Financial risks of illness: a shared responsibility?

Summary

In all summaries, the problems seem simpler than they actually are.

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Europe has a longstanding history of solidarity with the ill. In most countries, this has resulted in a rather stable system of public social insurance arrangements which protect citizens against the financial risks of illness. This protection encompasses two kinds of insurance: health insurance (HI), which covers the use of health services, and disability insurance (DI), which covers the potential loss of income due to a reduced capacity to work. This dissertation aims to understand the effects of reforms on the solidarity of these arrangements (first aim), opinions about the deservingness of claimants (second aim), and the similarities and differences between HI and DI in this respect.

Introduction (Chapter 1)

Chapter 1 provides a background on illness-related social insurance and the aims of the dissertation. Public arrangements for health insurance and disability insurance go back to the end of the 19th century and were gradually extended over the years. This extension process went relatively smoothly until the 1970s. After that, demographic, technological, economic and broader sociological developments jointly challenged the continuation of illness-related social insurance as it was. These developments created a momentum for change. The reforms that were implemented since the 1980s were often aimed at reducing expenditures. Consequently, the economic effects of reforms have been subject to evaluation. However, the reforms may also have influenced solidarity, one of the cornerstones of social insurance, and knowledge about these effects of the reforms on solidarity is lacking. It is important to increase our insights into this matter, especially in light of new reforms which are on the horizon. Knowledge about past reforms' impact on solidarity could inform policymakers. Therefore, this dissertation looks back on the reforms that have been implemented in health insurance and disability insurance since the 1980s and aims to understand how they have affected solidarity (first aim).

Despite the policy reforms undertaken in the last three decades, policymakers remain concerned about the sustainability of public social insurance arrangements for at least two reasons. First, because the expenditure curve has not always bent downwards as was hoped. Second, because past policy reforms may have had a negative impact on social values – such as solidarity – and given rise to new concerns. The status quo in health insurance and disability insurance is understood to require new reforms, and these are expected in the near future. Restricting allocation is a recurring idea in the political and societal debate on public social insurance. Allocation policies

stipulate what requirements must be met to be entitled to collectively financed resources. Those requirements are based on deservingness perceptions, i.e. answers to the question "who deserves what benefits and under which circumstances"? Deservingness opinions in illness-related social insurance arrangements have scarcely been studied, even though they may provide valuable insights for policy makers, especially with new reforms on the horizon. Therefore, this dissertation also aims to analyse opinions about deservingness in health insurance and disability insurance (second aim).

The attempt to understand solidarity (first aim) and deservingness opinions (second aim) in both health insurance and disability insurance raises questions about the comparability of these social arrangements. Health insurance and disability insurance both cover a financial risk of illness, but are nevertheless separately approached in policy (ministries) and science (disciplines). Comparing their solidarity-development and deservingness opinions may show that certain aspects of one arrangement are relevant for the other. In the light of reform, the third and overarching aim of this dissertation is to understand the similarities and differences between health insurance and disability insurance regarding (i) the impact of past reforms on solidarity, and (ii) deservingness opinions.

Impact of reform on solidarity (Chapters 2 and 3)

Solidarity is an ambiguous and dynamic concept that is predominantly understood normatively. Accordingly, its analysis is not an uncontested exercise. In **Chapters 2 and 3**, we present a framework for tackling this problem and to enable scientific analysis of solidarity. The framework distinguishes six dimensions, which represent the recipient side (membership, benefits, cost coverage and conditioning) and the contribution side (risk-relatedness and income-relatedness) of the bond of solidarity instituted in public social insurance arrangements. Our scientific approach implies that we study solidarity by describing the impact of reforms on each of its six dimensions separately and in isolation from other (competing) values.

Our analysis focuses on the Netherlands, which is a country with a long history of public social insurance arrangements for covering the financial risks of illness. Since the 1980s, the Dutch state has implemented significant reforms in health insurance and disability insurance. Disability insurance underwent most changes in the 1990s, while reforms in health insurance were still being

debated. Eventually these debates reached a momentum for change as well, resulting in reforms in the insurance of both medical care (2006) and long term care (2007 and 2015). To understand the impact of post-1980 reforms on solidarity in health insurance and disability insurance (first aim) and how the impact between both arrangements compares (third aim), we conducted policy analysis on said reforms in the Netherlands by using the multidimensional analytical framework.

Past reforms in health insurance and disability insurance

Chapter 2 presents a comparative analysis of the impact on solidarity of reforms undertaken in health insurance (medical care) and disability insurance in the Netherlands by analysing their effect on each dimension of solidarity. In medical care, a long lead-up to reform eventually resulted in a new Health Insurance Act (*Zorgverzekeringswet*, Zvw) in 2006, introducing a single mandatory insurance scheme. In disability insurance, reforms from 1994 to 2004 obliged employers to continue wage payment during the first period of illness (up to two years in 2004). Moreover, a new Disability Insurance Act (*Wet werk en inkomen naar arbeidsvermogen,* Wet WIA) was implemented in 2005; this significantly adjusted both the dimensions of benefits and access to them.

The analysis showed that reforms in health insurance and disability insurance affected different dimensions of solidarity and did so differently. On the coverage side of arrangements, we observed that solidarity in health insurance had increased in the membership dimension as a result of the introduction of a single mandatory insurance scheme for all citizens, whereas before the 2006 reform, the public scheme covered only two thirds of the population. On the other hand, reforms in disability insurance did not affect membership because all employees already were members of a disability insurance arrangement at the beginning of the period analysed. Regarding material coverage, both health insurance and disability insurance met extensions and restrictions, but these did not result in significant effects on solidarity. Cost coverage – a dimension that does not apply to disability insurance – was the sole dimension in which we found a decrease in solidarity in health insurance, and this decrease was mainly related to increasing co-payments. Regarding conditioning of coverage, not much had changed in health insurance, whereas we observed a decrease in solidarity in disability insurance due to a stricter need assessment process and adjustment of allocation criteria. On the financing side of the arrangements, we observed that contributions became increasingly risk-related in disability insurance, which means a decrease in risk solidarity.

This is in contrast with the effect of reforms on health insurance, which strengthened risk solidarity, for example, by banning risk rating. Regarding the income-relatedness of contributions, the reforms did not significantly affect solidarity in either health insurance or disability insurance.

Considering the effects of post-1980 reforms on solidarity in health insurance and disability insurance, we conclude that the reforms had effects on most of the dimensions of solidarity. However, in terms of their set-up of solidarity, health insurance and disability insurance have developed along different paths; health insurance has been more 'immune' to solidarity-restricting reforms than has disability insurance.

Past reforms in medical care and long-term care

Health insurance is broader than merely the insurance of medical care. Therefore, **Chapter 3** analyses and compares the impact of major reforms on solidarity in medical care and long-term care. The analysis concentrates on developments in the Netherlands, where a new Health Insurance Act was introduced in 2006 for medical care, while several significant reform measures were implemented in long-term care in 2007 and 2015. The Social Support Act (*Wet Maatschappelijke Ondersteuning,* Wmo) came into effect in 2007; this act covered services that were previously covered by the then existing Long-term Care Act, for which the central government was responsible. In 2015, the old Long-term Care Act was abolished. Its services were mostly shifted to a new Long-term Care Act (*Wet Langdurige Zorg*, Wlz), although some services were incorporated into the Health Insurance Act and the renewed Social Support Act (renamed as Wmo2015); fewer financial resources were allocated to deliver this support.

The reforms in medical care and long-term care had different effects on solidarity. In most dimensions, solidarity in medical care was maintained following the 2006-reform and there was even a strengthening effect in the membership dimension and in risk solidarity. Cost coverage was the sole dimension in which we observed some decrease in solidarity in medical care. In long-term care, we found that the dimensions of conditioning and cost-coverage had been weakened in long-term care following the reforms, while other dimensions of solidarity were not significantly affected by the reforms. This effect stems mainly from a normative reorientation on responsibilities for the risks of long-term care in combination with budget cuts. Nevertheless, these measures reducing solidarity did not affect all areas of long-term care.

In conclusion, Chapter 3 shows that the effects of past reforms on solidarity in long-term care were more restrictive than in medical care. These findings may be related to the different services that each arrangement covers as well as to the diverging power of health professionals in medical care and long-term care.

Deservingness opinions (Chapters 4, 5 and 6)

In order to analyse (second aim) and compare opinions about deservingness in health insurance and disability insurance (third aim), we conducted discrete choice experiments in which we asked respondents which hypothetical claimant – out of two alternatives – they found most deserving of collectively financed support. A claimant/choice alternative was represented by five deservingness criteria: *severity of illness, financial capacity, lifestyle, cooperation with treatment or reintegration into employment* and *choice of package/premium.* For instance, claimant A was severely ill and had high financial capacity, while claimant B was moderately ill and had low financial capacity. Respondents had to trade-off the criteria in choosing which of two respondents they find most deserving. By repeatedly stating which of the two hypothetical claimants is most deserving, we could reveal each of the respondent's implicit preferences for deservingness criteria in general, i.e. to what extent respondents value each criterion in deservingness decisions.

We invited a representative sample of the Dutch population (regarding sex, age, region and educational level) to participate in the discrete choice experiments. A total of 774 invitees responded, of which 375 completed the online questionnaire. Statistical analysis of their data was based on random utility theory, which assumes that respondents make rational decisions, i.e. maximizing utility based on variation in the criteria of the alternative choices.

Variation in healthcare deservingness opinions

Chapter 4 presents the results of the discrete choice experiment on health insurance, which shows that the general public considers severity of illness to be the most important criterion in determining claimants' deservingness (β=0.04 per percentage). Respondents considered claimants to be 0.04 more deserving for each percentage point of loss of quality of life. A loss of 40% in quality of life thus equals a beta value of 1.60, which gives a good indication of the importance of this criterion in deservingness opinions. Financial capacity

(range 0-β_{max}=1.26), cooperation (1.05) and lifestyle (1.04) also influence deservingness opinions in health insurance, but not as much as severity of illness.

The experiment also showed considerable variation in deservingness opinions between respondents. These were related to the demographic and ideology characteristics of the respondents. Demographic characteristics – such as age, gender, education and income – mainly influenced the importance of lifestyle and cooperation. Being female and younger related to having a significantly more conditional view on healthcare allocation regarding the lifestyle and cooperation of a claimant (both $p<0.05$). For instance, the deservingness of a claimant with a suboptimal lifestyle was considered 0.36 less deserving by females than by males. The ideological factors of respondents had different effects on deservingness opinions. For instance, opinions between respondents on the political left and right did not differ, while respondents' understanding of the level of state responsibility for health care did; respondents who consider the state highly responsible for health care find claimants 0.03 more deserving for each percentage of increase in need, in comparison with respondents who consider the state less responsible for health care ($p<0.01$). Those who consider the state highly responsible for health care also assigned significantly less weight to financial capacity of claimants (-0.56) in determining who they find most deserving ($p<0.05$). In conclusion, subgroup analysis showed that the respondents' demographic factors mainly influenced their emphasis on lifestyle and cooperation, while respondents' ideological characteristics changed their weight on the criteria need and financial capacity.

Health insurance and disability insurance

Chapter 5 provides the opinions of the respondents regarding deservingness of disability insurance benefits and compares these opinions to their healthcare deservingness opinions. We found a similar order of criteria preferences in health insurance and disability insurance. However, the role of a claimant's cooperation (with reintegration directions) was significantly more important for being considered deserving in disability insurance than was the role of cooperation (with treatment directions) in health insurance. The cooperation of claimants influenced deservingness decisions in disability insurance by 30%, whereas in health insurance this was 19%. Deservingness decisions in health insurance were mostly determined by severity of illness (30%), which had less influence on deservingness opinions in disability benefits, although it was considered relevant as well (25%). Accordingly, the main difference between deser-

vingness opinions in health insurance and disability insurance is that the deservingness of claimants for health services is first and foremost determined by severity of illness, while the perceived deservingness of claimants of disability benefits is highly influenced by their cooperation with reintegration directions.

Social legitimacy

Variation in deservingness opinions between groups with different demographic characteristics and ideology – observed in Chapter 4 – raises the question of whether policy makers hold different opinions than the people they represent, because policy makers are on average more highly educated and have a higher income than the general population. In the context of social legitimacy, we studied congruency between the deservingness opinions of the general public and those of policymakers in **Chapter 6**. We gathered deservingness opinions of Dutch policy makers and compared them with public opinion as presented in Chapters 4 and 5. We contacted hundreds of policy makers and policy officers working in the social domain at the national, regional and local levels, as well as in organizations. This resulted in a sample of 81 respondents, of whom 74 completed all the items.

Analysis shows that the deservingness opinions of policy makers and the general public are similar regarding the order of importance of criteria; the claimants' severity of illness was the most decisive criterion in the deservingness opinions of both groups, followed by the claimants' financial capacity, lifestyle, cooperation and choice of premium/package. However, the relative weights assigned to each of these criteria differed between policy makers and the general public. The decisions of policy makers regarding which alternative was considered most deserving were influenced 50% by the severity of illness, while this was 30% for the general public. Policy makers found claimants 0.13 more deserving for each percentage of loss in quality in life, whereas this was 0.04 for the general public ($p<0.01$). On the other hand, financial capacity and the lifestyle of claimants had significantly more influence on the deservingness opinions of the general public than in the opinions of policymakers ($p<0,05$). Therefore, we conclude that the general public holds different deservingness opinions compared to policy makers. Chapter 6 suggests that institutionalized behaviour of policymakers and self-interest may explain the difference in their opinions. However, we also discuss that insight into the substantive and political complexity of welfare state redistribution could play a role in the differing deservingness opinions between policy makers and the general public. An information gap is likely to underlie this incongru-

ence in insights, as a consequence of which we suggest that public involvement in the policymaking process could improve the social legitimacy of social insurance policies.

Reflection (Chapter 7)

Considering all studies, **Chapter 7** reflects upon the theory, methodology and results in light of the three aims of the dissertation, resulting in recommendations for research and policy. In doing so, we concluded that the impact of reforms on solidarity (first aim) and deservingness opinions (second aim) are consistent with each other within health insurance and disability insurance. This means that restrictions in solidarity were accompanied by more conditional deservingness opinions and vice versa. However, solidarity was impacted differently in health insurance and in disability insurance, and deservingness opinions differed in each arrangement as well (third aim), On the one hand, opinions about allocation in health insurance were found to be primarily need-based, which corresponds with the limited impact of reforms on the conditioning dimension of solidarity in medical care. On the other hand, opinions about allocation in disability insurance were more conditional, which is congruent with the increased conditioning observed in disability insurance in the policy analysis. The policy analysis and discrete choice experiments both point at a 'status aparte' of medical care.

Recommendations

From an academic perspective, the most important reflection in the discussion chapter relates to the concept of solidarity, which is both politically and scientifically contested. Our choice for a qualitative approach and a particular definition and multidimensional framework enabled empirical research that could provide a nuanced overview of the effect of reforms on solidarity. We encourage researchers to develop the analytical framework to better match the changing conceptual understanding on solidarity, i.e. the decrease in formal solidarity. Our structured framework provides a starting point for international comparison, which we also call for. We also recommend more in-depth research on solidarity and deservingness opinions between health insurance and disability insurance because the nature of differences and similarities between these illness-related arrangements was beyond the scope of this thesis.

Finally, the discussion chapter presents two lessons learned for policy practice. First, the thesis shows that the multidimensional framework of solidarity presents an antidote to political reductionism, i.e. to the practice of politicians to narrow a concept down to one of its dimensions. Second, variation in deservingness opinions brings us to recommend that policymakers consider the opinions of various stakeholders in the policymaking process. This may increase the social legitimacy of new reforms, which will doubtless be implemented in both the Netherlands and worldwide.

The set-up of solidarity and resource allocation in social insurance may be a politically normative affair, but this thesis enables evidence-informed decisions that may contribute to the sustainable solutions for which policymakers are looking.