Early investments in education are investments in active ageing. Educational status which has been acquired in childhood and adolescence has positive effects on health, social integration, and participation in late adulthood. Late investments in active ageing are effective, as well. Interventions in health, integration, and participation in late adulthood are possible and might change ageing trajectories towards active ageing. In addition, health, integration and participation are highly connected. Health is a necessary precondition for active participation in the labour market and in volunteering organization. On the other hand, social integration and participation have positive effects, for instance in respect to a better health of active volunteers. Finally, societal investments in active ageing concern opportunities for education, for participation in the labour force and civic organisations and for social security systems like unemployment protection, pension system, health care system, and long-term care system. These results are exciting and may lead to highly optimistic conclusions. It has to be pointed out, however, that despite many promising pathways for change in ageing trajectories, losses in functional abilities and frailty will be the reality for a substantial part of older people. Before presenting policy implications and policy recommendations some pitfalls of focusing exclusively on positive aspects of active ageing have to be discussed and arguments for a broader understanding of active ageing put forward.

5.1 Towards a broader understanding of active ageing

Two potential pitfalls of focusing exclusively on positive aspects of active ageing should be highlighted. These pitfalls concern the long-term consequences of preventive interventions and unintended social exclusion of ageing individuals who suffer from multi-morbidity, disabilities, frailty, and whose ageing trajectories are by definition not “successful”. Hence, we would like to argue that the WHO definition of active ageing calls for a broader understanding of active ageing which strengthens the societal inclusion of all older people, both healthy and frail older people.

(a) Overcoming the limitations of active ageing

Interventions intended to improve active ageing have been shown to positively affect health status, subjective well-being, and participation of older people. Assuming that populations have a maximum average life span (taking into account within-population variance in individual life expectancies around the population mean) this could mean that health promotion and prevention may shift the onset of chronic illness and disability to a short period before death. These ideas characterized the initial conception of “compression of morbidity” (Fries, 1980). Demographic and epidemiological research in the last decades has shown a complex pattern of results, however. Although younger cohorts are characterized by improved functional health when entering the phase of old age (Freedman et al., 2004; results on the prevalence of illnesses are less positive), it has been shown that there is no limit of maximum life expectancy, so far. All assumptions regarding life expectancy have been broken in the past (Oeppen & Vaupel, 2002). Additionally, it has been shown that the onset of senescence has shifted into later phases of the life course, but that the rate of ageing has remained unchanged (Vaupel, 2010).

Figure 4 shows hypothetical representations of life courses which illustrate this point. Figure 4(a) is the starting point: Here the hypothetical trajectory of a person is shown who has not participated in preventive interventions and who experiences a phase of frailty before death. Figures 4(b) and 4(c) show hypothetical life courses of two persons who have participated in preventive interventions and who both benefit from these interventions: In both cases the life span increases. There are two important differences, however. Figure 4(b) shows a life course where the rate of ageing has been slowed and where death occurs before the person enters into a frailty phase. In contrast, Figure 4(c) shows a life course where senescence has been shifted to
Active ageing and quality of life in old age

Figure 4
Hypothetical representations of (a) a life course with frailty phase, (b) a life course with extension of life span, changed rate of ageing and no frailty phase, and (c) a life course with extension of life span, unchanged rate of ageing and frailty phase.
a later phase of life, but where the rate of ageing has remained unchanged and where the person goes through a phase of frailty before death (like in the first example). While the trajectory depicted in Figure 4(b) is the ideal goal of prevention and health promotion (as in the concept “compression of morbidity” by Fries, 2005), the trajectory depicted in Figure 4(c) seems to be more in line with empirical findings (Vaupel, 2010).

Hence, even if health promotion and prevention are successful (i.e. extending the life span and leading to a better health status of the “young old”) it can nevertheless be expected that – late in life – a substantial proportion of the “old old” will need support because of multi-morbidity and frailty. When emphasising health promotion and prevention in policies on active ageing, governments should be aware that these policies may improve the living situation of the “young old”, but may not completely prevent frailty and dependency. Policies on active ageing should therefore include policies also for supporting frail older people.

(b) Inclusion of frail older people

Definitions of active, healthy, and successful ageing tend to be normative and lead to propositions like the following: “It is better to be active and healthy in old age than to be inactive and to suffer from chronic diseases”. These normative propositions may influence both the individual course of ageing and the societal acceptance of old age. Research on the consequences of age stereotypes has shown that individuals with a positive self-image of ageing are healthier and live longer than individuals with a less positive self-image (Levy, 2003; Levy, Slade, & Gill, 2006; Levy, Slade, Kunkel, & Kasl, 2002). However, positive images of ageing may have a dark side and pose a danger for those people who do not fall under the definition of successful ageing (Torres & Hammarström, 2009). Highlighting good, positive or desirable ageing trajectories implies that there are also bad, negative and undesirable ageing trajectories. In a societal perspective, a one-sided focus on successful ageing could lead to the social exclusion of frail older people who do not fit into perceptions of “active” or “successful” ageing (see the discussion in the 6th German Government Report on the living situations of older people; BMFSFJ Bundesministerium für Familie Senioren Frauen und Jugend, 2010, p. 262; for an English short version see BMFSFJ German Federal Ministry for Family Affairs, 2011). When addressing the topic of active ageing and quality of life, attention should be given to the “incomplete architecture of human ontogeny” (Baltes, 1997) and the “Janus face of ageing” (Baltes, 2003). Policies for active ageing will be necessary for ageing societies, but they should be complemented by policies on supporting frail and dependent older people to ensure their social inclusion and human dignity (see for instance the European Charter of the Rights and Responsibilities of Older People in Need of Long-term Care and Assistance, AGE Platform Europe, 2010).

5.2 Setting the framework for active ageing

Similar considerations and precautions can be found in the WHO definition of active ageing. A central component of the WHO definition is the reference to a “process of optimizing opportunities for health, participation and security in order to enhance quality of life as people age” (WHO, 2002, p. 12; emphasis added). In this paper the term investment has been used to indicate that active ageing needs a framework of enabling factors, opportunity structures and societal institutions to amend ageing trajectories. Investments in active ageing should be inclusive and embrace all ageing persons, regardless of their health status. Before discussing specific recommendations three cross-cutting issues: Education, security, and images of ageing are worth pointing out.

(a) Investing in education

Policies on active ageing should comprehend measures which foster successful development in earlier phases in life. Education encourages the continuous development of knowledge and skills necessary for a healthy life style, for employment, for societal participation, and also for personal fulfilment. Governments and relevant stakeholders need to ensure that children and adolescents have the possibility to receive a thorough primary, secondary, and tertiary education (university education, vocational education). It is important to reduce the share of students who leave school early (without a leaving certificate, and raise the share of students with a tertiary degree. Educational institutions have to suit an increasing diversity of students. In addition, more attention should be given to systematically promote life-long learning, which is of high relevance for employees
in modern economies that are based on knowledge
and innovation. Hence, states and other relevant
stakeholders may consider developing structures
promoting life-long learning (e.g. institutions,
funding schemes, curricula).

(b) Providing security

Active ageing needs a secure base. Social security
systems provide protection against social risks like
illness, disability, unemployment, and poverty – and
they also regulate pension schemes. Hence, social
security is a necessary condition for active ageing.
Although the instruments for social security might
differ between societies and might include benefits
from the state, market, civil society and/or families,
government role is to provide a system of regulation
for the combined effects of these stakeholders.
Stimulating opportunities for older workers to
participate in gainful employment until retirement
age (and, if they wish so, also beyond retirement
age) and securing adequate income for older people
who are in retirement are important tasks for states
in this respect. Combating poverty will also help
to reduce health inequalities and to increase the
chances for individuals to take an active part in
society. Given the expectation that a substantial
proportion of older people needs long-term care
at present (and probably will so in the future), it is
highly important that the social risk of frailty will be
covered by social security systems (e.g. long-term
care insurance).

(c) Encouraging inclusive images of ageing

Societal and individual conceptions of ageing
influence developmental trajectories over the life
span. Quite often, these everyday conceptions are
alluded to as “images of ageing” which are expressed
in beliefs, in behaviour routines, in societal
regulations, and also in pictures (as in advertising).
Yet many images of ageing do not do justice to
the diversity of old age. It is an important task to
examine the effects of these images, as they may
courage (or prevent) older people from taking
part actively in society. Quite often, legal retirement
ages are justified implicitly or explicitly by assuming
that older people have a reduced work capacity or
resilience. Bringing new “images of ageing” into
the mass media and into the consciousness of the
general public might show that in fact older people
are a potential societal resource. It should be noted,
however, that replacing “negative” images of ageing

with purely “positive” images does not do justice
to the situation of frail older people in need of care.
Hence, images of ageing should be inclusive and
embrace both the potentials and the risks of old
age.

5.3 Fostering healthy biographies

(a) Promoting a healthy lifestyle

The foundation for active ageing starts in childhood.
Although experiences and events in earlier phases
of the life course do not determine completely an
individual’s living situation in later adulthood, they
are important factors for many aspects of the ageing
process. However, also in later phases of the life
course, there should be opportunities and incentives
for adequate health behaviour. The state and other
stakeholders have to provide the legal and financial
basis for life-long health education and promotion.
Special emphasis should be given to develop and
implement health promotion for older people. In
addition to enhancing a healthy lifestyle, the relevant
stakeholders need to provide healthy settings in
schools, workplaces, and neighbourhoods. Design
in shaping housing, neighbourhoods, and traffic
systems should stimulate health behaviour over the
life span.

(b) Providing effective services of health care and
long-term care

Healthy ageing needs to be supported through an
effective health care system. The state needs to
establish the legal and financial basis for health
promotion and prevention up to old age (primary,
secondary, and tertiary prevention). A precondition
for real choice by users is full information about
which services are available. Independent advice
institutions would be one way of achieving this.
When frailty and dependency in old age happen,
this should be accepted as part of the life-span.
Innovative solutions like fall detection devices, easy
to use social interaction services, and smart use of
information and communication technology (ICT)
in the home may help to support older people to
live independently at home. While staying at home
may be the preference of many older people,
in some cases residential accommodation may
provide more safety and security. Also in the case
of living in a residential care facility, there should be
opportunities for active participation in society.
5.4 Supporting social integration
(a) Strengthening diverse family types, extending social ties beyond the family

Active ageing means also to grow old in social networks. Hence, policies on active ageing should strengthen social integration and social activities. This means to enable families realizing the opportunities for intergenerational contact, exchange and solidarity. The diversity of families and private networks should be reflected in policies which attempt to strengthen social cohesion. Policies on active ageing should also strengthen private networks outside the family. Communities and other stakeholder might consider creating opportunities for the exchange between generations outside of the family. Both older and younger people may benefit from these exchanges (e.g. support in schools, in neighbourhoods, in multi-generation meeting places). Attention should be paid to the fact that fighting loneliness in older people may also require the individual attendance to personal cognitive capacities and preferences.

(b) Giving aid to caring families

Families take over the task of caring for frail older people in many societies. Since family structures are changing, the female employment participation rate is increasing, and working life is gradually extended, informal care through families and private networks need to be supported. The state should provide legislation and a financial basis for adequate long-term care services. This support should correspond to people’s choices: When facing the task of family care, care policies should support a partnership approach between family carers, professional providers and cared-for persons. Informal care should be a positive choice to care, not an obligation to care.

5.5 Encouraging societal participation
(a) Reinforcing employability and stimulating employers

Active ageing and the extension of working life is not only an economic necessity in many countries, but also corresponds with many older people’s wish to societal participation. Policies on the employment of older workers should not only combat early retirement, but also emphasise the maintenance of working capacity and employability. A higher retirement age calls for environments which enable older workers to remain healthy and productive, a responsibility not only of policy makers, but also of companies and individuals themselves. Hence, relevant stakeholder should promote healthy workplaces, provide age-friendly and safe work environments, and increase flexibility of work time (e.g., work time accounts, sabbaticals). Active ageing policies should consider incentives for employees to retire later and for employers to hire and keep older workers.

(b) Creating opportunities for volunteering

Volunteering is part of active ageing. Although volunteering can be seen as an altruistic activity, intended to promote the quality of life of other people, volunteers profit by participating in these activities as well, e.g. in terms of skill development, social integration or having a pleasant leisure time. The development of age-friendly communities should be supported by improving urban and local environments (e.g., “walkability” of neighbourhoods, creating multi-generation meeting points). Desirable places and spaces can motivate (older) citizens to participate in their neighbourhoods. A variety of organisations could get involved in supporting the development of volunteering. There are several strategies which could be used by communities to increase volunteering (e.g. providing funds to launch projects that engage volunteers; developing infrastructures for recruiting, training, and connecting older adults). A culture of participation and intergenerational transfer could be fostered in clubs and associations, emphasizing opportunity structures for realizing the potential of ageing and old citizens. The central arena for investments in active ageing is the local and regional context (e.g. age-friendly cities; WHO, 2007).