Determinants of high levels of functional disability in New Member States and its economic consequences

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What Makes the Difference?

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Content

1. **Evidence of disability:**
   - two types of definition of disability: functional and legal disability
   - different tendencies based on these definitions in NMS

2. **Determinants of disability**:
   - diseases, injuries, genetic diseases
   - different structure of disability causes in NMS and „old" Europe

3. **Consequences**:
   - high costs of disability
   - need for long-term care development

Definition of disability

Problems with definitions of disability and measures

- **Functional disability** based on ICF concept; ADL and IADL

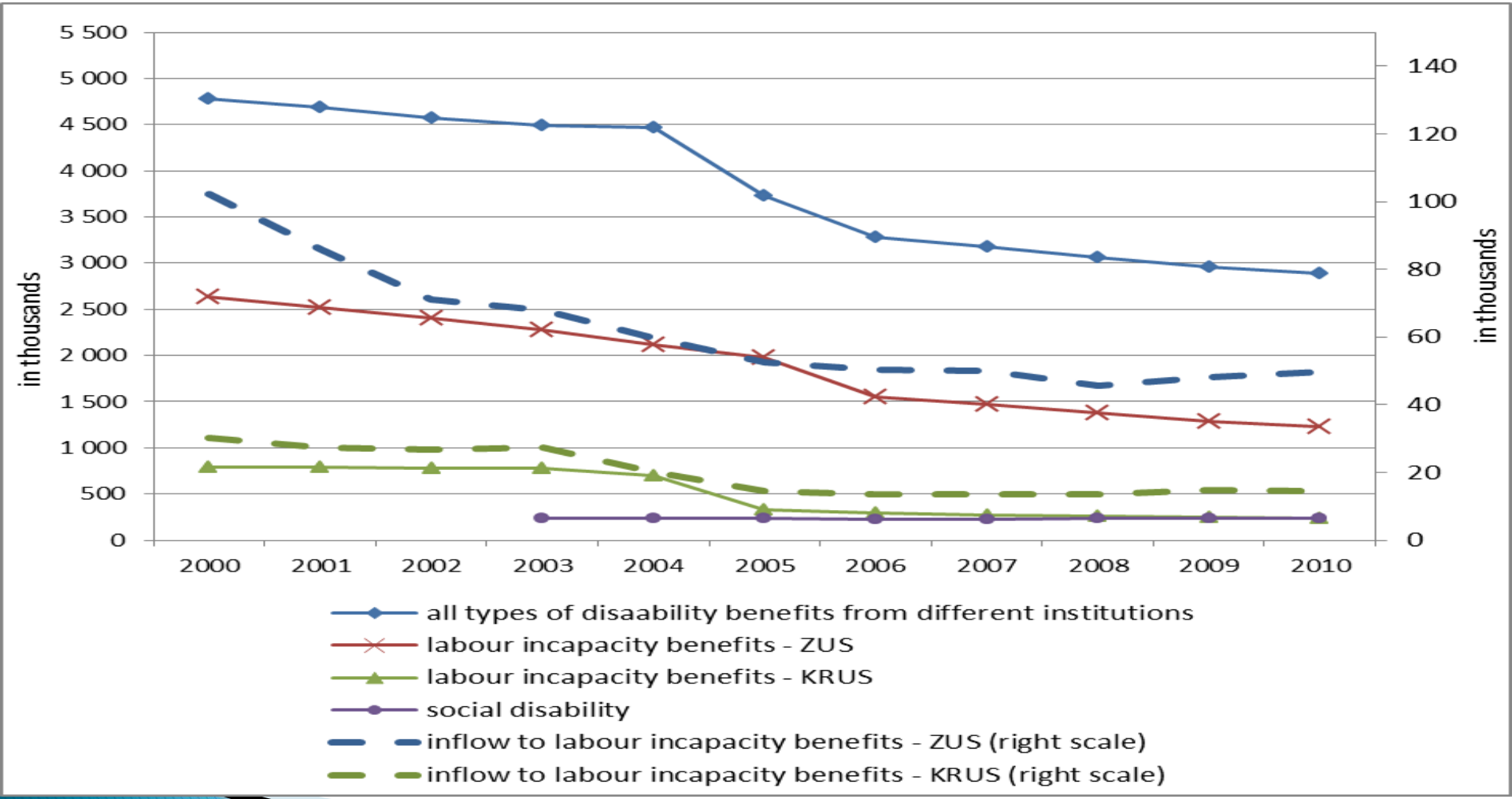
- **Legal disability** based on medical assessment of incapacity to work > entitlement to disability benefits (pension). Prevalance of legal disability strongly depends on institutional settings: financial constraints and social policy in a given country.

NMS – different prevelance and tendencies of disability based on two types of definitions

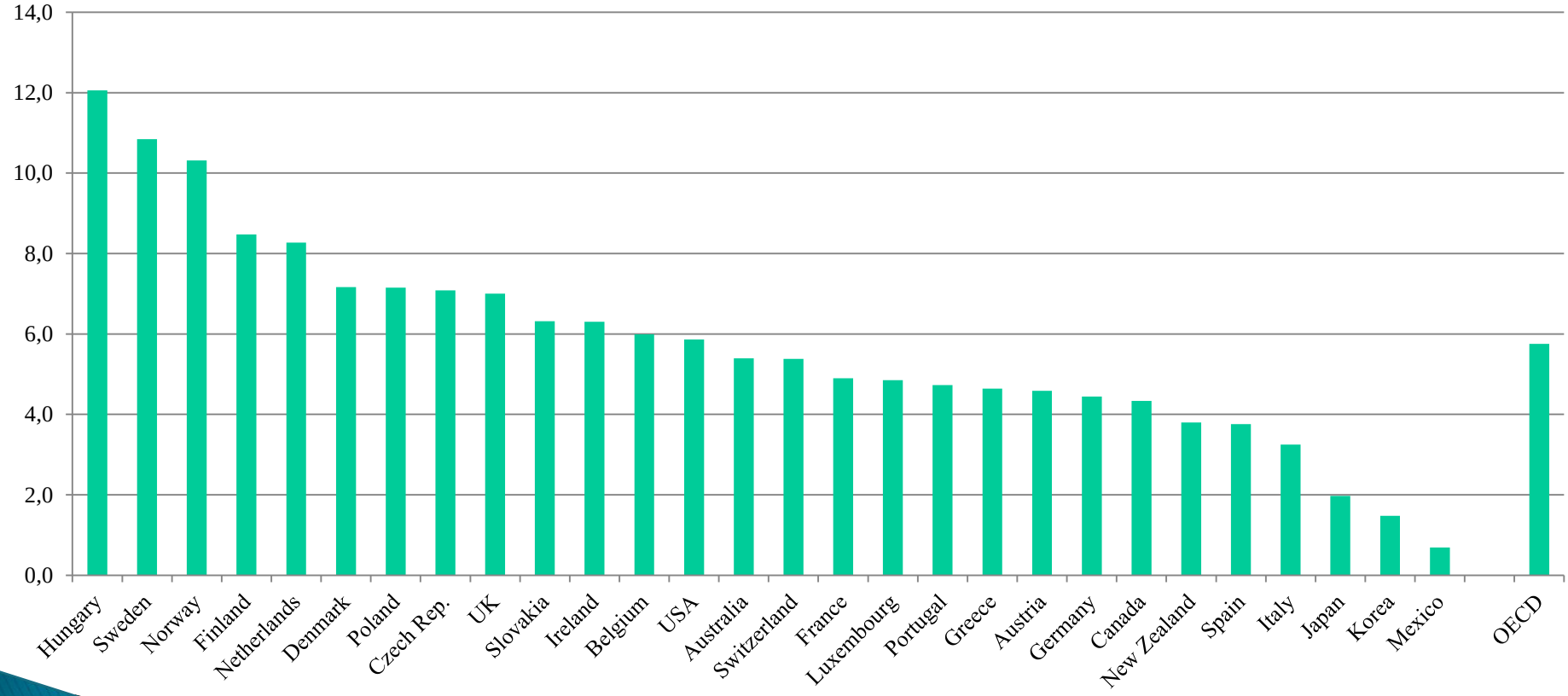
Two groups of countries:

- Czech Republic, Slovenia and Hungary: paralel development of functional and legal disability
- Poland and others – contradictions: functional disability strongly increases but legal disability decreases

Decreasing number of people with disability pensions - Poland



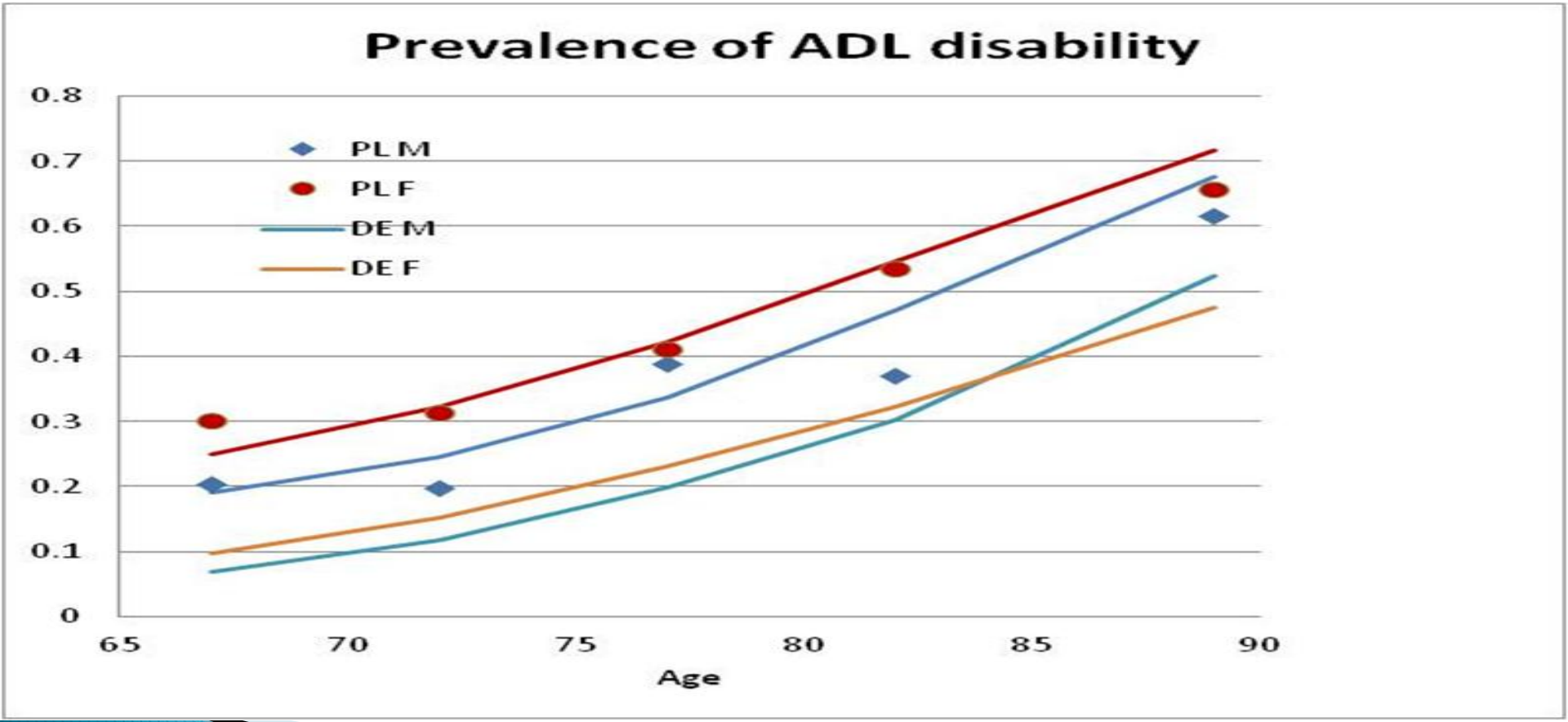
Disability benefit recipients in percent of the population aged 20-64



OECD 2010

	Occurrence of disability or long-term (chronic) diseases	Poland	The average for the given group of countries
1	The share of population with long-term problems or chronic illnesses lasting at least 6 months. EHIS / GUS * study	43% (problems) 55% (diseases) (2009)	31% (problems) (2008) EU-27
2	The share of people evaluating their health below good in the general population. EHIS / GUS study	34% (2009)	33% (2008) EU-27
3	Percentage of people with chronic illness or long-term health problems in the general population. EU-SILC survey	32.0% (2007)	30.7% (2007) EU-27
4	The percentage of people with limitations in daily activities lasting longer than 6 months among people of working age: 24-64 EU-SILC survey	16.0% (2009)	17.5 (2009) EU-27
5	The percentage of people with reduced life activity lasting longer than 6 months aged 55-64 among the people in that age group EU-SILC survey	**53.4%**	37.5% (2009) EU-27
6	The percentage of people with functional limitations aged 50 + among the people in that age group ADL IADL SHARE Study *	**16.3% (2006)** **16.7%**	6.9% (2006) 9.1% EU 12 countries
7	Percentage of population aged 20-64 receiving disability benefits. OECD data (OECD 2009)	7.0 (2007)	5.8 (2007) 28 countries

Disability prevelance among elderly in Poland and Germany based on SHARE data

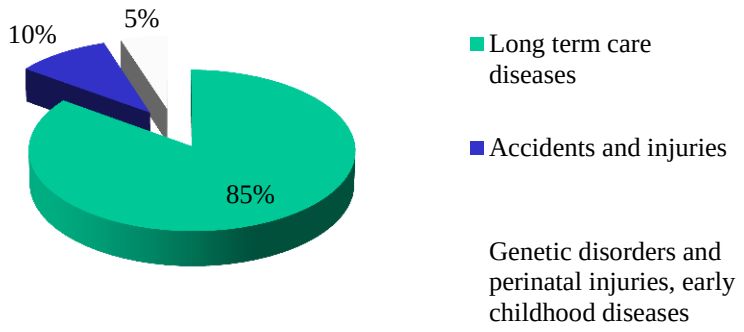


3 paths lead to disability

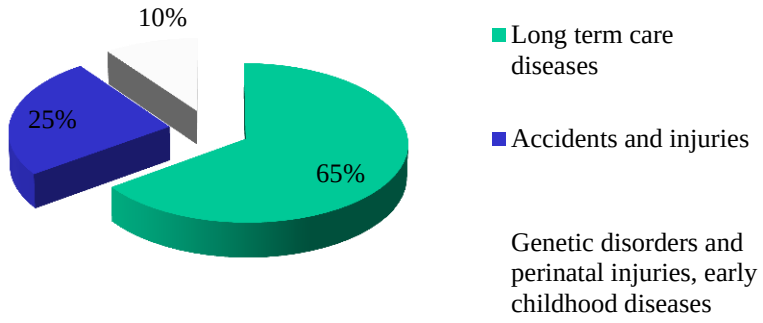
1. Disability as the result of long-term disease(s) – 60% (in high income countries 65-85%)
2. Disability as the result of accident or injury – 30% (about 10% in high income countries)
3. Disability from birth caused by genetic disorders, perinatal injuries and early childhood diseases – 10% (a few percent in high income countries)

Comparison of disability causes

High income countries



NMS

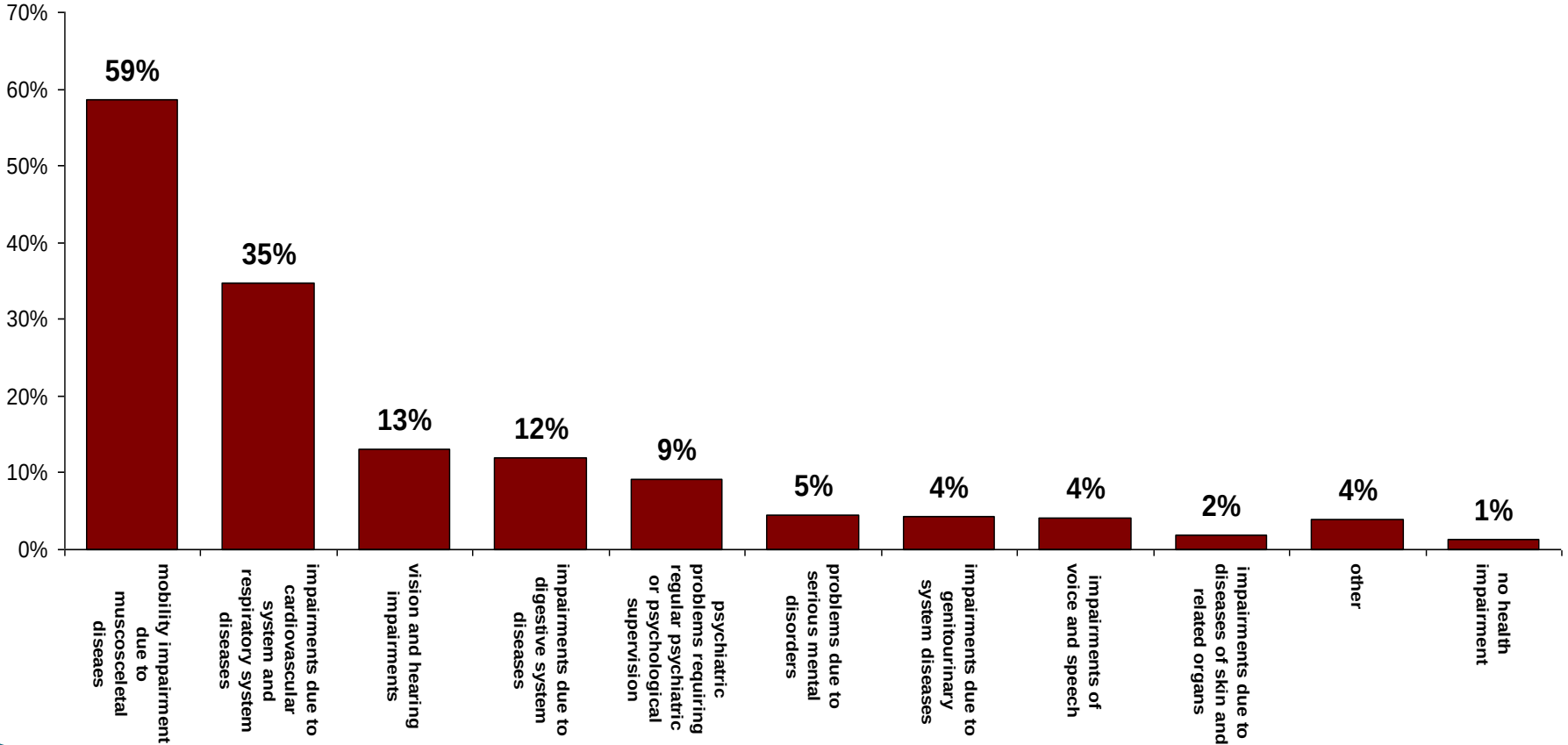


DALYs; mln years

Group of diseases	In middle-income countries	In the European Region	In countries with the highest income
Ischemic heart disease	28.9	16.8	7.7
Brain vascular disease	27.5	9.5	4.8
Unipolar depressive disorder	29.0	8.4	10.0
Dementia and Alzheimer's disease	~ ~	8.4	4.4
Alcohol use disorder	14.9	7.1	4.2
Cirrhosis		3.1	
Chronic obstructive pulmonary disease	16.1	3.3	3.7
Other respiratory diseases and lung cancer	~ ~	3.7	3.6
Infectious respiratory diseases	16.3		~ ~
Bone and joint diseases and osteoporosis	~ ~	3.1	
Damage to sensory organs	~ ~	3.9	4.2
Diabetes	~ ~	2.3	3.6

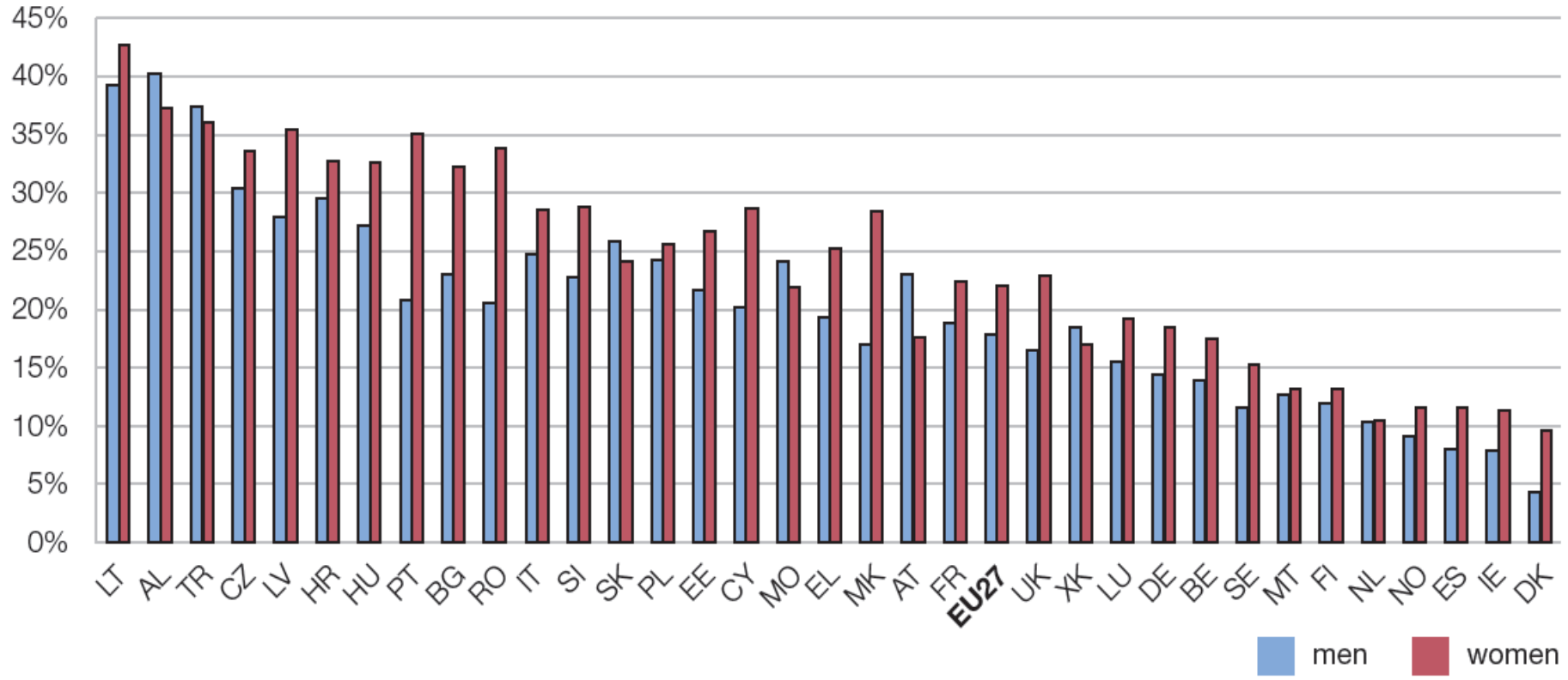
WHO database 2008

Main diseases within legaly disabled persons - Poland



Golinowska & Sowa, IPiSS 2012 AŻON survey

Share of employees declaring risk of mental disorders at workplace



Disability from injuries

Two main causes of injuries (fatal and nonfatal; the last is 20 times higher > poor evidence):

•**Road traffic accidents**; there are several causes of the high level of road accidents in Poland (and some other NMS – esp. Baltic countries): a dynamic increase in the number of vehicles on the road, failure to comply with safe driving standards (speeding, driving after drinking alcohol) and inadequate road infrastructure

• **Accidents at work**; monitoring of accidents at work indicates some increase since 2006 (esp.in Poland), although in the years 1990-2005 the trend was rather favourable; concentration in selected sections of economy: mining, manufacturing, construction, and transport.

Disability from birth and early childhood diseases

In Poland significantly more often than in other countries (European register EUROCAT) children are born with serious birth defects. At the same time extended screenings of newborns are developed, for example screenings for hearing defects and cognitial metabolic diseases

Generally it could be estimated that the programs and activities relating to reproductive health and child care in NMS are mainly focused on reducing infant mortality. Reducing the frequency of chronic diseases and diseases leading to child disability is not a priority in health policies of some NMS (evidently in Poland).

Costs of disability

Direct costs:

- Public; costs of benefits and programmes for disabled persons and expenditures of public insurer on health care and rehabiliation (net effect)
- Individual costs; *extra costs of living with disability*

Indirect – opportunity costs

Direct costs of disability - Poland

Type of cost	Tendency 2006-2010	% of GDP (2010)
Benefits	↓	1.93
Individual expenditures on health – net effect	↓	0.55
Public expenditures on health care and rehabilitation (medical & ocupational) – net effect	↑	1.53
Public subvention for education focused on disabled children/students	↓	0.21
Medical assessment and PFRON	↓	0.34
Total		4.56

Indirect costs of disability - Poland

Type of opportunity costs	% of GDP (2010)
Increase in incomes of disabled persons	0.28
Taxes and contributions	0.03
Lower expenditure on disability benefits	0.27
Total	0.58

- Results of simulation based on assumption of increase in labour market activity of persons with disability (from 13% to 30%)

Need for LTC development

- LTC is not separated as a social/health policy sector in NMS
- Care for disabled and dependent persons is based on family (informal care) → family based social model
- Family care givers are mostly women who leave labour market on average 7 years earlier then men
- Dynamic ageing combined with increase in retirement age are external factors for changing institutional arrangements of LTC (decreasing supply of care). At the same time increase in labour market participation of highly skilled women will stimulate development of formal LTC. This social policy challenge has not been insufficiently addressed by policy makers

Projected LTC public spending as % of the GDP

Country	2010	2060	Increase in pp.	% of increase
Czech Rep.	0.8	1.6	0.8	97.9
Germany	1.4	3.3	1.9	129.4
Netherlands	3.8	8.4	4.6	128.2
Poland	**0.7**	**1.9**	1.1	**156.4**
Spain	0.8	1.6	0.7	89.9
UK	2.0	2.9	0.9	44.5
Romania	0.6	1.9	1.2	**198.7**
EU-27	1.8	3.6	1.7	94.0

Conclusions

- Legal disability and functional disability – two different pictures: high prevalence and increasing tendency of functional disability; decreasing tendency of legal disability > poor incentives for policy makers to response
- Different structure of disability causes compared NMS with the countries of “old Europe”; more causes connected with injuries > more space for prevention policy
- Dynamic ageing and epidemiological transition in NMS leads to increase in occurrence of chronic diseases, especially in older age. This leads to an increase in functional disability, which has already been signalled by some European surveys (EHIS, SHARE)

Conclusions cont.

- High level of functional disability and prevalence of chronic diseases in population aged 50+ > strong factor of increasing LTC needs
- LTC needs driven also by external factors: opportunity costs of care related to higher labour market participation of women > development of formal sector of care
- High disability direct costs because of disability pension and other benefits in cash > inactivity of disabled persons on the difficult labour market (low empoloyment rate)
- Economic indirect costs might not be very impressive, but non-economic costs would be significant > more integration and participation > political choice

Presented findings and conclusions
are based on results of two research projects:

- ANCIEN, EC funded 7th Framework Programme, http://www.ancien-longtermcare.eu/

- Institutional, health and social determinants of disability, project of Institute of Labour and Social Studies (IPiSS) in Warsaw sponsored by Państwowy Fundusz Rehabilitacji Osób Niepełnosprawnych (National Fund of Rehabilitation of Disabled Persons)