ENGLISH SUMMARY

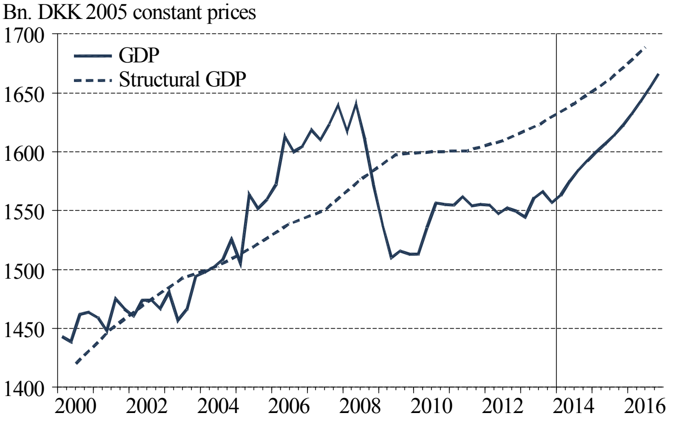
This report contains three chapters: Chapter I presents an economic outlook for the Danish economy, chapter II presents a long-term projection for the Danish economy with emphasis on the public sector finances, and chapter III examines the youth education system.

Chapter I: Economic Outlook

In recent years both the European and the Danish economy have stagnated. However, the outlook for the European economy has improved reflecting a stabilization of the economies hit by the sovereign debt crisis. This is visible from the marked decrease in the interest rates on sovereign bonds in the affected countries. Interest rates on Italian and Spanish bonds are about 1½ percentage points higher than those of German bonds, and Portugal recently returned to market financing.

The improvements in the euro area point towards higher growth in Danish export markets, which is likely to boost Danish exports. In addition, rising consumer and business confidence in Denmark over the last year will possibly stimulate private consumption and business fixed investment. On this basis, following three and a half years of stagnation, the Danish economy is expected to experience positive growth rates shortly. This year GDP is forecasted to grow about 1½ pct. accelerating to about 2 pct. in 2015 and 2½ pct. in 2016, cf. Figure A. These growth rates are distinctly higher than the rates of structural growth. The output gap is estimated to shrink from -4 pct. of GDP in 2013-14 to about -3 pct. in 2015 and about -2½ pct. in 2016.

Figure A GDP in Denmark



Note: Vertical bar indicates transition to forecast. The structural GDP series is based on own calculations.
Source: Statistics Denmark.

The short-term projection and current fiscal policy point towards a budget deficit close to 3 pct. of GDP in 2015. Naturally, this estimate is based on a number of assumptions. Thus, there is a risk that the budget deficit in 2015 will exceed the deficit limit of 3 pct. of GDP stipulated in the Stability and Growth Pact. This significantly reduces the room for fiscal manoeuvres in 2015.

Bearing in mind the expected economic recovery and the limited room for fiscal manoeuvre, a gradual fiscal tightening is appropriate. If the economic recovery should turns out to be weaker than expected, it would at first hand seem natural to postpone the fiscal tightening in order to support the economy. However, this would increase the budget deficit above the deficit limit of 3 pct. of GDP and is, therefore, not an option. If, on the other hand, the recovery turns out stronger than expected, the need for a more accommodating fiscal policy is correspondingly smaller. On this basis, it is assessed that the gradual fiscal tightening currently planned for the coming years is aligned with the expected economic recovery.

From 2014, the Danish Economic Council has been assigned the role of “Fiscal Watchdog”. This involves performing an annual assessment of fiscal sustainability, an assessment of the medium-term development of the budget balance and an evaluation of the adopted ceilings on general government spending. The expenditure ceilings must be in accordance with fiscal objectives, taking account of adopted reforms etc. Further, public budgets and accounts must comply with the spending ceilings. The assessment of the Economic Council is summarized in Table A below.

It is essential that all computations and assumptions relevant to the spending ceilings and the structural balance are thoroughly documented. Moreover, the documentation should be comprehensible and publicly available. The set of supporting documents provided by the Ministry of Finance has been extended gradually, but there is need for an ongoing effort to produce a complete and comprehensible set of supporting documents.

In 2020 a public budget surplus of about ¾ pct. of GDP is expected. Hence, according to the projection, the government’s fiscal objective of budget balance or a small budget surplus in the medium run is met. In addition, the budget deficit stays below 3 pct. of GDP in all years until 2020. However, in 2015 the budget deficit is estimated to be 2.8 pct. of GDP, which is close to the deficit limit of 3 pct. of GDP. The present risk of breaking the deficit limit calls for caution in the planning and conduct of fiscal policy. As to the structural balance, for the years 2014-2020, there is no conflict with the deficit limit of ½ pct. of GDP stipulated by the Danish Budget Act. This is based on the calculation methodology of the Ministry of Finance, which is the relevant concept of structural balance in the Budget Act.

According to the Budget Act public expenditure must comply with the adopted spending ceilings. Based on the government’s estimate of growth in public consumption, the operating expenditure will be close to the ceiling in 2014-17, while public transfer payment expenditure is estimated to stay below the ceiling. In the projection the government expenditure on transfer payments is estimated to stay below the ceiling by approximately DKK 5 billion in 2014, increasing to just over DKK 10 billion in 2017.

If the budget ceilings are fully utilised the structural deficit will increase significantly. As a result, the structural balance would increase to just above ½ pct. of GDP in 2015-17. This is in conflict with the deficit limit on the structural balance in the Budget Act. Consequently, the discrepancy between projected expenditure and the expenditure ceilings does not represent scope for increased public expenditure or lower taxes.

The disciplinary effect on fiscal planning that the expenditure ceilings are supposed to deliver is attenuated by the fact that the expenditure ceilings cannot be fully utilised. Therefore, when fixing the expenditure ceilings for 2018 in the budget proposal for 2015, utilisation of the ceilings without increasing the structural budget balance above the deficit limit of ½ pct. of GDP should be made possible.

Table A Assessment of fiscal policy objectives

Objective	Assessment
Sustainability	Currently planned fiscal policy is deemed sustainable
Medium run developments in budget balance	*Structural balance* The structural deficit (using the Budget Act method) is estimated to stay below ½ pct. of GDP in all years until 2020. In 2020 a surplus of about ¾ pct. of GDP is expected *Budget balance* The deficit on the budget balance is forecast to stay below 3 pct. of GDP in the years 2014-2020. In 2015 the estimated deficit is expected to be close to the limit of 3 pct. The risk of exceeding this limit warrants caution. The deficit is estimated to decrease in the following years
Spending ceilings in compliance with fiscal policy objectives	It is assessed that it is not possible to utilise the spending ceilings without breaking the structural deficit limit of ½ pct. of GDP stipulated by the Budget Act. Attention should be paid to this point
Compliance with expenditure ceilings in fiscal planning	The planned expenditures are estimated to stay below the ceilings
Compliance with expenditure ceilings in accounts	No assessment, as the accounts for 2014 are not yet available

This spring the government proposed some labour market reforms. The proposal includes an increased emphasis on business-oriented measures for unemployed people. In addition, it is suggested that the use of interviews be increased during the first six months of unemployment and that the whole responsibility be transferred to the unemployment insurance funds. Analyses have identified positive effects of interviews by municipal job centres, but there are no analyses of the effects of interviews by the unemployment insurance funds. Taking account of this, it might not be advisable to delegate meeting activities to the unemployment insurance funds rather than the municipal job centres.

The proposal presents training as instrumental in the pursuit of higher employment and assigns a higher priority to training measures. The emphasis on training is not justified by the bulk of the reviews of the current training measures. On the other hand, it is positive that the proposal allows unskilled unemployed to upgrade their skills while receiving reduced unemployment insurance benefits. The right to six weeks training of their own choice is changed to the right for unskilled and skilled workers to choose employment-oriented courses from a list. Moreover, the reimbursement grants to guidance and upgrading are removed due to inefficiency. Therefore, on balance, the training initiatives are a step in the right direction.

In May the government presented a growth initiative. A number of the proposals are in the form of intentions and objectives without specific reference to any means to fund them, and a number are merely implementation of measures that have already been adopted. Consequently, it is difficult to estimate the potential effects of the proposed initiative. The government estimates that the growth initiative will boost GDP by DKK 6 billion in 2020.

The proposal suggests reducing the current PSO tariff (Public Service Obligation) for some business sectors. The Danish PSO tariff is added to electricity bills and finances subsidies for renewable energy. The chairmanship of the Economic Council has previously recommended that renewable energy subsidies be financed through general income tax rather than through tariffs on electricity bills, cf. *Economy and Environment 2014*. As a general principle a low tax rate on a broad tax base is less distorting than a high tax rate on a narrow tax base. Moreover, a lower electricity price will promote the use of electricity in households and industries at the expense of fossil fuels. This would reduce CO_2 emissions from the sectors that are not covered by the EU Emissions Trading System (EU ETS), which limits the greenhouse gas emissions. Therefore reducing the PSO tariff is desirable, though only reducing it for some sectors will distort the allocation of resources.

In April the Danish Parliament adopted a law that modifies arrangements in the mortgage lending system. The law forces the maturity of existing bonds to be extended if an auction on mortgage bonds used for refinancing of adjustable rate mortgages fails. This eliminates the refinancing risk of mortgage banks and puts a ceiling on the possible interest rate increase on short term bonds. As investors assume the risk of refinancing a loan at an interest rate below the going market rate, the general level of interest will increase slightly. The law is expedient as it reduces the risk of a substantial negative economic impact of a sudden interest rate hike. However, consideration should be given to reducing the lending limit on adjustable rate mortgages to below that of fixed rate mortgages. Both currently stand at 80 pct. of the property value.

This spring the EU agreed to establish a banking union. The banking union comprises a single supervisory mechanism and a single resolution mechanism including a single resolution fund financed by levies on the financial sector. From a Danish perspective, participation in the banking union could be advantageous in several respects. Firstly, Danish financial institutions would be subject to the single supervisory mechanism which may help increase confidence further from the currently high level. Secondly, a number of Danish financial institutions are so large compared to the economy that if they became severely distressed, it would be difficult for the Danish government to handle the situation alone.

On the other hand, a number of circumstances speak against Danish participation in the banking union. The final design of a number of important elements in the banking union remains to be settled. This pertains to the conditions of participation for non-euro area Member States, the efficiency of the single resolution mechanism and the design of contributions to the single resolution fund.

Taking stock, the banking union is a well-reasoned step for the EU but in view of the remaining unsettled conditions it is preferable to wait for these conditions to be settled before deciding on Danish participation in the banking union.

Chapter II: Fiscal sustainability and intergenerational distribution

Chapter II presents a long-term projection for the Danish economy beyond 2020, which builds upon the medium-term projection to 2020 presented in Chapter I. The long-term projection is used to evaluate the long-term development of Danish fiscal policy under assumptions concerning demographic trends, etc. Furthermore, it is combined with historical data ranging back to 1948 to compare life-time incomes, net government contributions and life-time working hours for the generations born from 1930 to 2030.

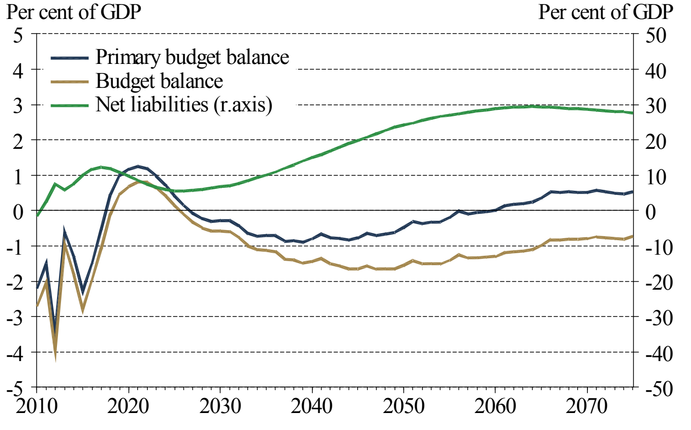
The sustainability indicator is -0.1 per cent (i.e. the primary budget balance must be improved permanently by 0.1 percent of GDP in order to avoid an exploding debt in the long run). In the long-run projection, the sustainability indicator was 0.0. In view of the huge uncertainties involved in long-run projections of this kind, differences of the magnitude of 0.1 per cent of GDP should not be emphasized. Consequently, Danish fiscal policy is still considered to be sustainable given the assumptions of the projection.

However, as seen in figure B, the budget deficit is projected to increase by almost 2 per cent of GDP during the decades after 2020. The main reasons for this are dwindling revenues from oil and gas extraction in the North Sea and younger and smaller generations succeeding older and larger ones in the labour market. After 2040, the picture is reversed so that larger generations replace smaller ones, with smaller deficits as a consequence.

Because of this deficit profile, the projected fiscal policy will conflict with the deficit limit of ½ per cent of GDP in the Danish Budget Act and with the deficit rules of the EU.

This is true, even though fiscal policy is sustainable and the projected EMU (gross) government debt stays below the limit of 60 per cent of GDP stipulated in the EU Stability and Growth Pact during all years until 2075.

Figure B Budget balance and net liabilities



Source: Statistics Denmark, ADAM, DREAM and own calculations.

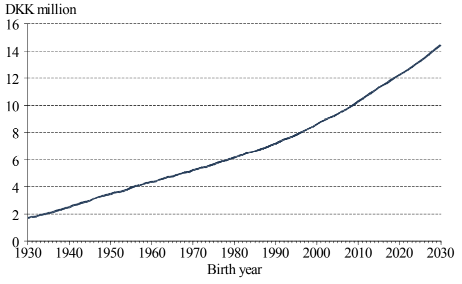
The projected deficit development is not considered to be a real economic problem for Denmark, partly due to the very large implicit government assets in the form of deferred tax on pension savings. In general a (very close to) balanced budget over the medium term is not optimal from a purely economic point of view. Denmark is obliged to adhere to the common EU rules, however. Common fiscal rules are relevant in a monetary union, and deficit restrictions may discipline the fiscal process in countries which run a serious risk of unsustainable development. For Denmark, however, the formulation of the present rules may be unsuitable. From a Danish point of view, it would be preferable if the rules were changed so that deferred pension taxes are taken into account when measuring debts, and their interest when measuring deficits. Alternatively, debt and deficit limits could be modified for the EU member countries individually to reflect institutional differences between the countries.

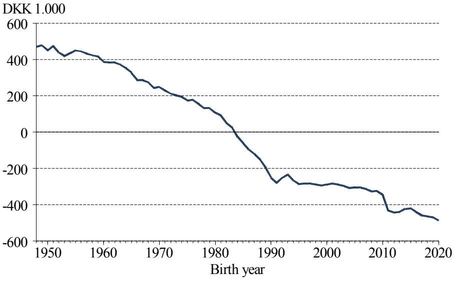
In the absence of such changes, actual budget improvements will become necessary. The projected deficits may be offset by temporary tax increases or expenditure cuts. Given the sustainable initial situation, these budget improvements will create room for corresponding later increased expenditure or tax cuts. Fluctuations in taxes and services create economic distortions compared to a situation where taxes and expenditures are smoothed over time. They also change the intergenerational distribution. Even though the specific intergenerational distribution profile will depend on the actual instruments used, the general tendency will probably be a redistribution from older to younger and future generations.

Distributional questions, including intergenerational ones, are fundamentally a political question. In order to make sensible decisions concerning changes in the intergenerational distribution, it is important to understand the initial situation. To evaluate this question, the long-term projection, made using the overlapping-generations CGE model, DREAM, is combined with historical micro and macro data to compare expected life-time incomes, total life-time working hours and net government contributions for cohorts born from 1930 until 2030.

Even though the various birth cohorts have been exposed to very different life conditions, e.g. in the form of wars, business cycles and numerous changes in economic policy, the development in life-time incomes is completely dominated by persistent productivity growth, causing each younger generation to become considerably richer than their parents, cf. figure C. Calculations of net government contributions are made allocating all primary government revenues and expenditures for each year to the specific cohorts paying or enjoying them. In some cases, where an age-specific distribution does not make sense or in the absence of data, the distribution is a lump-sum. The results show that net contributions are smaller for younger cohorts and indeed negative for generations born after around 1985, cf. figure D. This illustrates the fact that the most important generational redistribution in the Danish welfare state today occurs from adults to children. The change over time reflects the build-up of the welfare state during the decades after WWII.

Figure C	*Life-time labour income for various cohorts*	*Figure D*	*Net life-time government contributions for various cohorts*

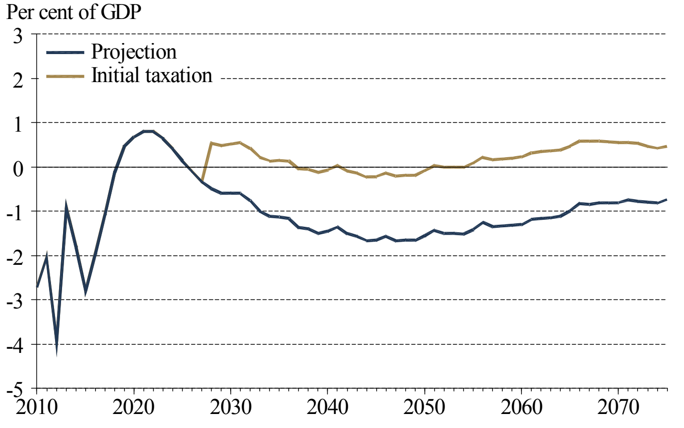




Source: Statistics Denmark, ADAM, DREAM and own calculations

An alternative to solving the deficit limit problem through tax hikes or expenditure cuts would be to front load the taxation of fixed-period annuities from the time when the pension is paid out to the time when the pension contribution is added to the pension account. As long as the present value of the tax payment is kept unchanged, fron loading would, in principle, affect neither real economic conditions nor the intergenerational distribution. However, it would permanently improve the budget by between 1 and 1½ per cent of GDP, cf. figure E. As a consequence, the budget would never exceed the deficit limit of ½ per cent of GDP in the Budget Act. A precondition for this result is that the tax reform must not affect the amount of savings and the extra short-run tax revenues must not lead to increased government expenditure or cuts in other taxes. Due to the uncertainty involved in these assumptions, the tax reform is not recommended at this point. However, if the government reaches a point during the 2020s when the structural deficit starts conflicting with the budget rules without any other solution having been obtained, the proposed tax reform on fixed-rate pensions seems an attractive alternative to more distortionary changes in taxes or government services.

Figure E *Changed tax on fixed-time annuity pension savings*



Note: The figure shows the budget in the base-line projection and in an alternative scenario where fixed-time annuity pension savings are taxed initially (i.e. when the saving is made) instead of when the pension is paid out.

Source: DREAM and own calculations.

Chapter III: Upper Secondary Education

In Denmark when young people have completed compulsory schooling around the age of 16, they can start upper secondary education. This level is divided into: General education qualifying for access to higher education, and vocational or technical education qualifying primarily for access to the labour market. Chapter III assesses how young people with different educational backgrounds fare in the labour market in the longer run. The analysis only includes people who do not complete any further education after completing upper secondary education.

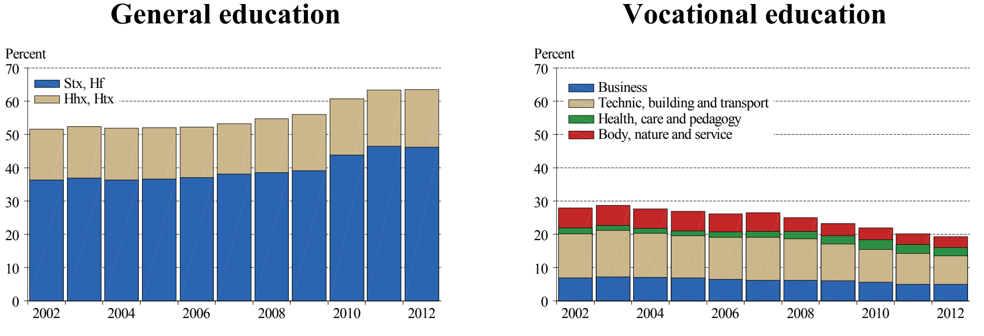
The general upper secondary education provision is comprised of gymnasium (STX), the higher preparatory examination program (HF), the higher commercial examination program (HHX), and the higher technical examination program (HTX). The common objective of the general education programs is to prepare young people for higher education, and in that connection to ensure that they acquire general education, knowledge and competencies by means of the subjects they study and the interaction between them. STX, HHX and HTX take three years to complete and admit young people who have completed nine years of basic schooling. HF takes two years and admits persons who have completed 10 years of basic schooling. The STX and HF programs consist of a broad range of subjects in the fields of the humanities, natural sciences and social sciences. The HHX program focuses on business and socio-economic disciplines in combination with foreign languages and other general subjects. The HTX program has its focus on technological and scientific subjects in combination with general subjects.

The Danish vocational education and training programs are alternating programs, where practical training in a company alternates with teaching at a vocational college. The programs consist of a basic and a main program. The basic program usually takes between 20 and 25 weeks. It is followed by the main course or VET-program, which is based on an alternating principle. This typically takes 3 - 3½ years, but can be shorter or longer (from 1½ and up to 5 years). The student must enter into a training agreement with a company approved by a confederation of representatives of employers and employees in order to accomplish the main programs. There are 107 vocational education and training programs. Those who have completed VET can immediately work within the line of industry or trade that is the focus of the program.

The students have a guarantee that, if they are admitted through one basic access channel, they will have the opportunity to complete one of the programs within that channel (educational guarantee). If a student is unable to obtain a training agreement, the educational guarantee means that they are offered admission to a school-based practical training program (a practical training period conducted by a college).

In 2012, 83 percent of the youth cohort started an upper secondary education directly after they had completed the compulsory schooling, see figure F. In recent years there has been a large increase in the proportion of young people who start general education directly after compulsory schooling, while a decreasing proportion start vocational education and training. The increase is especially seen in the STX program. The dropout rate in vocational education and training programs is often around 50 percent, while the dropout rate in general education is only around 20 percent. The high dropout rate in vocational education and training is mainly due to individuals undertaking this type of training having lower qualifications and/or problems accessing a training agreement.

Figure F *Educational choice for individuals starting an education directly after compulsory schooling*

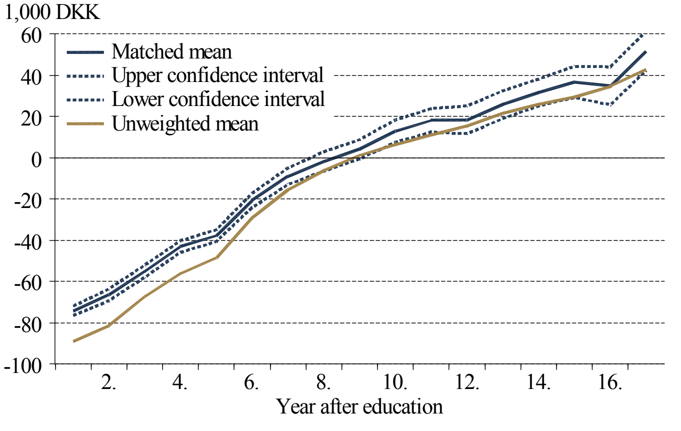


Source: Own calculations.

More than 90 percent of a youth cohort is expected to complete secondary education with the current education pattern, and this is not far from the government's 95 percent target. Almost 10 percent of a youth cohort completes an upper secondary general education without subsequently completing higher education.

In the report we compare the long term earnings of those who completed upper secondary general education and vocational education and training in Denmark between 1993 and 2006. We find that individuals with a general education have lower earnings than individuals with a vocational education in the first eight years after they finish their education, see figure G. After eight years the individuals with a general education have higher earnings than individuals with a vocational education.

Figure G *The effects on earnings of general upper secondary education compared to vocational education*



Note: The effects are calculated using the matching method, which takes into account that individuals have different background characteristics.

Source: Own calculations using register data.

The analysis only includes people who do not complete any other education after completing the upper secondary education. The group that completes further education after having completed upper secondary education has higher lifetime earnings, and thus the analysis underestimates the effect of comparing general education with vocational training. Overall, the analysis does not provide a basis for recommending a general limit on admissions into general upper secondary schools in order to increase the admissions in VET.

The alternative to a training agreement in a company is school-based practical training. An important question is whether students who have completed the practical training in school perform as well as students who have completed training in a company. The report analyses whether the returns in terms of employment and hourly wages are the same whether the practical part of the training is conducted in a school or in a company. The analysis is performed as a matching analysis, taking into account that people in the two groups may have different background characteristics. The analysis shows that there are limited differences in wage incomes between the individuals who have completed the school-based practical training and individuals who have completed the training in a company.

Despite the small differences in the returns, school-based training is not the general solution to the lack of practical training, because the dropout rate is usually higher during school practice than during training in a company, and the cost of school-based training is significantly higher than practical training in a company.

If there is a general lack of practical training agreements in companies, an option would be to provide a permanent general grant to companies that set up practical training. Such a grant could, for example, be financed by reducing the salary for students while they are participating in the mandatory school teaching part of the main program. Today, employers receive compensation when students participate in mandatory school teaching. If students only received a benefit at the level of what other individuals in an upper secondary education receive, the remainder of the compensation could be used to fund grants for practical training in firms.

The economic crisis in recent years has made it particularly difficult for students to find practical training agreements in firms. Therefore, companies that create a practical training agreement are eligible for a grant, and the number of places available in school-based training has been expanded.