

## **The Active Ageing Index and its extension to the regional level (Cracow, 15-16 October 2014)**

### **Active Ageing Index<sup>1</sup>**

**Kasia Karpinska**  
**Pearl Dykstra**  
Erasmus University Rotterdam

#### **1. Introduction: Background and context**

Ageing of the population and increasing life expectancy that have been observed in almost all European countries, have led to a widespread focus on active ageing. The active ageing policy discourse links specifically with the 'social ageing' phenomenon rather than with 'demographic ageing' (Zaidi et al., 2013). The latter concept is defined as either chronological ageing (i.e. age lived), or prospective ageing, that is remaining life years to be expected. Social ageing is defined in terms of stage in the life course and remaining years of life. This concept refers to an individual's changing roles and relationships with family and friends, in both paid and unpaid productive roles and in various organisations (Hooyman & Kiyak, 2010) and it emphasises expectations as well as institutional constraints that define how people live and work as they age. It takes into account, among other things, prospective age, changes in health, life expectancy, cognitive capacity, (dis)ability, workability or life course rescheduling behaviour.

The active ageing discourse builds upon this definition and at the same time stresses the importance of 'adding life to years'. Ensuring that the potential of older persons is fully realised– in the labour market as well as in other non-market productive social activities– and ensuring that older persons remain healthy and live independently as long as possible, have become increasingly important aspects of policy at the European and national level.

One of the challenges in applying adequate policy responses to tackle the issue of active ageing arises from the multidimensionality of the concept. Its complexity is captured by the definition provided by the World Health Organisation: 'Active ageing is the process of optimising opportunities for health, participation and security in order to enhance quality of people as they age. Active ageing applies to both individuals and population groups. It allows people to realise their potential for physical, social, and mental well-being throughout the life course and to participate in society according to their needs, desires and capacities, while providing them with adequate protection, security and care when they require assistance' (WHO, 2002, p.12). To fully capture the essence of active ageing it is thus necessary to focus on various aspects of the lives of older people, including their experiences but also activities undertaken in daily life, their health and increase of their autonomy (Zaidi et al., 2013).

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Increasing the opportunities for active ageing requires well-targeted policy responses, that are based on high-quality and independent evidence. As Zaidi et al. (2013) put it, strong evidence does not only contribute towards formulating better policy responses but also highlights the need for and benefits of changes. The Active Ageing Index, developed by the European Commission's Directorate General for Employment, Social Affairs and Inclusion and the United Nations Economic Commission for Europe, aimed to serve as an evidence base for policy responses. The main objectives of the AAI are to monitor active ageing outcomes at the country level, to describe the untapped potential of older people for active participation and to promote an active role of older people in societies. The core endeavour of the AAI project was to operationalise the multidimensional concept of active ageing and to show that 'rising longevity can become an asset for the societal progress, provided the European policy makers come up with appropriate policy responses in light of the evidence available to activate the potential of older people' (Zaidi et al., 2013, p.1).

In the following, we briefly describe the European level policies that have guided the development of the AAI. The conceptual model of the AAI, the methodology that was applied and the main results are also considered. Next, we present a preliminary evaluation of the Polish case and the application of the Active Ageing Index at the regional level. Last but not least, we present selected ideas on how the AAI can be applied in guiding policy responses, at both national and regional levels. We conclude with suggestions for further development of the AAI and policies that help promote active ageing.

## **2. Policy context at the European level**

The development of the Active Ageing Index has been pursued in close partnership with various policy initiatives at the European level. The first and most important was the labeling of 2012 as the European Year for Active Ageing and Solidarity between Generations (Decision 940/2011/EU)<sup>2</sup>. Designated to promote a culture of active ageing in the European communities based on the principles of a society for all ages, the main goal of the EY2012 was 'to raise awareness of the value of active ageing, highlighting the useful contributions older people make to society and the economy, to identify and disseminate good practices, and to encourage policy makers and stakeholders at all levels to promote active ageing' (Decision 940/2011/EU). Moreover, towards the end of 2012, the EU Social Affairs Ministers endorsed a Council declaration on the EY2012 and the Guiding Principles on Active Ageing and Solidarity between Generations (Council of the European Union, 2012). These principles reaffirmed that active ageing needs to be promoted in the three domains of employment, participation in society and independent living. Those principles were established as a checklist for national policymaking authorities and other stakeholders on what needs to be done to promote active ageing.

The effort to develop the AAI index was undertaken to mark two other occasions and to contribute towards the activities related to them. The first occasion was the 10<sup>th</sup> anniversary of the 2<sup>nd</sup> World Assembly on Ageing and the other was the second 5-year cycle of review and appraisal of the Madrid International Plan of Action on Ageing (MIPAA). The Political Declaration signed at the end of the 2<sup>nd</sup> World Assembly on Ageing emphasised the empowerment of older persons and the

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<sup>2</sup> <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2011:246:0005:0010:EN:PDF>



promotion of their full participation in work and social life—principles that are also present in the active ageing discourse. Policy recommendations of the MIPAA include those related to the active participation of older people in society and their development (through access to knowledge, education and training), health promotion and well-being throughout life and ensuring enabling and supportive environments (United Nations, 2002).

The year 2012 marked the end of the second 5-year cycle of review and appraisal of the MIPAA and its UNECE Regional implementation strategy. One of the major activities in this context was the Ministerial Conference on Ageing held in Vienna in 2012. A declaration adopted during this conference includes crucial references to active ageing as a policy course to be promoted across United Nations European Countries. The four goals that were identified included: encouraging working lives and maintaining work ability; promoting participation, non-discrimination and social inclusion of older persons; promoting and safeguarding dignity, health and independence in older age and maintaining and enhancing intergenerational solidarity.

## **Active Ageing Index**

### **Conceptual model**

The focus on active ageing and the directions European level policies were taking resulted in the development of the Active Ageing Index. The index was formed by an aggregated measure representing four domains:

1. Employment;
2. Participation in society;
3. Independent, healthy and secure living;
4. Capacity and enabling environment for active ageing.

The first three domains refer to actual expressions of active ageing are linked to the main principles of the European Year of Active Ageing and Solidarity between Generations (as mentioned on the EY2012 webpage)<sup>3</sup>:

“Employment – as life expectancy increases across Europe, pension ages are rising, but many fear that they will not be able to stay in their current jobs or to find another job until they can retire on a decent pension. We must give older workers better chances in the labour market.

Participation in society – retiring from one's job does not mean becoming idle. The contribution of older people to society as carers for others, typically their own parents or spouses and their grandchildren is often overlooked and so is their role as volunteers. The European Year seeks to ensure greater recognition of what older people bring to society and create more supportive conditions for them.

Independent living – our health declines as we grow old, but a lot can be done to cope with this decline. And quite small changes in our environment can make a big difference to people suffering from various health impairments and disabilities. Active ageing also means empowering us as we age so that we can remain in charge of our own lives as long as possible.”

The last domain captures the capacity and enabling environment aspects of active and healthy ageing. This domain is inspired by Sen's conceptual framework in which capabilities are defined as “substantive opportunities and empowerments to

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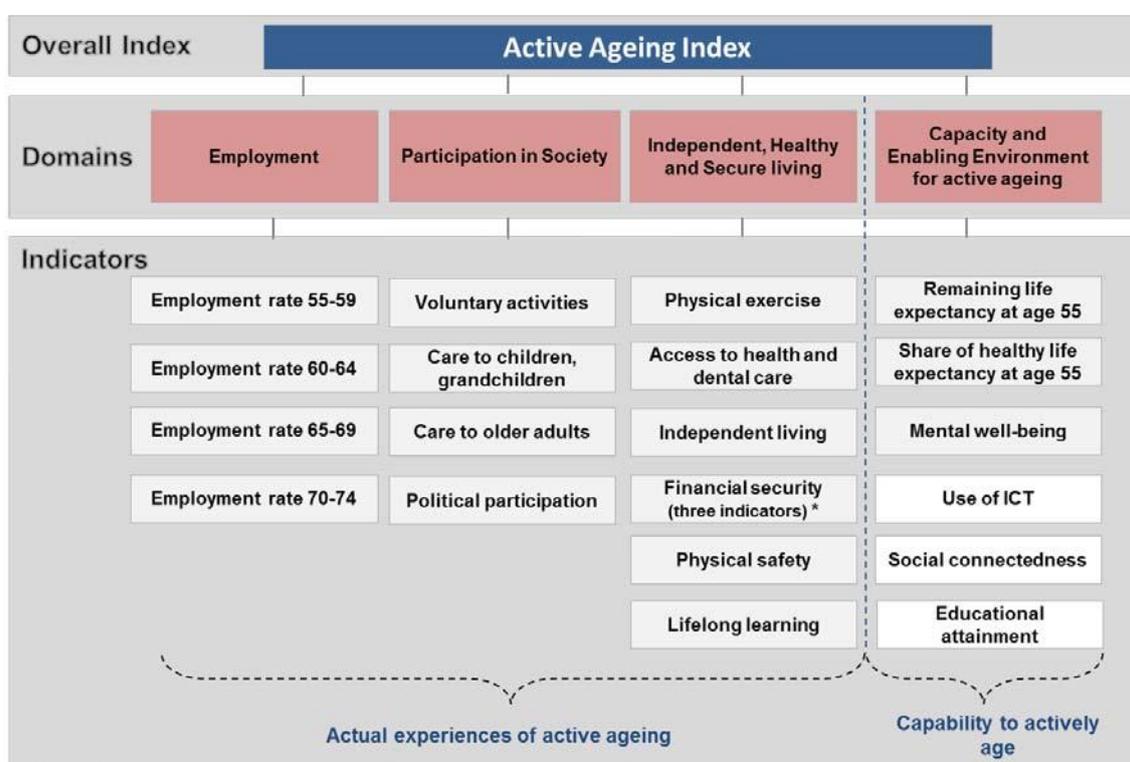
<sup>3</sup> <http://ec.europa.eu/archives/ey2012/ey2012main9ef0.html>



enhance well-being and quality of life, such as life expectancy, health, education, social participation and so forth” (Zaidi et al., 2013). This domain therefore measures human assets, health capital and human capital.

Each of the domains has been constructed by a selection of indicators. Figure 1 (adapted from Zaidi et al., 2013) depicts all four domains of the AAI. For methodological details regarding the choice of indicators, see Zaidi et al. (2013).

**Figure 1.** The domains and indicators of the aggregated Index, AAI (Source: Zaidi et al., 2013)



## Methodology

One of the goals of the AAI research project was the creation of a measure that allows the comparison of active ageing phenomena between different European countries and that helps identify strengths and weaknesses in a country. Following the development of the conceptual model, researchers explored different data sources to meet this objective. Elaborate and intensive work on methodological aspects was also carried out. For methodological details regarding the AAI, see Zaidi et al. (2013). Eventually, the AAI became an aggregated measure of all four domains, with each domain contributing towards the total score according to the assigned weight<sup>4</sup>. For each domain the arithmetic weighted average of the indicators was calculated. The overall aggregated indicator was then calculated as the arithmetic weighted average of the domain-specific indices.

<sup>4</sup> The weights were based on consultations with scientific and policy experts, for details see Zaidi et al (2013).



Gender-specific indices were also constructed, using the same weights as for the total population, while taking into account the values for the gender specific indicators. It is important to note that gender differences can only be analysed in a particular country, as those indices are not comparable across countries (Zaidi et al., 2013).

### **Interpretation**

The outcome of the Active Ageing Index is a value that ranges between 0 and 100, with higher outcomes pointing towards greater contributions of older people to society and better enabling conditions. Defining the outcome of the index in terms of range aimed at providing a unifying scheme that can be applied across countries and facilitate future evaluation of applied policies. The maximum of 100 is not likely to be achieved as it implies the “fullest active ageing” (Zaidi et al., 2013), and forms a theoretical possibility, rather than an attainable goal.

To interpret indicators included in the aggregated AAI, it is necessary to assign a certain importance to it. Zaidi et al. (2013) caution that the same normative value judgement of being a positive indicator (i.e. more is better) should not be applied to compare different indicators. As stated by the authors, this “higher is better” approach can be problematic. They provide an example of the indicators on care provision. They note that the argument that high levels are positive is only justified when taking the perspective of valuing informal care in terms of contributions made to the family and society. However, the care provisions by older adults, either to their partners or parents, or to their grandchildren, can also impose on the potential of informal carers. (Zaidi et al., 2013). Moreover, as Keck and Saraceno (2010) note, high levels of care provided by family members are characteristic of societies in which public care services are lacking. They use the term “familialism by default” to describe the situation in which family members are intensively involved in caring for the youngest and for the oldest—out of necessity, that is, because public policies and services are seriously insufficient.

This is not the only example where high levels on the AAI need to be interpreted cautiously. With respect to employment, high results need not indicate a positive climate towards employment of older people but might rather reflect a lack of sufficient retirement provisions; thus high employment levels of older persons might be dictated by necessity rather than free choice. Therefore, while interpreting the results of the AAI the policy context of the country in question needs to be explicitly taken into account. One should refrain from interpreting the results in terms of a better-worse outcome, but rather favour a “higher-lower” distinction.

Keeping that in mind, the methodology applied by the AAI still has major advantages in measuring active ageing phenomena in Europe. Firstly, it allows comparison of active ageing between different countries and data presentation in an appealing manner, allowing policy makers to assess the untapped potential of older persons in their country. Secondly the index permits comparisons over time, making it possible to monitor changes in active ageing outcomes in connection with changes in policies and economic circumstances. Thirdly, the possibility of disaggregating the AAI into contributions from each domain to the final score is an attractive feature because it highlights the importance of specific actions from policymakers in a given domain. Last but not least, the aggregate measure with its numerical interpretation of the index is probably better accessible for a wider public than the earlier suggested method based on the z-score methodology which was originally in constructing the AAI (for details see Zaidi et al., 2013). Moreover, one needs to keep in mind that indicators for each domain and for the overall AAI are

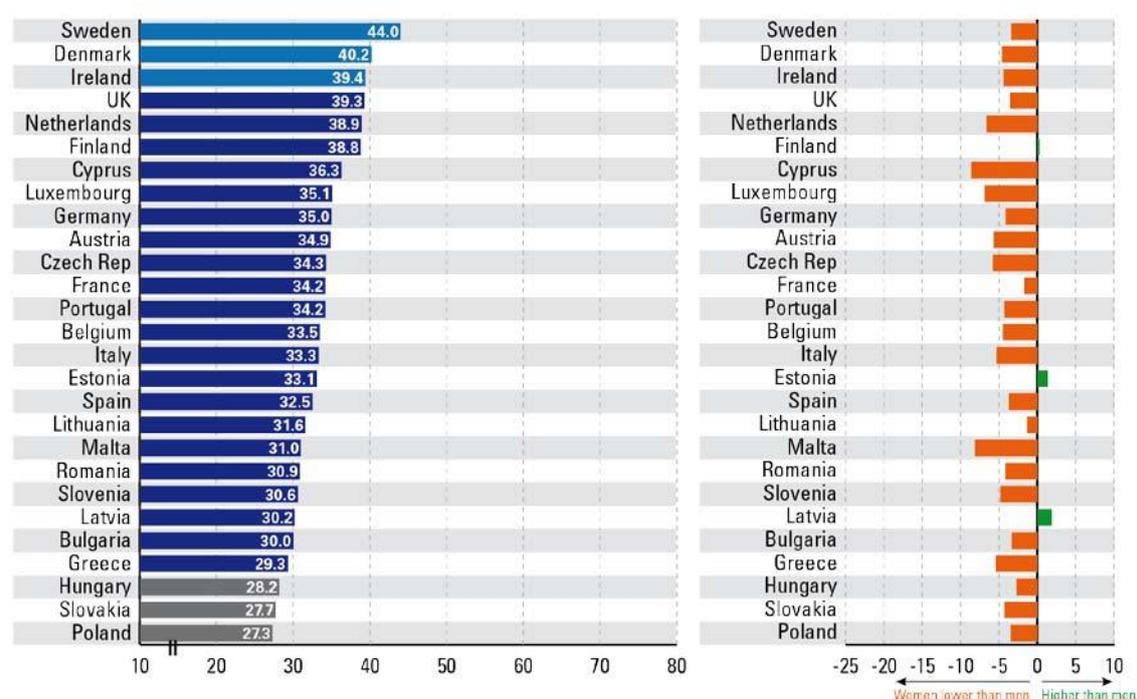


arithmetically averaged, meaning that the relative good performance of a country in one domain may counterbalance the relative worse performance in another.

## Results

The AAI index has been obtained for the 27 countries of the European Union as of 2012. In this paper we present selected results for all those countries (For a detailed overview of the results, see Zaidi et al., 2013). Figure 2 (adapted from Zaidi et al., 2013) shows the overall results for all European countries and their ranking with respect to active ageing. It also shows the differences between men and women.

**Figure 2.** Ranking of countries by the overall AAI for the total population and for differences between men and women. (Source: Zaidi et al., 2013)



Of all European countries, Sweden, Denmark and Ireland rank highest, while Eastern European countries are at the bottom of the ranking. Yet, even for the front-runner there is room for further improvement. The countries that score lowest (Poland, Slovakia and Hungary) require even greater policy efforts to close the gap between desired and current untapped potential for active ageing of older people.

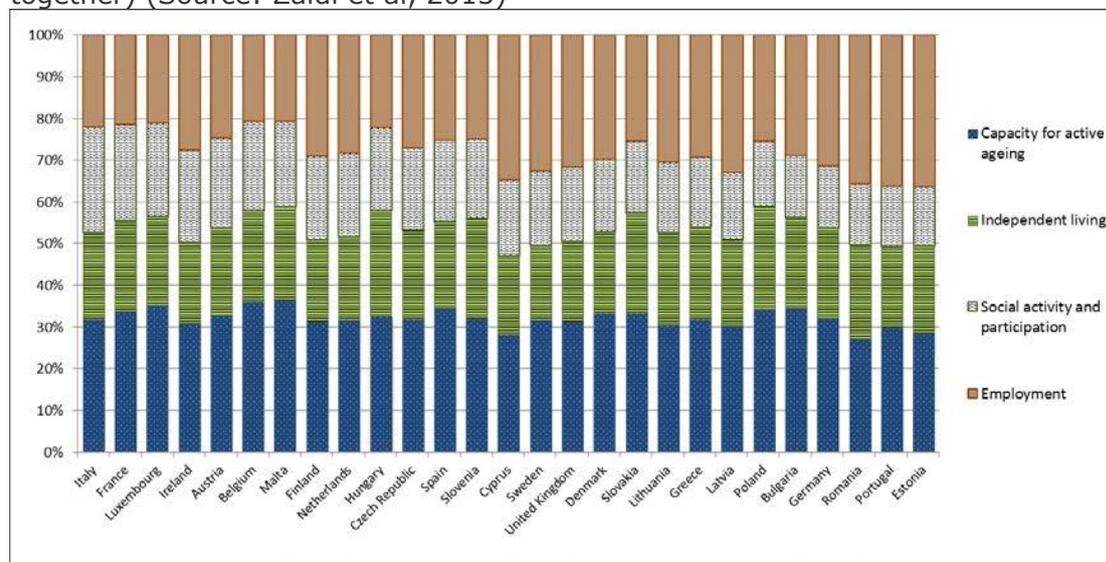
In almost all countries women have lower levels than men. The notable exceptions are Estonia and Latvia. In Southern countries, like Cyprus, Malta and Greece, the gap between men and women is the greatest, but large gaps are also visible in Luxemburg and the Netherlands.

Figure 3 (adapted from Zaidi et al., 2013) depicts the relative contributions of each domain to the overall AAI. The higher or lower contribution of a particular domain does not necessarily reflect higher or lower performance on the domain. It signals



the degree to which a given domain determines their rankings in the overall index (Zaidi et al., 2013).

**Figure 3.** Contribution of domains to the overall AAI index (men & women together) (Source: Zaidi et al, 2013)



The results show that the relative contribution of the first domain, *Employment*, is the highest in Cyprus and Portugal, and also in Estonia, Romania and Latvia, while France, Italy and Spain as well as Luxembourg and Belgium fall behind.

Italy and France as well as Luxembourg, Ireland and Austria stand out in terms of the relative contribution towards the total AAI in terms of *Participation to society*, while Estonia, Portugal and Romania record the lowest contribution from this domain.

With regard to the *Independent, healthy and secure living* domain, Hungary, Poland, Slovenia and Slovakia score the highest, while Sweden, Cyprus and Ireland record the lowest contribution for this domain to the overall index.

The relative contribution towards the *Capacity and enabling environment* domain is the highest in Luxemburg, Belgium, France, Poland and Bulgaria. The lowest contribution is observed in Cyprus and Romania.

Detailed data on all 27 countries (including ranks and values for the overall AAI and for each domain) are presented in Table 1 in the Appendix.

### The Active Ageing Index on the European policy agenda

#### Assessment of the AAI in relation to the priorities of the Europe 2020 strategy and the Social Investment Package.

'Europe 2020 – A Strategy for Smart, Sustainable and Inclusive Growth' is the European initiative that focuses on combating the economic crisis and creating the conditions for a more competitive economy with higher employment. The Europe 2020 strategy is about delivering growth that is smart, sustainable and inclusive.



The strategy is focused on five ambitious goals in the areas of employment, innovation, education, poverty reduction and climate/energy. The Europe 2020 strategy recognises the challenges that come with the ageing of populations, rising dependency ratios and a smaller productive population, threatening the sustainability of the social protection systems that are also suffering from the economic crisis (European Commission, 2013). Within this initiative “the challenge of promoting a healthy and active ageing population to allow for social cohesion and higher productivity” (European Commission 2010a, p. 18) is clearly recognised.

Within the Europe 2020 strategy, a set of five main goals has been specified, with two directly linked to the ageing population. One objective is to increase employment rates and assumes that 75% of those between the ages of 20 and 64 are employed in 2020. Moreover, Europe 2020 intends to lower the number of people at risk of poverty and social exclusion— among others, of older people— by 20 million. The targets are ambitious, but successful implementation of measures introduced to attain them will enhance the capacity and enabling environment for active and healthy ageing across the EU Member States.

The AAI can offer a useful tool for policy makers dealing with the implementation of the Europe 2020 strategy. The AAI includes the indicators that are closely related to the priorities of EUROPE 2020 – in the field of employment, lifelong learning and social inclusion (volunteering, helping family, participation in public life) and poverty of older people. Examination of the values of the index can help define the untapped potential of older people in those aspects in each European country and consequently, create policies or help adapt policies that can contribute towards greater promotion of healthy and active ageing. Further development of the AAI and calculation of the AAI for years other than 2012 can also help establish the effect of the policies towards achieving those goals.

Active ageing and its relation to making use of the potential of older people is also aligned with the Social Investment Package, a policy response of the European Commission that supports the idea that investing in people’s skills and capacities will allow them fruitful participation in employment and social life, generating economic and societal returns (European Commission, 2013). The European Commission's Social Investment Package urges member states to invest, among others, in individuals at different life stages and in different areas of their lives – employment, health, and participation in society. With reference to older people, the Social Investment package stressed the importance of health and active ageing policies in enabling people to make the most of their potential (European Commission, 2013). To that end member states are explicitly urged to refer to the AAI as a tool to support the implementation of this social investment orientation in social policies and to assess the extent to which older people can realise their potential (European Commission, 2013). Further development of the AAI is one of the actions included in the roadmap for Implementation of the Social Investment Package, which stresses the importance of the index as a tool to effectively apply the goals of the package (European Commission, 2014).

### **Application of the Active Ageing Index**

The AAI is still very novel; policy makers are in the process of becoming acquainted with the tool. The first example of application of the AAI for policy-making purposes is the active ageing strategy prepared by the government of Malta. In the “National Strategic Policy for Active Ageing: Malta 2014-2020” (Government of Malta, 2014), the national government refers to the AAI index as a tool that guided preparation of National Strategic Plan. The Maltese Strategy follows the distinction of domains as



introduced by the AAI and forms policy recommendations for three domains: employment, participation in society, and independent living. The Strategy presents descriptive analyses of trends and issues that arise in each crucial area of active ageing, and forms a number of policy recommendations for each of them. Those recommendations are rather broad and serve as a direction for future programmes, policies, and activities. The active ageing focus offers a comprehensive view on possible directions Malta intends to take to increase the potential of older people. With their explicit focus on enacting policies that improve social inclusion and increasing labour market participation, rather than only managing care services targeting older people, the government of Malta commits to a proactive stance in dealing with the challenges of an ageing population.

This is the first example of an application of the AAI for wider policy application, yet it already shows the utility of the AAI as a tool for policy makers. Without a doubt, more examples will follow.

### **The Global AgeWatch Index**

The development of the AAI has inspired the preparation of another index, the Global AgeWatch Index 2013, which measures and monitors key aspects of the economic and social wellbeing of older people globally. The Global AgeWatch index followed the AAI and the Human Development Index in the selection, development and use of multi-perspective quantitative indicators (Zaidi, 2013). The Global AgeWatch Index has been developed and constructed by HelpAge International. The applied data sources were drawn from different sources, including the United Nations Department of Economic and Social Affairs, the World Bank, World Health Organisation, International Labour Organisation, UNESCO and the Gallup World Poll.

The focus of the index is on the quality of life and well-being of older people, rather than a measure of the untapped potential of older people for active ageing, which is the focus of the AAI. In its design The Global AgeWatch index refers to the subjective and objective well-being of older people—aspects that the AAI index explicitly does not include in its indicators, as it measures the actual activity of older people making a positive contribution towards society (the first three domains) and the enabling environment. Yet, the essence of the concept of active ageing combines the element of productive ageing with a strong emphasis on quality of life and mental and physical well-being. A core assumption of the activity theory of ageing is that the initiation and maintenance of a productive activity is beneficial for older people's well-being (Havighurst, 1961). Consistent with this theory, studies have repeatedly shown that being engaged in a productive activity, such as volunteering is associated with improved well-being and quality of life (e.g., Siegrist and Wahrendorf, 2009). Beneficial effects are particularly likely if the productive activity provides opportunities for autonomy and provides rewards such as social recognition. High-investment activities such as long-term care for sick or disabled persons may even hamper psychological well-being because the options for autonomy and reward are restricted.

Although involvement in productive roles is deemed very important for the ways people age, modern societies face the so-called structural lag (Riley and Riley, 1994), i.e. the lack of meaningful and productive roles for older people that arose with the unprecedented increase of number of older people. Creating role opportunities for older people to utilise their capabilities will have important consequences for their successful active ageing and well-being. Clearly, the link



between (opportunities for) active ageing and well-being of older people require more attention.

### 3. Assessment of Polish policy

Gradually the AAI is being recognised as a tool for guiding policy responses by policy makers. Yet, the development of the AAI had not ceased once the results of the index were published in 2012. In Poland, it results was a key to design and prepare the long-term senior policy<sup>5</sup>. The AAI served also as a departing point for evaluating active ageing potential in regional perspective. Work carried out by Polish experts who constructed a regional level AAI is an example of such an application (Perek-Białas and Mysińska, 2013). The impetus for this work has been the poor AAI scores in Poland. The guiding question was whether regional differentiation might shed further light on the low scores, and more specifically whether the low scores were consistent across all Polish regions

#### Results

The results were described in the expert report presented to the Senior Citizen Policy Department of the Ministry of Labour and Social Policy in 2013. The regional AAI adopted the same conceptual framework as the national AAI. Yet, some of the indicators were excluded or adapted, due to data limitations.

One of the major strengths of the AAI in regional perspective is the explication of sub-national influences on the total value of the index for a country (in this case, Poland). The results presented in the executive summary show significant differences in the extent to which regions already (successfully) had adapted active ageing policies and those, which require additional action to unlock the potential of older persons. A comparison between the overall score for Poland as presented in the original AAI index and the regional disaggregation shows that most of the regions score lower than the country average, with only the top three regions matching the overall score. The final AAI score for Poland is thus lifted by the efforts of those three regions, while the remaining 13 regions clearly need to intensify their efforts and investment in the promotion of active ageing.

The definite front-runner is *Mazowieckie* region, which held the first position regardless if different weighs were applied. This is not surprising, given that *Mazowieckie* is a central region of Poland with a capital of Warsaw which plays a significant role here, attracting more investment, enjoying better economic conditions and social infrastructure in comparison to other regions of Poland. The last three positions are occupied by *Warmińsko-Mazurskie*, *Kujawsko-Pomorskie* and *Zachodniopomorskie* regions, all located in the north of Poland, remain low in the ranking, despite different weights applied.

Another nice feature of the AAI in regional perspective is that it depicts a detailed picture of each domain at the lower-level geographic unit. In doing that it follows the original methodology applied by Zaidi et al. (2013). A tremendous effort is required to find the necessary data at the regional level. More importantly, the results show a differentiation of problematic areas per region, offering the possibility to evaluate the need for policies for each of those domains in different regions and thus enabling a more detailed examination of the active ageing circumstances. Poland as a country has only recently engaged in the active ageing

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<sup>5</sup> See <http://www.senior.gov.pl>



discourse (following EY2012 initiatives) and the discussion regarding active ageing evolves mostly around extending working lives of older workers and rising the pension eligibility age. This focus is well justified, as there is a wide gap between regions in how they score on the employment domain – the scores obtained by the leaders in that domain (*Podkarpackie*, *Mazowieckie* and *Lubelskie* regions) and the last region in the ranking (*Kujawsko – Pomorskie* region) differ by roughly 40%. The need for targeted policies with respect to lifelong learning, which is closely related to employment, has already been one of the recommendations of the European Commission for Poland (2014).

The regional AAI shows that other aspects need not be neglected and that also other domains can be targeted. One example refers to the second domain, *Participation in the society*, for which Poland scored low in the overall AAI. Participation in volunteering activities has traditionally been low in Poland but the regional AAI shows that there is great variance between for instance *Warminsko-Mazurskie* (with the score on the volunteering activities index of 7.7) and the highest-scoring region, the *Lubuskie* region, with its score of 22.1. Clearly, the *Warminsko-Mazurskie* region falls behind with respect to volunteering. Those differences form an excellent example of how detailed response of the national and regional policy makers can be applied when the regional AAI is available.

The AAI in regional perspective serves as an excellent tool for identifying problematic areas. Addressing the disparities in the active ageing potential across regions might include policy measures taken at the national level, the regional level, or both. The extent to which the national and the local authorities can target the potential for active ageing at the regional level depends on the level of authority in charge of that area of active ageing. Moreover, some policies might be more relevant for some regions than for others. For instance, where *Use of internet* is concerned, the regions of *Małopolskie*, *Opolskie* *Podkarpackie*, and *Świętokrzyskie* clearly require more focus than other regions. The following sections describe the possibilities of policy actions in both the regional and the national perspectives.

### **Methodological considerations**

The Polish team has undergone a tremendous effort to compute the AAI for the regional level. Unfortunately there is a lack of appropriate data at the regional level in Poland for some of the indicators. Therefore some of the indicators needed to be adapted, while others were dropped entirely. In addition, the existing data did not allow for calculation of the regional AAI for both men and women. Given the unquestionable benefits of the AAI in the regional perspective, other Member States will likely follow the Polish example and adapt the AAI in regional perspective to their own countries. We foresee that also other Member States will encounter data shortages at the regional level. The question arises to what extent alterations to match the availability of regional-level data are justified and in which case the resulting index becomes a new entity.

In their work, the Polish team has applied different domain-specific weights in their regional AAI. Next to the original AAI weighting (35%-35%-10%-20%), 20%-20%-30%-30% weights were also calculated. This increased the impact of two domains, for which Poland ranked a bit higher in the overall AAI (the *Independent, healthy and secure living* domain and the *Capacity and enabling environment for active ageing* domain). This strategy also changed the ranking of regions, although the first three regions maintained their position in the top five, and the front-runner remained the same. This differential weighting exercise can also be adopted by



other Member States wishing to develop their own regional AAI, but clearly deserves thoughtful discussion.

#### 4. Policy focus

##### Outcome of the AAI and the policy context

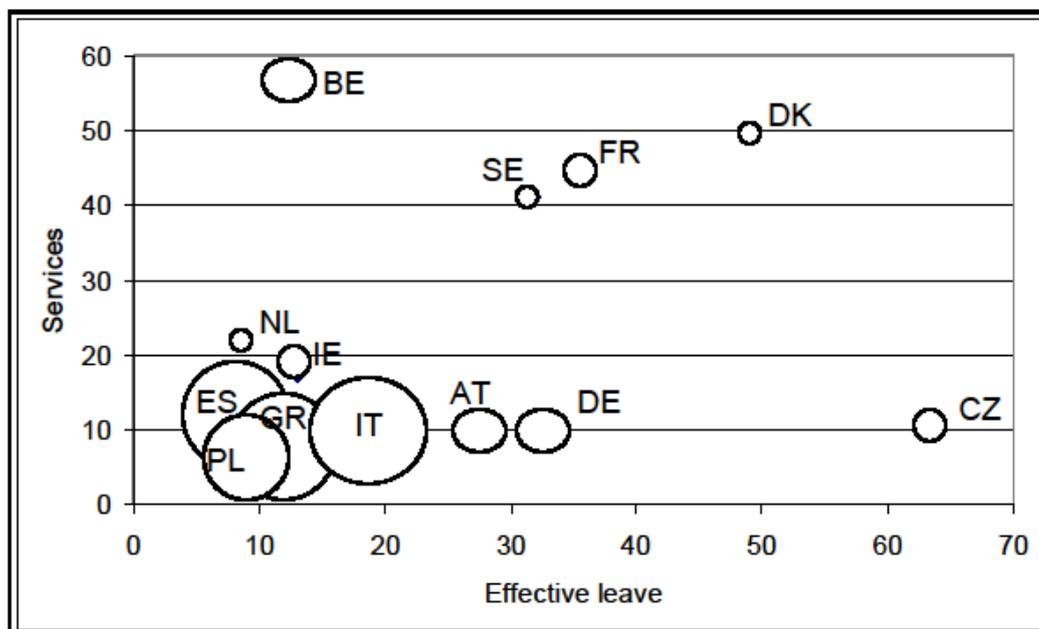
As mentioned earlier, outcomes of the AAI for each country are closely related to legal and policy arrangements. Hence, while interpreting results, one needs to keep in mind the policy context of a country. Scientific research presents evidence that supports the idea of interplay between the welfare system and participation of older people in society. One example of such interplay is the care older people provide to their kin. Within each country, laws define the rights and duties of younger and older family members towards each other, while policies (or their absence) reward or discourage particular family practices (Dykstra, 2013). In Figure 4 (adopted from Bordone, Arpino & Aassve, 2012) based on findings from the MULTILINKS research project (Dykstra & Komter, 2012), the size and position of the circles show, for a number of European countries, the likelihood that grandparents provide childcare on a daily basis. The larger the circle, the greater the likelihood is that grandparents provide care. Denmark is characterised by the smallest circle: the probability of Danish grandparents to be involved in daily care is 1,8%, while in Italy this number was estimated at the 34,9%. The other countries position themselves in between these two extremes. The propensity to take care for grandchildren may seem to be dependent mainly on personal inclinations and cultural habits, but as it emerges, the size of the circle – they are particularly large for Italy, Greece, Spain and Poland – is strongly linked to the availability of public arrangements<sup>6</sup>. This is indicated by the position of the circle, which is determined by the availability of childcare services and the generosity of parental leave. Belgium scores highest in terms of childcare services, the Czech Republic when it comes to parental leave, and Denmark has high levels in both types of arrangements. The key conclusion is that we find the largest circles where the services and leaves are least generous. Grandparents step in when a lack of public facilities keeps parents from combining paid work and parenting. Moreover, as Keck and Saraceno (2010) note, high levels of care provided by family members are characteristic of societies where public care services are lacking. They use the term “familialism by default” to describe the situation where family members are intensively involved in caring for the youngest and for the oldest—out of necessity, that is, because public policies and services are seriously insufficient.

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<sup>6</sup> The policy measures are from the MULTILINKS policy indicators database (Keck, Hessel, & Saraceno, 2009). Childcare services are the number of places in publicly subsidised facilities as a share of the number of children under the age of three. Effective leave is the duration of paid parental leave multiplied by the level of financial compensation for the leave.



**Figure 4.** Predicted probability of caring for the child of a working daughter by level of effective leave and services



Similar findings are observed in the values of the AAI. When the relative contributions of the indicator *care to children and grandchildren* towards the domain *Participation in society* are taken into account, we observe that the relative contribution of this indicator towards the domain-specific index is the highest in Greece, Italy, Cyprus and in Eastern European countries: Hungary, Latvia and Lithuania. Poland's score is lower than other Eastern European countries, yet substantial.

This example shows the impact of the policy and legal context employ on the active participation of older people and indicates that high participation may arise from lack of suitable support from the state. It is important to keep in mind that high participation of older people in active care for their children or grandchildren does not need to form a burden—given adequate policy arrangements. Policy makers can formalise the care provided to family by offering (better) financial or work arrangements, so care will become a choice rather than a necessity. Note, however, that withdrawal from the labour market in order to provide care might have negative financial consequences, such as a drop in income and lower pension benefits. When designing policies one needs to take into account those completing interests, both for individual older people but also for the welfare systems.

### The AAI and policy responses in national and regional perspective

The previous paragraph noted that policies and legal arrangements shape the possibilities of older people for active ageing. The AAI in regional perspective suggests that different dimensions of active ageing can be targeted at regional rather than national level only. As shown in the Polish example, some regions lag behind and require more attention from policy makers than others. The question is whether problematic areas can be targeted by the regional authorities or whether the national government needs to apply policies to support active ageing within



regions. The analysis of the distribution of responsibilities for policy changes between the national and regional levels will shed more light on the possibilities for adequate policy response.

Figures 5 and 6 present the AAI index disaggregated into 22 indicators for both the European Union (figure 5) and for Poland (figure 6)<sup>7</sup>. Both figures show how policy responsibilities are distributed between different levels of government (national, regional or both) for all indicators that contribute towards the overall AAI. For the EU (Figure 5) the indicators were assigned to one of the governance levels based on where the policy responsibilities for each indicator are *typically* located. For Poland (figure 6) we attempted to assign those indicators based on the *actual* distribution as observed in Poland. Each indicator was scored on two additional dimensions, namely time (policy changes arising in the short versus the long run) and influence of policy changes on each indicator (direct versus indirect influence). For those two dimensions, each indicator was assigned a value ranging between 0 and 1. With respect to the time dimension, 0 means that a given indicator can be affected by policies in short term, while 1 denotes that changes in this indicator are expected in long run. The position of the indicators is relative; we ranged those indicators relative to each other and thus not in a given time frame. Similarly, with respect to the influence of policy, indicators that can be affected indirectly obtained a score closer to 0, with value of 1 being reserved for indicators that can be affected by direct policy measures<sup>8</sup>.

The size of the bubble corresponds with the relative influence of each indicator on the respective domain (and consequently, on the overall value of the index). Those values represent the implicit weights that are assigned to each indicator in the AAI (a multiplication of the explicit weight and the indicator value, Zaidi et al., 2013)<sup>9</sup>. Values for the EU were calculated based on the average values for each indicator for all 27 countries of the European Union; for Poland the specific values as presented in the AAI were taken.

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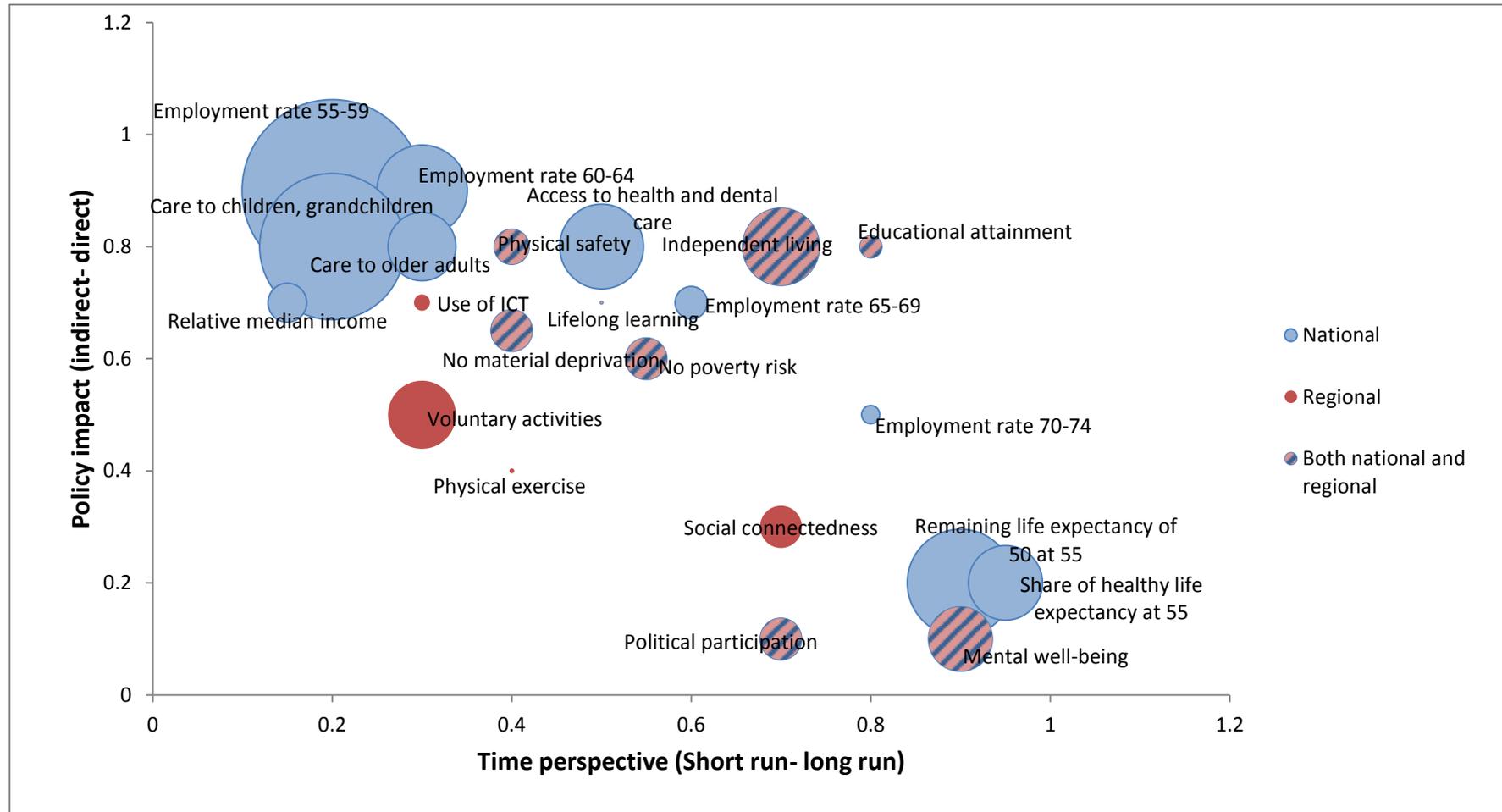
<sup>7</sup> We gratefully acknowledge the idea and suggestions by Ralf Jacob (European Commission), which guided the preparation of figures 5 and 6.

<sup>8</sup> Allocation of the indicators to one of the governmental levels of influence and the position on the chart is based on own estimation and may be subjected to further adjustments.

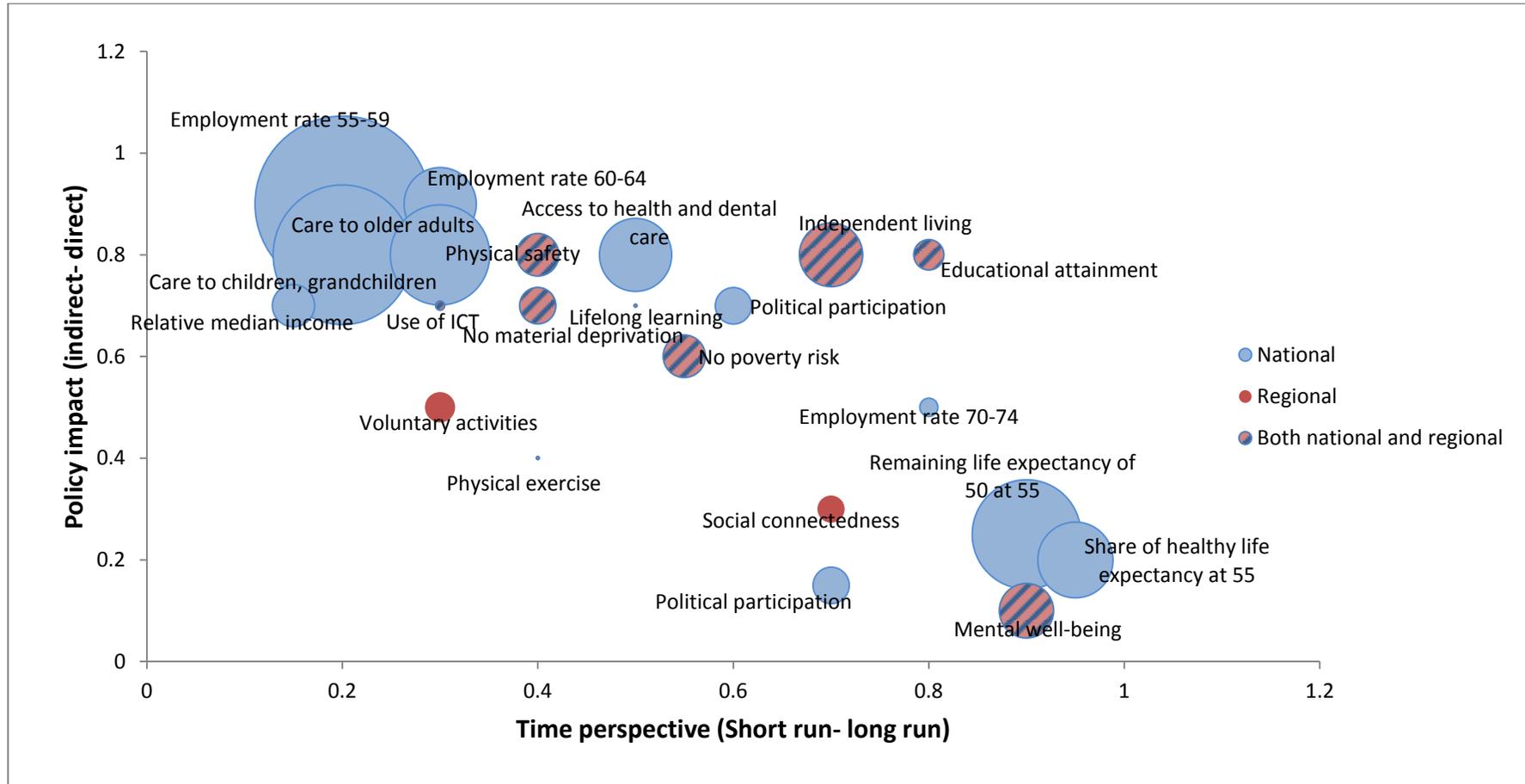
<sup>9</sup> The value of the explicit weight is calibrated so that the chosen final implicit weights match with those recommended by the Expert Group.



**Figure 5.** The AAI indicators for the EU.



**Figure 6.** The AAI indicators for Poland.



Figures 5 and 6 both show the distribution of the various indicators across the three dimensions – *time*, *influence of policy* and *level of governance* where responsibilities for change rest. There is a certain degree of overlap between the presented figures, as we expect there are similarities regarding the extent to which authorities are in charge of a particular active ageing aspect. Also, for both the EU and Polish cases, we expect that the time required for changes (long run vs short run) and the nature of the policy influence (direct or indirect) is fairly comparable. Therefore, the location of the indicators is analogous in both figures. The major changes refer to the size of the bubble, which denotes the impact of the indicators on the AAI. Note however, that the values for the level of influence and the required time span (and therefore, the position of the bubbles) can be subjected to discussion. Greater differences in the distributions of the various indicators are likely to emerge when national differences in the allocation of responsibilities are taken into consideration.

In both figures, indicators contributing towards the first domain, *Employment*, are located in the upper left corner of the graph, thus denoting indicators that can be affected in a relatively short time perspective and by means of direct policy measures. The time span expected to pass before a measure affects an active ageing indicator increases with the age of the population targeted by the measure – we expect that increases in the labour market participation of older persons will occur later than for those aged 55-59. Also, for both representations, the employment of people aged 55-59 forms the largest bubble, indicating its relative importance. Increasing the labour market participation of older people is predominantly the responsibility of national governments, although we do not exclude the possibility that regional policy initiatives can also be effective.

The indicators contributing towards *Participation in society domain* are distributed throughout the whole spectrum of time and influence. In the upper left corner (short term and direct policy influence), one finds *care to children and grandchildren* and *care to older adults*. Those aspects of *Participation in society* also fall under national government's responsibilities and we expect them to be affected by direct policy measures, e.g. policies that reduce the availability and access to professional care. Political participation is also assigned to the national policy sphere, while volunteering can be most effectively tackled at the regional (or even local levels). Volunteering is expected to be affected by a shorter time span and by more direct policy measures than political participation. *Care to children and grandchildren* and *care to older adults* are also the largest bubble in this domain.

In our analysis, indicators that belong to the domain *Independent and healthy and secure living* are more dispersed in terms of the allocation of responsibilities, and the timing of changes; yet they are all located in the upper part of the graph, meaning that all of them, except for physical exercise, can be affected by direct policy initiatives. *Access to health and dental care* and *relative median income* are assumed to be exclusive responsibilities of national governments, physical exercise can be affected by local initiatives, while the remaining indicators can be targeted by both regional and national policies. Issues related to physical exercise or access to health care services and financial security (*no material deprivation*, *relative median income* and *no poverty risk*) can be affected in a relatively short time perspective, while *lifelong learning* requires long-term policy efforts.

*Capacity and enabling environment for active ageing* includes indicators in various areas of government responsibility and across various time and policy influences. Policy responsibilities for the use of ICT (in the case of Poland), is located at both the regional and the national levels of governance; *educational attainment* is mostly



the responsibility of national authorities and *social connectedness* is located at the regional level. *Use of ICT* and *educational attainment* can be affected by direct policies but do take some time before having an effect. *Social connectedness*, in turn, is affected by indirect policy influences and takes place in a longer time perspective.

Located in the lower right corner are *remaining life expectancy*, *share of healthy life expectancy* and *mental well-being*. Those aspects of active ageing are not easily amenable to policies and require a longer time span to have an effect. They presume a life course approach towards active ageing, a principle stating that experiences in earlier life influence how individuals age. To affect those outcomes, policy makers need to adopt a long-term approach towards the promotion of healthy lifestyles and other determinants of health. Mental health, for instance, can be related to numerous factors, including genetic factors, but also to economic and environmental conditions (e.g. living conditions) and education, employment or social circumstances like social isolation (European Commission, 2005). Social support networks, participation in volunteering activities and encouragement of physical activity were deemed successful actions to increase mental health of ageing populations (European Commission, 2005). In turn, mental health can affect the social connectedness and participation in society. Similar mechanisms apply to remaining life expectancy, or a share of healthy life expectancy.

In general, the various components of active ageing that can be targeted by direct policies have relatively immediate consequences. These indicators strongly influence the overall AAI, which suggest that with suitable policy responses targeting each indicator, the active potential of older people (and the overall AAI) can be significantly increased in a relatively short time period. Changes in other indicators, however, require more extended efforts of policy makers. In fact, indicators located in the lower right corner (indicators affected in the long run by indirect rather than direct policy initiatives) require a lifelong dedication to active ageing, as an increase in those indicators is inextricably linked to changes in other aspects of active ageing. This emphasises the need for a multidimensional and multifocal policy approach to active ageing.

The disaggregation of regional or national policy responses provides an indication of where the influence is located. It shows that although the national governments define the legal and policy framework, the regional authorities can also contribute to increasing the potential of older persons. The extent to which local authorities can exert an impact depends on the specific arrangements in each Member State.

### **Regional policy focus in Poland**

The focus on active ageing at the regional rather than only at the national level has been initiated by the Polish team in an attempt to draw lessons from the bottom position Poland occupied in the overall AAI. Based on the Polish example, we give the preliminary assessment of the possibilities for action at this level.

In the case of Poland there are no legal restrictions regarding targeting active ageing issues at regional or local levels. With so-called "own tasks" local authorities can shape social policy according to the needs of their local community (in accordance with national policies) (Korolewska, 2013). However, local governments often need to finance those initiatives, and a lack of resources can limit the development and implementation of active ageing policies and initiatives. Still, the general goals and strategy regarding older persons are in the jurisdiction of the national government and organisations at the national level, which shape the legal framework of active ageing policies and their financial component (Błędowski,



2012). Theiss (2012) suggests that the focus of Polish social policies targeting older citizens at a local level currently relies on the notion that family members are responsible for ageing people—in particular care for older people or their independent living. The specificity of Polish “familialism” results in local efforts implemented only when a family dysfunctions and lacks broader focus on older people and policies that address their needs. Yet, there are examples that show that the family-centered approach has been changing and there are local policies that address the challenges of the ageing of the population in a more comprehensive way. One of the examples includes involving the unemployed in older adult care, resulting in higher levels of social cohesion while cutting financial expenditures. Theiss (2012) attributes the success of this initiative to three components, namely locally defined ageing strategies, integration of the social problem in the local community (i.e. unemployment) and local policy-making. This good practice shows that a local focus and the application of activating policies is possible, though it requires a careful analysis of locally defined ageing and recognition of local needs and local assets.

## 5. Conclusions

The development of the AAI index offers researchers and policy makers a tool to help understand gaps in policies aimed at dealing with the ageing population. As shown in the example of the strategy prepared by the government of Malta, the Active Ageing Index has been successfully applied in the process of developing a framework for increasing active ageing in the national perspective.

The Polish attempt to apply the AAI to address regional differences offers the possibility to expand the analysis of active ageing within a country by showing that the contributions of individual regions can vary considerably. Although the Peer Review focuses on the specific case of Poland, their expertise in applying the AAI at the regional level can contribute towards adaptation of the AAI by other Member States.

Further development and application of the AAI, in both national and regional perspectives, is required, however. The following points are possible directions guiding the application and further development of the AAI.

- Increasing the active participation of older people (and raising the overall AAI for a country) is one of the main areas of interest for policy makers working with the AAI. Their effort to raise participation must not, however, be at the expense of the well-being of older people, e.g. by forcing the labour market participation or increasing care responsibilities. The challenge for policy makers lies in designing policies that will increase active participation of older people, while supporting their well-being.
- Policies that promote the active ageing potential of the ageing population can contribute towards sustainability of welfare systems, by, for instance, lowering the costs of social security or increasing the contributions towards pension schemes. Means to promote active ageing might, however, be in conflict with one another. For instance, increasing participation in the care of family members can reduce participation in the labour market. In designing policy measures to increase active ageing potential, policy makers need to take possible competing outcomes into account as well as their impact on the sustainability of welfare systems.



- While designing policies to promote active ageing, policy makers need to take the structural gap into account, i.e. the imbalance between the number of older people and the number of meaningful and productive roles they can engage in to utilise their capabilities. Supporting active aging policies requires designing policies that develop possibilities for older people to take up new roles in social structure, for instance in post-retirement employment, lifelong learning or voluntary activities.
- The Active Ageing Index reflects the multidimensionality of active ageing and the potential of older people. This multidimensionality and the relations between different aspects of active ageing, show that targeting one aspect of active ageing affects others (for instance, changes in employment affect one's financial situation, increasing social connectedness and mental health). Long-term strategies and a life course perspective to active ageing are, therefore, required.
- The example of Poland shows that regional differences can be substantial and any country interested in increasing active ageing in their country (and consequently, increasing the AAI) would be well advised to look at regional disparities, allowing policy makers to focus their efforts on regions that lag behind. The question arises however, if such an exercise will be fruitful in smaller countries that might be more homogeneous.
- The disaggregation of the AAI by different levels of policy responsibilities, direction of influence, and time required for change, illustrates the areas of influence for policy makers. Does targeting active ageing at the regional level differ across Member States? Which aspect can be targeted at the national and which at the regional (or even local) level? Is there consensus on which indicators can be affected directly?
- The experience of Poland and the methodological problems that have been encountered in obtaining the relevant data at the regional level raise the question of how to construct regional versions of the AAI with limited data. We foresee that this issue will more often form an obstacle in obtaining a regional AAI. Which alterations of the AAI in regional perspective are acceptable and which pose a threat towards the validity of the index? To what extent is the application of different weights justified?
- The holistic approach applied by the AAI reveals the complexity of active ageing for men and women, and invites policy makers to take into account different dynamics of male and female ageing. The regional AAI presented by the Polish team is an aggregated measure for both men and women. Provided data are available, calculation of the active ageing indices for men and women separately would allow gender disparities in potential for active ageing to be addressed at a regional level.



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## Appendix

**Table 1.** The overall and domain AAI, per country.

OVERALL			1. Employment			2. Participation in society			3. Independent, healthy and secure living			4. Capacity and enabling environment for active ageing		
Rank	Country	Value	Rank	Country	Value	Rank	Country	Value	Rank	Country	Value	Rank	Country	Value
1	Sweden	44.0	1	Sweden	41.0	1	Ireland	25.2	1	Denmark	79.0	1	Sweden	69.5
2	Denmark	40.2	2	Cyprus	36.1	2	Italy	24.1	2	Sweden	78.7	2	Denmark	66.7
3	Ireland	39.4	3	UK	35.5	3	Luxembourg	22.6	3	Netherlands	77.7	3	Netherlands	61.6
4	UK	39.3	4	Portugal	35.3	4	Sweden	22.6	4	Finland	76.6	4	Luxembourg	61.6
5	Netherlands	38.9	5	Estonia	34.4	5	France	22.4	5	Germany	75.8	5	UK	61.4
6	Finland	38.8	6	Denmark	34.0	6	Netherlands	22.4	6	UK	75.7	6	Ireland	60.8
7	Cyprus	36.3	7	Finland	32.0	7	Finland	22.4	7	Ireland	75.7	7	Finland	60.7
8	Luxembourg	35.1	8	Romania	31.4	8	Austria	21.4	8	Luxembourg	74.7	8	Belgium	60.3
9	Germany	35.0	9	Netherlands	31.4	9	Belgium	20.4	9	France	74.6	9	France	57.8
10	Austria	34.9	10	Germany	31.2	10	Denmark	20.1	10	Slovenia	74.4	10	Austria	57.5
11	Czech Rep	34.3	11	Ireland	31.0	11	UK	20.0	11	Czech Rep	73.8	11	Germany	56.2
12	France	34.2	12	Latvia	28.3	12	Czech Rep	19.4	12	Belgium	73.4	12	Spain	56.1
13	Portugal	34.2	13	Lithuania	27.4	13	Cyprus	18.7	13	Austria	73.0	13	Malta	56.1
14	Belgium	33.5	14	Czech Rep	26.4	14	Spain	18.3	14	Hungary	71.9	14	Czech Rep	54.4
15	Italy	33.3	15	Austria	24.6	15	Malta	18.2	15	Lithuania	70.6	15	Italy	52.8
16	Estonia	33.1	16	Bulgaria	24.6	16	Slovenia	16.7	16	Romania	70.1	16	Bulgaria	51.7
17	Spain	32.5	17	Greece	24.4	17	Hungary	16.1	17	Malta	70.1	17	Cyprus	51.1
18	Lithuania	31.6	18	Spain	23.3	18	Lithuania	15.3	18	Estonia	70.0	18	Portugal	50.8
19	Malta	31.0	19	Slovenia	21.6	19	Germany	14.9	19	Italy	69.9	19	Slovenia	48.8
20	Romania	30.9	20	Luxembourg	21.1	20	Portugal	14.3	20	Cyprus	69.1	20	Lithuania	47.9
21	Slovenia	30.6	21	France	21.0	21	Greece	14.2	21	Poland	67.5	21	Estonia	47.1
22	Latvia	30.2	22	Italy	20.9	22	Latvia	13.9	22	Spain	67.3	22	Poland	46.7
23	Bulgaria	30.0	23	Slovakia	20.1	23	Slovakia	13.7	23	Slovakia	67.0	23	Greece	46.7
24	Greece	29.3	24	Poland	19.8	24	Estonia	13.3	24	Portugal	66.7	24	Slovakia	45.9
25	Hungary	28.2	25	Belgium	19.8	25	Romania	12.9	25	Greece	65.2	25	Hungary	45.9
26	Slovakia	27.7	26	Malta	18.3	26	Bulgaria	12.9	26	Bulgaria	65.2	26	Latvia	45.4
27	Poland	27.3	27	Hungary	17.8	27	Poland	12.2	27	Latvia	63.2	27	Romania	42.0

