

# Working hour-reduction in the move to full retirement

How does this affect retirement preferences of 50+ individuals in Flanders?

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## 1. Nederlandstalige samenvatting

### 1.1 Abstract

Het aantal 50-plussers dat minder gaat werken in aanloop tot het pensioen is de laatste jaren gestaag toegenomen. Dit is te verklaren door een arbeidsmarktbeleid dat inzet op flexibele werktijd mogelijkheden om op die manier werk, gezin en vrije tijd beter te combineren met als ultieme doel de arbeidsmarktdeelname over de loopbaan te maximaliseren en pensionering uit te stellen. In deze studie onderzoeken we of werkduurvermindering bij 50+ in Vlaanderen effectief samen gaat met een lagere vervroegde uittrede kans. In dit rapport analyseren we data van eerste WSE survey 'Loopbanen in Vlaanderen' verzameld in 2011. Werkduurvermindering wordt hierbij gedefinieerd als de transitie van een voltijdse naar een deeltijdse job. Concreet selecteerden we 168 voltijds werkende 50+ in 2001, die nog steeds tewerkgesteld waren in 2011. 29,5% (N=49) van de totale steekproef maakte de transitie van een voltijdse naar een deeltijdse job. We stellen vast dat werkduurvermindering gepaard gaat met een grotere kans om vervroegd te willen pensioneren, en dat deze relatie verklaard wordt doordat zij die de werkduur verminderd hebben ook een lagere werkcentraliteit en een hogere uittrede-intentie hebben. Hierdoor wordt het vermoeden bevestigd dat stelsels van werkduurvermindering op het einde van de loopbaan vooral gebruikt worden als een opstapje naar vervroegd pensioen.

### 1.2 Doel van het onderzoek

#### 1.2.1 Context en doelstellingen

Het aantal 50-plussers in deeltijdse uittredestelsels is het laatste decennium gestaag toegenomen in Vlaanderen (RVA, 2014a). De mogelijkheden om de werktijd af te bouwen in aanloop tot het pensioen kaderen binnen een Europese strategie om de totale tewerkstellingsgraad te verhogen (Huiskamp & Vos, 2011). Door de veroudering van de bevolking neemt de druk op bestaande pensioen- en sociale zekerheidsstelsels toe en moeten er bijgevolg meer mensen aan het werk. De cruciale vraag voor het beleid is of stelsels van werkduurvermindering de loopbaan effectief verlengen en de tewerkstellingsgraad verhogen. Voorgaand onderzoek toonde reeds aan dat deeltijds werkenden 50+ in België een hogere vervroegde uittrede kans hebben (Devisscher & Van Pelt, 2006; Van Looy et al., 2012; Van Looy et

al., 2013). In dit onderzoek trachten we de relatie tussen werkduurvermindering en gewenste pensioenleeftijd te verklaren door de rol van werk-identiteit (gemeten a.d.h.v. de concepten werkcentraliteit en uittrede-intentie) en werk-leven balans te belichten. We analyseren data van eerste WSE survey ‘Loopbanen in Vlaanderen’ verzameld in 2011. Werkduurvermindering definiëren we als de transitie van een voltijdse naar een deeltijdse job. Concreet selecteerden we 168 voltijds werkende 50+ in 2001, die nog steeds tewerkgesteld waren in 2011. 29.5% (N=49) van de totale steekproef maakte de transitie van een voltijdse naar een deeltijdse job.

## 2. Theoretisch kader

Over de relatie tussen werkduurvermindering en de gewenste pensioenleeftijd kunnen twee centrale hypothesen afgeleid worden. Enerzijds verwachten we vanuit de *schaarsheidstheorie* (nl. *resource drain theory*) en de *conservation of resource theory* (COR) dat diegenen die de werkduur verminderen een lagere kans hebben om vervroegd de arbeidsmarkt te willen verlaten, doordat ze een betere balans tussen werk en leven hebben (*hypothese 1, Figuur 1*) (Albertsen et al., 2008; Greenhaus & Beutell, 1985; Kahn et al., 1964). Werk-leven balans definiëren we in deze studie als “de afwezigheid van werk-familie/familie-werk conflict” (Greenhaus & Beutell, 1985). Vanuit het schaarsheidsperspectief stellen we dat mensen over een vaste hoeveelheid energie en tijd beschikken die ze aan allerlei rolverplichtingen kunnen besteden (Kahn et al., 1964). Tijd en energie besteed aan de éne rol zijn niet langer beschikbaar voor de andere rol(len), waardoor een proces van energie-uitputting kan ontstaan dat ontaardt in een interrol-conflict. We maken een onderscheid tussen *werk-familie* en *familie-werk conflict*, en daarbinnen tussen *tijds-* en *stress-gerelateerde* conflicten.

Anderzijds verwachten we op basis van de *social identity theory* dat zij die werkduur verminderen een hogere kans hebben om vervroegd te willen pensioneren (*hypothese 2, Figuur 1*) (Meyer et al., 2006; Tajfel & Turner, 1985; Vignoles et al., 2006). Deze theorie stelt dat het aantal uren gespendeerd aan werk een afspiegeling is van de mate waarin een individu zich met de werkrol identificeert (Ng & Feldman, 2008). Individuen die minder uren werken stellen hun werk minder centraal in het leven, waardoor ze bijgevolg een hogere kans hebben om vervroegd te willen pensioneren. Vanuit dit perspectief bekijken we, naast werkcentraliteit, ook de rol die uittrede-intentie speelt in het verklaren van de relatie tussen werkduurvermindering en gewenste pensioneringstiming. Het concept ‘uittrede-intentie’ koppelt de centraliteit van arbeid in het leven aan de effectieve drang om de arbeidsmarkt zo snel mogelijk te verlaten. Deze wens uit zich in de vorm van niet

opnieuw naar een job zoeken wanneer men de job verliest, ernstig overwegen om onmiddellijk te stoppen met werken wanneer de kans zich voor doet en de wil om zo snel mogelijk definitief te stoppen met werken.

### **3. Methoden en data**

#### **3.1 Data**

We gebruiken data van de eerste golf van de survey 'Loopbanen in de Vlaanderen' die in het voorjaar van 2011 verzameld werd door het Steunpunt Werk en Sociale Economie. In de survey komen verscheidene aspecten (vb. werk-familie conflict, sociale en economische oorzaken en gevolgen van loopbaantransities, loopbaanplanning) van het arbeidsleven van de Vlaamse bevolking aan bod. In totaal werden 1518 personen bevestigd. Omdat we geïnteresseerd zijn in de relatie tussen werkduurvermindering naar het einde van de loopbaan toe en gewenste pensioneringstiming selecteren we twee groepen die we met elkaar vergelijken. Concreet definiëren we werkduurvermindering aan de hand van twee tijdstippen: 2001 en 2011. We selecteren alle 50+ in 2011 die voltijds tewerkgesteld waren in 2001. De controlegroep bestaat uit diegenen die voltijds werkten in 2001 en nog steeds voltijds tewerkgesteld waren in 2011 (voltijdse trajecten). De tweede groep bestaat uit de deeltijdse uittredetrajecten, met name zij die voltijds werkten in 2001 en deeltijds werkten in 2011 (voltijds-deeltijdse trajecten). Omwille van de kleine steekproef, hebben we niet de mogelijkheid om de resultaten afzonderlijk voor de verschillende institutionele stelsels (vb. tijdskrediet eindloopbaan) van werkduurvermindering te bekijken. In totaal selecteren we 168 respondenten. 66.07% (N=111) is man en 33.93% (N=57) is vrouw. De gemiddelde leeftijd is 54 jaar.

#### **3.2 Methode**

In een eerste fase van het onderzoek bekijken we met behulp van beschrijvende statistieken (kruistabellen, vergelijking van de gemiddelden) de kenmerken van alle 50+-ers die deeltijds zijn gaan werken. In de tweede fase zullen dan de eerder geformuleerde hypothesen (zie figuur 1) getest worden m.b.v. padanalyse. Padanalyse is een statistische techniek die toelaat om directe, indirecte en totale effecten te schatten aan de hand van een model met meerdere afhankelijke variabelen (Bollen, 1989). We veronderstellen dat werk-familie conflict en familie-werk conflict (zowel tijds- en stress-gerelateerd) optreden als mediërende variabelen in de relatie tussen werkduurvermindering en gewenste pensioneringstiming (*Figuur 1*) (Baron & Kenny, 1986). Mediëren betekent dat er een indirecte causale relatie



wordt verondersteld waarbij een onafhankelijke variabele een mediërende variabele beïnvloedt, die bijgevolg de afhankelijke variabele beïnvloedt. We maken in de padmodellen gebruik van de maximum-likelihood schattingsmethode (MLR variant).

## 4. Resultaten

### 4.1 Beschrijvende resultaten

Werkduurvermindering is populair bij 50+, zo blijkt uit de resultaten. 29.5% (N=49) van de steekproef maakte de transitie van een voltijdse naar een deeltijdse job. 6 op de 10 50+ die de werktijd verminderd hebben ging 4/5 werken. 1 op 3 ging halftijds aan de slag. Als we kijken naar gewenste pensioenleeftijd dan stellen we vast dat zij die de werktijd afbouwden, significant vroeger willen stoppen met werken.

Meer tijd voor huishoudelijk werk (30.6%) en vrije tijd (36.8%) zijn de belangrijkste motieven om deeltijds te gaan werken (*Tabel 1*). Gezondheidsproblemen komen op de 3<sup>e</sup> plaats (20.41%). Bij de exploratie van de profielkenmerken van individuen in voltijds-deeltijds trajecten worden verschillende socio-demografische, huishoud-, job- en financiële kenmerken (allen opgemeten in 2011) onder de loep genomen (*Tabel 2*). Slechts op een beperkt aantal aspecten werden duidelijk significante verschillen in profielkenmerken opgemerkt tussen voltijds en voltijds-deeltijdse trajecten. Ten eerste, stellen we vast dat werkduurvermindering bij 50+ vooral een vrouwenzaak is. Daar waar bij vrouwen bijna de helft (47.37%) de werktijd verminderd heeft, doet slechts 1/5 (19.82%) van de mannen het. Ten tweede, stellen we geen grote verschillen vast in subjectieve jobkenmerken (autonomie, werkdruk, emotionele belasting, geestelijke belasting, vaardigheidsbenutting en sociale steun) wanneer we voltijdse én voltijdse-deeltijdse trajecten vergelijken. Zij die de werktijd verminderd hebben, rapporteren enkel een significant hogere fysieke belasting in de job. De opvallendste verschillen situeren zich in werkmotivaties. Als men een transitie maakte van een voltijdse naar een deeltijdse job dan zien we een significant lagere werkcentraliteit en hogere uittrede-intentie. Werk-familie en familie-werk conflict, zowel de tijds- als stress-gerelateerde varianten, zijn dan weer niet significant lager voor de deeltijds werkenden in onze steekproef.

## 4.2 Padmodellen

Verschillende modellen werden geschat om de hypothesen voorgesteld in figuur 1 te testen. Uit model 1 (null model) blijkt dat voltijds-deeltijdse trajecten een significant hogere kans hebben om vervroegd te willen pensioneren (Appendix 2, Tabel 6). De vergelijking voor gewenste pensioenleeftijd is in deze fase gecontroleerd voor leeftijd, geslacht, aantal kinderen en tewerkstellingsstatus van de partner.

Model 2 test de indirecte relaties tussen werkduurvermindering en gewenste pensioenleeftijd via werk-familie en familie-werk conflict (*hypothese 1, figuur 2, Appendix 3*). Bijkomende controlevariabelen (nl. netto persoonlijk inkomen, subjectieve gezondheid, beroep, sector, lengte van de loopbaan en opleidingsniveau) worden in het model gebracht in de padvergelijking op gewenste pensioenleeftijd. Over het algemeen concluderen we dat individuen in voltijds-deeltijdse trajecten geen significant lager werk-familie conflict en familie-werk conflict, waardoor geen significante indirecte relaties tussen werkduurvermindering en gewenste pensioenleeftijd gevonden worden. Met andere woorden, hebben ook deeltijds werkenden nog steeds een sterk gevoel, vergelijken met de groep die voltijds blijft werken, dat ze omwille van hun activiteiten op de arbeidsmarkt tijd en energie tekort hebben om aan hun familiale verantwoordelijkheden te voldoen. Bovendien hebben deeltijds werkenden nog steeds een opvallend sterk gevoel dat ze tijdens hun job tijd tekort komen omwille van tijd gependend aan hun familiale verantwoordelijkheden. Dit doet vermoeden dat de tijd die vrij komt door minder tijd aan betaalde arbeid te spenderen, niet voldoende is om alle familiale verantwoordelijkheden na te komen. Doordat deeltijds werkenden 50+ dus nog een relatief sterke druk ervaren van het werk- op het gezinsleven en visa versa, zijn ze niet geneigd om op latere leeftijd te wensen te pensioneren. Er is één uitzondering, 50+ in deeltijdse jobs scoren namelijk wel significant lager op stress-gerelateerd familie-werk conflict, wat er op wijst dat ze opvallend minder emotioneel uitgeput en gestresseerd zijn tijdens hun werk ten gevolge van familiale verantwoordelijkheden. Een negatieve directe relatie tussen werkduurvermindering en gewenste pensioenleeftijd, die er op wijst dat zij die de werkduur verminderd hebben vroeger wensen te gaan, blijft ook in model 2 bestaan.

In model 3a en 3b worden achtereenvolgens bijkomende controlevariabelen werkcentraliteit en uittrede-intentie in het model gebracht, die elk afzonderlijk de significante relatie tussen werkduurvermindering en gewenste pensioenleeftijd weg verklaren (*hypothese 2, Appendix 4*). Concreet wil dit zeggen dat zij die de werkduur verminderd hebben vroeger willen pensioneren omdat ze werk minder centraal stellen in hun leven en een hogere uittrede-intentie hebben.

## 5. Conclusies en beleidsaanbevelingen

De bevindingen van dit onderzoek werpen een nieuw licht op een debat dat al jarenlang woedt omtrent de effectiviteit van stelsels van deeltijdse werkduurvermindering (nl. tijdskrediet en loopbaanonderbreking) op het einde van de loopbaan in het verhogen van de arbeidsmarktparticipatie van 50+ in België. Daar waar men vanuit theoretisch en beleidsperspectief veronderstelt dat werkduurvermindering de arbeidsmarktparticipatie maximaliseert door een betere combinatie van werk, gezin en vrije tijd, stellen critici van de systemen dat de realiteit minder fraai is. In plaats van pensionering uit te stellen, zou arbeidsduurvermindering vooral gebruikt worden als een opstapje naar vervroegd pensioen door diegenen die reeds vroeger wensen te pensioneren. Het is in de richting van deze argumentatie dat de bevindingen van deze studie wijzen. We stellen nl. vast dat werkduurvermindering gepaard gaat met een grotere kans om vervroegd te willen pensioneren, en dat deze relatie verklaard wordt doordat zij die de werkduur verminderd hebben een lagere werkcentraliteit en een hogere uittrede-intentie hebben.

Hieruit volgen een aantal belangrijke lessen voor het beleid. Ten eerste, moet het beleid ervoor zorgen dat 50+ de niet-werktijd voldoende kunnen spenderen aan familie, vrienden en andere vrijetijdsactiviteiten. Werkduurvermindering gaat over het algemeen niet gepaard met een betere werk-leven balans. Wat blijkt is dat de tijd die vrij komt door 1 of 2 dagen per week minder te werken vooral gespendeerd wordt aan huishoudelijke activiteiten, waardoor stelsels van werkduurvermindering niet voldoende tegemoet komen aan de verwachtingen en noden van 50+ en de ervaring van werk-familie/familie-werk conflict ook voor de deeltijdse tewerkgestelde 50+ relatief hoog blijft. Een verdere ondersteuning van het dienstenchequesysteem, waardoor individuen op een fiscaal interessante manier beroep kunnen doen op ondersteuning in huishoudelijke taken, kan hier een oplossing bieden. Dit mogelijk met specifieke maatregelen voor de groep van oudere werknemers (vb. net zoals bij jonge moeders in het zelfstandigenstatuut een zeker aantal dienstenscheques gratis aanbieden).

Ten tweede, stellen we dat het belangrijk is om werkomstandigheden in deeltijdse jobs onder de loep te nemen. Hoewel deeltijds werkenden 50+ geen significante slechtere werkomstandigheden hebben (behalve wat betreft fysieke belasting van de job), zien we dat 17,65% van diegenen die deeltijds werkten in hun laatste job gepensioneerd zijn omwille van aspecten verbonden aan de job (vb. stress, slechte

werktijdregelingen, gezondheidsproblemen). Op het vlak van werk moeten daarom twee aspecten aangepakt worden: enerzijds moet ervoor gezorgd worden dat ook voor ouderen in een slechtere gezondheid werk werkbaar blijft door een aanpassing van de werkcondities aan de gezondheidsomstandigheden. Anderzijds moet de zin om te (blijven) werken, in het bijzonder bij 50+ in deeltijdse uittredestelsels, verder aangewakkerd worden. Een maximale benutting van hun vaardigheden, de kans om hun expertise in te zetten om jongeren in de organisatie te begeleiden en de nodige steun van hun leidinggevende(n) en collega's zijn hierin belangrijke aspecten.

Om een volledig beeld te krijgen van de effectiviteit van eindeloopbaanstelsels van werkduurvermindering (vb. tijdskrediet en loopbaanonderbreking) in het verhogen van de tewerkstellingsgraad is het belangrijk om push- en pull-effecten vanuit een macro-perspectief ten opzichte van elkaar af te wegen (Devisscher & Van Pelt, 2006). Om eindeloopbaanstelsels van tijdskrediet/loopbaanonderbreking tot een succes te maken is het o.a. belangrijk dat individuen die er gebruik van maken langer aan de slag blijven (d.w.z. dat hun totaal arbeidsvolume overheen de loopbaan stijgt). De mate waarin dat minder uren gaan werken op het einde van de loopbaan effectief aanzet en leidt tot een langere loopbaan is nog niet onderzocht. Devisscher en Van Pelt (2006) stelden wel vast in hun studie dat push-effecten dominant zijn en dat 50-plussers met loopbaanonderbreking minder lang aanwezig zijn op de arbeidsmarkt vergeleken met de groep die de loopbaan niet onderbreekt. Vanuit deze studie voegen we daaraan toe dat 50+ die deeltijds werken ook effectief vroeger *willen* pensioneren, en dat deze groep gekenmerkt wordt door een hogere-uittrede intentie en een lagere werkcentraliteit. Hoewel we geen conclusies kunnen trekken over of ze al dan niet langer aan de slag blijven, doet dit wel vermoeden dat deeltijdse stelsels niet leiden tot het verlengen van de loopbaan maar gebruikt worden als een opstapje naar vervroegd pensioen.

De conclusies van deze studie voor wat betreft de effectiviteit van specifieke stelsels van werkduurvermindering (zoals vb. tijdskrediet) moeten genuanceerd worden aangezien de data het niet toelaten om de verschillende stelsels afzonderlijk te bekijken. Aangezien 63.2% van de respondenten de werkduur echter verminderd heeft in een stelsel van loopbaanonderbreking/ tijdskrediet, is het interessant om deze conclusies tegen de achtergrond van de recente hervormingen in het stelsel van loopbaanonderbreking en tijdskrediet te belichten (RVA, 2014b; RVP, 2014). De vraag rijst namelijk wat er gebeurt wanneer de mogelijkheden om de werktijd te verminderen (vb. door de verschuiving van de intrede-leeftijd van 50 naar 55) afgebouwd worden. In plaats van een vermindering van de totale overheidsuitgaven,

zullen we mogelijk een verschuiving zien van de uitgaven doordat 50+ met een hoge uittrede-intentie, lagere werkcentraliteit en een slechtere gezondheid een verhoogde kans hebben om te eindigen in de gezondheidszorg of de werkloosheid (i.p.v. aan het werk blijven). Zij die instromen zullen minder lang in tijdscrediet/loopbaanonderbreking blijven doordat de jaren van onderbreking niet volledig meetellen in de berekening van het pensioen. In plaats van de intredeleeftijd te verhogen en financieel interessante mogelijkheden om de werktijd te verminderen af te bouwen, moet het eindeloopbaanbeleid zich opnieuw focussen op zijn kerndoelstellingen. Beleid moet name werkbaar werk en een gevoel van een betere balans tussen werk en leven op het einde van de loopbaan voor op stellen, zodanig dat 50+ ook effectief langer aan de slag willen en kunnen blijven.

## ABSTRACT

End-of-career time-credit and career-break systems are popular in Flanders but have been negatively evaluated by some as leading to a higher probability of early retirement. In this study we focus on possible explanations for this finding in previous research by examining the role of work-life balance and work identity (i.e. 'work centrality', 'exit intention') in explaining the relationship between a reduction in working hours and the preferred retirement age of 50+ employees living with family (i.e. singles with dependent children and couples). The study performed path analyses on Flemish WSE Career Survey data. We selected 168 individuals aged 50+ in 2011 who were employed full-time in 2001 and were still employed in 2011. In total, 29.5% (N = 49) reduced their working hours between 2001 and 2011. We found that those who had reduced their working hours such that they had moved from full-time to a part-time employment were more likely to prefer early retirement. This relationship could be explained by the fact that those who moved from full-time to part-time work had lower work centrality and a higher exit intention, suggesting that part-time exit strategies are also used as a pathway to early exit from the labour market. Although we also found lower strain-based family-to-work conflict in those who reduced their working hours, and this partly neutralized the negative relationship between working-hour regime and preferred retirement age, the overall total negative relationship between a reduction in working hours and preferred retirement age remained predominant.

## 6. Introduction

Over the last decade the number of 50+ employees taking advantage of the end-of-career part-time time-credit (private sector) and career-break systems (public sector) has greatly increased in Flanders. While in 2002, only 6729 older employees participated in the end-of-career time-credit system, by 2012 the number had increased to 65 076. Although the increase in the number of participants in the end-of-career part-time career-break system was smaller, the number of people taking a part-time career break still increased from 23 564 in 2002 to 30432 in 2012 (RVA, 2014a; Steunpunt WSE, 2014). The main purpose of end-of-career working-hour reduction systems is to increase the employment rate of older workers (European Commission, 2011; Schmid, 1998). Over the period 2002-2011 this appears to have occurred, with the employment rate of the 50+ population in Flanders increasing from 40,6% in 2002 to 53.6% in 2012 (Eurostat, 2014).

In this study, we are specifically interested in the relationship between a reduction in working hours and retirement timing in Flanders. The policy relevance of this question is fuelled by the current widespread social debate on end-of-career part-time work systems in Belgium. In this debate, employers argue that working-hour reduction systems are being used at the end of the working career as a ‘step-up’ to early retirement. Previous research supported these critics in concluding that those reducing their working hours have a greater likelihood of *preferring to leave* (Van Looy et al., 2012) or *of actually leaving* the labour market early (Devisscher & Van Pelt, 2006; Van Looy et al., 2013). However, these previous studies did not address the question of the precise nature of this relationship. This study will thus add to the literature by examining the factors that may explain why those who reduce their working hours have a higher probability of early exit, where reduction in working hours is defined as a transition from a full-time to a part-time job. We focus on the question of whether lower work identity (i.e. ‘work centrality’, ‘exit intention’) and/or a better work-life balance play a role in explaining this relationship, and address these questions by studying a specific group selected from the first wave of the Flemish WSE Career Survey completed in 2011. We selected 168 individuals who were aged 50-64 in 2011, who were employed full-time in 2001 and were still employed in 2011 (excluding those self-employed). All respondents with a family, defined as ‘having a spouse or cohabitating partner and/or dependent children’ (Gutek et al., 1991), were included in the analysis. We framed the research question at the individual level by focusing on retirement preferences, although we were

aware of the fact that contextual factors (e.g. involuntary job loss, illness of partner, institutional characteristics) might also play a role in determining the effective timing of labour market exit (De Preter, Van Looy, & Mortelmans, 2013; De Preter, Van Looy, Mortelmans, et al., 2013; Denaeghel et al., 2011). Our specific focus on the individual preferences intends to broaden the understanding of researchers and policymakers with respect to how a reduction in working hours in the lead up to full retirement shapes individual preferences regarding retirement timing, regardless of the other factors that might influence effective retirement timing.

## **7. The Belgian career break system for 50+**

Since 1985, legislation on career breaks exists in Belgium to decrease unemployment rates. In the light of “flexicurity”-principles, introduced by the European Employment strategy, the crucial aim of career break systems changed to enabling more relaxed careers in combination with financial security (Huiskamp & Vos, 2011). In order to specifically encourage 50+ to stay in the labour market, reforms in the Belgian career break system in 2002, introduced special rules for older workers. The so called “landing-strip jobs”, create the opportunity for 50+ to voluntarily take up (part-time) career leave, for whatever what reason, until the moment of retirement. In the private sector, where career breaks are known as “time credit” since 2002, opportunities are created to start working four-fifth or part-time from the age of 50 in case that the individual spent at least 20 years in employment (RVA, 2014b). In the public sector, where the name “career break system” remained since 2002, 50+ have the opportunity to reduce working time with one-fifth, one-fourth, one-third, or half of total employment. As in both the time credit and career break system, the years spent in part-time career leave counted fully in the calculation of pension benefits, staying employed during periods of part-time career break was financially not discouraged.

In 2012, radical reforms in the time credit/career break system, limiting entrance and financial attractiveness of end-career working hours reduction schemes, were introduced in Belgium. From that moment, part-time career leave is only available from the age of 55, given a working career of at least 25 years. Furthermore, reforms in the Belgian pension system in 2013, changed regulations on the calculation of pension entitlements when taking up part-time career leave in the private sector. Although total years of participation in part-time working hours reduction systems from the age of 55 count in the calculation of pension entitlements (in case that the individuals received benefits), the wage on which yearly pension payments are



based, varies (RVP, 2014). This regulation implies that individuals who take up part-time career leave are entitled to retire on the planned retirement age, but with lower pension benefits as in the case they did not reduced working time.

## 8. Literature review and theory

A number of studies have focused on the relationship between the use of end-of-career time-credit/career-break systems and labour market exit in Belgium. Generally, the conclusion is that those who reduce their working hours are more likely to leave the labour market early (Devisscher & Van Pelt, 2006; Van Looy et al., 2012; Van Looy et al., 2013). In 2006, using statistics from the Data Warehouse Labour Market and Social Protection, Devisscher and Van Pelt (2006) studied a representative sample of 75 031 people who were taking advantage of the time-credit or career-break systems in 1999. Of those, 73.8% were taking a part-time career break and 31.2% of the total sample was aged 50 or older in 1999. In this study, Devisscher and Van Pelt reconstructed the careers of the individuals in the sample over a period of five years (1998-2002) and concluded that, in general, people taking a career break or making use of the time-credit system had a higher probability of leaving the labour market early (e.g. greater chance of inactivity or retirement). Of those in the group aged 50+ who had worked full-time in 1998 and were no longer taking a career break in 2002, 56.6% had left the full-time labour market, while 63% of those aged 50+ taking a career break in 1998 but who had left that system by 2002 had made a permanent exit from the labour market.

While this study did not make a distinction between part-time and full-time career breaks, a study by Van Looy, Mortelmans and De Preter (2013) specifically focused on the part-time reduction of working hours at the end of working careers. Using a representative sample of 50 000 men and 50 000 women from the Data Warehouse Labour Market and Social Protection in 2008, they studied the labour market exit behaviour of people who had reduced their working hours at the end of their career. Working-hour reduction was operationalized as a move from a full-time to a part-time job, with part-time employment measured as a percentage of full-time employment. The study selected all individuals who were aged 49-54 in 1998 and who had worked full-time in the private or public sectors, reconstructing their careers over a period of 12 years (1998-2009). The total sample included 12 134 respondents. Of those in the group who had reduced their working hours, 42.5% of the men and 30.7% of the women had subsequently left the labour market through an early exit pathway (e.g. employment break or pre-pension, disability or full-time

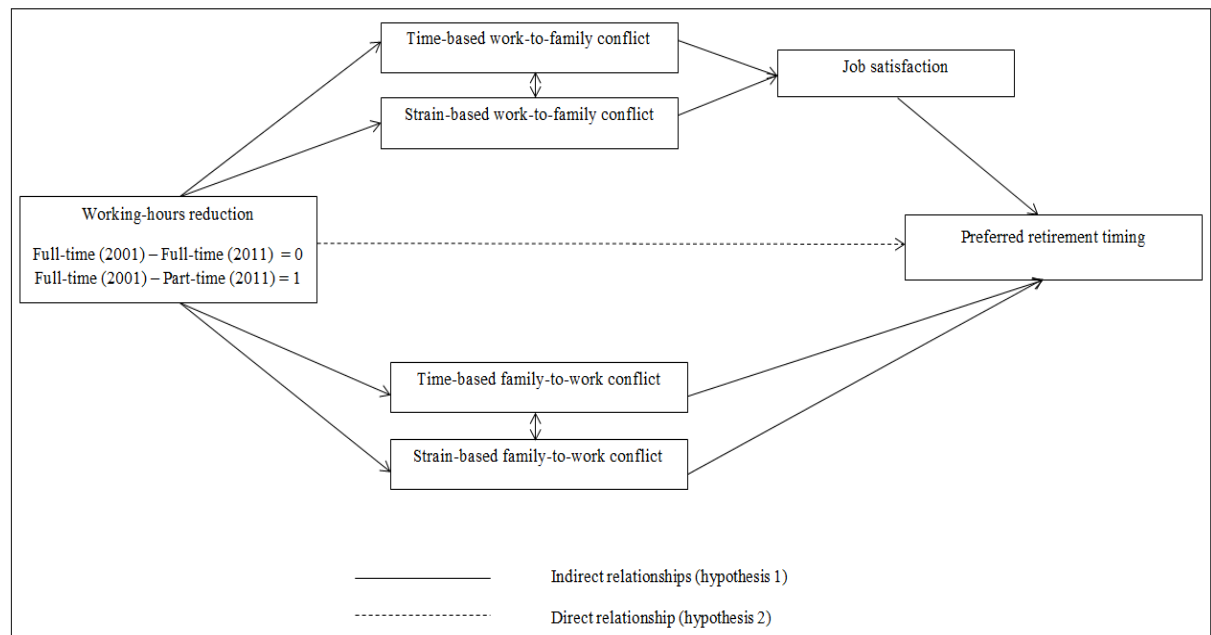
career break). On average, the men in these groups left the labour market at the age of 57 and women at the age of 56.6. Of those leaving the labour market through the official legal pension system (43% of men, 56% of women), hazard rates showed that those who moved from a full-time to a part-time job were more likely to retire at the early retirement age compared to those who remained employed full-time. None of these studies, however, explained why those who reduced their working hours were more likely to leave the labour market early.

### 8.1 Conceptualizing retirement preferences

Previous research has mainly focused on *effective retirement age*, *expectations about or the intention to retire* by a given age, thereby overlooking individual preferences. An increase in the role of individual retirement planning as a consequence of the decreasing institutionalization of the retirement process highlights the need for research and policy on retirement to focus on retirement preferences (Raymo & Sweeney, 2006). In previous research on retirement preferences conducted in several fields (mainly sociology, economics and psychology) various conceptions can be found, with the three most common being retirement *expectations*, retirement *intentions* and retirement *preferences* (Örestig et al., 2013). Retirement *expectations* includes various different types of expectations on the future life as retired such as views on how an individual experiences the transition from work to retirement and what the life in retirement should be like (van Solinge & Henkens, 2008). The concept retirement intentions captures different measurements of when older workers intend to retire from the labour market (Henkens, 1999). Following the economic school of thought, 'preferences' reflect ideal choices (Hechter & Kanazawa, 1997; Steiber, 2008), and 'retirement preferences' are modelled as rational choices based on the assumption that when making retirement decisions individuals assess various life course transitions against the costs and benefits of increased leisure time. Economic theory thus assumes that older workers prefer to retire when pension payments offer adequate compensation for their potential loss of income from labour (Hechter & Kanazawa, 1997). However, we consider that such preferences are formed in the context of structural and cultural constraints and may therefore vary across socio-economic contexts. Consequently, we adopt the notion of 'bounded preferences', assuming that retirement preferences are not ideal choices but are shaped by constraints such as domestic responsibilities, economic limitations and social norms (Steiber, 2008). 'Retirement preferences' can thus only be partly explained on the

basis of assuming that rational choice and utility-maximizing behaviour occurs in relation to financial decision-making. On the basis of the notion of ‘bounded rationality’, the relationship between a working-hour regime and preferred retirement age will be informed by three main theoretical frameworks, *resource drain theory*, *COR-theory* and *social identity theory*.

**Figure 1.** Theoretical model



*Notes:* For the sake of simplicity control variables and correlations between dimension of work-to-family and family-to-work conflict are not represented.

## 8.2 Working hours and work-life balance: resource drain and COR- theory

The relationship between working hours and work-life balance has frequently been studied (Adkins & Premeaux, 2012; Albertsen et al., 2008). We define ‘work-life balance’ as the absence of ‘work-family conflict’ or, in other words, the absence of ‘a form of inter-role conflict in which the role pressures from the work and the family domains are mutually incompatible in some respect’ (Greenhaus & Beutell, 1985). The literature on the work-family relationship makes a distinction between work-to-family and family-to-work conflict. While work-to-family conflict occurs when the demands of work make it difficult to perform family responsibilities, family-to-work conflict emerges when family demands hinder the performance of work duties (Frone et al., 1997; Gutek et al., 1991). Time-based (TB) work-to-family/family-to-work conflict appears as a consequence of the limited availability of time resources. Strain-based (SB) inter-role conflicts occur in the form of physical (e.g. energy

depletion) or psychological strain (e.g. concentration problems, worries, tensions created in a relationship) (Greenhaus & Beutell, 1985).

Two theoretical frameworks shape the relationship between the working-hour regime and work-to-family and family-to-work conflict: *resource drain theory* and the *conservation of resources theory*. According to resource drain theory, individuals play multiple roles in a context in which time and energy resources are limited (Greenhaus & Beutell, 1985; Kahn et al., 1964). Consequently, role demands in different life domains might start to conflict with each other, as the scarcity of individual resources implies that an hour devoted to one role represents an hour that is no longer available for the other (Greenhaus & Beutell, 1985). The conservation of resources theory (COR) is an integrated model of stress which also conceptualizes work-family conflict in terms of a depletion or perceived depletion of resources (Hobfoll, 1989). However, it emphasizes the importance of the individual's response to the depletion or perceived depletion of resources when explaining the link between the number of working hours and inter-role conflicts. According to the COR model, individuals seek to acquire and maintain resources (e.g. time, energy), but insofar as spending more time at work reduces the time and energy available for participating in non-work activities, a stress response occurs that results in a negative spill over between work and family demands (Hobfoll, 1989).

The COR model's presumption that individuals attempt to *maintain* resources may also shed light on the relationship between work-to-family/family-to-work conflict and preferred retirement age (Hobfoll, 1989). The greater the work-to-family/family-to-work conflict, the more individual resources are depleted and thus the more likely it is that an individual will seek to resolve the perceived stress by retiring early (Raymo & Sweeney, 2006). This is in line with (Thoits, 1994) who argued that individuals are not passive subjects but active agents who attempt to shape their own life outcomes. As Allen et al. (2000) have shown, work-to-family/family-to-work conflict is associated with widespread and serious negative consequences related to stress in both work and non-work settings. For example, work that prevents an individual from spending sufficient time and energy on non-work activities decreases the overall level of contentment with the job due to the depletion of resources (Allen et al., 2000; Erickson et al., 2010; Martinengo et al., 2010). Lower job satisfaction, in turn, implies early retirement (Kubicek et al., 2010). On the bases of these theoretical notions, we assume that those who reduce their working hours experience lower time-based and strain-based work-to-family and family-to-work conflict and are therefore less likely to prefer to retire early (*Hypothesis 1*). In line

with a number of longitudinal studies who found a causal effect from work hours on work-family balance (e.g. Berger, 2009; Britt & Dawson, 2005; Gash et al., 2009; Hammer et al., 2005; Laurijssen & Glorieux, 2012), we assume work-to-family and family-to-work conflict to act as mediators in the relationship between working-hour reduction and preferred retirement timing.

### **8.3 Working hours and work centrality: a social identity perspective**

According to social identity theory, the number of hours spent at work represents the extent to which an individual identifies with different social roles (e.g. work, family) (Tajfel & Turner, 1985; Vignoles et al., 2006). In other words, social identity theorists argue that those working fewer hours identify less with their occupation and the organization in which they work, or, in more general terms, with work itself (Ng & Feldman, 2008). The social identity perspective offers an overarching theoretical framework that integrates insights from previous research on the relationship between a variety of organizational, job, personal and family characteristics and the number of hours worked (Ng & Feldman, 2008). Identity is defined as 'a subjective concept an individual has of himself or herself as a person' (Vignoles et al., 2006). One is likely to identify with a social group (an organization, work, family, union, etc.), when membership based on a strong identification with group values, internalized beliefs and mutual respect occurs (Hornsey & Hogg, 2000). According to the identity-commitment approach (Meyer et al., 2006) individuals who strongly identify with the group's values and perceive the group's goals as ideals to be achieved are more likely to make an effort to realize the specific goals of that social group. Meyer et al. (2006) also suggested that rather than a single social identity in itself, it is the relative salience of different social identities (e.g. occupational, organizational, family) that influences work behaviour. With respect to workers who strongly identify with both their occupation and their family, wishing to be both a successful employee and a caring parent/grandparent/partner, sociologists argue that they spend most time on those activities that most support their salient social identity (Ng & Feldman, 2007; Ng & Feldman, 2008; Struyker & Serpe, 1982). Furthermore, social identity theorists do not neglect the importance of situational demands (e.g. organizational pressures on performance, job demands, rigid work schedules) that may require individuals to work more hours and therefore constrain their ability to act in an identity-consistent way (Greenhaus et al., 2012).

In their meta-analysis of the relationship between working hours and identity, Ng and Feldman (2008) concluded that ‘work centrality’ – defined as ‘individuals’ beliefs regarding the degree of importance that work plays in their lives’ (Walsh & Gordon, 2008)– is one of the strongest correlates of the time devoted to work. We argue that another indicator of identification with a work role is ‘exit intention’, which is related to work centrality, and which we define as ‘an individual’s intention to leave the labour market as early as possible due to low centrality of the work role in life’. Those individuals who perceive work as less important in their lives and who have higher exit intentions are less satisfied in their jobs, less engaged in their work and report higher job turnover intentions (Bal & Kooij, 2011; Carr et al., 2008). On the basis of these theories, we assume that individuals who decide to reduce their working hours are more likely to prefer to retire early due to lower work centrality and a higher exit intention (*Hypothesis 2*).

As previous research on the relationship between work centrality and work hours is largely cross-sectional in nature, conclusions about causation cannot be made (Ng and Feldman, 2008). In addition to the social identity theory, however, reducing work time might also further reduce work centrality (due to part-time job conditions that do not fit expectations for example). For that reason, we consider work centrality as a correlate, rather than an antecedent or consequence of the number of hours worked.

## **9. Method**

### **9.1 Data and sample**

In order to test our hypotheses, Flemish WSE Career survey data of the first wave realized in 2011 are used. The aim of the survey is to gain insights in the development of careers in Flanders and the rationale behind transitions on the labor market. The sample is representative for Flemish labor force (with the exception of Brussels) on gender and age. Themes included in the study are (amongst others): social and economic causes and consequences of labor market decision, career perspectives on the long term, recent search behavior and transitions on the labor market, employability, work-life conflict and career success. The sample is two-stage probability-proportional-to-size (PPS) with an oversampling of older workers (50+). First, 135 Belgian municipalities were selected (primary sampling units) in which a representative sample of individuals aged 18-65 (secondary sampling units) was drawn. Students and self-employed respondents were excluded. All individuals were

interviewed in computer-assisted personal interviews (CAPI). In total, the first wave realized a response of 53.1%. 1518 respondents were interviewed of which 49% men and 51% women.

We selected all individuals who were aged 50-64 in the first wave, who were employed full-time in 2001 and were still employed in 2011. As the items of the work-family conflict scale assume respondents to live in a household (Carlson et al., 2000), selected those respondents living with a partner and/or dependent children. 43% (N=658) of the total sample was aged 50 to 64. 48% (N=318) was employed in 2011, but only 66% (N=210) was employed full-time in 2001. 87% (N=182) lives in a household including a partner and/or dependent children. After excluding missing values, our sample includes 168 individuals. 66.07% (N=111) is men and 33.93% (N=57) is women. The mean age of those included in the sample equals 54 (standard deviation 2,59), where the youngest respondent is 50 and the oldest respondent is 59 years old. 52.98% (N=89) lives with a partner and dependent children, 41.67% (N=79) only lives with a partner and 5.63% (N=9) is a single parent with dependent children in the household. 74.4% (N=125) lives in a dual-earner and 20.24% (N=34) in a single-earner couple. 8.33% (N=14) is low educated, 51.19% (N=86) is medium educated and 40.48% (N=68) is high educated. 47.02% (N=79) are elementary workers, 13.69% (N=23) are administrative employees, 8.93% (N=15) are professional employees, 22.02% (N=37) are part of middle management, 3.57% (N=6) are senior management employees and 4.76% (N=8) are top management employees. 1.79% (N=3) of the total sample is employed in the primary sector, 24.4% (N=41) in the secondary sector, 32.14% (N=54) in the tertiary sector and 41.67% (N=70) in the government/public sector.

## **9.2 Analysis**

To test our hypotheses, we performed path analysis using the MPLUS software package. Path analysis is a statistical technique used to model direct and indirect effects with multiple dependent variables (Bollen, 1989; Lleras, 2005). We assumed the dependent variables work-to-family conflict (TB and SB) and family-to-work conflict (TB and SB) to act as mediators in the relationships between work hours and preferred retirement age. Mediation implies an indirect causal hypothesis in which an independent variable influences a mediator, which in turn influences a dependent variable (Baron & Kenny, 1986). If a significant indirect effect is accompanied by another significant direct or indirect effect, mediation is only partial (Baron & Kenny, 1986). To ensure robustness against non-normality, we use the MLR-estimator. The

hypotheses are tested in different stages: Model 1 test the null model where working hours reduction is controlled for gender, age and family type. Model 2 test the extent to which work-to-family conflict (TB and SB) and family-to-work (TB and SB) mediates the relationship between working hours reduction and preferred retirement timing. Model 3 aims to explain the direct relationship between working hours reduction and preferred retirement timing by bringing additional control variables in the model. We evaluated the fit of the different models tested using the root mean square error of approximation (RMSEA) and the comparative fit index (CFI). RMSEA compares the fit of the hypothesised model to the observed variance-covariance matrix (Hatcher, 1994). RMSEA values indicate a close fit to the data if the values are 0.05 or less. The comparative fit index compares the hypothesised model with the independence model in which no relationships are assumed. Acceptable fit is indicated by CFI values of 0.90 or greater (Hoyle, 1995).

### 9.3 Measures

Working-hour reduction is conceptualised as reducing working hours from a full-time job in 2001 to a part-time job in 2011. The percentage of employment is measured with the following question “at what percentage of the full-time contract are you currently employed?”. We compare two groups: (1) employees who worked full-time in 2001 and 2011 (control group) and (2) employees who worked full-time in 2001 and part-time in 2011. The variable “working hour-reduction” is a dichotomous variable where 0 refers to the control group including those who did not reduced working time. Category 1 includes all respondents who moved from a full-time to a part-time job.

The dependent variables are preferred retirement timing, job satisfaction, time-based and strain-based work-to-family conflict and family-to-work conflict. Preferred retirement age is measured with the question “at what age do you prefer to stop working?”. The question “How satisfied are you with your job?” is measured along a 10 point scale (1= extremely unsatisfied; 10=extremely satisfied). In order to measure work-to-family and family-to-work conflict, we use the scale of (Carlson et al., 2000) (Appendix 1, Table 5). This scale distinguishes time-based and strain-based variants of work-to-family and family-to-work conflicts. Each of the four scales includes a set of 3 items. The question stem was “To what extent do you agree with the following propositions?”. Each item is answered along a five-point scale (1=totally disagree; 5= totally agree). An example of an item included in the sum scale on time-based work-to-family conflict ( $\alpha=0.89$ ) is: “My work keeps me from my



family activities more than I would like". The scale on strain-based work-to-family conflict ( $\alpha = 0.86$ ) includes items such as "When I get home from work I am often too frazzled to participate in family activities and responsibilities". An item included in the scale on time-based family-to-work conflict ( $\alpha = 0.90$ ) is "I have to miss work activities due to the amount of time I must spend on family responsibilities". Finally, items such as "Because I am often too stressed from family responsibilities, I have a hard time concentrating on my work" are included in the sum scale on strain-based family-to-work conflict ( $\alpha = 0.95$ ). The scales used here has been used previously in multiple studies and demonstrated high composite reliabilities (Carlson et al., 2000).

A number of theoretical relevant control variables, of which the relevance has been proven abundantly in the literature, are included in each of the paths. The scale measuring 'work centrality' includes 8 items, based on items from Warr et al. (1979) and Warr and Jackson (1984). For some individuals work, defined as having a paid job, is just a means to get money, whereas for others work is the centre of their life. Items included in the sum scale on work centrality ( $\alpha = 0.80$ ) are, for example, "Even if I won a great deal of money on the pools I would continue to work somewhere" and "The most important things that happen to me involve work". On each item, respondents should indicate the extent to which they disagree or agree (1=totally disagree; 5= totally agree). The 'exit intention scale' is an instrument developed for the Flemish WSE Career survey. It consists of several newly introduced items. In total, four items are included which are answered along a 5-point scale (1= totally disagree; 5 = totally degree). Different items included are "If I get an offer tomorrow to permanently stop working, I will earnestly consider it", "I prefer to stay employed as long as possible", "My work is the most important thing in my life" and "If I'll lose my job, I will not immediately look for a new job". The composite reliability ( $\alpha = 0.68$ ) of the scale is acceptable, indicating that the scale is internally consistent.

We use scales on subjective job characteristics (i.e. autonomy, work pressure, emotional job demands, cognitive job demands, physical job demands, skill utilization and social support) from the VBBA-questionnaire developed by Veldhoven and Meijman (1994). Scales include 3 or 4 items, which should be answered with never, sometimes, often or always (Appendix 1). Autonomy refers to the degree of control that people can exercise regarding the way in which they perform their work (decide how to organise daily work, change pace of work, can choose when to take a break). An item included in the work pressure scale is "Do you need to hurry in order to fulfil your job tasks in time?". Cognitive job demands refer to whether job tasks require high concentration. The composite reliability of these different scales range

from 0.74 to 0.88. Other control variables included in our analyses are occupation, sector, education (low = primary education, medium=secondary education, high = bachelor, master), net personal income, subjective health (1=very bad; 10=very good), length of the working career, number of dependent children in the household, employment status partner (1 = no partner, 2=non-employed partner, 3= employed partner), gender (0=men; 1=women) and age.

## 10. Results

### 10.1 Descriptives

Of the total sample, 29.5% (N = 49) moved from a full-time to a part-time job in the period studied. Of those who reduced their working hours, 61.2% (N = 30) chose to work 80% of a full-time job and 38.8% (N = 19) chose to work half-time. On average, those who reduced their working hours preferred to retire significantly earlier (at the age of 59.5) than those who remained in full-time employment (60.5). In the group of those who reduced their working hours, 42.9% (N = 21) preferred to retire between the ages of 55-59, 49% (N = 24) between 60-64 and 8.1% (N = 4) at the age of 65 or older. For those individuals who remained in full-time employment, 27.7% (N = 33) said they would retire between 55-59, 53.8% (N = 64) between 60-64 and 18.5% (N = 22) at the age of 65 or older. Below we will examine the reasons why individuals chose to reduce their working hours in the move to full retirement (Table 1).

Reasons behind a reduction in working hours (Table 1)- Regarding the move to part-time work, we found that the most important reasons given are more leisure time (36.73%) and more time for domestic work (30.61%), with health reasons (20.41%) being the third most important motive. In addition, 10% worked part-time due to caring responsibilities, while 12% of the total sample of part-time workers no longer needed to work full-time for financial reasons. More time to study (2%) was the weakest reason for part-time employment, while involuntary part-time employment due to economic circumstances faced by the organization (4%) or no opportunity to work full-time for the employer (6%) were both rather low.

Table 2 and 3 focus on the specific characteristics of those 50+ individuals who moved from a full-time to a part-time job (Table 2 and Table 3). All of the characteristics were measured in 2011. In order to test whether the bivariate

relationships were significant, Chi-square tests (for crosstabs) (Table 2) or independent sample T-tests (for interval variables) (Table 3) were used.

**Table 1.** Motivations for part-time work (percentages)

Motivation	Percentage (n=49)
More time for domestic work	30.61%
More time for caring	10.20%
More time for leisure	36.73%
More time for study	2.04%
Health reasons	20.41%
No full-time employment opportunities	6.12%
Organizational problems	4.08%
No longer need it financially to work full-time	12.24%
Other reasons	16.33%

Note: Multiple answers are possible: 65.31% (n=32) report 1 reason, 26.53% (n=13) report 2 reasons, 6.12% report 3 reasons (n=3), 2.04% (n=1) report 4 reasons.

Source: Flemish WSE Career Survey, 2011

Socio-demographic characteristics (Table 2) – Compared to men (19.82%), women were significantly more likely (47.37%) to have reduced their working hours over the period 2001-2011. While we found that a reduction in working hours was not significantly related to age or educational level, 32.88% of individuals aged 55-59 years reduced their working hours, but only 26.32% of those aged 50-54 moved to part-time work. Moreover, highly educated individuals were least likely to have reduced their working hours, with only 23.53% moving out of full-time employment.

Household characteristics (Table 2) – The likelihood of reduced working hours was not significantly related to household characteristics. However, singles with dependent children were the least likely to reduce their working hours (only 22.22%), while those with an employed partner (dual-earner couples) were more likely (30%) to participate in a working-hour

**Table 2.** Characteristics of 50+ reducing working time (row percentages)

	Full-time (n=119)	Part-time (n=49)
	Percentages	Percentages
<i>A. Socio-demographic</i>		
Age		
50-54	73.68	26.32
55-59	67.12	32.88
Gender ***		
Men	80.18	19.82
Women	52.63	47.37
Educational level		
Low education	64.29	35.71
Medium education	67.44	32.56
High education	76.47	23.53
<i>B. Household</i>		
Family-type		
Single with dependent children in the household	77.78	22.22
Couple without dependent children in the household	70	30
Couple with dependent children in the household	70.79	29.21
Employment status partner		
No partner	77.78	22.22
Non-employed partner	73.53	26.47
Employed partner	69.60	30.40
Number of dependent children in the HH		
No children	70	30
1	66.67	33.33
2	75	25
3	81.82	18.18
4	50	50
5	100	0
<i>C. Objective job characteristics</i>		
Occupation		
Elementary workers	67.09	32.91
Administrative employees	60.87	39.13
Professional employees	80	20
Middle management	75.68	24.32
Senior management	83.33	16.67
Top management	87.5	12.5
Sector		
Primary sector	33.33	66.67
Secondary	80.49	19.51
Tertiary sector	74.07	25.93
Government/public sector	64.29	35.71

Notes: Significance chi-square difference test bivariate crosstabs: \*p < 0.05 \*\* p < 0.01 \*\*\* p < 0.001

Source: Flemish WSE Career Survey, 2011

reduction scheme. Furthermore, it was not the presence of children as such, but the number of children that determined the likelihood of moving to a part-time job. When a household had two or more dependent children the likelihood of moving to a part-time job decreased.

Objective job characteristics (Table 2) – No significant associations were found between objective job characteristics and the likelihood of having reduced working hours. However, the higher the job status, the lower the probability of having moved to a part-time job. Of workers in administrative jobs, 39.13% had reduced their working hours, while in 2011, 20% of professional employees, 24.3% of middle management, 16.67% of senior and 12.5% of top management were working part-time. The likelihood of having reduced working hours was the largest in the tertiary and quaternary sectors (small N for primary sector).

Subjective job characteristics (Table 3) – A significant difference in physical work demand was found between those who remained in full-time employment and those who reduced their working hours. Those 50+ individuals who worked part-time scored on average significantly higher on physical job demands (1.95) than full-time employees (1.67). Autonomy, work pressure, cognitive job demands, use of capabilities and social support did not significantly differ between those working full-time or part-time. Although no significant difference in emotional demands of the job was found, those working part-time scored 1.96 on average on this scale, while those in full-time employment scored 1.73 on average.

Motivational characteristics (Table 3) – Those who reduced their working hours scored significantly lower on work centrality and higher on exit intention. With a p-value of 0.066, job satisfaction was, strictly speaking, not significantly lower for those who had reduced their working hours.

Health (Table 3) – Those who had reduced their working hours did not score significantly higher on subjective health.

Personal net income (Table 3) – Individuals employed part-time earned significantly less than those employed full-time.

Length of working career (Table 3) – Those who had reduced their working hours had a significantly longer working career (35 years) than full-time employees (33.23 years).

**Table 3.** Characteristics of 50+ reducing working time (mean and standard deviation)

	Full-time (n=119)	Part-time (n=49)
	Mean (std)	Mean (std)
<i>D. Subjective job characteristics</i>		
Autonomy(1-4)	3.01 (0.77)	2.94 (0.85)
Work pressure (1-4)	2.28 (0.74)	2.21 (0.84)
Emotional job demands (1-4)	1.73 (0.65)	1.96 (0.91)
Cognitive job demands (1-4)	3.25 (0.69)	3.20 (0.67)
Physical job demands (1-4) *	1.67 (0.79)	1.95 (0.87)
Skill utilisation (1-4)	2.86 (0.64)	2.77 (0.77)
Social support (1-4)	3.13 (0.59)	3.05 (0.72)
<i>E. Motivational characteristics</i>		
Job satisfaction (1-10) <sup>o</sup>	7.77 (1.44)	7.24 (2.02)
Work centrality (1-5)*	3.66 (0.75)	3.36 (0.81)
Exit intention (1-5)**	2.62 (0.92)	3.09 (1.04)
<i>F. Work-life balance</i>		
Time-based work-to-family conflict (1-5) <sup>o</sup>	2.55 (1.15)	2.18 (1.16)
Strain-based work-to-family conflict (1-5)	1.95 (0.90)	1.82 (1.03)
Time-based family-to-work conflict (1-5)	1.58 (0.71)	1.49 (0.72)
Strain-based family-to-work conflict (1-5)	1.40 (0.63)	1.24 (0.42)
<i>G. Subjective health (1-10)</i>		
	7.87 (1.47)	7.51 (1.32)
<i>H. Net personal income (in euro)*</i>		
	2282.8 (1062.8)	1791 (1709)
<i>I. Length of the working career (in years)**</i>		
	33.23 (4.51)	35 (4.08)

Notes: Significance independent sample t-test: \*p < 0.05 \*\* p < 0.01 \*\*\* p < 0.001. After each variable name the range of the response categories or the unity in which the variable is measured is added.

Std = standard deviation

Source: Flemish WSE Career Survey, 2011

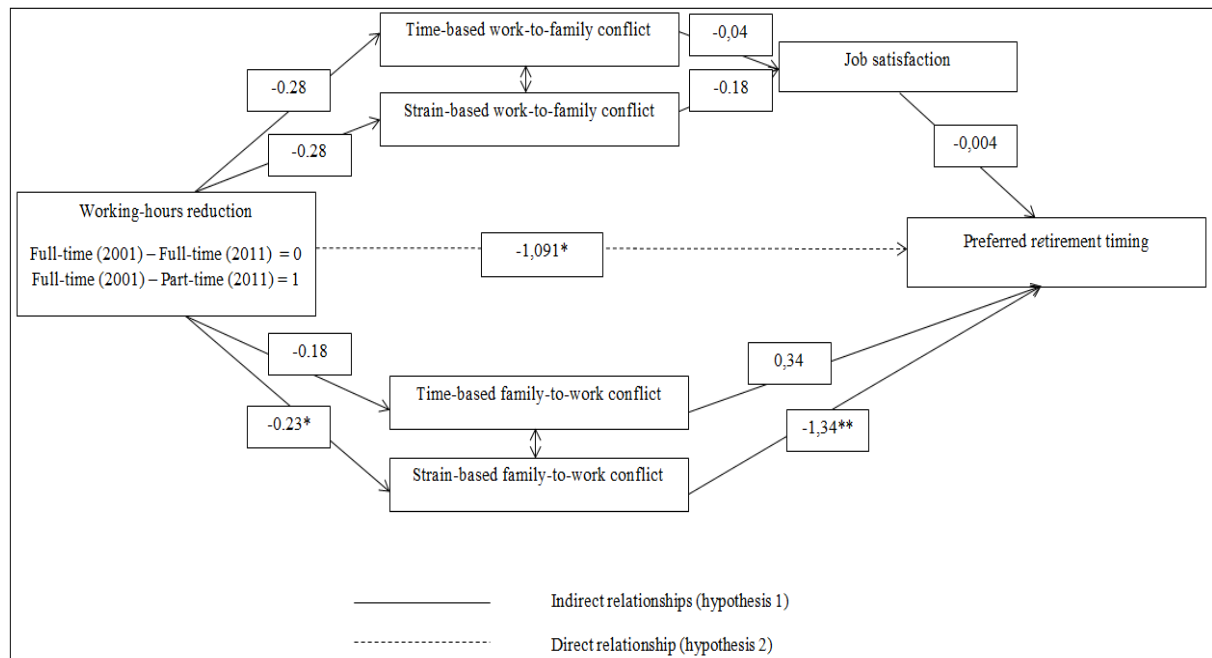
## 10.2 Path analysis

Several models were estimated in order to test our hypotheses. In Model 1 (for the complete results see Table 6, Appendix 2), the null model, we tested the relationship between working-hour reduction and preferred retirement age, controlling for gender, age, number of children and partner status. Those who reduced their working hours had a significantly higher probability of preferring to retire earlier (-1.38; p-value 0.003) compared to those who remained employed full-time. As the dependent variable 'preferred retirement age' was ordered from low to high values, a negative estimate suggested a higher probability on the preference to retire early.

More specifically, it was apparent that those who reduced their working hours preferred to retire 1.38 years earlier on average. Models 2 and 3 explain this relationship further.

Model 2 (*Hypothesis 1*) tested the mediating role of work-to-family conflict (TB and SB), job satisfaction and family-to-work conflict (both TB and SB) in the relationship between working-hour reduction and individual retirement preferences. In the paths concerning time-based and strain-based work-to-family and family-to-work conflict and job satisfaction only the significant control variables were left in the model. Appendix 3 (Table 8 and 9) shows the control variables included in each path. The path on preferred retirement age was controlled for job satisfaction, family-to-work conflict (SB and TB), net personal income, subjective health, occupation, sector, length of working career and educational level (Table 7, Appendix 3). Furthermore, each path included in the model was controlled for age, gender, number of dependent children in the household and partner status. For the model on preferred retirement age, we also tested non-linear relationships for age, net personal income and length of career by adding quadratic terms, none of which were significant. The results of Model 2 are presented in Figure 2.

Figure 2. Unstandardized estimates Model 2



Notes: For the sake of simplicity control variables and correlations between work-to-family and family-to-work conflict are not represented. Two-tailed test:  $p < 0,05$  \*\*Two-tailed test:  $p < 0,01$  \*\*\* Two-tailed test:  $p < 0,001$

Source: Flemish WSE Career Survey, 2011

Model 2 (for complete results see Table 7, 8 and 9, Appendix 3) has an acceptable fit to the data (RMSEA = 0.046; CFI = 0.928; SRMR = 0.029). It shows firstly that those who reduced their working hours were not significantly more likely to retire later due to lower time-based and/or strain-based work-to-family conflict. Working fewer hours was not significantly related to lower time-based (-0.284; p-value 0.184) and strain-based (-0.28; p-value 0.088) work-to-family conflict. Furthermore, no significant relationship was found between time-based (-0.042; p-value 0.676) and strain-based work-to-family conflict (-0.176; p-value 0.193) and job satisfaction. Job satisfaction had no significant relationship with preferred retirement age (0.004; 0.971). The indirect relationships between working hours and preferred retirement age through time-based (0.000; p-value 0.971) and strain-based work-to-family conflict (0.000; 0.971) were not significant. Regarding the indirect relationship through time-based and strain-based family-to-work conflict, the results revealed that those who reduced their working hours perceived significantly less strain-based family-to-work conflict (-0.233; p-value 0.017). Model 2 further reveals that strain-based family-to-work conflict is significantly related to a higher probability of preferring to retire early (-1.338; p-value 0.004). However, the total indirect relationship through strain-based family-to-work conflict was not significant (0.312; p-value 0.078). Time-based family-to-work conflict, in contrast, played no mediating role in the relationship between working hours and preferred retirement age. More specifically, no significant relationship was found between working hours and time-based family-to-work conflict (-0.179; p-value 0.164) or time-based family-to-work conflict and preferred retirement age (0.336; p-value 0.334).

In Model 2 there remained a significant negative direct relationship (-1.109; p-value 0.036) between working-hour reduction and preferred retirement timing when controlling for job satisfaction, family-to-work conflict (SB and TB), net personal income, subjective health, occupation, sector, length of working career and educational level (Table 7, Appendix 3). Therefore, in Model 3 (*Hypothesis 2*) we brought additional control variables into the regression model on preferred retirement age in an attempt to explain why those who have reduced work time have a significant higher probability to prefer to retire early (Table 10 and 11, Appendix 4).



**Table 4.** Model fit comparison

Models	CFI	RMSEA	SRMR	AIC	BIC
Model 1 (null model)	1	0	0.008	3027.672	3213.374
Model 2 (work-life balance)	0.928	0.046	0.029	2825.459	3081.624
Model 3a (work centrality)	0.909	0.051	0.031	2752.931	3010.22
Model 3b (exit intention)	0.901	0.054	0.032	2748.766	3006.054

Source: Flemish WSE Career Survey, 2011

In Model 3 (for complete results see Table 10 and 11, Appendix 4) we decided to bring the control variables into the analysis using separate models in order to clearly distinguish the impact of each. Model 3a focuses on work centrality (Table 10, Appendix 4) and Model 3b on exit intention (Table 11, Appendix 4). Each separate model has an acceptable fit to the data (Table 4). Both work centrality (Model 3a: 0.69, p-value 0.036) and exit intention (Model 3b: -1.016, p-value 0.000) were found to be significant predictors of retirement timing. Controlling for work centrality (Model 3a) and exit intention (Model 3b), the relationship between working-hour reduction and preferred retirement timing became insignificant. Controlling for work centrality, the relationship between working hours and preferred retirement timing was -1.001 (p-value 0.059) (Table 10, Appendix 4). Controlling for exit intention, a relationship of -0.733 (p-value 0.151) between working hours and preferred retirement timing was found (Table 11, Appendix 4). AIC and BIC values, which compare the model fit of non-nested models, showed that Model 3b fits the data best as it has the lowest AIC and BIC values (Table 4).

## 11. Discussion and conclusion

This study contributes to the literature by investigating the factors that may explain why those 50+ individuals who reduce their working hours have a higher probability of early exit from the labour market. More specifically, we focused on the question whether lower work identity (i.e. work centrality, exit intention) and/or a better work-life balance play a role in explaining this relationship. Although theory and policy largely assume that those who reduce their working hours at the end of their working career should have a better work-life balance than those who do not (Greenhaus & Beutell, 1985; Kahn et al., 1964; Schmid, 1998), we found that working part-time was not related to a better work-life balance – measured in terms of work-family conflict – for older employees (with the exception of strain-based family-to-

work conflict). This finding has different implications for both resource drain and COR theory when studying older workers (see section 6.1) . Rather than providing a better balance between work and non-work life and decreasing the preference for early retirement, working-hour reduction was found to be strongly associated with a greater preference to retire early. Using the social identity perspective we were able to explain why those who had reduced their working hours at the end of their working career were more likely to express a preference for early retirement (Ng & Feldman, 2008), with lower work centrality and higher exit intentions as the most important reasons.

### **11.1 Implications for theory**

Although resource drain theory and the COR model have been applied numerous times in empirical studies (Adkins & Premeaux, 2012; Albertsen et al., 2008), they have not been tested specifically in the context of 50+ workers. Therefore, this study raises important implications for theory regarding the role of working hours in predicting inter-role conflicts in the context of older workers. In line with resource drain and COR theory (Greenhaus & Beutell, 1985; Kahn et al., 1964), we conclude that a reduction in working hours is indeed associated with lower strain-based family-to-work conflict which makes older workers less likely to prefer to retire earlier. Due to the fact that 50+ individuals who work part-time have more time to deal with demanding family responsibilities (e.g. ill partner, dependent parents), they are less likely to feel preoccupied with family matters at work. With respect to the ‘sandwiched generation’, who care for both dependent parents and (grand-)children at the same time (Cleveland, 2009), these results are particularly interesting. However, we found no relationship between the working-hour regime and either time-based or strain-based work-to-family conflict. In other words, although part-time employees work fewer hours, they still report a strong likelihood of feeling that they are not participating equally in household activities due to the time spent at work, and they may feel frazzled, emotionally drained and stressed when they come home from work. As a positive relationship between working hours and work-to-family conflict has frequently been found in previous research (Albertsen et al., 2008), we suggest there are specific age-related psychological, physical and emotional changes that might explain these particular findings for older workers (Lachman, 2004).

Firstly, even after reducing their working hours, 50+ individuals may still face great demands to perform various non-work activities, which might explain why they are

still likely to perceive high negative work-to-family spill over. The notion of socio-emotional selectivity suggests that as individuals become more aware of the fact that time is finite they will highly prioritize tasks and goals that are emotionally meaningful (e.g. partner, time with children and grandchildren)(Carstensen et al., 2003; Grant & Wade-Benzoni, 2009). In this regard, the demands on non-work time may be numerous for older workers who want to spend more time with children, grandchildren and their partners, or who prefer to have more time to relax or to spend on leisure activities (Kahn et al., 1964). We argue that a decrease in weekly working hours by only one or two days is not sufficient to fulfil all these different emotional needs and is therefore not associated with the experience of lower levels of time-based and strain-based work-to-family conflict.

A second explanation based on theory might be the occurrence of a mismatch between an expected and effective decrease in work-role demands when making a transition to a part-time job towards the end of a working career. If 50+ employees expect a decrease in demands and this does not occur, they may be less likely to perceive a significantly lower level of work-to-family conflict (Erickson et al., 2010). The literature on older workers' attitudes towards employment has shown that 50+ individuals, in general, believe that work is good for people and that they like working (McNair, 2006; Vickerstaff, 2007). However, they have a strong preference to work part-time or on a flexible basis and to have more control over what they do and how they do it (McNair, 2006; Vickerstaff, 2007). In Flanders, those 50+ individuals who reduced their working hours did not perceive significantly higher autonomy in their jobs and were no less likely to face lower time pressure in their jobs than full-time employees, suggesting a mismatch between expected and realized changes in job-role demands. In addition, theories on age-related changes in cognitive and physical functioning suggest that even when changes in job-role demands fit expectations, a decline in physical (e.g. strength, vision, hearing, balance) and cognitive abilities (e.g. working memory, manner or speed of processing new information) makes it difficult to decrease work-to-family conflict in older workers by working fewer hours (Skirbekk, 2003).

Thirdly, we argue that based on the literature and the findings discussed here, a more philosophical point should be made on the meaning of the subjective constructs 'work-to-family conflict' and 'family-to-work conflict' for older individuals. Does an *imbalance* between work and life mean experiencing large *inter-role conflicts* for older workers? In other words, are 'work-to-family' and 'family-to-work' conflicts the most ideal constructs for gaining an understanding of work-life balance

in older workers? Numerous definitions of work-life balance can be found in the literature, alongside traditional definitions which conceptualize work-life balance in terms of inter-role conflicts (Greenhaus & Beutell, 1985) and/or inter-role facilitation (Frone et al., 2003). More recently, a number of broader conceptualizations have defined work-life balance. For example, Higgins et al. (2000) defined it as a 'perceptual phenomenon characterized by a sense of having achieved a satisfactory resolution of the multiple demands of work and family domains', while Voydanoff (2005) conceptualized the work-life balance as a 'global assessment that work resources meet family demands, and family resources meet work demands such that participation is effective in both domains'. Other definitions which focus less explicitly on the combination of work and life responsibilities define work-life balance as 'a feeling of equilibrium or overall sense of harmony in life' (Clarke et al., 2004). Although theory assumes a negative relationship between work-to-family and family-to-work conflict and uses more global measures of the work-life balance (e.g. satisfaction with work-life balance) (Beham, 2010), we assume that this relationship is less strong for older workers. Put plainly, for older workers, having low work-to-family and family-to-work conflict does not necessarily go hand in hand with the experience of a more balanced work and life, as viewed from a more global perspective. The most important explanation based on theory is that the experience of work-to-family and family-to-work conflict is lower for older workers, regardless of their overall feeling of equilibrium or sense of harmony in life, due to a greater ability to control stress, to regulate emotions and to put daily problems into perspective (Carstensen et al., 2003). Therefore, older workers are less likely to consider work-life balance in terms of inter-role spill over between work and family role demands. This might also explain why we did not find a positive relationship between work-to-family conflict (TB or SB) and satisfaction with the job. As Jung (1971) suggested, the mature years involve a turning inward to explore subjective perceptions of life balance and well-being, while young adulthood requires an extraverted orientation to meet work and family demands. Furthermore, for the group studied here, job satisfaction was not found to be an important predictor of retirement timing. As all of the workers who remained employed over the last decade were relatively satisfied with their jobs, we conclude that in relation to our sample it is not job satisfaction as such, but work centrality and exit intention that are the main predictors of retirement timing for older workers.

Informed by the social identity perspective, we were able to explain the higher early retirement preferences of those who had reduced their working hours over the previous ten years. We thus conclude that for older workers the number of hours

devoted to the job also represents the extent to which the individual identifies with the work role (Tajfel & Turner, 1985). Those 50+ individuals who had reduced their working hours over the last decade scored significantly lower on *work centrality* and higher on *exit intention*, which explains why they preferred to retire earlier. However, when applying social identity theory in the context of older workers, it can be argued that specific situational demands, largely neglected in previous studies on social identity theory, become important in explaining working hours (Greenhaus et al., 2012; Ng & Feldman, 2008). For example, work-related health issues due to high physical and emotional work demands increases the likelihood that working fewer hours is a necessity rather than a choice for 50+ individuals. Therefore, theory should take into account that lower work centrality for 50+ individuals is likely to occur not only because they *choose* to identify less with the work role, but because they are *forced* to make their work role less central due to health problems.

## 11.2 Implications for practice

A picture of the characteristics of those 50+ individuals who have reduced their working hours is of notable practical utility as it provides a mechanism for policymakers to make more informed decisions about the relative need and corresponding benefits of work-family programs for older workers. From a policy perspective, studying preferences on retirement timing is important, as preferences largely predict effective retirement behaviour (Örestig et al., 2013). Due to data limitations, we were not able to distinguish different legal working-hour reduction schemes in our analysis. However, in total, 63.2% of all respondents who started working part-time reduced working time in the time credit/career break system. Of most importance for practitioners is the finding that those 50+ individuals who reduced their working hours considered their work role to be less central to their lives and were more likely to quit their job as soon as they had the opportunity to do so, resulting in earlier preferred retirement ages for those in end-of-career working-hour reduction schemes. From a policy perspective, we could question whether this finding is problematic, given that the possibility of partially reducing working hours at the end of a working career is specifically designed to assist these specific groups to stay employed longer.

Whether, from a macro-economic perspective, end-of-career working-hour reduction schemes are efficient in maximizing the overall labour market participation rate depends on the interplay of numerous push and pull factors (Devisscher & Van Pelt, 2008). On the one hand, end-of-career working-hour reduction schemes may

keep older workers in the labour market who would otherwise already have left had such financially advantageous part-time exit strategies not been available (pull). Furthermore, part-time exit strategies may create work opportunities for other groups (e.g. for women) in the labour market (pull). On the other hand, a number of workers who might have planned to remain employed full-time had they not had access to such a scheme, might decide to work on a part-time basis, which in turn may encourage early exit, as the experience of the advantages of more leisure time would increase their preference to further reduce their working hours (push). In order to determine whether our findings are problematic from a macro-economic perspective, the various push and pull effects should be delineated. In Flanders, in particular, only 6,9% of the total number of older workers reported that they would definitely work longer by working fewer hours, as our data showed, suggesting that our findings are indeed problematic from a policy perspective.

Based on our study, we suggest that a number of strategies can be used to lengthen working careers by means of participation in end-of-career working-hour reduction schemes. Firstly, time use during non-work time should be improved, which would result in a more successful reconciliation of work and non-work life. In line with Vandeweyer (2010), who studied time use of employees younger than 50 in career break, we conclude that, in Flanders, the time that 50+ individuals gain by working one or two days less a week is largely consumed by domestic responsibilities. Moreover, WSE data shows that participation in volunteer work and social activities (e.g. clubs) is not higher for part-time as for full-time 50+ employees. While part-time employees are more likely to be satisfied with the time spent on household activities, they still express the same desire to spend more time with friends and family and on leisure activities as full-time employees. Whereas 20.41% of part-time employees want to spend more time on household activities, 34.45% of full-time employees does. Although differences were not statistically significant for family time, friends and leisure, 38.77% of 50+ in part-time exit trajectories prefers to spend more time on family, whereas 55.46% of full-time employees does. Given that 42.58% of part-time employees prefers to spend more time on friends and 48.98% to spend more time on leisure, a strong need of those who reduce working time to allocate more freed-up working time to these life domains is suggested. As more time for leisure and family are the main reasons behind the desire to reduce working hours, older workers might be disappointed when they find that their needs are not fulfilled by spending fewer hours in the job, resulting in a greater preference to further reduce working hours or to quit work as soon as possible. To avoid that time use of older workers become a combination of multiple short activities, which

increases time pressure and decreases well-being, subsidized employment regulations for domestic support (known as “dienstcheques” in Belgium) should be further supported in Belgium. Such schemes are fiscally interesting and create the opportunity to hire employees to perform domestic tasks for a relatively low hourly wage (9 euro). Policy makers should think about a reallocation of costs related to unemployment and pension schemes by investing in such subsidized employment schemes to increase domestic support for older workers. In line with young self-employed mothers, specific measures targeted on 50+ could be developed (e.g. a number of hours of domestic support for free), in order to improve the take-up rate of domestic support in the group of 50+.

Secondly, we argue that a policy which focuses on longer working careers should question the working conditions of those who reduce their working hours. What we can conclude for 50+ individuals in our sample is that job conditions, in general, are not significantly worse for those in part-time jobs (e.g. autonomy, social support). However, a possible misfit between expected and realized changes in job conditions when reducing working hours should be taken into account, as in Flanders 17.65% of those who worked part-time in their last jobs retired due to job-related aspects (e.g. stress, work-time regulations, work-related health issues). As health issues are an important reason why 50+ employees work part-time, working conditions and work environments that sustain workers’ health and well-being and maximize their lifelong employability should be promoted. Improving older workers’ attitudes and orientation towards work can be fostered by means of counselling, tailored placement and reintegration support for older workers who wish to remain in the labour market.

Thirdly, cultural values such as the social acceptance of early retirement, which is deeply rooted in Flemish culture and may take a long time to change, should be addressed (Petrovici, 2012). In order to avoid early retirement, policymakers should also address the negative attitudes and age-related stereotypes of employers and their discriminatory attitudes towards older workers in the work place. Rather than firing older workers or negotiating leave options, employers should be further supported to capitalize on older workers’ knowledge and skills. At the same time, employees should be encouraged to remain in employment longer by increasing their awareness of their responsibilities towards society in creating a sustainable social security and pension system.

Finally, based on the specific characteristics of those who reduced their working hours, we suggest that the recent legal reforms to the end-of-career time-credit and career-break systems, limiting access to and financial benefits from the end-of-career time-credit/career-break systems, will not be sufficient. As we found that those who reduce their working hours generally give work a less central role in their life, desire more leisure time and/or have health issues, we argue that such individuals are likely to ‘crash’ into the unemployment and disability systems on a large scale if policy limits their access to and financial benefits from the time-credit/career-break systems. Obviously, this would not result in a reduction of total costs but in a redistribution of costs across other social security schemes (e.g. disability, unemployment). In combination with an improvement in the quality of non-work time, the adaptation of working conditions to older workers’ needs and the stimulation of change in cultural values, policymakers should also create an employment-friendly end-of-career working-hour reduction system that ensures that work pays for older workers.

### **11.3 Limitations and future research**

Our research is subject to several limitations but also has implications for future research. Firstly, due to the use of *cross-sectional data* we were unable to formulate conclusions on the causality behind the relationships hypothesized. While part-time work can be a facilitator of a work-life balance insofar as it lowers work-family conflict, it may also be a response to the experience of high levels of pressure from both family and work. Only a very limited set of small-scale studies have addressed this topic and most have found a causal effect, with the number of working hours influencing the work-family balance (Berger, 2009; Britt & Dawson, 2005; Gash et al., 2009; Hammer et al., 2005; Laurijssen & Glorieux, 2012). The same is true regarding the relationship between working hours and preferred retirement age, work centrality and exit intention. To what extent do lower work centrality and higher exit intentions already play a role in the decision to reduce working hours? An answer to this question will have important practical implications for policy. Therefore, future research should further fuel this discussion by addressing our research questions using large-scale longitudinal data.

Secondly, due to a small sample size we were not able to focus on gender differences, although we might assume on the basis of theory that such differences play an important role in understanding the relationship between a reduction in



working hours and preferred retirement timing (Van Looy et al., 2012). Another drawback related to the small sample size was an inability to study differences between singles, single-earner and dual-earner families (Adkins, 2010). Furthermore, the WSE does not provide indicators that allow the measurement of work-to-family and family-to-work conflict for single employees who do not have a family (i.e. having spouse/partner and/or children in the household) (Carlson et al., 2000). As singles without dependent children and/or a partner in the household may become a more significant part of the population in the future due to the increasing diversity of family structures and the ageing population, future research that addresses our hypotheses specifically with respect to these family types would further improve retirement policy.

Thirdly, future studies on the relationship between working-hour reduction and retirement behaviour should carefully reconstruct the career paths of 50+ individuals in order to obtain a more complete picture of the probability of early retirement by those who partially reduce their working hours. In this study, we were only able to examine the retirement preferences of those who were employed full-time in 2001 and who were still employed in 2011. During this period it is probable that a number of those who participated in end-of-career working-hour reduction schemes left the labour market permanently. Furthermore, policy would benefit from studying our hypotheses separately for the time-credit and career-break schemes, as well as focusing on differences between 80% employment and half-time employment. A macro-economic analysis that brings together the push and pull effects of end-of-career working-hour reduction schemes is also required. Furthermore, larger samples should be used to differentiate the relationship between working-hour reduction and preferred retirement age across background characteristics relevant for future policy. For example, regarding educational level, descriptive analysis showed that high educated 50+ are less likely to have reduced working time, but if they did, they are more likely to prefer to retire relatively earlier than their full-time counterparts compared to lower and medium educated 50+ . Moreover, a reduction of working time to a part-time job is more strongly associated with lower work centrality and higher exit-intention for high educated 50+ . Finally, in addition to the measurement of work-to-family and family-to-work conflict used in this study, future theorizing should focus on different measurements and definitions of work-life balance that might increase our understanding of the issues faced by older workers in this regard.

## 11.4 Conclusion

End-of-career working-hour reduction schemes are a hot topic in the debate on the sustainability of the social security and pension systems in Belgium. This debate is particularly being fuelled by Belgian employer organizations who argue that the original purpose of end-of-career working-hour reduction schemes – to lengthen working careers – has not been achieved. Unions and employees, in contrast, consider the opportunity for respite at the end of a long working career to be an individual right, arguing that when an older worker lacks the willingness, capability (physical, mental, etc.) and/or opportunity to remain employed longer, this right should be respected.

This study provides a greater understanding of the characteristics of individuals who choose to reduce their working hours towards the end of their working career, and this knowledge can be used by practitioners and the various actors involved in the debate concerning the policy measures most suitable to lengthen working careers. In agreement with the criticisms of employers, we conclude that end-of-career working-hour reduction schemes in Flanders are specifically used by those groups of older workers who give work a less central role in their life and who are less motivated to remain active in the labour market for as long as possible. Furthermore, low work motivation and high exit intentions explained why those who reduced their working hours preferred earlier retirement. Together with a relatively young age on which those who reduced working time started to work part-time (on average 51, standard deviation 3,5), this study suggests that 50+ use part-time employment strategies as an early exit pathway out of the labour market. Motivations for part-time employment showed that 88% of those who reduced working time still need it financially to stay employed for at least a number of hours, suggesting that part-time employed 50+ are not prolonging their working careers. Furthermore, our assumption that part-time employment pathways are used as a step-up to earlier retirement is supported by the fact that only 6,9% of total employed older workers showed the intention to prolong the working career in the case of a reduction in work hours. Although we were not able to make a distinction between different legal frameworks for end-of-career working-hour reduction (e.g. time credit), it is interesting to interpret the results against the background of the recently introduced reforms in Belgian time credit, career break and pension system. Policymakers recently introduced a number of legal reforms limiting access to and financial benefits from the end-of-career time-credit/career-break systems. In the light of a dwindling time frame, we suggest that, the opportunity to reduce working

hours, for whatever what reason, from the age of 50 (e.g. relaxing, spending time with grandchildren) should be protected in future social policy. As those who reduced their working hours give work a less central role in life, desire more leisure time and/or have health issues, the legal reforms recently introduced will only increase the likelihood that such individuals are forced to turn to unemployment and disability schemes. Therefore, future policy on end-of-career working-hour reduction schemes should focus on their main purpose, namely balancing work and life, and should increase both employer and employee awareness of their responsibilities in the creation of a successful system.

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## Appendix 1: Scales

**Table 5.** Scales

Schaal	Items
Work-to-family/family-to-work conflict	<p>Time-based work-to-family conflict (Cronbach's alpha = 0,89)</p> <p>(1) My work keeps me from my family activities more than I would like</p> <p>(2) The time I must devote to my job keeps me from participating equally in household responsibilities and activities</p> <p>(3) I have to miss family duties due to the amount of time I must spend on work responsibilities.</p> <p>Strain-based work-to-family conflict (Cronbach's alpha = 0,86)</p> <p>(1) When I get home from work I am often too frazzled to participate in family activities and responsibilities</p> <p>(2) I am often so emotionally drained when I get home from work that it prevents me from contributing to my family</p> <p>(3) Due to all the pressures of work, sometimes when I come home I am too stressed to do the things I enjoy</p> <p>Time-based family-to-work conflict (Cronbach's alpha = 0,90)</p> <p>(1) The time I spend on family responsibilities often interfere with my work responsibilities</p> <p>(2) The time I spend with my family often causes me not to spend time in activities at work that could be helpful to my career</p> <p>(3) I have to miss work activities due to the amount of time I must spend on family responsibilities.</p> <p>Strain-based family-to-work conflict (Cronbach's alpha = 0,95)</p> <p>(1) Due to stress at home, I am often preoccupied with family matters at work</p> <p>(2) Because I am often too stressed from family responsibilities, I have a hard time concentrating on my work</p> <p>(3) Tension and anxiety from my family life often weakens my ability to do my job</p>
Autonomy (0,83)	<p>(1) Heeft u vrijheid bij het uitvoeren van uw werkzaamheden?</p> <p>(2) Heeft u invloed op het werktempo?</p> <p>(3) Kunt u uw werk even onderbreken als u dat nodig vindt?</p> <p>(4) Kunt u zelf de volgorde van uw werkzaamheden bepalen?</p>
Work pressure (0,85)	<p>(1) Werkt u onder tijdsdruk?</p> <p>(2) Moet u extra hard werken om iets af te krijgen?</p> <p>(3) Moet u zich haasten?</p>
Emotional job demands (0,88)	<p>(1) Is uw werk emotioneel zwaar?</p> <p>(2) Wordt u in uw werk geconfronteerd met dingen die u persoonlijk raken?</p> <p>(3) Komt u door uw werk in aangrijpende situaties terecht?</p>
Cognitive job demands (0,78)	<p>(1) Vraagt uw werk veel concentratie?</p> <p>(2) Vereist uw werk dat u er steeds bij moet nadenken?</p> <p>(3) Vereist uw werk grote zorgvuldigheid?</p>
Physical job demands (0,83)	<p>(1) Werkt u in ongemakkelijke of inspannende houdingen?</p> <p>(2) Vindt u uw werk lichamelijk erg inspannend?</p> <p>(3) Vereist uw werk lichaamskracht?</p>
Skill utilization (0,74)	<p>(1) Doet uw werk voldoende beroep op al uw vaardigheden of capaciteiten?</p> <p>(2) Leert u nieuwe dingen op het werk?</p> <p>(3) Geeft uw werk u het gevoel er iets mee te kunnen bereiken?</p>
Social support (0,77)	<p>(1) Kunt u, als dat nodig is, uw collega's om hulp vragen?</p> <p>(2) Voelt u zich in uw werk gewaardeerd door uw collega's?</p> <p>(3) Kunt u, als dat nodig is, uw directe leiding om hulp vragen?</p> <p>(4) Voelt u zich in uw werk gewaardeerd door uw directe leiding?</p>

## Appendix 2: Model 1

**Table 6.** Model 1 (null model): Relationship between working-hour reduction and preferred retirement age (n=172)

Dependent variable: Preferred retirement age	Estimate	Standardized estimate	P-value
<b>Working- hour reduction (ref = no)</b>	-1,38	-0.197	0.003**
<u>Control variables</u>			
Number of dependent children	0.411	0.135	0.044*
Employment status partner (ref= employed partner)			
No partner	-0.914	-0.064	0.36
Non-employed partner	-1.24	-0.157	0.007**
Gender (ref=men)			
	0.355	0.053	0.478
Age	0.383	0.312	0.000***

Notes: Significance t-test: \*p < 0.05 \*\* p < 0.01 \*\*\*p < 0.001

Source: Flemish WSE Career Survey, 2011

## Appendix 3: Model 2

**Table 7.** Model 2: Direct and indirect relationships between working-hour reduction and preferred retirement age (n=168)

Dependent variable: Preferred retirement age	Estimate	Standardized estimate	P-value
<b><u>Direct relationships</u></b>			
<b>Working-hour reduction (ref = no)</b>	-1.091	-0.153	0.036*
Job satisfaction	-0.004	-0.002	0.971
Strain-based family-to-work conflict	-1.338	-0.238	0.004**
Time-based family-to-work conflict	0.336	0.073	0.334
<b><u>Control variables</u></b>			
Occupation (ref = elementary workers)			
Administrative employees	0.073	0.008	0.893
Professional employees	0.158	0.014	0.803
Middle management	-0.34	-0.044	0.503
Senior and top management	3.223	0.275	0.031*
Sector (ref = government/public sector)			
Primary sector	2.546	0.104	0.036*
Secondary sector	0.483	0.064	0.34
Tertiary sector	0.528	0.076	0.352
Education (ref = high educated)			
Low educated	-1	-0.085	0.227
Medium educated	-1.358	-0.21	0.003**
Net income	-0.011	-0.045	0.478
Subjective health	0.164	0.073	0.231
Length of the working career	-0.191	-0.262	0.003**
Number of dependent children	0.285	0.092	0.227
Employment status partner (ref= employed partner)			
No partner	-1.695	-0.118	0.128
Non-employed partner	-0.8	-0.099	0.07
Gender (ref=men)	0.61	0.089	0.234
Age	0.572	0.456	0.000***
<b><u>Indirect relationships</u></b>			
Via time-based work-to-family conflict	0.000	0.000	0.971
Via strain-based work-to-family conflict	0.000	0.000	0.971
Via time-based family-to-work conflict	-0.06	-0.008	0.418
Via strain-based family-to-work conflict	0.312	0.044	0.078
Total indirect	0.251	0.035	0.082

Notes: Significance t-test: \*p =< 0.05 \*\* p =<0.01 \*\*\*p =<0.001

Source: Flemish WSE Career Survey, 2011

**Table 8.** Model 2: Paths on job satisfaction and work-to-family conflict (n=168)

	Estimate	Standardized estimate	P-value
<b><u>Dependent variable 1: Job satisfaction</u></b>			
Time-based work-to-family conflict	-0.042	-0.029	0.676
Strain-based work-to-family conflict	-0.176	-0.101	0.193
<b><u>Control variables</u></b>			
Skill utilization	0.562	0.233	0.003**
Physical job demands	-0.299	-0.19	0.025*
Social support	1.078	0.416	0.000***
Number of dependent children	0.003	0.002	0.975
Employment status partner (ref= employed partner)			
No partner	-0.638	-0.088	0.055
Non-employed partner	-0.218	-0.054	0.376
Gender (ref=men)	0.182	0.053	0.343
Age	0.038	0.06	0.406
<b><u>Dependent variable 2: Time-based work-to-family conflict</u></b>			
Working-hour reduction (ref = no)	-0.284	-0.113	0.184
<b><u>Control variables</u></b>			
Autonomy	-0.171	-0.119	0.045*
Work pressure	0.335	0.229	0.002**
Emotional job demands	0.346	0.225	0.005**
Number of dependent children	-0.009	-0.009	0.91
Employment status partner (ref= employed partner)			
No partner	1.115	0.22	0.005**
Non-employed partner	0.02	0.007	0.917
Gender (ref=men)	-0.385	-0.16	0.061
Age	-0.028	-0.063	0.425
<b><u>Dependent variable 3: Strain-based work-to-family conflict</u></b>			
Working-hour reduction (ref = no)	-0.28	-0.136	0.088
<b><u>Control variables</u></b>			
Emotional job demands	0.321	0.256	0.001***
Social support	-0.286	-0.193	0.000***
Number of dependent children	0.075	0.084	0.303
Employment status partner (ref= employed partner)			
No partner	0.88	0.213	0.022*
Non-employed partner	0.522	0.225	0.003**
Gender (ref=men)	0.233	0.118	0.136
Age	0.029	0.079	0.253

Notes: Significance t-test: \*p < 0.05 \*\* p < 0.01 \*\*\*p < 0.001

Source: Flemish WSE Career Survey, 2011

**Table 9.** Model 2: Paths on family-to-work conflict (n=168)

	Estimate	Standardized estimate	P-value
<b><i>Dependent variable 4: Time-based family-to-work conflict</i></b>			
Working-hour reduction (ref = no)	-0.179	-0.115	0.164
<i>Control variables</i>			
Autonomy	-0.156	-0.176	0.004**
Emotional job demands	0.294	0.308	0.003**
Number of dependent children	-0.01	-0.015	0.85
Employment status partner (ref= employed partner)			
No partner	0.264	0.084	0.172
Non-employed partner	0.004	0.003	0.974
Gender (ref=men)	0.011	0.007	0.94
Age	0.016	0.059	0.443
<b><i>Dependent variable 5: Strain-based family-to-work conflict</i></b>			
Working-hour reduction (ref = no)	-0.233	-0.184	0.017**
<i>Control variables</i>			
Emotional job demands	0.151	0.195	0.025*
Social support	-0.121	-0.132	0.039
Number of dependent children	0.051	0.092	0.21
Employment status partner (ref= employed partner)			
No partner	0.448	0.175	0.159
Non-employed partner	0.179	0.125	0.121
Gender (ref=men)	0.099	0.081	0.342
Age	0.033	0.147	0.086

Notes: Significance t-test: \*p < 0.05 \*\* p < 0.01 \*\*\*p < 0.001

Source: Flemish WSE Career Survey, 2011

## Appendix 4: Model 3a and 3b

**Table 10.** Model 3a: Direct and indirect relationships between work hours reduction and preferred retirement age, controlled for work centrality (n = 164)

Dependent variable: Preferred retirement age	Estimate	Standardized estimate	P-value
<b>Direct relationships</b>			
<b>Working-hour reduction (ref = no)</b>	-1.001	-0.139	0.059
Job satisfaction	-0.096	-0.048	0.294
Strain-based family-to-work conflict	-1.227	-0.217	0.015**
Time-based family-to-work conflict	0.244	0.053	0.511
<b>Control variables</b>			
<u>Occupation (ref = elementary workers)</u>			
Administrative employees	-0.113	-0.012	0.827
Professional employees	-0.009	-0.001	0.989
Middle management	-0.406	-0.05	0.454
Senior and top management	3.221	0.275	0.036*
<u>Sector (ref = government/public sector)</u>			
Primary sector	0.374	0.05	0.45
Secondary sector	0.547	0.078	0.326
Tertiary sector			
<u>Education (ref = high educated)</u>			
Low educated	-0.884	-0.076	0.247
Medium educated	-1.348	-0.206	0.002**
<u>Net income</u>			
	-0.011	-0.044	0.461
<u>Subjective health</u>			
	0.108	0.047	0.409
<u>Length of the working career</u>			
	-0.215	-0.295	0.000***
<u>Number of dependent children</u>			
	0.254	0.082	0.298
<u>Employment status partner (ref= employed partner)</u>			
No partner	-1.719	-0.12	0.1
Non-employed partner	-0.833	-0.102	0.057
<u>Gender (ref=men)</u>			
	0.693	0.1	0.167
<u>Age</u>			
	0.563	0.447	0.000***
<b>Work centrality</b>	0.69	0.164	0.036*
<b>Indirect relationships</b>			
Via time-based work-to-family conflict	0.000	0.000	0.723
Via strain-based work-to-family conflict	-0.001	-0.002	0.424
Via time-based family-to-work conflict	-0.007	-0.014	0.526
Via strain-based family-to-work conflict	0.042	0.092	0.074
Total indirect	0.034	0.075	0.084

Notes: Significance t-test: \*p < 0.05 \*\* p < 0.01 \*\*\*p < 0.001

Source: Flemish WSE Career Survey, 2011

**Table 11.** Model 3b: Direct and indirect relationships between work hours reduction and preferred retirement age, controlled for exit intention (n=164)

Dependent variable: Preferred retirement age	Estimate	Standardized estimate	P-value
<b><u>Direct relationships</u></b>			
<b>Working-hour reduction (ref = no)</b>	-0.733	-0.102	0.151
Job satisfaction	-0.206	-0.104	0.046*
Strain-based family-to-work conflict	-1.046	-0.185	0.028**
Time-based family-to-work conflict	0.125	0.027	0.734
<b><u>Control variables</u></b>			
<b><u>Occupation (ref = elementary workers)</u></b>			
Administrative employees	-0.175	-0.019	0.717
Professional employees	-0.004	0.000	0.995
Middle management	-0.637	-0.08	0.213
Senior and top management	3.259	0.279	0.031*
<b><u>Sector (ref = government/ public sector)</u></b>			
Primary sector	0.265	0.035	0.578
Secondary sector	0.688	0.098	0.236
Tertiary sector			
<b><u>Education (ref = high educated)</u></b>			
Low educated	-0.913	-0.078	0.231
Medium educated	-1.213	-0.185	0.006**
<b><u>Net income</u></b>			
	-0.013	-0.052	0.408
<b><u>Subjective health</u></b>			
	0.091	0.04	0.505
<b><u>Length of the working career</u></b>			
	-0.169	-0.231	0.005**
<b><u>Number of dependent children</u></b>			
	0.236	0.076	0.287
<b>Employment status partner (ref= employed partner)</b>			
No partner	-1.549	-0.102	0.091
Non-employed partner	-0.683	-0.085	0.287
<b><u>Gender (ref=men)</u></b>			
	0.444	0.064	0.39
<b><u>Age</u></b>			
	0.576	0.459	0.000***
<b>Exit intention</b>			
	-1.016	-0.303	0.000***
<b><u>Indirect relationships</u></b>			
Via time-based work-to-family conflict	-0.002	0.000	0.735
Via strain-based work-to-family conflict	-0.01	-0.001	0.363
Via time-based family-to-work conflict	-0.021	-0.003	0.742
Via strain-based family-to-work conflict	0.249	0.035	0.128
Total indirect	0.215	0.03	0.106

Notes: Significance t-test: \*p < 0.05 \*\* p < 0.01 \*\*\*p < 0.001

Source: Flemish WSE Career Survey, 2011