The new updated version of
the regional Active Ageing Index is currently available and in this 2nd Edition “no poverty risk” was calculated but “no material deprivation” was not possible to obtain (see Perek-Biański and Zwierzchowski 2014;
Table 2. Original indicators from the Active Ageing Index and possible options for using the same indicator in the Polish regional extension of the Active Ageing Index

<table>
<thead>
<tr>
<th>Indicator in original AAI</th>
<th>Indicator in Polish version of AAI</th>
<th>Source</th>
<th>Description</th>
<th>Some additional remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relative median income (65+)</td>
<td>Average level of the indicator of the pension assessment base</td>
<td>Central Statistical Office/Social Insurance Institute 2011</td>
<td>The indicator has been modified from the original one, which used relative median income of persons aged over 65. Here, we used the average level of pensions as compared to average gross remuneration. (Average gross monthly remuneration – 100).</td>
<td>Average level of pensions as compared to average gross remuneration. The analysis covered pensions from the non-agricultural social security system, excluding pensions paid out by the Ministry of National Dense, Ministry of the Interior, and the Ministry of Justice, as well as those paid out pursuant to international agreements. Excluding the social security contributions paid by the insured employee. Average gross monthly remuneration – 100.</td>
</tr>
<tr>
<td>No poverty risk (65+)</td>
<td>–</td>
<td>–</td>
<td>Abandoned in Polish extension of Active Ageing Index</td>
<td>–</td>
</tr>
</tbody>
</table>
| No severe material deprivation (65+) | Satisfaction with financial situation (65+) | Social Diagnostic Survey 2011 | Originally, the indicator for material deprivation covers situations where at least 3 out of 9 listed needs are unmet, apparently due to financial considerations (as the same as above). | Percentage of persons (65+) who indicated that they were very satisfied, satisfied or rather satisfied with the material situation of the family. Scale of responses: 1) highly satisfied 2) satisfied 3) somewhat satisfied 4) somewhat unsatisfied 5) unsatisfied 6) highly unsatisfied. Responses regarding satisfaction with „the financial situation of your family”.

Source: own elaboration, see: Perek-Białas and Mysińska 2013
Figure 8. Relationship between employment rates of people 60+ and financial satisfaction of people 65+ (2011)
Source: own based on data from Perek-Białas and Mysińska 2013

Figure 9. Relationship between employment rates of people 60+ and financial satisfaction of people 65+ (2013)
Source: own based on data from Perek-Białas, Zwierzchowski 2014
CONCLUSIONS

Thanks to EU-SILC we are able to monitor the material situation of older generations in Europe even though there are some limitations, but more studies about reasons of changes and factors influencing the material deprivation of older generations over time in these countries are needed. In many countries the policymakers make interventions based on these indicators and shape the policy affecting the living standards of the older society (for example changes in minimum pension). In countries like Poland these regional differences are clearly visible although the methodology used could be further discussed and refined.

The aim of this paper was to briefly present how material deprivation is used in the overall approach towards active ageing policy via the Active Ageing Index. At the European level it is possible to analyze, for example, EU-SILC data on what was shown in cross-country comparisons, but it is not possible yet to apply these indicators directly (such as material deprivation) at the regional level due to methodological problems (as was shown by the Polish example). And currently available data like Social Diagnosis is not an appropriate source to replace the exact same information/indicator as it should be requested. Besides the presentation of how the indicators are included in the concept, some analysis showing the situation of European countries was presented.

Yet, the research of the Polish Active Ageing Index was aimed at answering a key question: whether it is possible to adopt the original concept of AAI in our Polish regional perspective and to compare not only countries but also regions within the country. Then the aim was to test if this tool could be used in policy making. So far it seems to be useful, but as it was shown we need to calculate the material deprivation indicator, as using only one option such as the poverty indicator or relative median income is not enough.

In a follow-up study, every single indicator included in this analysis must be re-checked, evaluated and compared with data which could/should be used in further analysis. The problem is that some data (especially at the regional level) are not available, for example differentiated by gender or by some potentially useful categories (like differentiation between rural and urban, education etc.) and which are especially crucial from a sociological point of view, and with the perspective of seeing it in the age-integrated paradigm over the whole life course not only for a certain group of people over 60 or over 65. Neither is it possible to capture all the needed and necessary indicators for the regional index of active ageing in Poland every year, as many are based on surveys which are not carried out on an annual basis. Some data are just not updated as promptly as we need them for designing and then effectively implementing the best measures in the policies regarding active ageing outcomes.

Variations in AAI show what works better and where, if we analyze the Active Ageing Index and what is missing to make good use of the untapped potential of older citizens on regional and local levels in Poland, and also in what areas the regions should make interventions and take actions to change regional positions (Perek-Białas and Mysińska 2013; Perek-Białas and Zwierzchowski 2014). The regional Active Ageing Index provides a tool and shows the direction a region should take to be more age-friendly in various domains, and so to improve their position compared to other regions of Poland, and then enable Poland to change its overall position in the European ranking of active ageing indicators.
However, at this stage of the work it is also important to see how in other countries the policymakers can use this or a similar approach at the regional level to better plan active ageing policies. However, not only should labour market indicators (like employment) be a priority of active ageing policy at the regional level in Poland, but others from the AAI as well, like those considering financial aspects and material deprivation, which are also of prime importance.

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