

Stabilization Mechanisms in the Dutch Pension System Benne van Popta¹

1) The Dutch Pension System has three pillars. In this short paper I will have a look at only the stabilization mechanisms in the first and second pillar.

2) The first pillar is a public pension.

The first pillar delivers a flat rat benefit. This benefit is $\in 850$ per month (after taxes) for one partner of a couple; a couple receives $\in 1.700$. The benefit for a single person is $\in 1.150$.

These benefits are not related to income earned or years worked. Nor is the benefit related to contributions paid. And the flat rate benefit is not means tested (income and/or assets). But the benefit is related to residency (after 50 years of residence between 15 and 65 years you are entitled to the full benefit, with 2% reduction of each year less). If your benefit is below a certain minimum (i.e. immigrants) you will receive an add on (means tested).

The first pillar is part of the budget, is paid on a PAYGO basis. In the early days the benefits were paid by a social contribution rate on wages (because it started as a social security benefit). But later on also by general taxes, because we put a cap on the contribution rate on wages, to prevent labor becoming too expensive.

3) Till 2012 the public retirement age was 65. After 2012 the retirement age would increase in a few steps to 67. And thereafter the retirement age would be linked to an increase in longevity. One year longer living would result in an increase of the retirement age of also one year (so one year longer work-ing). In 2015 the increase towards 67 was accelerated. The linkage to an increase in longevity did not change. In 2019 the stabilization formula was changed again. The increase towards 67 was delayed. The linkage to an increase in longevity was slowed down. One year longer living now results in 8 month longer working.

Year	State pension age according to 2015	State pension age according to 2019 law
	law	
2020	66 years, 8 months	66 years and 4 months
2021	67 years	66 years and 4 months
2022	Linked to rising life expectancy (1 to 1)	66 years and 7 months
2023	Linked to rising life expectancy (1 to 1)	66 years and 10 months
2024	Linked to rising life expectancy (1 to 1)	67 years
2025	Linked to rising life expectancy (1 to 1)	Linked to rising life expectancy (a rise in
		life expectancy with one year will lead to
		a rise in the retirement age of eight month

4) Why does a country choose for an *automatic* stabilization formula and change it afterwards two times in a very short period? This depends upon changing circumstances and opinions. The budget deteriorated very much after the 2008 financial crisis. So there was an opportunity and a need to change the public pension age, as in many other countries. What already also was needed because of

¹ Benne van Popta, Chairman of the Board of the Industrywide Pension fund for Metal and Technological Industry, PMT; The Netherlands.



demographic changes. So, make it part of austerity measures!² After some years the public opinion changed in many countries. May be we have had to much austerity! And also labor market issues became part of the considerations. Would there be enough labor market opportunities for older people? Not in the short term! As a result of the rise of the public pension age, expenditure on public pensions were (partly) substituted for expenditure on public disability benefits. With small or no net benefits for the whole economy as a result. So, let's have second thoughts about the *automatic* formula.

The new Dutch *automatic* formula is a compromise of budgetary considerations and labor market adaptability capacities. And the new formula was part of a grand deal, in 2019, about changes in the first and second pillar pensions. A big give and take between the ministry of finance and the unions.

5) So, you can have an *automatic* formula for the retirement age. For about 5 years, would be my guess. This formula is based on considerations related to budget, labor market, demography, economy. This *automatic* formula needs to be the result of an intense public debate, as a pacifying formula. And after 5 years the circle takes another loop. In between you have political peace. At turning points you will have political debate and/or political disruptions. So, agree on these automatic formulas. But be aware that circumstances and/or opinions can change. And someone should be in charge of controlling these sequences of loops. I think the minister of pensions and/or finance and employer organizations and unions. This is more or less the situation in The Netherlands.

6) The second pillar is a private pillar, based on public law. It is funded. There are about 50 industrywide and about 150 company pension funds. These funds are managed by employer organizations and trade unions (industrywide) or management and workers (company). The governance of pension funds is strongly regulated.

The "social partners" in each sector or company negotiate a pension contract (accrual rate and contribution rate). The accrual rate differs between sectors and companies, but in general is between 1,5 and 1,875 (1,875 is the maximum accrual rate, based on tax regulations). Also the contribution rate differs, but in general is between 13 and 18% of wages. Social partners ask their pension fund to execute the pension contract. Pension funds will evaluate the contract and assess if the combination of accrual rate and contributions will match with returns on assets within an acceptable risk profile.

The overall target of the Dutch pension system (first and second pillar together) is an replacement rate of 80% of average wages. Due to low interest rates and lower aggregate returns this target is not met in the last decade. But also the solvency regime plays an important role. There is a strong trade off between adequacy and solvency.

7) The solvency rules are the *automatic* stabilizer of the balance sheet of a pension fund. The aim of these rules is: pension funds should be fully funded, otherwise they cannot meet their liabilities (all pension benefits to be paid tomorrow and the next 80 years). If pension funds need to be fully funded, they should have enough reserves to absorb financial shocks (i.e. a sudden decline in interest rates or a sudden decline in equity prices or sudden changes in credit spreads and/or exchange rates). The essence of the solvency rules is a) to define the minimum level of reserves and the equilibrium level of reserves and b) to prescribe actions to be taken when the reserves are lower than the required minimum, or in between the minimum and equilibrium levels, or above equilibrium levels. Take a computer, have your solvency program installed, with the relevant data, updated each month. And the computer can run the pension fund. Was the idea.

² It was a classical case of pension reform: an economic crisis gives a window of opportunity to take measures, not possible to take in "normal" circumstances.



8) If the solvency ratio is above the equilibrium level of 125 (so, a reserve of 25% above the fully funded level), full indexation of liabilities is allowed. Between 110 and 125 partial indexation is ok. Between 100 and 110: no indexation of liabilities is allowed. If a pension fund has a solvency ratio below 104, the minimum level, for more than 5 years, a haircut on pensions in paying and liabilities is needed. 1/10 of the actual solvency ratio minus 104 solvency ratio has to be implemented the next ten years, each year 1/10.

The last ten years no indexation has been allowed. Real value of pension liabilities and pension benefits have decreased by about 15%. PMT liabilities did decrease the last ten years with those 15%, but 6,5% was added due to a haircut, so a real decrease of more than 20%. The solvency ratio has swung between 90 and 105 in the last decade, due to high returns on equity on the one hand and sharp decreases in interest rates, pushing up liabilities and bond values (interest rate risk is hedged 50%).

9) Did it work this way? Not the haircut part, at least not in general. It worked if only a few pension funds were involved. But when many pension funds were involved, supervisors and authorities hesitated and found reasons not the implement the automatic rules (and of course somewhere in the rules an escape route is incorporated). And the haircut part was almost every year relevant in the last decade after the 2008 financial crisis and quantitative easing by central banks. And also the non-indexation part has been criticized more and more in recent years. The solvency rules have a bias, so has become more and more the opinion of the general public, towards solvency. There is a trade off between solvency and adequacy. The idea of the general public has become that solvency gets to much weight in this trade off³.

10) Why didn't it work as supposed? Because of technical and political reasons. The technical reasons are related to the calculation of the solvency ratio and the short term focus of the solvency regime.

Liabilities have to be discounted with a risk-free rate (European swap rate), according to the legal rules and the opinion of the supervisor and the minister of pensions. These rules are strongly defended by actuaries and financial economists. These rules are strongly opposed by participants, the general public and some political parties. So, there is a deadlock. Rules that were meant to protect participants, resulted in a highly politicized debate about our pension system and the advantages of capital funding. What is the added value of capital funding with these low returns, these volatile financial markets, these unpredictable monetary policies and financial parameters? Why should we have to accept so much uncertainty?

The solvency regime is focused on the short term. The equilibrium solvency ratio is 125 (with a risk free discount rate). Funds have to be fully funded at all time (at least 104), but can stay below this level for five years. Pension funds want to protect themselves for this downside risk (one of the main risks is interest-rate related). So, they invest a lot in bonds (also with negative yields) and derivatives. This has a negative effect on the overall returns of a pension fund. This got more and more attention because in the last decade the difference between the risk free rate and an average return on all assets have become larger and larger. It was a decade of lost opportunities, so it is seen.

11) The Dutch second pillar is very large, in number of participants (more than 8 million) and in capital involved (more than 200% GDP). The second pillar is seen by many as part of public social security. You cannot run such a large public system on the basis of only financial criteria for financial products. The impact is too large. And the system is too volatile and too unpredictable, due to financial

³ Because of the use of a risk free swap rate as a discount rate. Other less stringent discount rates are available, as other countries show.



markets and monetary policy. So, haircuts are only possible in individual cases, not at large. It is like a decrease in real wages. That is possible when nominal wages increases less then the inflation rate. But a real wage decline is not possible by a cut in nominal wages. Unions will not except that. And it is even more. After a decade of non-indexation participants do not even accept that anymore, also given the returns on equity.

12) So, the Dutch solvency rules are not *automatic*. Because they are heavily debated. Because too many disagree. Because they do not take into account the social security character of the very large second pillar. Because the second pillar is too large and participants refuse "to dance on the music of volatile equity prices, negative interest rates and intransparant monetary policies". An individual has to accept. A society can (and will) refuse.

13) So, the final question is: do *automatic* solvency rules exist?

Yes. When the pension product is seen as a financial product, as an individual product, as an capital accumulation product. Because it is an individual product, you do not need automatic rules. The financial market takes care of itself. See Australia (and other Anglo-Saxon countries)

Yes. When the funded part of a pension system is seen as part of social security, as a safety belt for all participants, as a buffer fund in stead of a solvency fund, and the analysis is a cash flow analysis in stead of a solvency analysis. See Canada.

No. When the funded part of a pension system is regarded as a financial product, but the funded part is also seen as part of public social security, because it is too big to be seen as an addition sum of numerous individual accounts. Than the *automatic financial* solvency rules will not work. In the end you will have *ad hoc political* solvency rules. See The Netherlands.