Chapter 6

Summary, policy implications and topics for future research

6.1 Summary

6.1.1 The labour market and policy in the Netherlands

When it comes to the level of unemployment, the Dutch labour market has been doing rather well since the mid 1990s, at least until recently, though part of the unemployed may have been hiding in e.g. disability and early retirement schemes. However, the flows seem to tell a different story. Indeed, the average flow rate from employment to unemployment and from unemployment to employment are among the lowest in the OECD. The usual suspects for these low flow rates are generous unemployment insurance and strict employment protection. Indeed, unemployment insurance benefits seem rather generous compared to other OECD countries. Furthermore, the protection of regular employment contracts seems rather strict. Finally, the steep rise in public expenditures on active labour market policies appears to have had limited success in raising the outflow rate from unemployment. In the subsequent chapters we consider whether unemployment insurance benefits are indeed too high, employment protection is too strict and active labour market policies are actually active.

6.1.2 Unemployment insurance

We study optimal unemployment insurance in a lifecycle model with unemployment risk. The incidence and duration of the risk may vary over the lifecycle. Workers decide on search effort when unemployed, consumption and savings. The ability to save and borrow gives workers the opportunity to self insure against the unemployment risk. However, the extent to which they can do so may be limited by liquidity constraints.

We calibrate the model to the panel data of De Koning et al. (2006) on the incidence and duration of unemployment over the lifecycle, and the empirical literature on the elasticity of unemployment and consumption with respect to the benefit level.

We find that in the base calibration, the optimal benefit level is quite close to the actual benefit level of around 70% of the wage. However, given our limited knowledge of
moral hazard, risk aversion and the role of liquidity constraints, the optimal level could be somewhat lower or higher. But the welfare cost of a sub optimal replacement rate by say 10 percentage points is small (.1% in consumption terms).

We further find that the replacement rate should be higher for older workers and for lower educated workers. This is in line with the current system that links the maximum UI duration with the preceding employment duration and the maximum income borders for UI premiums and benefits.

Hence, although the relatively generous unemployment insurance is one of the reasons for the low outflow rate from unemployment to employment in the Netherlands, it may be second best.

### 6.1.3 Individual accounts

Next, we study the introduction of unemployment insurance savings accounts (UISA). Under the current system employees pay a premium to finance unemployment insurance benefits for the unemployed. Under a UISA system the premium is replaced by mandatory savings into an individual account out of which benefits are paid during unemployment. Because individuals can have a negative balance they still have access to income during unemployment. Furthermore, in a popular proposal by Feldstein and Altman (1998), negative terminal balances at the end of working life are nullified, which is financed by a tax, and positive terminal balances go to the individual pension account.

Under the UISA system, individuals that expect to end up with a positive terminal balance will have a stronger incentive to keep their job and to find a new one in case of job loss. Individuals that expect to end up with a negative terminal balance will have weaker incentives though. But as most individuals will end up with a positive terminal balance, on net incentives are improved and unemployment will fall.

However, the pooling of the unemployment risk will fall as well. Individuals that are unemployed often or for a long duration will have a lower lifetime income, though some risk pooling remains when negative terminal balances are nullified. Hence, also UISA do not escape the trade off between incentives and insurance.

But still, individual accounts may improve this trade off. When unemployed have no assets and can not borrow, their consumption is determined solely by their unemployment benefits. UISA force individuals to build up some precautionary savings for job loss and allow the unemployed to borrow in the case of job loss. In this way, individuals can self insure against the risk of unemployment, and the need for public insurance against unemployment is reduced.

However, for reasonable levels of unemployment insurance benefits, most unemployed individuals do not run into liquidity constraints. Most unemployment spells do not last that long, and most unemployed have sufficient assets or access to funds to cover the larger part of the income shock due to unemployment. Indeed, studies that look into the effect of a change in the unemployment benefit on the consumption of the unemployed find that consumption falls only slightly even when benefits are reduced significantly.

Simulation results indicate that the welfare gains of introducing UISA in the Netherlands are indeed small. The introduction of an UISA leads to a substantial drop in unemployment, but also to a substantial loss in risk pooling. Starting from an optimal
unemployment benefit level the overall welfare gains are less than .1% in consumption terms. In line with empirical studies, most unemployed in the model do not run into borrowing constraints.

Starting from a higher benefit level, the welfare gains from introducing UISA are larger, but then simply reducing benefit levels seems preferable. Furthermore, to reap a welfare gain the policy maker needs to have precise knowledge on the extent of moral hazard and risk aversion of the workers. A sub optimal choice for the replacement rate and the mandatory savings rate under a UISA system easily results in a welfare loss, and a mistake is easy to make given our limited knowledge of moral hazard and risk aversion.

All in all, UISA then do not seem to offer much over the current UI system in the Netherlands. However, this does not mean that individual accounts are not interesting for other types of income shocks, like education and health care, which have a larger intra personal and a smaller interpersonal component than unemployment benefits.

6.1.4 Employment protection

Next, we consider employment protection. We consider the impact of severance pay, firing costs and firing taxes in a general equilibrium vintage model with specific worker and firm investments to raise the productivity of a match.

A qualitative analysis of the balanced growth path shows that lumping together different types of employment protection, as in the OECD indicator, may be a poor empirical strategy. Different types of employment protection have different effects. Furthermore, we also provide some empirical support for this. Specifically, we show that when severance pay is initially zero, severance pay is neutral when it comes to job creation and destruction. However, an interesting implication of rising severance pay with tenure is that it tilts the wage profile. Wages of new hires fall and wages of workers with long tenures rise, potentially creating a political economy problem.

Furthermore, we show that rising firing costs with tenure, popular in practice, are less detrimental to job creation than flat firing costs, popular in theoretical work. Hence, previous simulation studies may have overstated the negative effect of firing costs on employment.

In the qualitative analysis we also consider the first best solution, and consider how contracting problems in specific investments and the presence of unemployment insurance benefits may provide a second best role for firing taxes. In particular, in both cases match destruction will be too high and match creation will be too low. Firing taxes lengthen match durations and thereby mitigate the distortion on the destruction side. When we use the receipts to reduce unemployment insurance premiums, this can be done without collateral damage on the creation side.

We illustrate a number of points quantitatively in a calibration exercise for the Netherlands. When there is a large under investment problem in match specific human capital, firing costs raise productivity and employment (though a rise in productivity and employment does not guarantee a rise in welfare, due to the higher investment costs).

When there is no under investment problem in match specific human capital, firing costs reduce productivity and welfare though they may still raise employment. When there is no under investment, firing taxes can still improve welfare, matches are terminated
too soon due to the presence of unemployment insurance benefits and premiums. When we return the receipts of the firing taxes in the form of lower unemployment insurance premiums the policy reform actually boosts job creation.

In an extension with an endogenous labour force we further shows that the model can also produce falling employment as a result of higher firing costs. This is in line with our empirical findings earlier in the chapter, and a number of other empirical studies.

Again, returning to the flow data from Chapter 2, our analysis of employment protection suggests that firing costs are a likely candidate for the low flow rate from employment into unemployment, and perhaps the low flow rate from unemployment to employment, in the Netherlands. Is this also collateral damage for the greater good? It depends, it is when we believe that there is a sizeable under investment problem in specific investments in the Netherlands. However, then attacking the contracting problem directly seems a less costly approach than imposing firing costs in terms of job creation and welfare in general. When there is no under investment problem in specific investments the strict employment protection of permanent contracts in the Netherlands likely reduces welfare. The analysis also shows that another form of protection, firing taxes, may play a similar productive role as firing costs, but without the collateral damage to welfare. Our theoretical and empirical analysis suggests that severance pay is not behind the low flow rates between employment and unemployment.

6.1.5 Active labour market policies

Finally, we consider the effectiveness of active labour market policies in raising the job finding rate of job seekers and their subsequent productivity, in general equilibrium.

We consider the impact of a number of popular active labour market policies in a stripped down version of the so-called MIMIC model. The focus of the stripped down model is on the matching process and the wage bargain, which are supposed to capture the main channels through which these policies affect the workings of the economy.

In the stripped down model we introduce: a) relief jobs in the public sector, where participants produce some output but do not regain skills, b) training programs, where low-productive individuals become as productive as high-productive individuals but produce no output while on training, and c) temporary employment subsidies in the private sector. The relief jobs and the training program are supposed to capture the two polar cases of subsidized employment in the public sector, with actual programs containing elements of both. Indeed, comparing the individual wage and employment effect of our stylised programs we find that our stylised relief jobs are rather pessimistic and our stylised training programs are rather optimistic when compared to the findings of micro-econometric studies on the impact of actual programs abroad.

We consider the effect of increasing the budget for each of the ALMPs by 115 million euros. When individuals move into a relief job they reduce their search effort for regular employment, this increases search costs for firms. Furthermore, the higher compensation in relief jobs than in low-productive unemployment and the financing of this higher compensation raises labour costs as well. As a result the net employment effect of relief jobs is only 31 percent of placements. Although relief job workers produce some output, the crowding out of regular employment leads to an overall fall in output.
6.1. SUMMARY

The public training program speeds up the process by which participants find employment. However, higher compensation in the training program than in low-productive unemployment, and the financing of this higher compensation plus training costs push up labour costs in the private sector. Higher participation in the training program crowds out regular employment as well. Overall, the favourable effect of training on the individual level is reversed on the aggregate level. The net employment effect is somewhat below 50 percent of placements. Output again falls.

Finally, employment subsidies in the private sector encourage rather than discourage private sector employment. But the net employment effect is only 2 percent of placements. There is a small increase in output. Although the training program enhances human capital formation, the fact that expenditures are used to reduce labour costs rather than (partly) improving labour’s fall back option, combined with the fact that individuals produce output right away still makes targeted employment subsidies in the private sector more effective in enhancing output and regular employment than the training program.

Compared to macro-econometric studies on subsidized employment programs in the public sector abroad (more specifically Sweden) the net employment effect of relief jobs seems on the upper bound of the reported findings, whereas the net employment effect of the training program is above the upper bound of the reported findings.

In our base simulations we set the compensation in relief jobs and the training program conservatively at the minimum wage, whereas actual programs typically pay wages above the minimum wage. When we increase the compensation to 115 percent of minimum wages, subsidized employment in the public sector crowds out more regular employment. Furthermore, when we make less favourable assumptions on the effect of the training program on human capital formation or the employment probability we also find more crowding out of regular employment. The results then move closer to the overall findings of the macro-econometric studies on the net employment effect of subsidized employment in the public sector.

Studies on the overall impact of employment subsidies in the private sector typically do not employ aggregate data but rely on survey studies instead. Employers are asked to indicate to what extent subsidized individuals constitute net employment gains. Presuming that the reported net employment effects accord with the actual employment effects on the individual firm level, our net employment effect of employment subsidies is below the lower bound of the reported findings. However, as the survey studies do not consider the effect on wage formation via taxes, they are likely to overstate the overall net employment effect.

To conclude, for all active labour market policies we find that the aggregate effect is less favourable than the individual effect, due to additional wage pressure and higher taxes to finance the programs. Hence, the result that targeted wage cost subsidies raise the rate at which targeted individuals find employment (as suggested by e.g. the meta analysis of Kluve, 2006), does not mean that they raise the average job finding rate of all job seekers. Furthermore, training programs that seem to promote the employment rate of participants on net (despite lock-in effects) may not do so for the average job seeker. Finally, relief jobs seem even more detrimental for the transition into regular employment once we account for the negative side effects of additional wage pressure and higher taxes. Hence, the fact that the Netherlands has had one of the lowest outflow rates
from unemployment to employment, despite the steep rise in spending on active labour market policies, does not come as a surprise.

6.2 Policy implications

Clearly, this whole thesis is about policy. But there is no harm in reiterating some key policy implications and consider how they relate to the current policy debate. We do this with the help of bullets.

**Unemployment insurance**

- Are unemployment benefits too high? Not necessarily, simulation results suggest that the optimal replacement rate is in the order of 60-70%. Furthermore, the welfare cost of setting the replacement 10 percentage points too high or too low is also small, around .1% (the objective function is fairly flat close to the optimum).

- Are unemployment insurance savings accounts an interesting policy option for the Netherlands? No, most unemployed do not run into liquidity constraints, and a large part of the redistribution by the unemployment insurance system is interpersonal not intra personal. Simulations results suggest that the welfare gain is less than .1% in consumption terms.

**Employment protection**

- Is employment protection too strict? Not necessarily, firing costs can play a productive role when there is under investment in match specific human capital and in the presence of unemployment insurance. For a realistic parameter range the effect on both employment and productivity can go either way when we increase (or decrease) firing costs.

- Is severance pay in the Netherlands too high? The average severance pay in the Netherlands is average in the OECD, though above average for high tenures. But even if severance pay is considered too high for high tenures, theory indicates that severance pay is typically neutral when it comes to job creation and destruction, which also gets empirical support.

- So the current system might be optimal? No, there is no need to treat every layoff as a potential crime. Firing taxes can perform the same role as costly or lengthy procedures in preventing an excessive inflow into unemployment insurance. When the receipts are used to lower unemployment insurance premiums labour costs can actually fall.

**Active labour market policies**

- Are active labour market policies active? Typically not, in particular relief jobs seem to keep people out of regular jobs rather than guide them towards them, and training programs give mixed results, with typically negative effects for youths.
So should we abandon active labour market policies all together? No, some ALMPs seem to work, at least on the individual level. Job search assistance, targeted employment subsidies in the private sector and start-up grants seem to improve the employment prospects of participants.

However, that job search assistance and subsidies for workers or entrepreneurs help to get individuals back to employment on the partial level is hardly surprising. Our analysis shows that wage pressure and higher taxes can take a substantial bite out of the effect on the aggregate level, and even reverse the effect. So, a cost-benefit analysis of ALMPs based on individual outcomes can lead one to the wrong conclusion.

6.3 Topics for future research

We conclude this thesis with a number of promising topics for future research, again organised by topic.

The empirical knowledge on the costs and benefits of unemployment insurance in the Netherlands is limited. The policy changes over the past decade, in particular the shortening of the maximum insurance duration and the increase in the initial benefit, provide an interesting natural experiment. When we study the impact of these experiments we should not only study unemployment durations (and subsequent wages), but also the impact on consumption. In this way we can determine both the costs and the benefits of the changes in the program. In doing so, it seems also fruitful to distinguish between individuals with and without assets, and with and without a partner, as shown by Chetty (2008).

As for individual accounts, our analyses suggests that this is a dead end for the unemployment risk. Because most unemployed do not seem to run into liquidity constraints, and a large part of the redistribution is interpersonal not intra personal. But perhaps liquidity constraints are more important than the scarce evidence suggests. Again, the analysis of the recent changes in the UI program may be helpful in determining the relevance of liquidity constraints for unemployment. Also, we may study individual accounts for tax financed programs that have more intra personal redistribution, like education and health care.

There also remain some theoretical challenges. What if these liquidity constraints are there for a good reason? Stiglitz and Yun (2005) suggest that integrating unemployment insurance with social insurance may be welfare improving. However, in their model liquidity constraints have no productive role. But we know there may be good reasons why we force individuals to save for retirement, which they can not undo via private savings/borrowing due to liquidity constraints. Individuals may have hyperbolic preferences, or expect others to buy them out when the time comes. An integrated analysis seems to be called for, where these considerations are also taken into account.

Regarding employment protection, there is still a lack of thorough empirical studies on the impact of employment protection. Cross-country studies have their downsides, systems are hard to compare across countries and there is little variation in EPL. Over the past decade we also have seen some changes in EPL in the Netherlands for example.
There has been some work into the effect of these changes,\(^1\) but their scope is still partial and limited.

Considering theoretical challenges, it would be interesting to study the role of severance pay (notice periods) and firing procedures more closely. In the typical model, the former are neutral and the latter are simply a social waste. However, the prevalence and persistence of these arrangements, in so many countries and also in private contracts, suggest they have some productive role to play. Severance pay may provide insurance against the risk of losing the returns to match specific human capital. It would be interesting to study what role severance pay (and notice periods) has to play next to unemployment insurance. Pissarides (2004) and Fella (2007) provide an interesting start, but they take unemployment benefits as exogenous.

Also of interest is the lifecycle pattern of EPL. Older workers are typically harder to fire, and typically also get more severance pay. Why does EPL have this lifecycle pattern, and is it optimal?\(^2\)

As for active labour market policies, first and foremost we need more empirical knowledge on their effects on the individual level. Preferably, this knowledge would come from randomised experiments. The budgetary outlays warrant a thorough evaluation on the individual and aggregate level. Most active labour market policies have a rather poor track record in terms of raising the regular employment prospects of participants. Apparently we are not putting people’s lives at stake, and the benefits of experiments are likely to outweigh the costs in terms of heterogeneous outcomes.

Furthermore, as we get longer and longer data series with changes in ALMPs, empirical tests on the impact of ALMPs at the aggregate level become more powerful. This study has shown that in the evaluation of ALMPs, we should typically look beyond the effects on the individual level. A dif-in-dif estimate on the treatment and the control group will not tell you the effect of additional taxes or wage pressure on both of them.

\(^1\)See e.g. Gielen and Van Ours (2006).

\(^2\)See Deelen and Jongen (2009) for some preliminary thoughts on this.