Family farm transfer in Europe
A focus on the financial and fiscal facilities in six European countries

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This report compares the farm take-over process in six European countries: The Netherlands, Denmark, France, Germany, Spain and the United Kingdom. Farm take-over is a very complex social and financial process, which differs across the mentioned countries. The study focuses on the financial and fiscal facilities available for the young farmers, but also draws attentions to the principals of inheritance and succession since they have a large impact on the installation costs. Based on the facilities available in the other countries, the report ends with an analysis of potential facilities for The Netherlands.
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Preface

Farm take-over is a complex social and financial process, which differs across Europe. The available financial and fiscal facilities influence the installation costs and economic prospects of young farmers. This study analyses the take-over process in six European countries: The Netherlands, Denmark, France, Germany, Spain and the United Kingdom.

This report has been prepared on behalf of the Dutch Ministry of Agriculture, Nature Management and Fisheries (LNV) under its national and international policy research programme and its market and entrepreneurship research programme. The research has been carried out by Hennie van der Veen, Karel van Bommel and Gabe Venema. They have benefited from comments and discussions with the advisory committee consisting of Gijs van Leeuwen, Dineke van Zwieten and Jacques Urselmann (LNV), Jehan Bouma and Harjo Hoiting (NAJK), Arjen Sukkel (LTO), and Pieter de Boer (Alfa Accountants).

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The LEI managing director,

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Prof. Dr. L.C. Zachariasse
Introduction

This research focuses on the process of farm take-over in six European countries. The process of farm take-over differs across Europe. The differences lie in the fiscal and financial facilities and the principals of inheritance and succession. The Dutch Ministry of Agriculture, Nature Management and Fisheries (LNV) is interested in a competitive agricultural sector and asked LEI to analyse the take-over process in Europe, with a focus on the financial and fiscal facilities. The research focuses on six European countries, which are the main European competitors for the Dutch agricultural sector: Denmark, France, Germany, Spain and the United Kingdom.

The interest of the government in the agricultural sector is already visible in the agricultural issues found in the tax systems. In France and Germany, for example, special rules exist for the calculation of the agricultural income. Denmark however, the trend is that farmers are treated as any other businessman. This trend is also visible in The Netherlands. However, the Agricultural Allowance ('landbouwvrijstelling') still exists in The Netherlands, which excludes certain capital gains on agricultural land from income tax. The differences in the process of farm take-over are found in many areas. This research focuses on the fiscal and financial facilities, but other factors behind the differences are the principals of inheritance and succession.

Status of the young farmer during the transition process

The status of the young farmer during the transition process is mainly influenced by traditions. In some of the analysed countries, the young farmer has an official status, while in others, the young farmer is just a farm hand. The official status is found in The Netherlands ('maatschap') and in the UK. The size of the farm in these countries is usually sufficient to provide an income to both the successor and his predecessor. An official co-operation is also sometimes found in Denmark. However, it is rare. Usually the son starts working as a paid worker, either on the parent's farm or on another farm. After this period he buys a little farm or a part of the one of his parents. In France, the economic size of the exploitations often does not permit an association between one of the parents and the successor. If the size is large enough, an association is common. Contrary to this, in Spain, the successor is often not more than a farm hand. This is especially the case on the medium-sized farms. On the very small farms, the farm size is so small that the required labour force is small. Often the parents work on the farm till they die. The role of a family's aid for a period longer than 10 years is often found in Germany.

Principals of inheritance and succession

The principals of inheritance and succession define whether the farm is transferred completely to the successor (unity) and whether the other heirs have to be compensated
(equality). Three main types of farm transfer are found in practice. The first type (preservation of the unity of the farm and compensation to the other heirs) is found in France. The situation in Denmark also belongs to this type, although the successors do not have to pay compensation directly to the other heirs. They pay almost the entire market price to the parents. The second type (the farm is dispersed in several units and divided among heirs) is mainly found in the southern European countries, including Spain. Economic pressures and financial problems oblige farm families to preserve the unity of the farm and to minimise claims from non-successor co-heirs. This type is found in the other countries.

Installation costs

The costs of entering farming, the installation costs, depend on the principals of inheritance and succession. However, this is not the only factor behind the installation costs. The actual value of the farm and the appraisal of the value of the farm at the moment of transfer are the other factors. The value of the average agricultural farm, compared to the other countries, is very high in The Netherlands, followed by the UK. This is both due to the average economic size of the farms and the prices of the assets. In Spain and France, the value is much lower. Inheritance law prescribes the appraisal of the value of the farm. If the farm is transferred below the prescribed value, inheritance or gift tax has to be paid. In that case, family capital is transferred from the family to the state, which often will be avoided. In the analysed countries, different rules exist for the appraisal of the value. In The Netherlands, till 2002 it is possible to request for a transfer at book value of the production rights (only purchased rights are valued) and land can be transferred at leasehold value. From 2002 on, the going concern value will be the basis. In Denmark, the successor can take over at a valuation price of 15% more or less than of the actual value. French successors have to compensate the other heirs based on the market value of the assets. In Germany, the rules differ across the country and range from a value based on the Einheitswert (a low fiscal standard) to the market value. In Spain, the successor can buy the parts of the other heirs at book value, except for land, which is valued at market value. If the farm in the UK is transferred while the parents are still alive, it is possible that the successor pays nothing and no taxes have to paid. In case of a transfer on the death of the parents, the market value serves as a basis.

Facilities

In all of the analysed countries, facilities exist which aid the farm take-over process. The facilities can be divided in facilities to build up equity, facilities that lower the installation costs and facilities that improve the agricultural income after take-over. Not all the facilities available to the successor especially focus on the agricultural sector. This is especially the case in The Netherlands and Denmark. As far as the facilities to build up equity are concerned, not all countries provide them to young farmers. Only The Netherlands, France and Denmark have these facilities. In all countries, facilities exist that lower the installation costs. Mostly they are related to the appraisal of the value of the farm (already mentioned above). In France, Germany and Spain an Installation Grant is given to young farmers. In Denmark, France and Spain the young farmers are also privileged as far as the milk quotas
are concerned. All countries provide facilities that improve the agricultural income after the take-over. These facilities always, except for the UK, include support for interest payment.

**Analysis of FADN data**

Sample farms are used to illustrate the take over process and the monetary effect of the facilities in the various countries. However, since the take over process is very complex, no hard conclusions about the possible degree of financial distress of the successors in the various countries can be drawn. For this kind of analysis we used the FADN\(^1\) data. We both analysed the installation costs and the agricultural income in the six countries. However, the problem of high installation does not stand on its own. High installation costs only form a problem if the agricultural income is not sufficient to carry the interest and rent burden caused by the installation costs. We consequently analysed both these factors and introduced a ratio which gives an indication of the relative financial distress after take-over of the farm in the six analysed countries (figure 1). From this ratio we concluded that transfer of a farm within a family is the hardest in Denmark, followed by The Netherlands. The large problems in Denmark are caused by the high take-over price, leading to a high debt ratio. Additionally, in the interest rate is the highest of the six analysed countries. The average market value is in The Netherlands much higher. However, in this country the appraisal of the value of the farm at the moment of transfer is favourable. Land and production rights can be valued far below market value. Furthermore, the interest rate is lower than in Denmark.

Figure 1  Paid interest and rents as a percentage of the net operating surplus (1990-1998)
Source: FADN-CCE-DG VI/A-3; adaptation LEI.

\(^1\) The European Farm Accountancy Data Network.
The production factors land and milk quota in The Netherlands

The high market value of the average farm in The Netherlands is mainly caused by the high prices of land and milk production rights in relation with the large size of the farm. The production factor land is subject to intense competition in The Netherlands. Especially non-agricultural factors, such as speculation on changes in the zoning plan, have a large impact on the price of agricultural land. Additionally, national (e.g. manure legislation) and international policies (cross compliance) aiming at extensification of the sector request for more land. On the other hand, extensification reduces the marginal revenue of the land. This consequently lowers the agricultural value of land.

The introduction of the production rights lead to an increase of the installation costs. In The Netherlands the most valuable right is related to milk. The rules applied for the transfer of the milk quotas, which influence the market value, differ across Europe. In The Netherlands, the rights can be freely traded. This implies that the marginal net revenue of the additional right determines the value of production rights. In case of milk quotas, this implies that the difference between the extra milk revenues and the marginal costs determines the market price of milk quotas. Since many Dutch dairy farmers are faced with under-occupation and with an increasing milk production per cow, the extra costs of milk consequently only exist out of the variable costs, leading to high market prices of production rights. These high market values of milk quotas can only be a sound investment in case of an expansion of a farm and not in the case of a transfer of a complete farm.

Interesting facilities for The Netherlands

Some of the facilities found in the five other countries could be interesting for the Dutch young farmers. To build up equity, the establishment account found in Denmark and the system of deferred wages (France) might be interesting. The establishment account helps young wage earners who want to establish an independent business in the future to build up equity. They can save part of their wage in special bank accounts (establishment account). The wage earners can deduct these savings from their income. The deferred wages refer to young farmers who have worked unpaid at the farm after the age of 18. A child succeeding can claim a share of the land-sale profits. However, since the maatschap arrangement includes appointments about the remuneration, this arrangement is only helpful for a small part of the succeeding farmers. An installation grant, which is found in several countries, can only significantly lower the installation costs of young farmers if it would involve a substantial amount. Privileged milk quota transfer would enable some young farmers to optimise the scale of production. Especially in the period close after farm takeover, young farmers might have difficulty financing investments in production rights. However, most of the young farmers co-operating in a maatschap invest in the production rights during the maatschap. They would only benefit from this arrangement if they would be eligible during this period. The prohibition on the lease of rights (Germany) can perhaps be beneficial for The Netherlands, since it can lead to a decrease of the price of milk quota. No additional useful facility to improve the economic prospects of Dutch young farmers after farm take over was found in the analysed countries.
However, already a number of facilities exist in The Netherlands. One very important instrument is the *maatschap*. During this period, the successor can benefit from a number of fiscal facilities. Above this, the take-over value is limited compared to the market value of the farm. Still, the installation costs are among the highest in Europe. However, this is mainly the effect of the high prices of the production factors, especially land, and the average economic size of the farm.
Samenvatting

Inleiding
Dit onderzoek richt zich op het proces van agrarische bedrijfsovername in zes Europese landen. De processen die bij de bedrijfsovername om de hoek komen kijken, zijn in heel Europa verschillend. De verschillen zijn zowel terug te voeren op fiscale en financiële voorzieningen, als op de principes van vererving en opvolging. Het Nederlandse Ministerie van Landbouw, Natuurbeheer en Visserij (LNV) ziet graag een concurrerende landbouwsector en verzocht het LEI een analyse te maken van overnameprocessen in Europa, met het accent op financiële en fiscale voorzieningen. Het onderzoek richt zich op de zes Europese landen die als de belangrijkste concurrenten van de Nederlandse landbouwsector gelden: Denemarken, Frankrijk, Duitsland, Spanje en het Verenigd Koninkrijk.

Het belang dat regeringen hechten aan de landbouwsector, wordt al zichtbaar in de specifiek op landbouw gerichte voorzieningen van de verschillende belastingstelsels. Zo bestaan er in Frankrijk en Duitsland speciale regelingen voor de berekening van het agrarisch inkomen, terwijl de trend in Denemarken is dat boeren op gelijke voet worden behandeld met andere ondernemers. Deze trend kan ook in Nederland worden waargenomen, maar hier bestaat nog steeds de landbouwvrijstelling, waarmee bepaalde vormen van kapitaalwinst op landbouwgrond vrijgesteld zijn van inkomstenbelasting. De verschillen in de processen van bedrijfsovernames zijn te vinden op uiteenlopende terreinen. In dit onderzoek wordt primair gekeken naar de fiscale en financiële voorzieningen. Andere factoren die voor verschillen zorgen, zijn de principes van vererving en opvolging.

De status van de jonge boer tijdens de overgangsperiode
De status van de jonge boer tijdens de overgangsperiode is vooral ingegeven door tradities. In een aantal van de geanalyseerde landen heeft een jonge boer een officiële status, terwijl hij in andere landen alleen beschouwd wordt als familielid dat een handje helpt in het bedrijf. Van een officiële status is sprake in Nederland (in de vorm van een maatschap) en in het Verenigd Koninkrijk. De grootte van de boerderij in beide landen is vaak van dien aard dat er meestal voldoende inkomen wordt gegenereerd voor zowel de boer zelf als voor diens opvolger. Ook in Denemarken is er soms sprake van een officiële vorm van samenwerking. Dit komt echter zelden voor. Meestal werkt de zoon als een betaalde kracht mee op de boerderij van zijn ouders of op een andere boerderij. Na die periode koopt hij een kleine boerderij of een gedeelte van de boerderij van zijn ouders. In Frankrijk is de omvang van de bedrijven economisch gezien vaak niet voldoende voor een samenwerking tussen één van de ouders en de opvolger. Als er sprake is van een bedrijf van voldoende omvang, is samenwerking echter heel gebruikelijk. In tegenstelling daartoe is de opvolger in Spanje vaak niet meer dan een helpende hand binnen de familie. Dit is zeker het geval op boerderijen van gemiddelde omvang. De hele kleine boerderijen zijn vaak zo beperkt van omvang dat de behoefte aan werkrachten er gering is. De ouders werken vaak tot hun overlijden.
op de boerderij. De rol van helpend familielid voor een periode van langer dan 10 jaar is vaak te vinden in Duitsland.

**De principes van vererving en opvolging**

Al naar gelang de principes die gelden voor vererving en opvolging, wordt bepaald of de boerderij in zijn geheel wordt overgeheveld naar de opvolger (eenheid) en in hoeverre de overige erfgenamen moeten worden gecompenseerd (evenredigheid). In de praktijk komen er bij de overdracht van boerderijen drie hoofdtypen voor. De eerste vorm (het als één geheel laten voortbestaan van de boerderij met compensatieverlening aan de overige erfgenamen) vindt men in Frankrijk. De situatie in Denemarken kan ook worden ingedeeld bij dit type van overdracht, hoewel de opvolgers hier de andere erfgenamen geen compensatie hoeven te betalen. Zij betalen hun ouders vrijwel de gehele marktprijs. Het tweede type overdracht (opsplitsing van de boerderij in meerdere onderdelen en verdeling onder de erfgenamen) komt voornamelijk voor in de Zuid-Europese landen, zoals bijvoorbeeld Spanje. Door de economische druk en de financiële problemen kunnen boerenfamilies vaak genoodzaakt zijn om de boerderij als één geheel te laten voortbestaan en claims van mede-erfgenamen, die niet als opvolger in aanmerking komen, zo veel mogelijk te reduceren. Dit type overdracht is te vinden in de overige landen.

**Installatiekosten**

De kosten die gepaard gaan met het starten van een agrarische onderneming, zijn afhankelijk van de principes die gelden voor vererving en opvolging. Dit is echter niet de enige factor die de installatiekosten bepaalt. De werkelijke waarde van de boerderij en de waardebepaling van de boerderij op het moment van overdracht zijn andere factoren die van invloed zijn. De waarde van de gemiddelde boerderij is in Nederland in vergelijking met andere landen heel hoog, met het Verenigd Koninkrijk daarbij op de tweede plaats. Dit is het gevolg van de gemiddelde economische omvang van de boerderijen en van de prijzen van productiemiddelen. In Spanje en Frankrijk ligt de gemiddelde waarde veel lager. De waardebepaling van boerderijen is in de successiewetgeving geregeld. Wanneer een boerderij beneden de geschatte waarde wordt overgedragen, moeten successie- of schenkingsschepen worden betaald. In dat geval wordt een gedeelte van het familiekapitaal overgeheveld naar de fiscus, wat men vaak zal willen voorkomen. In de geanalyseerde landen zijn er verschillende regelingen voor de waardebepaling. In Nederland is het tot 2002 mogelijk om de productierechten over te dragen voor de boekwaarde (hierbij worden alleen de gekochte rechten geschat) en de grond tegen de waarde in verpachte staat. Vanaf 2002 geldt de 'going-concern' waarde van de onderneming als geheel als basis voor de overdrachtwaarde. In Denemarken kan de opvolger het bedrijf overnemen tegen een geschatte prijs die 15% hoger of lager ligt dan de werkelijke waarde. Voor Franse opvolgers geldt dat zij de andere erfgenamen moeten compenseren op basis van de marktwaarde van het vermogen. In Duitsland bestaan er per deelstaat verschillende regelingen. De mogelijkheden lopen uiteen van een overname op basis van de Einheitswert (een lage fiscale standaard) tot overname tegen marktwaarde. In Spanje kan de opvolger de gedeelten van de andere erfgenamen kopen op basis van de boekwaarde. Voor grond geldt hier echter een marktconforme waardebepaling. In het Verenigd Koninkrijk bestaat de mogelijkheid om de boerderij nog bij leven van de ouders aan de opvolger over te dragen, zonder dat hij
daarvoor hoeft te betalen en hierover belasting verschuldigd is. In het geval dat de overdracht na het overlijden van de ouders plaatsvindt, wordt uitgegaan van de marktwaarde.

**Voorzieningen**

In alle landen die geanalyseerd werden, is er sprake van voorzieningen ter ondersteuning van de overname van boerenbedrijven. Deze kunnen worden gesplitst in voorzieningen ten behoeve van de opbouw van vermogen, voorzieningen die de installatiekosten reduceren en voorzieningen voor verbetering van het agrarisch inkomen na de overname. Niet alle voorzieningen voor opvolgers zijn speciaal gericht op de agrarische sector. Dit is vooral het geval in Nederland en Denemarken. Voor zover het gaat om voorzieningen ten behoeve van vermogen, zijn deze niet in alle landen beschikbaar voor jonge boeren. Dergelijke voorzieningen bestaan alleen in Nederland, Frankrijk en Denemarken. Alle landen hebben voorzieningen ter vermindering van de installatiekosten. Vaak zijn deze gekoppeld aan de bepaling van de overnameprijs van de boerderij (zoals boven reeds beschreven is). In Frankrijk, Duitsland en Spanje wordt aan jonge boeren een bijdrage in de installatiekosten verstrekt. In Denemarken, Frankrijk en Spanje krijgen jonge boeren ook privileges met betrekking tot melkquota. Alle landen hebben voorzieningen ter verbetering van het agrarisch inkomen na de overname. Met uitzondering van het Verenigd Koninkrijk omvatten deze voorzieningen altijd ondersteuning voor rentebetalingen.

**Analyse van RICA-gegevens**

Er worden voorbeeldbedrijven gepresenteerd om het overnameproces en de monetaire effecten van de voorzieningen in de verschillende landen te illustreren. Aangezien het overnameproces zeer complex is, kunnen er geen harde conclusies worden getrokken met betrekking tot de mogelijk aanwezige financiële problemen van opvolgers in de verschillende landen. Voor dit doel hebben wij gebruik gemaakt van gegevens van het RICA. Wij hebben zowel installatiekosten als agrarisch inkomen in de zes verschillende landen geanalyseerd. Het probleem van hoge installatiekosten staat echter niet op zichzelf. Hoge installatiekosten vormen alleen dan een probleem, wanneer het agrarisch inkomen niet voldoende is, om rente- en pachtlasten te kunnen dragen die het gevolg zijn van de installatiekosten. Wij hebben daarom beide factoren onderzocht en hebben gebruik gemaakt van een verhoudingsgetal dat een indicatie geeft met welke relatieve financiële problemen een agrariër na overname van een boerderij te maken krijgt in de zes geanalyseerde landen (figuur 1). Afgaand op dit verhoudingsgetal konden wij concluderen, dat de overdracht van een boerderij binnen de familie de meeste problemen oplevert in Denemarken en daarna in Nederland. De grote problemen in Denemarken zijn terug te voeren op de vaak hoge overnameprijs, die zorgt voor een hoge schuldenlast. Daarnaast is het renteniveau in dit land het hoogst van de zes landen die geanalyseerd werden. De gemiddelde marktwaarde is in Nederland veel hoger. Hier is echter de waardebepaling van de boerderij op het moment van overdracht gunstiger. De waarde van grond en productierechten kunnen ver onder de marktwaarde worden geraamd. Daarnaast is het renteniveau lager dan in Denemarken.

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1 De Europese databank van landbouwbedrijven.
De productiefactoren land en melkquota in Nederland

De hoge marktwaarde van de gemiddelde Nederlandse boerderij kan grotendeels worden teruggevoerd op de hoge prijzen voor grond en melkquota, gekoppeld aan de grote omvang van de boerderij. De productiefactor grond is in Nederland onderhevig aan sterke concurrentie. Niet-agrarische factoren, zoals speculaties over wijzigingen in bestemmingsplannen, hebben een grote invloed op de prijs van landbouwgrond. Daarnaast spelen nationaal beleid (bijv. mestwetgeving) en internationaal beleid (cross compliance) gericht op de extensivering van de landbouwsector een rol, aangezien hiermee meer beslag op grond wordt gelegd. Aan de andere kant zorgt extensivering ook voor lagere marginale opbrengsten, waardoor de agrarische waarde van grond daalt.

Door de invoering van de productierechten zijn de installatiekosten gestegen. In Nederland hebben productierechten voor melk de hoogste waarde. De regelingen die betrekking hebben op de overdracht van melkquota en die invloed hebben op de marktwaarde, verschillen in heel Europa. In Nederland mogen deze rechten vrij verhandeld worden. Dit houdt in dat de netto marginale inkomsten uit de extra productierechten de waarde van de productierechten bepalen. In het geval van de melkquota betekent dit, dat het verschil tussen de extra inkomsten uit de melk en de marginale kosten de marktprijs van de melkquota bepaalt. Aangezien steeds meer Nederlandse melkveehouders te maken hebben met onderbezetting en een toenemende melkproductie per koe, bestaan de extra kosten van melkproductie dientengevolge alleen uit de variabele kosten, waardoor de productierechten voor hoge prijzen op de markt komen. Deze hoge marktwaarden voor melkquota zijn alleen betaalbaar bij uitbreiding van een boerderij en niet bij overdracht van een complete boerderij.
Interessante voorzieningen voor Nederland

Een aantal voorzieningen uit de zes andere landen zou interessant kunnen zijn voor jonge Nederlandse boeren. Voor het opbouwen van vermogen kunnen de startersrekening, zoals die in Denemarken wordt gehanteerd, en het systeem van uitgesteld loon (Frankrijk) interessant zijn. Door middel van de startersrekening kunnen jonge agrariërs in loondienst, die in de toekomst een eigen bedrijf willen starten, worden geholpen bij het opbouwen van vermogen. Ze kunnen een deel van hun loon op speciale bankrekeningen zetten (startersrekeningen). De werknemers in loondienst kunnen deze spaargelden van hun inkomen aftrekken. De regeling voor uitgesteld loon heeft betrekking op jonge boeren die vanaf hun 18e levensjaar onbetaald op de boerderij hebben gewerkt. Een kind dat opvolger in het boerenbedrijf wordt, kan aanspraak maken op een deel van de winst uit grondverkoop. Gezien het feit dat in de overeenkomst van de maatschap een aantal afspraken worden gemaakt over vergoedingen, is deze regeling alleen zinvol voor een klein deel van de opvolgers in landbouwbedrijven. Een bijdrage in de installatiekosten, zoals die in verschillende landen wordt verstrekt, kan alleen een goede bijdrage aan de verlaging van de installatiekosten van jonge boeren leveren, als het om een substantieel bedrag zou gaan. Privileges bij de overdracht van melkquota zouden voor een aantal jonge boeren een oplossing kunnen zijn voor het optimaliseren van hun productieomvang. Vooral in de periode direct na de overname van het boerenbedrijf zou het voor jonge boeren lastig kunnen zijn om investeringen in productierechten te financieren. De meeste van de jonge boeren die samenwerken in een maatschap investeren echter al gedurende de looptijd van de maatschap in productierechten. Deze regeling zou voor hen dan ook alleen voordelen hebben, wanneer zij er al gedurende die periode voor in aanmerking zouden kunnen komen. Het verbod op het verhuren van rechten (Duitsland) zou voor Nederland voordelig kunnen zijn, aangezien het tot een prijsdaling kan leiden. In de geanalyseerde landen zijn er geen andere extra voorzieningen gevonden die van nut kunnen zijn bij het verbeteren van de economische vooruitzichten van jonge Nederlandse boeren.

In Nederland is reeds sprake van verschillende voorzieningen. Een belangrijk instrument is de maatschapconstructie. Gedurende die periode kan de opvolger profiteren van een aantal fiscale voorzieningen. Bovendien wordt de overnamewaarde verminderd in relatie tot de marktwaarde van de boerderij. De installatiekosten behoren echter nog tot de hoogste van Europa. Dit wordt echter hoofdzakelijk veroorzaakt door de hoge prijzen voor productiefactoren, vooral grond, en door de gemiddelde economische omvang van de boerenbedrijven.
1. Introduction

Aim of the research
The take-over process of farms vary a great deal in Europe. Several factors lie behind these differences, which can be found in tax systems, financial facilities, traditions and succession law. Since the Dutch Ministry of Agriculture, Nature Management and Fisheries (LNV) focuses on a competitive agricultural sector, they want to get insight in these differences and the position of the Dutch young farmer.

Besides the government, also Dutch agricultural entrepreneurs are interested in the facilities around farm take-overs in other European countries. Because of the financing bottlenecks in practise the Dutch Agricultural Youth Organisation (NAJK) indicates the need for more facilities around the take-over process in The Netherlands.

In this research the process of farm take-over in The Netherlands will be compared with Germany, France, United Kingdom, Spain and Denmark. The focus will be on the financial and fiscal facilities. However, also some attention is paid to the period before take-over and the principals of inheritance and succession. This research will answer the following questions:

1. what are the general differences between the tax-systems of The Netherlands and the five other EU-countries? Do they have special agricultural issues;
2. what are the traditions and facilities around farm take-over;
3. how do the facilities influence the take-over process at farm level;
4. how large are the problems of installation costs of Dutch young farmers compared to the other countries;
5. what are possible facilities for The Netherlands?

Method of research
To give an answer on the first two questions a literature study has taken place. Sample farms are used to illustrate the process of farm take-over in practice. The sample farms are not useful for a detailed comparison, since the take-over is a complex process, which differs from farm to farm. The sample farms consequently only have a illustrative value in that they show how take-over might work in practice and what the effect of the different facilities is. For every country a sample farm of one of their main sector is arranged and analysed (except for The Netherlands, where three sample farms have been used). The sample farms are composed of FADN data. In some situation we showed different ways for the take-over process of one sample farm. With the sample farms, we answered the third research question.

To answer the fourth question, the principals of inheritance and succession, the installation costs, the financial and fiscal facilities and the agricultural income are compared. The problems of installation costs can not be analysed without including the agricultural income. High installation costs only are a problem in case the agricultural income is not high enough to pay them. For the analysis of the high installation costs and the agricultural
income we will also use the FADN information. Based on this comparison, the next analy-
sis will focus on some aspects of the installation costs that play an important role in The
Netherlands: the price of land and the production rights.

The last aspect of this study focuses on possible facilities for The Netherlands, which
are either proposed by the EU, the NAJK or found in the other countries. They answer our
last research question. Pros and contras of the facilities are given.

To check the validity of the information of the foreign countries, experts were asked
for a review of our work. It should be noted that the study focuses on farm transfer be-
tween family members. The issue of the starting up of a farm is not incorporated in this
project.

Outline of the study
Chapter two describes a brief comparison of the tax systems of the six examined countries,
especially the income calculation and special agricultural issues. A more detailed descrip-
tion is given in appendix 1. Chapter three focuses on the different aspects of farm take-
overs. For all of the six countries general information related to farm take-over is given,
followed by a paragraph about the position of the successor during the transition period.
After that the last two sections of the chapter focus on the installation costs and the facili-
ties related to farm take-over. Chapter four shows sample farms for the six countries. For
The Netherlands, sample farms for the dairy, arable and horticultural farms are analysed,
for the other countries only one sample farm is described for one of the main sectors in the
specific country. Chapter five compares the countries from the point of view of two main
problems in The Netherlands, the high installation costs and the agricultural income.
Chapter six discusses the main factors behind the high market value of farms in The Neth-
erlands: the price of land and production rights. The report end with recommendations
about the usefulness of a number of facilities for the Dutch situation of take-over in agri-
culture (chapter seven).
2. General comparison of tax systems

This chapter gives a brief comparison of the tax system of the six examined countries. For a more detailed description we refer you to Appendix 1.

2.1 General

Business forms
In the examined countries, the most important business form is the one-man business. The legal form is not very common. In France, where tax rules stimulate the number of legal persons and the United Kingdom where a co-operation between husband and wife automatically is a partnership, the number of legal persons is higher than in the other countries.

Accounts
In the United Kingdom and The Netherlands, all farmers have to have accounts. However, the rules for small farmers are less stringent in the UK. The majority of farmers in France, Germany and Spain do not keep books. As soon as certain conditions are met, which are in France and Spain related to turnover and in Germany to size, profit and turnover, an obligation for bookkeeping exists. In Denmark, nowadays approximately 5 to 10% of the farms do not keep books. Farms that are founded after 1st July 1999 are obliged to keep books. Small farms that are established before that date do not have this obligation.

Income calculation
In Denmark, The Netherlands, the UK and Spain, no special category of farming income exists. In Germany, farmers are exempt from both trade tax on income and the special tax for businesses levied by the German municipalities. France has a specific category for farmers' income. It is either calculated according to the rules of the valuation regime or the actual income regime, which can be simple or standard.

Assets
In no country, land is depreciated. In the UK no depreciation exists at all. In this country, capital allowance regulations exist, which are deducted in arriving at the total tax payable. These capital allowances have no relation with a decline in value due to wear and tear. Depreciation in the other countries depends on the expected economic life of the asset. In The Netherlands and France this is in accordance with business practices. In Denmark, depreciation is computed using the straight-line method. Plant, machinery and equipment, including ships, used for business purposes are depreciated on a pool basis using the declining-balance method. In the other countries the depreciation rates (or capital allowance in the case of the UK) are rather fixed.

This chapter is primarily based on EFAC (2000) except for Spain.
In all countries, if no price has been paid for the acquisition of intangible assets, they are not included in the balance sheet. In France and Denmark, intangible assets are never depreciated. In Spain, intangible assets can only be depreciated if fixed index numbers are used for the calculation of profit. In Germany, only milk quotas and to a certain extent planting rights for winegrowers can be depreciated. In The Netherlands, most intangible assets can be depreciated if they appear on the balance sheet. In the UK, the balance sheet has no effect on the income calculation, the treatment of intangible is irrelevant. No deduction related to intangible assets is possible.

In France and The Netherlands, accelerated depreciation is allowed for environmental investments. In The Netherlands, these investments can be depreciated fully in the first tax year. In France, full depreciation can take place during the first 12-month period, which can fall in two tax years.

Income taxes and social security contributions
In Denmark and Germany, both central and local government levies taxes on income. All of the examined countries levy taxes on world-wide income. The taxable units differ between the countries. In most of the countries tax is levied individually. However, in Denmark it is possible to transfer unused basic allowance to the taxable income of the other spouse. In the UK, agricultural businesses conducted between husband and wife automatically form a partnership. The income is split between the spouses according to the share of profit determined on the partners. In Germany, the tax subject is the individual; however, the system provides an election for joint taxation of married couples living together. If they do not express any other wish, they are taxed together. The total income of each person is determined, then aggregated and divided by two. The tax base is completely different in France. A taxable unity includes the individual taxpayer and a number of family persons that are regarded as fiscally dependent. In Spain, the members of a family can choose to be taxed as a unit separately. If spouses file separate returns, the determination of income and deductible expenses attributable to each taxpayer takes account of the category of source of income.

In all countries, apart from Denmark, social security fees are an essential part of taxes and fees. In Denmark, the social security system is only for a small part financed by social security contributions. In The Netherlands, social security contributions are incorporated in the tax system. In France, Germany and Spain, special rules exist for farmers. In France, a worker is affiliated to the social insurance regime that is related to his activity. The German farmers are obliged to pay a fixed contribution to their farmers pension scheme. They are exempt from the general pension scheme. In Spain, the contributions are partially paid to a general contribution systems and partially to a special scheme for agricultural workers. In all countries, except for the UK and The Netherlands, the social security fees can be deducted from the income as an expense.

Capital gains
In part of the countries, all income from business is taxed in the same way, regardless of whether it reflects the normal sale of a current asset or of machinery used in the business. In Spain, Germany and The Netherlands, the selling of business assets is subject to ordinary income taxation. In France, gains on the selling of assets owned for less than two
years are subject to income tax. Otherwise the gains are taxed at a flat rate. In the UK capital gains are not regarded as income. In Denmark, capital gains on the selling of real property are taxed in accordance with special rules. The selling of machinery or equipment does not give rise to taxation. The sale proceeds are deducted from the depreciable-pooled basis, which reduces the scope for future depreciation.

Loss transfer
Negative income can be set off against other income in all countries. In Germany the loss set off is complex. The aggregate negative income can be set off against the aggregate positive income up to a certain amount. If the positive income exceeds the maximum amount, the negative income is to be set off, in addition, against 50% of the excess positive income. If the negative income exceeds the amount that can be set off, only that part of the negative income of each category can be set off that corresponds to its share in the total negative income.

Carry back facilities are allowed in The Netherlands, Germany and the UK, although the time period is limited. Carry forward is allowed in all countries, although limited in all countries except for The Netherlands and the UK. However, in the UK the loss can only be deducted from income from the same business. Since 1999 carry forward of losses in Germany is restricted to surplus of the same category of income. In both Denmark and France there is a time limit of five years and in France also a limit related to the size of the other income.

Income equalisation
Some of the six examined countries have special regulations to level out high incomes. In France a three years averaging system and a quotient system exist. The average income is calculated as the mean of the income of the current year and the last two years. This income is used for tax calculations. This system is tacitly valid for the first year and the five following years. However the farmer may decide to opt out. The use of the quotient system is limited to some restrictions and comprehends that the tax is calculated based on one fifth of the exceptional income and the calculated amount is then multiplied by 5. The averaging system is also applied in The Netherlands and the period is also three years. In the UK the period is two years. In France, Germany and Spain part of the farmers do not keep books and the averaging system is not directly beneficial for this group. In Denmark equalisation can be achieved by saving in years with high income and withdraw it in years with none or low incomes. Not all farms are allowed to use this kind of equalisation. In the UK, Spain and Germany income distribution between partners equalises income. In Denmark, the distribution between husband and wife is possible within certain limits. In The Netherlands, two spouses can either form a partnership or choose for a deduction with or without income taxation of the other spouse.

Inheritance and gift tax
In all of the six examined countries, inheritance and gift tax exists. In all countries, except for Denmark and the UK, the inheritance and gift tax are similar. In Denmark, gifts are subject to income tax as personal income and in the UK no gift tax exists. However inheritance tax is also levied on certain gifts made within the 7 years before the death of a
person. In Spain, the taxable base in case of inheritance tax is reduced depending on the relationship between the heir and the deceased. In this country the rates may vary between the regions.

The tax-free amounts vary between the countries and except for Denmark all countries have progressive rates and rates depending on the relationship between the heir and the deceased.

2.2 Special agricultural issues

The Netherlands
In The Netherlands, the Agricultural Allowance (‘Landbouwvrijstelling’) exists which excludes capital gains on agricultural land under certain conditions from income tax. Land is an indispensable business asset in the agricultural industry. It is also a very exceptional business asset: land is not subject to wear and tear, it requires a lot of capital and it cannot be depreciated. The background to the Agricultural Allowance is that changes in value resulting from inflationary development or boom periods are exempt. In principle the gains made by a farm on account of the value of land (including land which has been built on) remain free from tax. However, the law provides for two exceptions to this:
- changes in value arising in the course of business and;
- non-agricultural changes in the value of land. Only changes of the value of the land that the land would have with an agricultural continuation are exempt. Anything above this value is taxable.

Agricultural land, forestry, manors and nature are also excluded from the taxation on real estate and taxation in box 3. The municipalities annually levy a real estate tax (‘onroerende zaakbelasting’). The tax consists of (i) a part levied on owners of immovable property and (ii) a part levied on users of immovable property.

Denmark
The trends in Denmark are that the farmers are treated more and more as any other businessmen are.

France
In France, exceptional depreciation can be claimed for environment investments. Farmers can get a taxable income reduction if they are member of a chartered accounting organisation.

Germany
Besides the fact that small agricultural farmers do not have the obligation to keep books, other advantageous rules for farmers exist:
- specific tax rates on extraordinary forestry income based on damages (storm, fire, etc.);
- agricultural and forestry businesses are exempt from trade tax on income and a special tax for businesses levied by the German municipalities;
- special exemptions and tax rate reductions are only available within the agricultural and forestry income taxation regime;
- a fixed facility on Value Added Tax (VAT) is used for agricultural and forestry businesses;
- the valuation base for heritage taxation is related to a specially structured profit related valuation. The real property tax on arable land differs from private or business real property;
- a tax-rate reduction for voluntarily bookkeeping agricultural enterprises is granted.

United Kingdom
A special definition for farming income exists, however in other respects farming is treated like any other trade.

Spain
Farmers that provide statistical, accounting and pricing data to the Ministry of Agriculture, Fisheries and Food (MAFF) may obtain an annual subsidy of at most 2,152 Euros per recipient a year for statistical data and 123 Euros for accounting data. The above figures are the maximum amounts for 2000.

To promote the use of new technologies in the agricultural area, incentives are provided for the acquisition of new machines and equipment that involve technological innovation.

2.3 Distribution of tax revenue

Regardless of the differences in the tax system, the importance of the various tax bases differ. Table 2.1 shows the distribution of the total national tax revenue over the different tax bases. The three major sources amount for about 80 to 90% in every country. In France, the social security is a major source of income for the government. Contrary to this, in Denmark, social security accounts for only 3% of the tax revenue. However, in this country the individual income tax accounts for more than half of the proceeds.

<table>
<thead>
<tr>
<th>Table 2.1 Distribution of tax revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual income tax</td>
</tr>
<tr>
<td>------------------------</td>
</tr>
<tr>
<td>Netherlands</td>
</tr>
<tr>
<td>Denmark</td>
</tr>
<tr>
<td>France</td>
</tr>
<tr>
<td>Germany</td>
</tr>
<tr>
<td>Spain</td>
</tr>
<tr>
<td>UK</td>
</tr>
</tbody>
</table>

3. Aspects of farm take-overs

This chapter focuses on the different aspects of farm take-overs. First of all, for all of the six countries general information related to farm take-over is given. A section about the position of the successor during the transition period follows this paragraph. The last two sections focus on the installation costs and the facilities related to farm take-over. The installation costs refer to the costs of entering farming and include the land sale and rental prices; cost of machinery; cost of farm improvements; the debt burden from buying out co-heirs and buying of production rights (Ross Gordon Consultants SPRL, 2000). These costs vary per country.

3.1 The Netherlands

3.1.1 Introduction

The number of agricultural holdings in The Netherlands\(^1\) has reduced during the period 1990-1997 by 14\% (table 3.1). This is less than the average of the EU-15 that showed a reduction of 19\%. The Dutch agricultural population is ageing. During the same period the percentage of farmers that was younger than 35 years was reduced from 9 to 7\%. The absolute number of young farmers showed a reduction of 34\%. On the other hand, the percentage of farmers that is older than 65 has grown from 15 to 19\%.

<table>
<thead>
<tr>
<th>Table 3.1</th>
<th>Key figures for agriculture in The Netherlands</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1990</td>
</tr>
<tr>
<td>Number of farms</td>
<td>124,800</td>
</tr>
<tr>
<td>Number of farmers younger than 35</td>
<td>11,150</td>
</tr>
<tr>
<td>Number of farmers older than 65</td>
<td>17,180</td>
</tr>
</tbody>
</table>

About 30\% of the young farmers owns a farm larger than 100 ESU\(^2\). Only 7\% of the young farmers owns a farm smaller than 8 ESU. This shows the scale of the Dutch agri-

---

\(^1\) The introductory section of every country and the EU-facilities are primarily based on the study 'The future of young farmers in the European Union' of Ross Gordon Consultants (2000).

\(^2\) The economic size of farms is expressed in terms of European Size Units (ESU). The value of one ESU is defined as a fixed number of EURO/ECU of Farm Gross Margin. Over time the number of EUR/ECU per ESU has changed to reflect inflation. In 1994 the value of one ESU was 1,200 Euro.
cultural sector. In the EU-15, only 4% of the young farmers owns a large farm, while more than 43% of the young farmers owns a small farm.

In The Netherlands, the price at which a young farmer can take over a farm from his parents is particularly high. However, the market value of the farm is much higher. On top of this there are costs for legal fees, taxation, advisory services and sometimes Property Transfer Tax, Gifts and Inheritance tax.

3.1.2 Status of the young farmer during the transition period

Take-over of capital-intensive farms is often organised so that successors can try to minimise financial difficulties. The system is based on a *maatschap*, an association between the parents and successor for the period of transition between the generations. Parents organise and control the take-over of their highly capitalistic holdings. Young farmers associated in a *maatschap* are economically independent and considered as real farmers, but it can also be difficult for a young farmer to accept the parents control over taking-over (Commission of the European Communities, 1992). This period of transition has lengthened as farm prices increased. Nowadays these associations run for 10-15 years. About 80% of entries into farming are based on *maatschappen* or firms (van der Veen et al., 2001).

At the end of the eighties, only 26% of the take-over took place in the form of the *maatschap*. At the end of the 20th century, this percentage has increased to 75 to 85%. The growing interest in the formation of a *maatschap* is related to fiscal facilities. As soon as the successor becomes an official entrepreneur in the *maatschap*, he can make use of this facilities.

The *maatschap* further offers the opportunity to accumulate capital (depending on the agreement on the division of the reserve assets), to build up experience and it offers security to the successor (van der Veen et al., 2001). Since the education level of the successor is sufficiently high, the partners of the *maatschap* have an equal relation. Since the value of the farms has increased during the last years, the period of co-operation has to increase to generate sufficient capital. This, however, can lead to tensions between the father and the successor if the ideas about the strategy to follow differ. In 18% of the cases, the co-operation (not always an official *maatschap*) lasts shorter than 7 years. On the other hand, in even as many cases, the co-operation lasts longer than 18 years. The average duration is 12 years (Flören, 2001).

De Haan (1994) argues that not only financial or tax reasons were the primary reasons behind the success of the *maatschap*. He believes that the *maatschap* was a symbolic expression of the successor's individuality towards his father and the other members of the family and expressed a fundamental change in family attitudes. It was a solution for many problems. Before the *maatschap*, even if the farm was transmitted during the parent's lifetime, the son had to endure a long period of dependence and submission. Years of uncertainty, denial of independence could gradually frustrate the successor, who was denied status, income and control over the farm and, not indeed sure about taking over at all. The *maatschap* allowed the son a proper status, guaranteed remuneration for his labour input, and security to take over the farm in its entirely. Labour relations were no longer based on the hierarchical model of the generations but on a partnership with equal rights.
3.1.3 Installation costs

*Principals of inheritance and succession*

In most parts of The Netherlands, the unity of the farm is preserved and the property is transferred to one heir. In general, the other heirs receive no compensation from the successor. However, in many cases the parents try to compensate the other heirs.

Legally, certain family members are entitled to a statutory share (*legitieme partie*). The statutory share is a fraction of the inheritance the heirs are entitled to in case the inheritance is divided by legal rules and not by the rules of the last will of the parents. As a result, parents are not able to fully disinherit their children against their will. A statutory share needs to be claimed by the family member who feels that his inheritance is less than his statutory share. Therefore, the heir might as well resign to his lower inheritance. Then, they officially have to reject their legitimate portion. In that way the principal of equality can be reversed. This tradition is especially found in the eastern part of the country (Vogelzang, 1989).

Historically, the practice of inheritance varies across The Netherlands. In 1960, the areas of partiability were still located in Brabant, Limburg, Drente and the western and southern part of Gelderland. Elsewhere the farm was not divided. The division of the farm over the heirs lead to the impulse of very intensive land use, resulting in farms with a very high productive capacity. This lead to the growing of intensive livestock farming and horticulture. However, under the current conditions, a division of the property to the heirs would lead to unviable units. Ideal farm succession consists of a transfer of property to one heir, who has to pay minor or no compensation to the other heirs. This pattern is nowadays not disputed, and the right of the other children of the legitimate portion is consequently denied. This is the heart of a problem that has to be solved in every farm family with more children than the potential successor (de Haan, 1994).

Although the successor does not have to compensate the other heirs, it is very common to make an arrangement for the case that the successor quits the job a short period after taking over. This clawback facility implies that if the successor quits the job within the mentioned period, the other heirs have to be compensated.

*Appraisal of the take-over value of the farm*

Legally, the parents are almost free to hand over their farm at whatever price they prefer to whomever they wish. At most the successor can incur a large claim from the tax authorities for Gifts Tax. However, in practice, parents will try to treat all children as equally as possible. Still, by handing over the farm at a value below the free market value it is possible that the other children will regard this as a preferential treatment. Farm take-over is very complex itself. While the brothers and sisters of the young farmer may understand the emotions around the farm, this is often not the case with their partners who may feel they 'lose' a lot of their prospective inheritance (Ross Gordon Consultants SPRL, 2000).

Since 1987 till 2001, the tax authorities allow land to be sold to the successor for the leasehold value (*verpachte staat*). This value is especially important in relation to the inheritance and gift tax. Any price lower than this farmed out value will lead to gift or inheritance tax. Nowadays for agricultural land a percentage of 40% of the market value is acceptable. For horticulture, this percentage is 60% (van der Veen et al, 2001). Valuing
land at the farmed out value is reasonable. The contract that specifies the appointments of the co-operation often includes the right of the antecedent to lease the land after the ending of the maatschap (Loman, 1999). The transfer of production rights can be based on the book value. Of the gift or inheritance that had to paid on the entrepreneurial capital, 25% is eligible for remission (Ministry of Finance, 2002).

The height of the transfer price still forms a problem for the successor, even though facilities exist, that allow a value below market value. Flören (2002) has examined the take-over value in relation to the real value (table 3.2). On 98 percent of all family farms, the farm was transferred at a discount to the successor. The average percentage is 49.7 of the price a non-family member would have to pay. He also found differences between the agricultural sectors. The dairy farmers pay on average the lowest percentage (46.5%) and in horticulture the successor paid on average the highest percentage (61.4%).

Since the introduction of the new succession law in 2002, the going-concern value of the farm is the basis for the succession law. The going concern value is the business economic value of the farm, calculated as the capitalised value of the net cash flow, preferably normalised. However, the exact rules for the calculation of the going concern value are still unknown.

By selling the farm for a lower price to the successor, parents might do harm to statutory shares of the other children. At the point where the inheritance actually needs to be divided, the other heirs may claim that the successor compensates their statutory share. The height of the statutory share depends on the number of brothers and sisters.

The difference between the take-over price and the fiscal book value of the farm is levied on the antecedent. However in most cases, facilities to avoid a final tax bill exist. In that case, the successor is allowed to take over the book values of his predecessor and therefore also the tax liability. This is allowed if the property is transferred in case of the death of the owner, in case of a divorce, in case of a transfer from parents to (grant)children, or after a co-operation between successor and antecedent of at least 3 years, or if the father is older than 55 years or is unfit for work for 45% or more.

The antecedent can make use of the agricultural allowance, which is related to land. The background to the Agricultural Allowance is that changes in value resulting from inflationary development or boom periods are exempt (see also chapter 2). The profit made on the sale of the land to the successor is then not included in the cessation profit ("Staking-swinst").

In case the successor is not able to finance the take-over, which might especially be the case in the land-bound sectors such as arable farming, an alternative might be the leasing by the parents of (part of) the land to the successor. During the period of the lease, the expenses on interest and redemption are reduced. The yearly rent is modest compared to the interest costs of financing the acquisition of the land (see chapter 5).
### Table 3.2 Distribution (%) of farms to the discount received in the take-over price

<table>
<thead>
<tr>
<th>Value paid in % of value paid by non fam. members</th>
<th>Percentage of farms</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 20</td>
<td>5.3</td>
</tr>
<tr>
<td>20-30</td>
<td>19.1</td>
</tr>
<tr>
<td>30-40</td>
<td>17.6</td>
</tr>
<tr>
<td>40-50</td>
<td>20.2</td>
</tr>
<tr>
<td>50-60</td>
<td>12.8</td>
</tr>
<tr>
<td>60-70</td>
<td>9.6</td>
</tr>
<tr>
<td>70-80</td>
<td>11.1</td>
</tr>
<tr>
<td>80-90</td>
<td>0.5</td>
</tr>
<tr>
<td>90-100</td>
<td>3.7</td>
</tr>
</tbody>
</table>

100


**Production rights**

In The Netherlands, the tradability of milk production rights knows some limits. First of all, transfers can not take place without land. Secondly, the size of the transfer is minimised at 20,000 kg. Lease of milk production rights is allowed in The Netherlands and does not have to go together with land rental. There is no division between regions regarding the distribution of quotas within The Netherlands. It is allowed to depreciate on milk quotas over a period of 8 years.

In The Netherlands, pigfarms need a license to produce (‘varkensrechten’). This is a tradable production right. If this production right is sold to a third party, this right will be reduced by 60%. When these production right are passed through to the next generation, no reduction of the license to produce has to be made. For sugar, a production right expressed in the contracted tonnage exists, which is freely tradable.

Hidden reserves on quota are often considerable. However, since 1987 it is possible to request for a transfer facility. In that case, the successor continues the business using the old book values for the production rights. The scheme applies automatically for milk quotas, manure quotas and ammonia rights.

### 3.1.4 Facilities related to farm take-over

**Facilities before take over to build up equity**

Since most take-overs take place in the form of a *maatschap*, the successor becomes an entrepreneur before the actual take-over. This implies that he can already benefit from the measures targeted at entrepreneurs. One of these reductions is the self-employed person’s allowance (‘Zelfstandigenaftrek’). The self-employed person’s allowance depends on the profit of the farm and ranges from about 3,000 Euro to about 6,000 Euro and diminishes if the profit is higher.

In The Netherlands, measures targeted at starting entrepreneurs are of a fiscal nature. A starting entrepreneur is an entrepreneur who has not been running a business for his own
profit and risk in one or more of five years previous to the current tax year. A young farmer fulfilling these criteria is eligible for the fiscal measures for (starting) entrepreneurs. During three years, a self-employed business in its start-up phase is entitled to an additional start-up allowance of 1774 Euro (2001) on top of the self-employed person's allowance. These persons are also entitled to choose the time when they wish to book the depreciation on operating assets acquired during the period in which they are entitled to the start-up allowance or in the year prior thereto. However this arbitrary depreciation is not allowed for investments of which no investment allowance is available. The amount of investment is maximised at 261,000 Euro (2001). No arbitrary depreciation is possible for anything in excess of this amount. Arbitrary depreciation primarily gives a liquidity benefit.

Above this, part of the increase in value of the assets will belong to the descendant. How large this share is depends on the agreement between the antecedent and the descendant.

The Dutch Ministry of Agriculture (2001) recognises that the need for capital has increased due to the trend of expansion, the replacement of labour by capital, and the higher standards for quality of product and production process. In the primary sector a great deal of this requirement has, to date, been met by the provision of risk-bearing equity capital in a family context. However, in the long run it is uncertain whether the farmer will able to raise the equity capital. The constant dilemma is that an entrepreneur who asks someone else to share the risk must also give this other person a say in the business and, moreover, must provide sufficient reward for this risk.

Special tax reductions for young farmers
See Facilities before take over to build up equity (previous paragraph).

Special subsidies or grants for young farmers
Dutch Government is not very passionate about giving installation aid to young farmers. They feared that farms that were not economically viable would be taken over, which is contrasting to the national structural policy.

Recently the minister introduced an installation aid of 1,900 Euro to formulate a business plan. A small group of 250 innovative starters receive 20,000 Euro.

Support for interest payments
In The Netherlands, if a tax subject provides a facilitated loan called venture capital ('durf-kapitaal') to a self-employed person in the start-up phase, then a deduction of the capital which is taxed in box 3 is allowed of maximum 94,000 Euro (2001) for each married couple. If the debt is waived because it cannot be repaid, then a maximised amount can be deducted from the taxable income in an 8-year period. The interest rate is at the most 0.6% lower than the normal interest rate. The loan must satisfy some conditions. No loans between spouses are allowed and the loan may not be used to pay existing loans. The capital can either be provided directly (e.g. between family members) or by facilitation of banks.

On 38% of the farms, the take-over is (partly) financed by venture capital from the bank, while on 31% of the farms venture capital from parents is used for financing the take-over (Flören 2002).
Pension of the antecedent
The antecedent receives a General Old Age Pension as soon as he reaches the age of the 65. Above this a group of facilities exist that allow for the building up of a provision for old age. Three of these facilities are interesting for the antecedent. First of all, premiums paid for annuity and pension insurance policies are deductible from taxable income. The premiums are subject to statutory maximum amounts. The second one is the self-employed persons pension allowance (‘FOR’). The maximum annual allocation to this tax-reserve is 12% of the profits made, with a maximum of 9,302 Euro. When the business is discontinued, the reserve formed must be used to buy an annuity. The third facility applies when the business is discontinued. The proprietor may then deduct a considerable amount as premium for annuity insurance. This premium may not exceed the profit made on the discontinuation of the business less the value of the self-employed persons pension allowance. All the annuity and pension payments received are subject to taxation.

Other
Farm take-over in a direct family line is exempt from Property Transfer Tax if the complete farm is handed over. However this exemption does not apply when a farm is handed over in other cases, e.g. from an uncle to a nephew or where there is no family relation. The exemption does not apply to the private residence.

The Foundation for Security (‘Borgstellingsfonds’) for Agriculture can guarantee the interest payments and the redemption of loans under certain conditions. A farm that does not dispose of enough certainty can apply for security. The farm has to generate sufficient income for replacement investments and to counterbalance a financial setback. The duration of the loan is at the most 20 years.

3.2 Denmark
3.2.1 Introduction
The number of agricultural holdings in Denmark has reduced by 22% during the period 1990-1997 (table 3.3). During this period the absolute number of young and old farmers has reduced, however as a percentage of the total number of farmers, they stayed about the same. About 10% of the farmers is younger than 35 years old and about 21% is older than 65 years old. In the EU-15 the percentage of young farmers is lower and the percentage of old farmers is higher.

In 1990 and 1997, about 20% of the young farmers owns a farm that is smaller than 8 ESU. The percentage of young farmer that owns a farm that is larger than 100 ESU has increased from 7% in 1990 to 23% in 1997. After The Netherlands, this is the highest percentage of young farmers owning a large farm.
Table 3.3  Key figures for agriculture in Denmark

<table>
<thead>
<tr>
<th></th>
<th>1990</th>
<th>1997</th>
</tr>
</thead>
<tbody>
<tr>
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<td>81,300</td>
<td>63,100</td>
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<tr>
<td>Number of farmers younger than 35</td>
<td>8,610</td>
<td>6,400</td>
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<tr>
<td>Number of farmers older than 65</td>
<td>16,080</td>
<td>13,070</td>
</tr>
</tbody>
</table>


Every year, about 800 people enter farming. The average age of farmers setting up is 29 years. Farm transfers are a family matter in Denmark: younger farmers take over land from their parents. About 50% of new entrants succeed family members. Danish farmers have to pay relative high prices for land take-over and therefore their debts are the highest of the young farmers in Europe. Younger farmers are therefore particularly vulnerable. It is essential for the farmer or spouse to have an outside job to manage the costs of the loans when taking over. State policy aims to reduce the costs of loans.

In Denmark, a maximum size of the aggregate farm area owned by one farmer exists. Landowners are allowed to own a maximum number of five holdings. For new landowners the number of holdings is maximised at three. A merger between holdings is maximised at 125 hectares. Farmers wishing to rent or buy agricultural land are required to live on the holding for at least 8 years. If the area rented or bought is more than 30 ha, the owner must show professional qualifications and make a commitment to the farm, which implies that they can not lease out the land for eight years. The restrictions aim at keeping land prices within certain limits.

The proportion of farm-rent and interest rate burden is very high in relation to the agricultural income. Ross Gordon Consultants SPRL (2000) stated that the installation costs and the administrative burden were the main problems in Denmark. The economic prospects and the availability of farms were less stringent problems. The training of young farmers forms no problem in Denmark.

Blanc et al. (1993b) already stated that the main problem in Denmark is the acquisition of a farm, either from the family or from the market. In both cases, the necessary capital is high, which is caused by the capital-intensive way of production. Farm transfer from parents to children overcomes at least part of this problem. First of all, the take-over of the responsibility by the successor can be spread in time, either in the form of aid and assistance or in the form of co-operation between generations. However, official partnerships are in general excluded. Secondly, successors in the family circle often benefit from a favourable evaluation of the property. Despite these advantages, the successor often has to lend a large amount of money, leading to a high endebtedness. Svendsen (2001) compares the debt ratio of 7 European countries in 1998. Of these countries, Denmark has by far the highest debt ratio of all: 58.1%. In France and the Netherlands the ratio is about 35%. The average amount paid on interest is in Denmark 27,000 Euro. However, these figures are averages for the whole sector. It can be expected that the figures will be higher for the young farmers.
3.2.2 Status of the young farmer during the transition period

In Denmark, farm take-over takes place within the family and is spread over a more or less long period. This enables both generations to help each other and to collaborate with each other. However, an official co-operation between the parents and the successor is not very usual, although it is an possibility. Usually, the son starts working at the parent's farm or another farm as a paid worker. After that he buys a little farm or a part of the one of his parents. At the moment that the parents retire, the successor either buys the rest or the complete farm (Blanc and Perrier, 1993a).

3.2.3 Installation costs

Principals of inheritance and succession

Denmark encourages a single-heir system and the unity of the farm is consequently preserved. The successor does not have to compensate the other heirs. However, equality is preserved by the fact that the transfer value of the farm is very close to the market value (see below). Often the old farmer tries to give financial compensation to the other heirs, but he does not have the obligation to do that.

Appraisal of the take-over value of the farm

Succession law allows relatives to chose one of two options when handing over a farm. The purchaser either takes on the vendor's basis of depreciation and tax obligations linked to depreciation, in which case the vendor makes a tax gain by not paying the taxes linked to past depreciation or a standard sale takes place. Under the first option, less capital for the financing of the farm is needed. However, the depreciation base is smaller, which leads to higher tax payments in the first years after take-over. Under the second option, relatives can chose to carry out a standard sale agreement, settling all outstanding taxes, including depreciation, before contracts are exchanged. This usually has the effect of increasing the price of the farm to market levels. However, the purchaser is able to claim the full investment benefits of depreciation (Ross Gordon Consultants SPRL, 2000).

In transfers to family members the taxation authorities will look critically at the price agreed on by both parties to find out whether it corresponds with the market value. If the price is considered too low, the seller has given a present and the buyer pays gift tax. Furthermore, this has the effect that the purchase price agreed on is increased by the value of the gift. The taxable purchase price of the buyer and thus also to some extent the depreciation basis increases correspondingly. In transfers to family members buyer and seller can always transfer real property at valuation price +/- 15% without paying gift tax. The rateable value of real property is fixed once a year by the public valuation authorities. The number of persons entitled to the benefit of this 15% rule is limited but not clearly defined. The rule is often used when transferring a farm to a son or daughter (EFAC, 2000).
Production rights
In Denmark, young farmers are privileged in buying milk quota. Young farmers without milk production rights can claim 300,000 kg of milk quota and young farmer who already have milk production rights can claim up to 560,000 kg of rights. In both situations one third is for free (national reserve) and the rest has to be bought at the Exchange. Lease or sale transactions of milk quota lead to skimming of 33%, which is added to the national reserve. Transactions between sellers and buyers who will co-operate for a period of 5 years are exempt.

3.2.4 Facilities related to farm take-over

Facilities before take over to build up equity
Young wage earners who want to establish an independent business in the future can save part of their wage in special bank accounts (establishment account). The wage earners can deduct these savings from their income. But the scheme only relates to the bottom tax and is maximised at 25% of the wage with a minimum of 6,730 Euro and a maximum of 23,500 Euro. Of the saved amount 40% tax is avoided. As soon as the wage earners set up a business, the savings can be cashed. The amount is deductible as advance depreciation of machinery and buildings costs. Thereafter only depreciation on the remaining part of the purchase price can be made. The establishment account can be used only for a business in which the farmer and/or his wife are working at least 50 hours per month. An independent business is normally to be established before reaching the age of 40 years.

Special tax reductions for young farmers
Special provisions allow the depreciation over 5 years of expenses for establishing or expanding a business, including market research expenses, and of research and development expenses. Expenses incurred in acquiring, securing and maintaining taxable income are in general deductible.

Special subsidies or grants for young farmers
No special subsidies or grants for young farmers exist. The Danish government traditionally has an aversion to supporting the agricultural sector. It has always preferred to ensure economic development by an active politic of modernisation by research, the formation and organisation of markets, structural development controlled by a strict juridical framework (Blanc et al., 1993b).

Support for interest payments
A state loan with duration of 20 years is granted on favourable conditions. The loan normally amounts to about 15% of the commercial value of a holding. The loan is maximised at 141,000 Euro. During the first four years, the farmer receives support for interest and redemption. In the first year, the state pays the interest and redemption up to 75% of the loan, however only up to 67,000 Euro. The support is gradually reduced in the next three years. In the second year, the support is 75% of the support in the first year, in the third year 50% and in the last year 25%.
In Denmark, the financing associations play an important role for the young farmers. These associations provide capital at an interest rate, which is about 2% less than the general rate for maximum 70% of the market value of the farm. These associations receive subsidies from the government and do not focus primarily on the agricultural sector.

Pension of the antecedent
The general pension scheme consists of payments of 6,200 Euro for people older than 67 years of age. A supplementary payment of 2,700 Euro is paid to spouses and 5,200 Euro to singles if the other income is less than 5,500 Euro.

In general, the premium paid to annuity schemes may be deducted in full from personal income, whereas pension payments received are fully subject to income tax. For self-employed persons that bound themselves to pay contributions for at least 10 years, there is no limit to the size of the contribution.

Other
None

3.3 France

3.3.1 Introduction

In 1997, there were about 680,000 farms in France (table 3.4). During the period 1990-1997 this number has decreased by 33%. This reduction is the highest in the EU-15, where the number of farm decreased on average by 19%. Both the numbers of young and old farmers reduced during the same period. However, the percentage young farmers reduced from 13 to 12%, while the share of older farmers rose from 14 to 16%.

In 1997, one third of the French farmers do not farm as their main job. Either they are retired or they have another non-agricultural job. Although the number of farms is great, it only accounts for 6% of the economic potential of agriculture (Rattin and Carlotti, 2000).

Table 3.4  Key figures for agriculture in France

<table>
<thead>
<tr>
<th></th>
<th>1990</th>
<th>1997</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of farms</td>
<td>1,017,000</td>
<td>679,500</td>
</tr>
<tr>
<td>Number of farmers younger than 35</td>
<td>120,690</td>
<td>78,990</td>
</tr>
<tr>
<td>Number of farmers older than 65</td>
<td>125,100</td>
<td>105,120</td>
</tr>
</tbody>
</table>

In 1990 19% of the young farmers owned a farm smaller than 8 ESU and 3% owned a farm larger than 100 ESU. The average size of the farm has increased and in 1997 only 13% of the young farmers owned a small farm, while 9% owns a large farm.

In France, the SAFER ('Sociétés pour l'aménagement foncier et l'établissement Rural') has to improve the structure of farming by acting in the farmland market, either as purchasers of land on the open market, or leasing of land. It must resell its purchase within five or ten years either to young farmers or to improve the viability of a less-sustainable holding such as a family farm. It's purpose is to build an ideal structural type, defined as a family farm with personal liability. SAFER has the pre-emptive right over all others. Above this, both farm sales and leases are regulated to encourage a family-farm-oriented structure. To avoid high installation costs, farmers can group together and take over a farm.

In France, farm transfer still is a family matter. Only 10% of all new farm-owners do not have agricultural parents or agricultural parents in law (Blanc et al., 1993b). It is three times more expensive for non-farming individuals to enter farming than it is for farmers' children. In the years 1996 and 1997 less than 8,000 farmers under 40 have settled. One out of four young farmers has joined a joint holding. One out of four successors extends the farm he takes over (Rattin, 1999a). However, after the age of 50 only one farmers out of three knows who will take over the farm. Yet this share has grown since 1990. The absence of a successor for a given farm has no effect on what will happen to the land, which will no doubt serve to expand neighbouring farms (Rattin, 2000). The young farmers in France generally have an agricultural training of a good level. These better trained farmers run general agricultural holdings rather than animal production farms (Rattin, 1999b).

Despite the governmental effort, the rate of replacement of farmers ceasing production is only one out of four. The main problems in France are related to farm structures (mountain farming), high installation costs and administrative burden. In France, the training of young farmers is also a rather stringent problem. The economic prospects and the availability of farms is less a problem (Ross Gordon Consultants SPRL, 2000).

3.3.2 Status of the young farmer during the transition period

The conditions of farm entry differ from one social group to the other. In the more modest social class the son is still quite frequently employed as family's help. Larger farms manage transfers well, usually giving the chosen transferee a part of the farm to be responsible for prior to transferral of the entire holding. For less-prosperous holdings the transferor tends to work for the parent as a farm help or is often the youngest son with the worst academic record who cannot obtain other employment. In small farms, the son quite often has a 'waiting' off farm job. This experience can help the farmer to-be but it can also hinder when he runs the farm (Commission of the European Communities, 1992).

3.3.3 Installation costs

*Principals of inheritance and succession*

The inheritance law allows for the division of the holding. However the unity of the farm is often maintained by leasing of the land to the heir that succeeds the overall running of the farm. In that way the large financial burden required compensating fellow heirs is avoided.
The successor can request the right to pay compensation to other heirs over a period of up to ten years.

**Appraisal of the take-over value of the farm**

The market value is used both as a basis for tax assessment and as a basis for calculating additional payments to other heirs (Commission of the European Communities, 1992). When the whole farm is transferred free of any charge to the farmer's successor, there is an opportunity to avoid taxation. In this case the valuation of all the assets in the successor's balance sheet must be exactly the same as in the retiring farmer's balance sheet. The new owner takes over the old owner's 'tax situation'. The same position is applicable if the farmer has died (EFAC, 2000).

**Production rights**

Yearly, the height of the milk quota is assessed. The dairy farmer gets the reference quota, which is equal to the quota of last year if the national quota stays the same. Besides this quota, a variable quota is available and amounts to about 10% of the reference quota. The variable quota of an individual farmer is maximised. Larger farmers get a lower percentage.

The milk production rights are inseparably bound to land. In case someone, who does not own milk quota, takes over a whole farm (either buy, lease, gift or inheritance), the total rights are transferred. If someone already has access to production rights and purchases additional rights, part of the rights is skimmed of according to the following rules:

1. the amount received out of the national reserves after 1984 is taken back by the national reserve;
2. of the remaining part, 10% is skimmed of;
3. if the total quota of the receiver (including the new ones) is less than 200,000, no more skimming of takes place;
4. if the total quota of the receiver is more than 200,000 litres and less than 300,000, 30% is skimmed of the received amount above the 200,000 litres;
5. in case the total amount after skimming of according to the above rules is more than 300,000 litres, of the received amount above 300,000 40% is skimmed of.

These rules also apply for trade between family members.

The production rights that are skimmed of are added to the national reserve. A dairy farmer who wants to leave the sector can sell his quota to the national reserve. The farmer stays owner of the land. In some departments, young farmers who already own milk quota are entitled to receive quota until 150,000 litres in the mountain areas and 200,000 litres in valleys. The quota from the national reserve are transferred to the new owner for free. Leasing is not allowed in France and no fiscal depreciation is allowed either.

3.3.4 Facilities related to farm take-over

**Facilities before take over to build up equity**

Children of a farmer can claim deferred wages ('salaire différé') if they have worked unpaid on the farm after the age of 18. This allows a child succeeding to claim a share of the
land sale profits. The height of this deferred salary is calculated as 2/3 times 2,080 times the legal minimum wage, which was in 1998 about 6 Euro per hour. For one year the deferred wages are 8,300 Euro. The maximum amount of deferred wages is calculated over a period of ten year; in this case 83,000 Euro. In 2002 the maximum amount of differed wages is 92,500 Euro.

Special tax reductions for young farmers

Young farmers, who are also eligible for and make use of the installation facilities for young farmers, may benefit from a 50% income-reduction when they are taxed on an actual income regime and they have settlement subsidies as ruled by the Rural Code. The reduction applies to the benefits obtained during the first 60 months after their settlement. After that the young farmers pays normal taxes as other farmers. Additionally these farmers get a discount on the payments for social securities during a period of five years. The discount is reduced gradually and ranges from a reduction of 65% in the first year (maximum 2,278 Euro) to 15% (maximum 525 Euro) in the fifth year.

Special subsidies or grants for young farmers

In France, three agricultural areas are distinguished, which are important for many facilities. The height and the applicability of many facilities depend on the area in which the farm is located. The three areas are:

- 'zone de montagne'; the mountain area. This classification applies if more than 80% of a municipality is situated higher than 600 metres or if the difference between the highest and the lowest point is more than 400 metres;
- 'les autres zones défavorisées'; other less favoured areas. This classification applies if the area is less productive than 80% of the national productivity or if the area has a low population density;
- 'le reste du territoire'; the other areas.

The facilities for these areas often differ due to the difference in exploitation. Young farmers can receive installation grants ranging from 16,500 Euro to 35,900 Euro per entrepreneur with his wife working on the farm in the mountain area. The grant ranges from 10,200 Euro to 22,600 Euro in the other less favoured areas and form 7,900 Euro to 25,200 Euro for the other areas. The farmer must be under the age of 40 and must have a professional qualification.

Support for interest payment ('les prêts de jeune agriculteurs PJA')

In France, special loans exist for the financing of investments in fittings and property involved in the transfer of the business. The interest rate for young farmers is ranging from 2 to 3.5% depending on the area. The loan is maximised at 95,000 Euro per individual and 141,800 Euro per individual, where the wife also works at the farm. According to the ministry of agriculture, this loan represents a benefit of 10 to 20% of the borrowed amount (French ministry of agriculture 2000).
Pension of the antecedent
National Insurance premiums are deductible from the income when they are paid to a compulsory regime. Optional pension premiums may also be deductible if they meet certain conditions. The optional pension premium is deductible up to a maximum of 7% of the farmer's income and up to a ceiling adjusted yearly. In 1998 the ceiling was 5,412 Euro. For 1999 the basic pension is 2,675 per year.

Other
Since 1995, France has made a commitment to try to ensure a generative shift in farmers at a time when numbers of farmers overall are declining relatively rapidly. One of the aspects of this policy is the setting up of Installation Welcome Points, where candidates for installation are prepared for the administrative, financial and practical problems they may face. Above this, Initial Installation Directories list farmers without successors and try to match them with young farmer candidates for installation. The Land Support Programme for Farm Take-overs is an experimental programme aimed at preparing older farmers (over 50 years old) with uncertain succession for the possibilities for handing over their farms in the future. And since accommodation is often a problem during the hand-over period of a farm, the Regional Council funding is sometimes available to young farmers for the renovation of old houses. The Regional Council also funds tenant farming advice and the special training of hand-over candidates.

Profits on the sale of small businesses are not taxable at all. Small businesses are defined as 'actual income taxed' businesses and have turnovers below 152,450 Euro per year. For 'Forfait' income taxed businesses there is no taxation when such a farm is sold. The annual turnover limit in such cases is 76,225 Euro.

3.4 Germany

3.4.1 Introduction

In Germany, the number of agricultural holdings reduced from 1990 till 1997 by 19% (table 3.5). In Germany, contrary to all the other EU-15 countries, the percentage of young farmers has increased from 15% in 1990 to 16% in 1997. The percentage of old farmers rose from 6 to 7%, which is almost the lowest figure of the investigated countries. In the EU-15 8% of the farmers is younger than 35 years old.

Table 3.5 Key figures for agriculture in Germany

<table>
<thead>
<tr>
<th></th>
<th>1990</th>
<th>1997</th>
</tr>
</thead>
<tbody>
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<td>665,100</td>
<td>535,900</td>
</tr>
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<td>Number of farmers younger than 35</td>
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<td>84,090</td>
</tr>
<tr>
<td>Number of farmers older than 65</td>
<td>41,440</td>
<td>37,150</td>
</tr>
</tbody>
</table>

A large percentage of the young farmers owns a small farm (37%). The percentage of young farmers owning a large farm has increased from 1% in 1990 to 4% in 1997.

In Germany a regional agency for the buying of land from farmers on behalf of farmers is authorised to purchase marketed blocks of land with a minimum size of 2 ha, but only where there are no farm buyers. The agency's pre-emptive rights only apply over non-farmers.

Approximately half of the farmers work part-time at the farm, since many farms are small to medium-sized. In general young farmers take over after helping on the farm. In 1997, in the former republic 11% of the farms over 100 ha have almost certainly no clear successor, whereas 26% of the farms from 10-20 ha have no successor. Of the main occupation farms 60% is quite to very certain that the farm will be taken over. Of the sideline farms, this percentage is some less: 57%. The uncertainty about the take-over decreases with the age of the antecedent. If the antecedent is over 65 years-of-age 78% of the farmers is quite to very certain that the farm will be taken over. In the new Ländern the individual farms are often with more than one family on one farm. This implies that potential successors can come from more families. The percentage of farmers that is quite to very certain about farm take-over is higher in this area. Of the main occupation farms, about 84% of the farmers is quite to very certain that the farm will be taken over. For the sideline farms, this percentage is 71%.

In Germany the main reasons for not wanting to succeed the farm is primarily the fact that outside the farm a higher income can be generated. In the former Federal Republic of Germany the labour burden is the second main reason. In the new Ländern the lack of interest is the second reason for not succeeding the farm.

For a long time, the automatic training in an agricultural farm on the basis of family tradition was common. However, nowadays a more rational approach of the potential successor is common practice (Fasterding, 1999).

The average size of the farms with successor is about 35 hectares, which is double the size of the farms without successor. Almost all successors are male. Only 13% of the successors is female (German Ministry of Consumer Protection, Food and Agriculture, 2001).

In Germany, the main problems for young farmers are also related to high installation costs. Above this, the economic prospects and the training are pretty serious problems. The availability of farms is a less critical problem (Ross Gordon Consultants SPRL, 2000).

3.4.2 Status of the young farmer during the transition period

In Germany, the status of the young farmer during the transition period can be diverse. If the old farmer has not reached the age of 65 and he wants to work until he is 65, the young farmers is often only a farm hand. At the age of 65, the old farmer can get the special agricultural pension, but only if he will lease or transfer the farm to other people (especially to the son or daughter). However, sometimes the young farmers want to have more responsibility, although the old farmer has not reached the age of 65. In that case the father and the successor could form a partnership or the antecedent leases the farm to the young farmer, if the income of the leasing is sufficient for the old farmer.
3.4.3 Installation costs

**Principals of inheritance and succession**

In Germany, the aim of the agricultural inheritance law and the preferential treatment of the farm successors is to maintain sustainable agricultural enterprises\(^1\). However, the inheritance laws differ over Germany. Three different regions can be distinguished.

1. **The Höfeordnung area.** This arrangement is applicable in Schleswig-Holstein, Hamburg, Niedersachsen and Nordrhein-Westfalen. The farm is transferred in total to one of the children, who is appointed by the parents based on education and devotion to the farm. On the contrary, in some areas just the youngest or oldest child has the take-over right. The successor can take-over the complete farm, including the dwelling and has to compensate the other heirs. The compensation of the other siblings is based on the *Einheitswert* (EW). The EW is a fiscal standard for the valuation of the wealth of a farm (Loman, 1999). Besides this compensation, the parents are supported until they die (*Altenteil*). In case of the *Altenteil*, the payments as permanent charges are depreciable for the succeeding farmer as special costs within his income calculation while on the other hand the predecessor is taxed on the full amount of the payments and payments in kind received (EFAC 2000).

   The basis of the compensation of the other brothers and sisters is 1.5 times the EW of the farm, which can be reduced by the value of executed activities, the *Altenteil* and the debts. However the in this way calculated value is at least one third of the actual value (Doll et al., 2001). The remaining amount is divided over all the children according to the Civil Code. If the successor sells the farm within 20 years, then the brothers and sisters can claim their legitimate inheritance based on the Civil Code after deducting the amount already received. Under the Civil Code, the farm is valued at commercial value.

   The value of the EW is based on the potential net revenue of the farm, expressed per unit surface. For a farm with land with soil quality of 100 points this value is 1,900 Euro per hectare. For other farms, this ratio ranges in practice from 18 to 110, depending on the type of soil and the concentration of livestock. If a farm obviously differs from the average, the value of the farm can be increased or reduced (Loman, 1999), especially if the concentration of livestock is very high.

2. **The area with Anerbergesetz.** This arrangement applies in a large number of Ländern in the Western part of Germany, including Bremen, Hessen, Rheinland-Pfalz and parts of Baden-Württemberg. The main difference with the Höfeordnung is the assessment of the value of the farm. A potential value is assessed for the farm, based on a capitalised value of the net revenue for comparable farms. The potential value is usually higher than in the Höfeordnung.

3. **Civil code.** In the area including Bayern, Berlin, Saarland, parts of Baden-Württemberg and the new federal states (the former GDR) the take-over is arranged according to the civil code. If the parents do not arrange anything while still alive, the farm has to be valued to the commercial value in case of take-over. But successors have the opportunity, to apply the Zuweisungsverfahren and the court of justice.

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\(^1\) It is noted that not only sustainable but also unsustainable farms are protected from division, an effect which causes delay in structural change (Doll et al., 2001).
could hand over the whole farm to this successor. This means, that a successor who possibly has agricultural training and the willingness to be a farmer could take over the complete farm, including the dwelling. Therefore the successor has to compensate the other heirs. The compensation of the other siblings is based on the net revenue not on the commercial value.

In the first two areas, the successor is obliged to pay the other heirs if the farm is sold within a certain period of time (ranging from 10 to 20 years). This obligation (Nachabfindungsregelung) results from the fact that the farm comes into his hands at a value below the market value. In the Höfeordnung, the obligation is digressively graduated.

In the areas without Anerbergesetz, the possibility exists that the farm will be transferred as Landgut. In that case the farm has to satisfy some conditions, such as that the successor has to be appointed by the parents. The compensation for the other heirs will be calculated according to the potential value, which is calculated specifically for that farm. In this case, no Nachabfindungsregelung is arranged.

If the parents have not appointed a successor, the Landgut-arrangement is not applicable. In that case, the Court can appoint one successor and the other heirs have to be compensated on the basis of the potential value. In general this will be one successor. The period for which the Nachabfindungsregelung applies is 15 years.

Above these facilities, the land trade laws provide for the possibility that one of the heirs requests the transfer of the complete farm. The other heirs will be compensated according to the potential value (Ertragswert) of comparable farms.

Appraisal of the take-over value of the farm
See principals of inheritance and succession (previous paragraphs).

Production rights
In Germany, a new dairy quota system exists since April 2000. The possibilities for leasing are restricted and regional quota markets are established. Now, farmers who stopped farming own a large amount of quota and lease it out. The new system aims at a transfer of this quota to current dairy farmers. That is why the possibilities for lease are strongly limited. No new lease contracts can be arranged. Current contracts can be extended, but only when a contract is ended, the lessee has the first right to buy the quota at 65% of the last market price.

The quota market is divided in 21 regions. For every region a price is settled depending on demand and supply. It is an obligation to trade the quota on the market except for the sale of a whole farm, succession or the sale of leased rights. If milk quota is traded on the market, 5% of the rights is skimmed off. It is not allowed to sell the bought quota within three years and all buyers have to be dairy farmers. The purchased quota can be depreciated in 10 years. No special provisions for young farmers exist. After April 2002, Germany will have a modified quota system. Farmer co-operations are allowed to lease the quotas if the owner is an active farmer of the co-operation. The legislator also wants to abolish the skin of.

In a part of Germany, the take-over price is assessed for the whole farm, which implies that the production rights are not separately valued. However, if the value of the farm
is settled at market value, the milk quotas are also valued against market value. In Germany, this value is about 57 Euro per 100 kg of milk.

3.4.4 Facilities related to farm take-over

Facilities before take over to build up equity
None

Special tax reductions for young farmers
In Germany starters have the possibility of advanced reserves for planned investments:
- the reserves can be related to planned investments in the year of starting a business and the following 4 years;
- the total amount of advanced reserves for starters may be up to 307,000 Euro;
- if the planned investments have not been made the reserves are dissolved and in addition must be taxed at 6% per year;
- starters can only get this tax incentive if they have not received income from business, agriculture and forestry or independent services during the last five years before starting the business;
- this tax incentive is possible for all kinds of profit income and is not specific to agriculture. There is no limit concerning the age of the starter. The passing over of a business to the following generation by heritage or gift does not qualify for start up support.

It has to be noted that most shifts of farms in Germany are not regarded as a 'starting up' of a farm. This provision is therefor not important for agriculture. If a young farmer sells land to compensate the other heirs, an amount of 61,000 Euro is exempt from capital gains.

Special subsidies or grants for young farmers
In Germany, the subsidies are recorded in the Agrarinvestitionsförderungsprogramm (AFP). However, not all federal states (for example Lower Saxony) give this subsidy. The installation grant is linked to investments in the farm. The investments must be at least 50,000 Euro. The installation grant is 12,000 Euro. In case of a merger at most 4 young farmers are eligible. Besides this special facility for young farmers, general investment incentives are given in the form of interest discounts and subsidies. The interest discount is at most 5% and the investment subsidy is 10% (at most 30,000 Euro) in case of immovable assets. The amount for which the interest discount is applicable is at most 200,000 Euro in case of two people working full time at the farm (German Ministry of Consumer Protection, Food and Agriculture, 2001). A diploma from a specialist agricultural college is sufficient technical qualification. Some Länder have regional new entrants programmes, in addition to Federal application of the EU system.
Support for interest payments

See special subsidies or grants for young farmers. Additional aid exists from the agricultural credit programme for small- and medium-sized holdings. They can get a 1% discount for a loan of at most 73,000 Euro per Man Work Unit.

Pension of the antecedent

In Germany, pensions play a major role not only for securing the provision for old age, but also as a tool to avoid a high tax liability in the event of transferring or selling a farm. Farmers also have been regarded as a sector of society, which should be required to make provisions for old age. However a system was introduced, exempting farmers from paying fees into the general pension scheme. Farmers are obliged to pay a fixed contribution to their farmers pension scheme. In 1998, the contribution is 171 Euro for the farmer and the same amount for his wife. If there is any other member of the family such as a child working on the farm as an employee the farmer is obliged to pay half of his contribution in addition for this person as well a general pension scheme contribution. In old age this person can therefore receive pensions from the two different systems. The contribution is not related to any of the farm statistics such as its size or the annual profit. If the profit of a year has been very low the farmer is granted a subsidy for himself, his wife and the employed members of the family as well. These subsidies are paid directly from the government to the farmers pension insurance.

Another kind of pension may be received due to the closing down or giving up of an agricultural business. These pensions are taxed as agricultural income.

Other

None

3.5 Spain

3.5.1 Introduction

In Spain, the number of farms has reduced from 1,593,600 farms in 1990 to 1,202,000 farms in 1997 (table 3.6). This is a reduction of 25%. Both the numbers of young and old farmers have reduced. However relative to the total number of farmers, the number of old farmers has increased. In 1990 23% of the farmers was older than 65, while this was 30% in 1997. The percentage of young farmers decreased from 7 to 6% in the same period. In Spain it is rather common for farmers to keep in power until they die. Spain is a country of small farms, a lot of them are part-time farms, 53% of the farmers work less than 25% of their time on their farm.

In 1990, 75% of the young farmers owned a farm that was smaller than 8 ESU. In 1997 this percentage has declined to 51%. However, only 0.6% of the young farmers owned a large farm (>100 ESU) in 1997. This is the lowest number of the investigated countries. In 1990 even only 0.2% owned a large farm.
### Table 3.6  Key figures for agriculture in Spain

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of farms</th>
<th>Number of farmers younger than 35</th>
<th>Number of farmers older than 65</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>1,593,600</td>
<td>105,990</td>
<td>323,790</td>
</tr>
<tr>
<td>1997</td>
<td>1,202,200</td>
<td>59,730</td>
<td>293,220</td>
</tr>
</tbody>
</table>


In Spain also the installation costs and the economic prospects are the biggest problems for young farmers. Above this, the availability of farms seems to be a large problem (Ross Gordon Consultants SPRL, 2000).

In Spain the young farmers are little developed and tend to produce in the same way as their parents. They are among the less capitalised farms among the EU. They make less investments and generate less revenues than the average Spanish entrepreneurs (Blanc et al., 1993b).

Older farmers do not have the obligation to make the appropriate investments to comply with new regulations. When the farm take-over takes place, the necessary investments to comply with the new regulations have to be made.

#### 3.5.2 Status of the young farmer during the transition period

Spanish young farmers are not really willing to get loans. The Spanish agriculture is mainly financed by farmers' savings. Therefore, the young farmer generally becomes the owner of the farm after a long period of transition. He is first family's help, usually for more than 10 years and finally comes the sharing-up of the heritage. The shares are usually equally divided over the children but the child, who takes over the farm, gets nevertheless a family advantage.

The co-operation between the successor and the antecedent depends on the size of the farm. In case of the very small farms, the owner often has a job besides the farm. In that situation the parents often work on the farm till they die and the successor does not take over the farm before that moment. On the small and medium-sized farms, the successor is often not more than a farm hand. This results in limited experience in the management of the farm.

#### 3.5.3 Installation costs

**Principals of inheritance and succession**

In Spain, as in many countries in Southern Europe, the farm is spread over the successors. All heirs receive equal or near equal portions.

**Appraisal of the take-over value of the farm**

Assets are valued on basis of investment costs, less fiscal depreciation. The maximum percentages of depreciation are 15% on machinery and 5% on buildings per year. The animals
are valued at production costs. If land is exchanged between heirs, the market value serves as a standard.

**Production rights**
Milk quota is freely traded under the condition that 50% of what is sold goes to the national reserve. Young farmers are entitled to receive quota for free or at a reduced price if they keep the quota for at least five years, develop an improvement plan on the farm and are able to provide the authorities with sustainable accounts.

Production rights are only valued if they are purchased. Historical rights are only valued when they are sold. The reason is double:
- if it is valued it is taxable;
- if the profit is invested in the business, this profit is free of taxes.

3.5.4 Facilities related to farm take-over

**Facilities before take over to build up equity**
None

**Special tax reductions for young farmers**
In Spain young farmers have in their first five years after installation special fiscal facilities. They have a reduction of 25% of their net income for the income tax. Young farmers enjoy also an extra reduction on the conveyance tax of 10%, they have a reduction of 85% instead of 75% with the transfer of a holding farm.

**Special subsidies or grants for young farmers**
Approximately 3,700 young farmers per year received installation aids in the 1990-1997 period. The variable grant is 2,000 to 6,000 Euro. The height of the grant depends on the type of transmission. A grant of 2,000 is provided in the inheritance does not involve compensation of the other heirs. The grant is higher if a farm is set up outside the family circle or with a co-operation or participation agreement of over 50% of the business capital (6,000 Euro). If the participation is less then 50%, 4,000 Euro is granted.

The government has the objective to assist young farmers who are setting up for the first time by contributing to the improvement and modernisation of agricultural structures and operations. A system of incentives has been established which aims at financing the implementation of plans to upgrade farms and at supporting initiatives to improve professional agricultural qualifications. Assistance may take the form of capital subsidies, interest relief, and subsidies covering part of the annual repayments of the principal, or assistance in financing the cost of guarantees, or a combination of both.

The capital subsidy may be of up to 24% applied to the first 24,000 Euro of the projected investment, taking into account that the volume of the qualifying investment will be subject to a maximum limit of 176,000 Euro per farm, if the applicant is an individual or jointly-owned property. If the applicant is a legal entity, this limit may be multiplied by the number of its shareholders who are professional farmers (up to a maximum of four). The interest grant is described below.
In any event, the maximum amount of the grant may not exceed 50% of the investment in the disadvantaged areas included in the lists approved at Community level, and may not exceed 40% in other areas. The subsidies are granted on a 50-50 basis by the Ministry of Agriculture, Fisheries and Food and the relevant Autonomous Communities, and may be channelled through private and public banking entities. Applications must be filed with the competent body of the Autonomous Community where the investment is located. More information on these grants can be provided by, among other agencies, the General Secretariat of Agriculture and Food, which reports to this Ministry (Garrigues, 2001).

Support for interest payments
Part of the investment incentives exist out of interest rate subsidies. The interest relief may be up to 8.5 percentage points annually, in such a way that the interest rate for the borrower must not be less than 3% or 4%, depending on the circumstances. The loans may cover up to 90% of the difference between the cost of the approved investment and the subsidy (Garrigues, 2001).

Pension of the antecedent
The Spanish pension system is structured along a three pillar system. The first pillar, the compulsory state pension scheme is universal and financed by taxes. The second pillar is an occupational pension scheme, financed from contributions and the third pillar is voluntary. In Spain, the overwhelming part (99%) of the income of retirees is still coming from the second pillar (INVERCO 2000). Self-employed persons have to finance the pension through an Individual's System Pension Funds. The maximum annual contribution (second and third pillar jointly) which can be deducted from the taxable base is limited to the minimum of 7,200 Euro or 25% of the net salary and income from business.

Other
Where, with an inheritance, the recipient is the spouse or child of the deceased, an additional deduction applies in respect of a family business, holdings qualifying for an exemption from net wealth tax and the permanent residence of the deceased. This deduction is 95% of the value of such property, but there is a limit of 123,000 euro for each recipient with respect to the deceased's residence. The capital gains as a result of the transfer of a company by inheritance will not be taxable.

3.6 United Kingdom

3.6.1 Introduction

Of the investigated countries, the United Kingdom showed the smallest reduction in the number of agricultural holdings during the period 1990-1997 (table 3.7). In this period the reduction was only 5%. The percentage of young farmers decreased from 7 to 6% and the percentage of older farmers reduced from 22 to 21%.
In 1997 a large part of the young farmers (37%) owns a farm that is smaller than 8 ESU. On the other hand, a small part of the young farmers (13%) owns a large farm. In 1990 only 7% of the young farmers owned a large farm, while about 37% owned a small farm.

In the UK, the farms are large and two generations can usually make a living of the farm. Most farmers inherit the farm from their parents with very low costs involved. Still, the installation costs, together with the administrative burden, are mentioned as the main problems for young farmers. Training, economic prospects and the availability of farms are less serious problems in the UK. The existence of large estates makes it easier for people from a non-farming background to gain access to farming, as it is possible for them to rent a farm from an estate.

<table>
<thead>
<tr>
<th>Table 3.7 Key figures for agriculture in the United Kingdom</th>
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<tbody>
<tr>
<td></td>
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<tr>
<td><strong>1990</strong></td>
</tr>
<tr>
<td>-------------------------------------------------------------</td>
</tr>
<tr>
<td>Number of farms</td>
</tr>
<tr>
<td>Number of farmers younger than 35</td>
</tr>
<tr>
<td>Number of farmers older than 65</td>
</tr>
</tbody>
</table>


Research showed in the UK that the son's farming methods and systems are not very different from the one used by their fathers (Blanc et al., 1993b). The modernisation of production units does not follow the farm entrance. Therefore, promoting young farmer entrants is not considered a priority in the UK.

However, the description of a farm entrance causing no problems and requiring no specific government policies cannot be applied without danger to all U.K. regions. On one hand, it is a good representation of what mainly happens in Central and Southern English plains. On the other hand, the renewal of farmers may engender problems in some parts of less-favoured areas and micro regions. That is the case when relative small production structures hinder the son's access to its professional and financial autonomy during the co-operation period between both generations.

3.6.2 Status of the young farmer during the transition period

Within the UK, farm succession differs on two dimensions: the extent to which the successor shares managerial decisions on the 'home farm' with his father and whether the successor runs an independent enterprise of his own. This leads to the identification of four types though there will of course be substantial variations around these main types in reality. The four types (Gasson and Errington, 1993) are:
- father-son partnership (no independent enterprise, great responsibility for 'home farm');
- separate enterprise (a separate enterprise, great responsibility for 'home farm');
- farmer's boy (no independent enterprise, little responsibility for 'home farm');
- separate farm (a separate enterprise, little responsibility for 'home farm').

The identification of the ideal types allows a number of generalisations to be made about farming succession in the UK. In the first place, the higher land prices made it much less feasible to set the son up on a separate farm where he could develop his management skills and make mistakes without jeopardising the whole family business. At a separate enterprise the successor is responsible for a part of the home farm, for example a pig unit. She has a good deal of autonomy in the development and management of the separate unit. There has consequently been an increase in the number of two-generation farms in the UK. While the relatively large size of UK farms and prevailing agricultural prosperity made this possible in the 1970s, problems are now emerging as farming incomes fall. Whatever the strategy employed to supplement income, it is likely that more and more UK farms will become two-generation businesses. In some cases formal partnerships between generations have been formed, though the increase in partnerships in UK farming owes more to tax and tenure legislation than to fundamental changes in the relationship between farmers and their successors (Blanc et al., 1993b).

3.6.3 Installation costs

Principal of inheritance and succession

In the UK, there is a simple system of single inheritor who has no requirement to compensate others. In practice, some provisions for the other children are made, such as an education and maintaining them until they become independent. The successor also takes care of the parents.

Appraisal of the take-over value of the farm

The take-over price depends on whether the farm is transferred while the parents are still alive or on the death of antecedent.

1. Transfer while the parents are still alive.
   If the farm is transferred while the parents are still alive, the principle tax applied is the Capital Gains Tax, payable by the parent. There are also specific provisions that permit the transfer of agricultural land on this basis even if it is not held as a business asset (this would include land let to an unconnected tenant provided it has been owned for at least 7 years). Where hold over relief is being claimed, the chargeable gain on the disposal by the parent is reduced by the gain held over and the cost to the second generation is reduced by the same amount. Where hold over relief is not being claimed, the value of the other farming assets will be calculated at their fair market value.

2. Transfer on death of the antecedent.
   When the farm is transferred on the death of the parents, all assets owned by an individual on death are revalued to current market value free of Capital Gains Tax. The tax valuation is effectively equal to the market valuation, although all these assets are subject to Inheritance Tax (IT). However, Agricultural Property Relief combined
with Business Property Relief ensures that for most family run farms there is no IT to pay.

Since in the UK no general gift tax exists, which levies a tax on the receiver of a gift, the farm can be transferred for free without the successor paying any taxes. The hold-over relief avoids the antecedent paying taxes on capital gains. To avoid too obvious avoidance of inheritance tax, inheritance tax is also levied on certain gifts made within the 7 years before the death of a person (potentially exempt transfers).

Production rights
Production rights, in general are treated from a tax value point of view, no differently from other business assets.

In the UK, the system of milk production rights is comparable to the one in The Netherlands. Quota can be leased and sold. In case of a transfer of the rights, the land also has to be transferred, either by sale or lease. Leasing takes place without the transfer of the use of the land. Milk quota can not be written down.

A similar system is also in place for the production of potatoes, and one for ewe and suckler cow premiums which entitles a farmer to claim EC subsidies for keeping ewes and sucker cows.

Since 2001 it is possible in the UK to sell the 'contracted tonnage' of sugar beet. It is possible to sell it through a broker or directly to another farmer. It can be sold without land. Besides selling the sugar quota it is also possible to lease it out.

The capital gains on quota are usually substantial, when they are sold, as they have no base value, because they are effectively given to the farmers. Where farmers have purchased quota from another farmer, capital gains will be lower as there will be a base value to the quota.

3.6.4 Facilities related to farm take-over

The politics in the UK have never put a large emphasis on the improvement of the production structure at the moment of farm take-overs. The emphasis has simultaneously been put on the vanishing of small companies and the enlargement of medium or large ones, independent of the age of the owner (Blanc et al., 1993b). There are no differences between different parts of the UK concerning tax law with regard to farm take-over.

Facilities before take over to build up equity
None

Special tax reductions for young farmers
There are no special tax reductions for young farmers. However, some basic tax reductions exist which also apply to farms. Pre-trading expenditure incurred and annual charges paid in the 7 years before commencement of trading are deductible on the commencement of trading. If a loss occurs in the year in which farming is commenced and in the three following tax years in which a trade is carried on, that loss can be set back against the farmer's total income for the three preceding tax years, taking the earliest year first. There
is no deduction for losses if there have been losses from farming for the five (consecutive) previous years. The repayment for earlier years will often include an interest supplement.

Special subsidies or grants for young farmers
None

Support for interest payments
None

Pension of the antecedent
An assured stream of money income is a necessary prerequisite for successful retirement. The picture was substantially the same for those anticipating semi-retirement as it was for those with full retirement in view, the largest single source (about 30%) being a self-employed/private pension. The only substantial difference between the two groups is the proportion of income from the farm, 25% for the semi-retired and 10% for the fully retired. The proportion of the post-retirement income to come from an independent capital fund such as a private pension or other off-farm investments is particularly significant for the farm family business. Such funds can safeguard the succeeding generation against the drain on the agricultural income and capital which otherwise be required to finance the retirement of the out-going generation.

The payment by individuals into funds to provide pensions should be given careful thought in years where profits are earned. Apart from the potential tax advantages, there can be considerable practical advantages in later years when individuals are looking to pass on the farm to the next generation if they have secured income for their retirement. The maximum contribution that can be made depends on whether the investment is being made into a traditional retirement annuity policy (RAP) or a personal pension policy (PPP) and professional advice is needed. These payments are deductible.

Other
Although it is argued that tenancy reform and especially the reintroduction of short-term tenancies was an advantage to young farmers in helping them get a foothold on the ladder, the tenanted land market is not the exclusive domain of young/new entrant farmers.

The government provides funding for training of young farmers of 2.5 million Euro spread over three years (1998-2000).
4. Composition and analysis of sample farms

This chapter illustrates the take-over process by using sample farms for the six countries of this research. For The Netherlands, sample farms for the dairy, arable and horticultural sector are composed and analysed. For the other countries, only a sample farm for the most relevant sector is presented.

4.1 Composition of sample farms

For the six countries, a sample farm for the most important sector will be analysed. Only for The Netherlands, more than one sample farm will be examined, since this country forms the basis for the comparison. Table 4.1 shows the sectors that will be studied in this research.

<table>
<thead>
<tr>
<th>Country</th>
<th>Sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denmark</td>
<td>Dairy farming</td>
</tr>
<tr>
<td>France</td>
<td>Arable farming</td>
</tr>
<tr>
<td>Germany</td>
<td>Dairy farming</td>
</tr>
<tr>
<td>Spain</td>
<td>Horticulture under glass</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>Arable farming</td>
</tr>
<tr>
<td>The Netherlands</td>
<td>Dairy farming, arable farming and horticulture under glass</td>
</tr>
</tbody>
</table>

For these sectors, farm cases will be arranged based on FADN-data. The sample farms will be an average of a selection of the farms in FADN. The selection criteria will be the age of the oldest entrepreneur and the presence of a successor. For these sample farms, the following information will be collected from FADN:
- an economic balance sheet on which the fiscal balance sheet will be based;
- a profit and loss account;
- technical information (size of the farm, intangible assets).

To illustrate the role of subsidies, fiscal and financial arrangements in relation to farm take-over, we will make use of sample farms. The best comparison between the countries can be made if farms that are eligible for take-over, even if these farms differ in size or structure. These are also the farms that will be competitive with the Dutch farms in the future. For the sample farms of The Netherlands, we can make use of the fact that it is known whether a potential successor is present at the farm. However, for the foreign coun-

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1 For a detailed description of the method of composition and analysis of sample farms, see Appendix 2.
tries, this fact is unknown. To select the farms that are eligible for take-over, the following
criteria could be of interest:
1. the size of the farm. The size of the farm can either be expressed in European Size
   Units (ESU), hectares, quota or the number of Agricultural Work Units (AWU);
2. the age of the oldest owner;
3. financial-economic criteria, such as agricultural income or solvability.

The sample farms have been based on data from FADN. The arable farms are the
specialised cereal growers and the general arable farmers. The dairy farmers are selected as
the specialised dairy farms and for the horticulture the specialised glasshouse horticulture
is selected.

Since we want to compare farms that are eligible for take-over we chose for the first
two criteria. Financial-economic criteria are to a degree influenced by for example the
management capacity and the amount of debts. The size of the farm and the age of the old-
est owner give an indication about the future viability of the farm and the probability that
the farm will be taken over. So first of all the farms of which the oldest owner is older than
the medial age of that sector have been selected. However, to exclude the extremes, the
oldest 5% of the total population is left out. Table 4.2 shows the selection criteria age, ex-
pressed in year of birth. The median shows the upper limit of the year of age and the 5th
percentile shows the minimum year of birth of the oldest manager to meet the age criterion.
As we already mentioned, the sample farms for The Netherlands are based on the age of
the oldest manager and the fact whether an eligible successor is present.

Table 4.2 Threshold values for the selection criterion year of birth

<table>
<thead>
<tr>
<th>Year of birth</th>
<th>Lower threshold (&lt; median)</th>
<th>Upper threshold (&lt; 5th percentile)</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>1952</td>
<td>1936</td>
</tr>
<tr>
<td>UK</td>
<td>1945</td>
<td>1928</td>
</tr>
<tr>
<td>Germany</td>
<td>1950</td>
<td>1934</td>
</tr>
<tr>
<td>Denmark</td>
<td>1950</td>
<td>1933</td>
</tr>
<tr>
<td>Spain</td>
<td>1960</td>
<td>1939</td>
</tr>
</tbody>
</table>

The second criterion, the size of the farm, will be expressed in ESU. We will use the
ESU for the size of the farm, since this is a standardised figure. First of all we will select
the farms that meet the age criterion. Of these farms we will select the farms that are larger
than the median size, but are smaller than the 95th percentile (to exclude the extremes). Ta-
ble 4.3 shows the median size and the 95th percentile of the selected (on basis of the age of
the oldest farmer) farms.

Table 4.4 shows the characteristics and the number of farms that were selected based
on the age and size criteria. The average year of birth ranges from 1938 in the UK till 1952
in Spain. The average size diverges more, from 28 ESU in Spain till 204 ESU in the UK.
The number of farms in the sample is sufficient for all sectors. The number of farms in the
sample ranges from 79 in Spain to 601 in France. The number of farms represented is also the highest in France.

Table 4.3  Threshold values for the selection criterion ESU

<table>
<thead>
<tr>
<th></th>
<th>Lower threshold (= median)</th>
<th>Upper threshold (=95th percentile)</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>66</td>
<td>206</td>
</tr>
<tr>
<td>UK</td>
<td>85</td>
<td>584</td>
</tr>
<tr>
<td>Germany</td>
<td>35</td>
<td>121</td>
</tr>
<tr>
<td>Denmark</td>
<td>86</td>
<td>216</td>
</tr>
<tr>
<td>Spain</td>
<td>16</td>
<td>49</td>
</tr>
</tbody>
</table>

Table 4.4  Selected farms and their characteristics

<table>
<thead>
<tr>
<th>Arable</th>
<th>Dairy</th>
<th>Glasshouse</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>France</td>
<td>UK</td>
</tr>
<tr>
<td></td>
<td>Germany</td>
<td>Denmark</td>
</tr>
<tr>
<td></td>
<td>Spain</td>
<td></td>
</tr>
<tr>
<td>Average year of birth</td>
<td>1946</td>
<td>1938</td>
</tr>
<tr>
<td>Average Size (ESU)</td>
<td>113</td>
<td>204</td>
</tr>
<tr>
<td>Number of farms in the sample</td>
<td>601</td>
<td>239</td>
</tr>
<tr>
<td>Number of farms represented</td>
<td>20,566</td>
<td>7,262</td>
</tr>
</tbody>
</table>

Source: FADN-CCE-DG VI/A-3; adaptation LEI.

4.2 Dairy farming

4.2.1 Dairy farm in The Netherlands

For the Dutch sample farm for the dairy sector\(^1\), we selected the dairy farms from the Dutch FADN, who indicated that an eligible successor is present and that the main owner is over 50 years of age. The sample farm is based on averages of this group of farms. The average size of these farms is 116 ESU. The business economic data, such as the balance sheet, profit and loss account are based on these farms. At the moment of take-over, the farmer owns 26 hectares of land and 10 hectares of rented land. Ten years ago, the antecedent and the successor started a partnership (‘maatschap’). During this period, the income was distributed over the two persons. However, nothing is known in the Dutch FADN about this distribution. The same applies to the fiscal balance sheet, the take-over price, the financing of the take-over, etc. For these last aspects, assumptions had to be made, which are checked in practice.

\(^1\) This sample farm is based on Van der Veen et al. (2001).
During the period of the partnership, the father and son yearly earned an income of about 51,000 Euro (table 4.5). About one fifth of the income is generated outside the farm. The distribution of the income over the partners is fictitious. During the period of the partnership, the successor can make use of the self-employed persons’ allowance (‘Zelfstandigenaftrek’) and the supplementary starters' allowance, which only applies for the first three years. The self-employed person's allowance depends on the profit of the farm and ranges from about 3,000 Euro to about 6,000 Euro and diminishes if the profit is higher. If we assume that the profit equals the agricultural income, then the self-employed persons' allowance amounts 4,675 Euro per entrepreneur. The supplementary starter’s allowance is about 1,800 Euro. These two measures diminish the amount of taxes paid during this period. It is favourable to have an official partnership, since in that case the number of entrepreneurs increases and consequently the rights to the allowances.

<table>
<thead>
<tr>
<th>Table 4.5 Income creation and appropriation on the Dutch dairy sample farm during the period of the partnership (Euro)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
</tr>
<tr>
<td>--------------------------------</td>
</tr>
<tr>
<td>Agricultural income</td>
</tr>
<tr>
<td>Non-agricultural income</td>
</tr>
<tr>
<td>Including:</td>
</tr>
<tr>
<td>- Property</td>
</tr>
<tr>
<td>- Labour</td>
</tr>
<tr>
<td>- Benefits</td>
</tr>
<tr>
<td>Total income</td>
</tr>
<tr>
<td>Taxes</td>
</tr>
<tr>
<td>Private spending</td>
</tr>
<tr>
<td>Savings</td>
</tr>
</tbody>
</table>

Source: Dutch FADN.

During the period of the partnership, the farm invested yearly an amount of 48,000 Euro. The emphasis was on expansion and the farm grew from 77 to 116 ESU. On average, an amount of 17,000 Euro was invested in production rights. During the period that the starter's allowance is applicable, the investments made by the successor can be depreciated arbitrarily. These investments are maximised at 261,000 Euro. Not all the investments made are qualified for this arbitrary depreciation. Investments in production rights, livestock and land are excluded.

The investments made during the period of the partnership were on average 48,000 Euro per year, however since land, livestock and production rights are excluded from the arbitrarily depreciation, the qualified investments were on average 20,000 Euro. If we assume that during the first three years of the partnership the investments were on average somewhat above this amount (to benefit more from the facility) and that the successor financed half of the amount, the total investments qualified for this facility are assumed to be about 50,000 Euro. If the marginal tax rate is the same during the period of depreciation, the facility only yields liquidity benefit, since the tax payments are equally lower in the
first years than they are higher in the last years. However, if can be benefited from a lower marginal tax rate, the advantage of this facility also additionally yield a lower overall tax payment. This additional benefit can range from 0% (no difference in tax payment) to 52%, in case of the highest marginal tax rate without the arbitrary depreciation and no tax payment with the facility. However, the last case is very unlikely, since the benefit has to be calculated during the whole depreciation period. Since the income in the dairy sector is quite stable and the averaging facility exists in The Netherlands, the tax benefit from this facility for this farm will be limited.

Table 4.6 shows the balance sheet of the Dutch dairy sample farm. The farm has a business economic value of around 1,4 million of Euro. However, only the bought production rights are valued against the book value. In reality, the production rights show a value of more than 700,000 Euro. However, it is allowed to transfer the production rights against book value (transfer facility). The take-over price of land is allowed to be only the leasehold of the agricultural land, in this case 40%. If the take-over price is lower than this value, the successor has to pay inheritance tax. This 60% reduction implies a reduction of the take-over price of 400,000 Euro!

If the transfer of the farm is between a family, no property transfer tax has to be paid, which would otherwise be 6% on the land and buildings, in this case more than 25,000 Euro.

Table 4.6  Balance sheet of the Dutch dairy sample farm (in thousands of Euro).

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total assets</td>
<td>1,354</td>
<td>771</td>
<td>775</td>
</tr>
<tr>
<td>Fixed assets</td>
<td>1,221</td>
<td>648</td>
<td>682</td>
</tr>
<tr>
<td>Including:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Production rights</td>
<td>136</td>
<td>79</td>
<td>79</td>
</tr>
<tr>
<td>- Land</td>
<td>662</td>
<td>250</td>
<td>265</td>
</tr>
<tr>
<td>- Buildings</td>
<td>177</td>
<td>142</td>
<td>159</td>
</tr>
<tr>
<td>- Tools and installations</td>
<td>74</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>- Livestock</td>
<td>66</td>
<td>56</td>
<td>56</td>
</tr>
<tr>
<td>- Private residence</td>
<td>106</td>
<td>62</td>
<td>62</td>
</tr>
<tr>
<td>Other material fixed assets</td>
<td>10</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>Financial fixed assets</td>
<td>18</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>Working capital</td>
<td>105</td>
<td>95</td>
<td>68</td>
</tr>
<tr>
<td>Liabilities</td>
<td>1,354</td>
<td>771</td>
<td></td>
</tr>
<tr>
<td>Including:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Net worth</td>
<td>1,034</td>
<td>437</td>
<td></td>
</tr>
<tr>
<td>- Long term borrowed capital</td>
<td>312</td>
<td>312</td>
<td></td>
</tr>
<tr>
<td>Including family</td>
<td>15</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>- Short term borrowed capital</td>
<td>8</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Solvency</td>
<td>76</td>
<td>57</td>
<td></td>
</tr>
</tbody>
</table>

Source: Business economics data: Dutch FADN, other data: assumptions.

1 Since the actual rules for the calculation of the going concern value are still uncertain, we use the old valuation rules instead.
We assume that all the reserve assets (the book value minus the fiscal value), which were built up during the partnership fall to the antecedent. The cessation profit is in this case only 32,000 Euro (land and buildings). The discontinuance allowance ('Stakingsvrijstelling') is 3,600 Euro of that the antecedent has to pay taxes over the cessation profit. The tax rate depends on the height of the other income and will range from 0 to 52%. This results in a tax payment on the succession profit ranging from 0 to 15,000 Euro.

The net worth of the successor has grown during the partnership period to an amount of 72,000 Euro, which partly (27,000 Euro) has been invested in the farm. The remaining amount has been kept outside the partnership. In addition to this amount, the successor and his partner have a bank account of about 23,000 Euro, which is left in the farm. The total sum of financial means of the successor including gifts, savings, investments and the bank account are 104,000 Euro.

Table 4.7 shows the ultimate financing plan. The antecedent is in this case willing to help to finance the farm with family capital. The antecedent can make use of the venture capital facility ('Durfkapitaal'), which offers financial benefits for both the successor and the antecedent. Since the provider of this capital does not have to pay tax in box 3 over the daring capital, a lower interest rate will be charged. However, the fiscal benefit for the supplier of the capital is limited to 47,000 Euro per financier (94,000 Euro per married couple). The interest rate paid by the borrower is at most 0.6% lower than the usual rate. The venture capital facility also applies to capital borrowed from the bank. In this case the advantage of 0.6% interest rate reduction applies to 182,000 (extra bank loan) and 94,000 Euro (family loan), which implies a benefit of 1,700 Euro in the first year, which gradually reduces due to redemption on the loan.

If the available securities are not sufficient to borrow this extra 182,000 Euro above the already borrowed amount of 320,000 Euro the successor might make use of the Foundation for Security ('Borgstellingsfonds'). However, in the case of the dairy sector, the value of the land is often sufficient for the security of loans. Since the antecedent takes over the land for only 40% of the economic value, land provides a large amount of security.

<table>
<thead>
<tr>
<th>Table 4.7</th>
<th>Financing of the take-over of the Dutch dairy sample farm in thousands of euro</th>
</tr>
</thead>
<tbody>
<tr>
<td>Take over price</td>
<td>776</td>
</tr>
<tr>
<td>Extra investments in first year</td>
<td>23</td>
</tr>
<tr>
<td>Necessary capital</td>
<td>799</td>
</tr>
<tr>
<td>Private means</td>
<td>104</td>
</tr>
<tr>
<td>Existing bank loan</td>
<td>320</td>
</tr>
<tr>
<td>Family loan</td>
<td>192</td>
</tr>
<tr>
<td>Including daring capital</td>
<td>94</td>
</tr>
<tr>
<td>Necessary extra bank loan</td>
<td>182</td>
</tr>
</tbody>
</table>
4.2.2 Dairy farm in Denmark

The Danish sample farm is a dairy farm. From the FADN database, dairy farms are selected based on 2 criteria. First of all, the farms of which the first owner is born between 1933 and 1950 are selected. From these farms, the ones that were larger than 86 ESU, but smaller than 216 were selected. The sample farm consists of 51 hectares owned land and 17 hectares leased land. The size is 129 ESU. Table 4.8 shows the income creation and appropriation on the Danish dairy sample farm. The figures are averages for the years 1996 and 1997 ¹.

In the period before the take-over, the young farmer can make use of the establishment account. He can save part of their wage in a special bank account. The saved amount leads to a reduction of bottom tax (40%) paid. A maximum of 25% of the wages can be saved. Only wage earners below 40 years of age can make use of this facility. In case of an average annual income of 25,000 Euro, the benefit is 2,500 Euro per year.

Table 4.8 Income creation and appropriation on the Danish dairy sample farm average of 1996 and 1997 in Euro

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount (Euro)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues</td>
<td>186,000</td>
</tr>
<tr>
<td>Subsidies on products</td>
<td>17,000</td>
</tr>
<tr>
<td>VAT net receipt</td>
<td>0</td>
</tr>
<tr>
<td>Direct costs</td>
<td>72,000</td>
</tr>
<tr>
<td>Overhead costs</td>
<td>36,000</td>
</tr>
<tr>
<td>Taxes (excluding income tax)</td>
<td>2,000</td>
</tr>
<tr>
<td>Gross agricultural income</td>
<td>93,000</td>
</tr>
<tr>
<td>Depreciation</td>
<td>20,000</td>
</tr>
<tr>
<td>Net added value</td>
<td>73,000</td>
</tr>
<tr>
<td>Subsidies on investment</td>
<td>0</td>
</tr>
<tr>
<td>Factor costs</td>
<td>51,000</td>
</tr>
<tr>
<td>Family income</td>
<td>23,000</td>
</tr>
<tr>
<td>Non-agricultural income)</td>
<td>25,000</td>
</tr>
<tr>
<td>Income taxes a)</td>
<td>14,000</td>
</tr>
<tr>
<td>Private spending a)</td>
<td>30,000</td>
</tr>
<tr>
<td>Savings</td>
<td>4,000</td>
</tr>
</tbody>
</table>

a) Assessment based on data of the Danish Institute of Agricultural and Fisheries Economics.
Source: FADN-CCE-DG VI/A-3; adaptation LEI.

After the take over, the establishment account leads to higher tax payments, since the depreciation base will be smaller. The facility primarily results in a liquidity advantage.

Table 4.9 shows the balance sheet of the Danish sample farm. Since the farm transfer is between family members, the take-over price is allowed to be plus or minus 15% of the valuation price. In that case no gift tax has to be paid. If we assume that the book value

¹ Since the 1997 data are the latest available in the FADN database, we will show the data of that year and the preceding one. However, we will show the facilities related to take-over as actual as possible. We are aware that this might lead to some inconsistencies. However for the simplicity and the aim of the sample farms (primarily illustrative) we will not make adjustments to the data.
equals the commercial value of the farm, the take-over price will be 750,000 Euro. The young farmer is privileged in buying milk quota, which he can partially get for free. Special provisions allow the depreciation over 5 years of expenses for establishing or expanding a business. Since many young farmers take over an existing farm, these costs are not very high. This implies that the benefit of this facility is limited.

In Denmark, an installation grant in the form of a state loan exists. For a period of 5 years, the young farmer receives a subsidy equivalent to the repayment of the loan and a contribution for management costs. The maximum loan is 141,000 Euro and 15% of the commercial value of the holding. Since the commercial value of the holding is 883,000 Euro the amount of 132,000 Euro can be borrowed. The duration of the loan is 20 years. During the first year, the government pays the interest charges on the minimum of either 75% of the loan or 67,000 Euro. In the following three years, the government reduces its assistance gradually. The benefit of the loan depends on the height of the interest rate. In case of an interest rate of 7% the gross benefit is in this case about 8,000 Euro in the first year, which will be lower in the following years due to redemption and a reducing assistance of the government. In total, the support is 19,000 Euro in case of an interest rate of 7%.

For 70% of the market value of the farm, the successor can borrow money from a financing association, e.g. 618,000 Euro. The interest rate is about 2% less than the market rate. The benefit in the first year is consequently about 12,400 Euro in the first year, which will gradually reduce due to redemption.

Table 4.9  Balance sheet of the Danish dairy sample farm (in thousands of Euro).

<table>
<thead>
<tr>
<th></th>
<th>Business economics 1997</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total assets</strong></td>
<td>883,000</td>
</tr>
<tr>
<td>Fixed assets</td>
<td>779,000</td>
</tr>
<tr>
<td>Including:</td>
<td></td>
</tr>
<tr>
<td>- Production rights a)</td>
<td>148,000</td>
</tr>
<tr>
<td>- Land en buildings</td>
<td>437,000</td>
</tr>
<tr>
<td>- Tools and installations</td>
<td>81,000</td>
</tr>
<tr>
<td>- Livestock</td>
<td>51,000</td>
</tr>
<tr>
<td>- Private residence b)</td>
<td>62,000</td>
</tr>
<tr>
<td>Working capital</td>
<td>104,000</td>
</tr>
<tr>
<td><strong>Liabilities</strong></td>
<td>883,000</td>
</tr>
<tr>
<td>Including:</td>
<td></td>
</tr>
<tr>
<td>- Net worth</td>
<td>498,000</td>
</tr>
<tr>
<td>- Long term borrowed capital</td>
<td>283,000</td>
</tr>
<tr>
<td>- Short term borrowed capital</td>
<td>102,000</td>
</tr>
<tr>
<td><strong>Solvency (%)</strong></td>
<td>56</td>
</tr>
</tbody>
</table>

a) 400,000 kg of milk quota valued at 37 Eurocent per kg.; b) Assessment based on data of the Danish Institute of Agricultural and Fisheries Economics.

Source: FADN-CCE-DG VI/A-3; adaptation LEI.
4.2.3 Dairy farm in Germany

The German sample farm is a dairy farm. From the FADN database, dairy farms are selected based on 2 criteria. First of all, the farms of which the first owner is born between 1934 and 1950 are selected. From these farms, the ones that were larger than 35 ESU, but smaller than 121 were selected. The sample farm consists of 22 hectares owned land and 22 hectares leased land. The size is 63 ESU.

About ten years ago, the successor started working at the farm. However during this period, he only received an amount for the performed labour. Table 4.10 shows the income creation and appropriation on the German dairy sample farm. The figures are averages for the years 1996 and 1997.

<table>
<thead>
<tr>
<th>Table 4.10</th>
<th>Income creation and appropriation on the German dairy sample farm average of 1996 and 1997 in Euro</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues</td>
<td>98,000</td>
</tr>
<tr>
<td>Subsidies on products</td>
<td>8,000</td>
</tr>
<tr>
<td>VAT net receipt</td>
<td>3,000</td>
</tr>
<tr>
<td>Direct costs</td>
<td>32,000</td>
</tr>
<tr>
<td>Overhead costs</td>
<td>24,000</td>
</tr>
<tr>
<td>Taxes (excluding income tax)</td>
<td>1,000</td>
</tr>
<tr>
<td>Gross agricultural income</td>
<td>52,000</td>
</tr>
<tr>
<td>Depreciation</td>
<td>17,000</td>
</tr>
<tr>
<td>Net added value</td>
<td>36,000</td>
</tr>
<tr>
<td>Subsidies on investment</td>
<td>-1,000</td>
</tr>
<tr>
<td>Factor costs</td>
<td>13,000</td>
</tr>
<tr>
<td>Family income</td>
<td>22,000</td>
</tr>
<tr>
<td>Non-agricultural income a)</td>
<td>5,000</td>
</tr>
<tr>
<td>Income taxes a)</td>
<td>3,000</td>
</tr>
<tr>
<td>Private spending a)</td>
<td>17,000</td>
</tr>
<tr>
<td>Savings</td>
<td>7,000</td>
</tr>
</tbody>
</table>

a) Assessment based on Agricultural Report 1999 (German Ministry of Agriculture, 1999).
Source: FADN-CCE-DG VI/A-3; adaptation LEI.

Table 4.11 shows the balance sheet for the dairy farm. The total book value of the farm is 709,000 Euro. The production rights are not valued, since most of these rights are granted for free.

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1 Since the 1997 data are the latest available in the FADN database, we will show the data of that year and the preceding one. However, we will show the facilities related to take-over as actual as possible. We are aware that this might lead to some inconsistencies. However for the simplicity and the aim of the sample farms (primarily illustrative) we will not make adjustments to the data.
Table 4.11  Balance sheet of the German dairy sample farm (in thousands of Euro).

<table>
<thead>
<tr>
<th></th>
<th>Business economic 1997</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total assets</td>
<td>709,000</td>
</tr>
<tr>
<td>Fixed assets</td>
<td>642,000</td>
</tr>
<tr>
<td>Including:</td>
<td></td>
</tr>
<tr>
<td>- Production rights</td>
<td></td>
</tr>
<tr>
<td>- Land en buildings</td>
<td>470,000</td>
</tr>
<tr>
<td>- Tools and installations</td>
<td>51,000</td>
</tr>
<tr>
<td>- Livestock</td>
<td>46,000</td>
</tr>
<tr>
<td>- Private residence a)</td>
<td>75,000</td>
</tr>
<tr>
<td>Working capital</td>
<td>67,000</td>
</tr>
<tr>
<td>Liabilities</td>
<td>709,000</td>
</tr>
<tr>
<td>Including:</td>
<td></td>
</tr>
<tr>
<td>- Net worth</td>
<td>626,000</td>
</tr>
<tr>
<td>- Long term borrowed capital</td>
<td>56,000</td>
</tr>
<tr>
<td>- Short term borrowed capital</td>
<td>27,000</td>
</tr>
<tr>
<td>Solvency (%)</td>
<td>88</td>
</tr>
</tbody>
</table>

a) Assessment.
Source: FADN-CCE-DG VI/A-3; adaptation LEI.

If you want to determine the cost of the take over in Germany, you should differentiate between the following costs:
1. taxes;
2. compensations (for the other heirs);
3. other costs (charges for lawyers or something like that). This study does not focus on these costs.

1. Taxes
In Germany very high tax allowance concerning the inheritance or gift tax exist, which implies that the inheritance or gift tax can be ignored.

2. Compensations (for the other heirs)
The compensations for the other heirs and the Altenteil for the antecedent are the important costs. The following calculations deal with this item.

   The following calculations concern the compensation for the other heirs. The costs of taking-over differ across Germany. We will show the costs in different scenarios:

   I Hofübergabe
   If this law applies, the take-over price for the farm is not based on fixing a price for the individual assets. The take-over value of the land, buildings, tools, installations, livestock and other fixed assets is determined by using the Einheitswert. For this sample farm the

---

1 The average milk production per farm in Germany is about 200,000 kilos. Since the market value of milk quota is about 57 Eurocent per kg milk, the market value of the milk quotas is 114,000 Euro.
total area of the farm is 44 hectares, of which is 22 hectares leased land. The Einheitswert for very good soil quality is 1,900 Euro (Fasterding et al. 2001). For a dairy farm, we can assume that the soil quality is much lower. In this case we assume an Einheitswert of 1,000 Euro. The value of the farm is 1.5 times the Einheitswert of 1,000. Part of the costs for the successor is based on this amount, since it is used to determine the compensation for the other heirs.

The Einheitswert only applies to owned land. The compensation for the other heir (the successor only has one brother) can be calculated as follows:

<table>
<thead>
<tr>
<th>Agricultural value, including dwelling (22 * 1,000* 1.5)</th>
<th>33,000 Euro</th>
</tr>
</thead>
<tbody>
<tr>
<td>= Fiscal value of total farm</td>
<td>33,000 Euro</td>
</tr>
<tr>
<td>-Borrowed capital</td>
<td>83,000 Euro</td>
</tr>
<tr>
<td>-Altenteil</td>
<td>44,000 Euro</td>
</tr>
<tr>
<td>= Value of the estate</td>
<td>11,000 Euro</td>
</tr>
<tr>
<td>Compensation for the other heir (brother)</td>
<td>5,500 Euro</td>
</tr>
</tbody>
</table>

The successor has to support his parents until they die (Altenteil). According to Doll et al. (2001) the market value of this obligation is about 2,000 Euro per ha owned land. In this case 44,000 Euro. The total amount of the compensation is 49,500 Euro. In this case, the successor pays for the complete farm an amount of on average 2,200 Euro per hectare owned land. However, he also has to refund the borrowed capital, in this case 83,000 Euro. Consequently, the total take-over price for the successor is 132,500 Euro. An indication of the market value of the farm (including production rights) is 709,000 Euro (total assets) plus 114,000 Euro (milk quota) sums more than 800,000 Euro. This implies that not more than 16% of the actual value is paid by the successor.

II Anerbengesetz

If the farm is taken over in the area of the Anerbengesetz, the farm is valued according to the Ertragswert. Since the sample farm is the average of a number of farms, the Ertragswert will be based on the net revenues of the sample farm, in this case 36,000 Euro, which is 818 Euro per hectare. The Ertragswert per hectare is 18 time the net revenue per hectare, in this case 14,700 Euro. The Ertragswert for the farm is 22 * 14,700 = 323,400 Euro.

| Ertragswert (22 * 14,700 Euro) | 323,400 Euro |
| + Dwelling (fiscal value)      | 20,000 Euro |
| = Fiscal value of total farm   | 343,400 Euro |
| -Borrowed capital              | 83,000 Euro |
| = Value of the estate          | 260,400 Euro |
| Compensation for the other heir (brother) | 130,200 Euro |

The total costs of the successor is:

- Compensation for the other heir: 130,200 Euro
- Altenteil: 44,000 Euro
- Borrowed capital taken over: 83,000 Euro

= Total costs: 257,200 Euro

1 At least one third of the fiscal value of the estate.
The total costs for the successor are more than 100,000 Euro more than in the Hofübergabe area.

III Civil code
The Civil Code is not likely to be applied in the case of farm succession. If no other regulations apply, the farm will be transferred as a Landgut, according to the Civil Code. Above this, the land trade laws provide the possibility that one of the heirs requests the transfer of the complete farm. In both cases, the compensation of the other heirs is based on the potential value (see: II Anerbengesetz).

In all areas, the successor is eligible for the installation grant recorded in the Agrarinvestitionsförderungsprogramm of 12,000 Euro if he successor is able to finance and investment over 51,000 Euro. Above this installation grant, the general investment subsidies are also applicable for the young farmer. This leads to a grant of 10% in case of investments in immovable assets and an interest reduction for the loans for this investment of at the most 5%.

The Agricultural Credit Programme (‘AKP’) provides for additional aid for small- and medium sized holding. They can get a 1% discount for a loan of at most 73,000 Euro per Man Work Unit. Since this dairy farm employs 2 MWU, this discount is maximised at 146,000 Euro. A 1-% discount leads in that case to a yearly benefit of 1,500 Euro in the first year, gradually reducing due to redemption.

4.3 Arable farming

4.3.1 Arable farming in The Netherlands

Of the specialised arable farms in the Dutch FADN, the ones with successor and the first owner older than 50 years are selected. This sample illustrates the take-over of an arable farm and has only an explanatory value. The company owns 37 hectares of land and leases 36 hectares. About 10 years ago, the father and son started a partnership. From that point in time, the farm has grown from 102 to 145 ESU and the surface of cultivated land grew from 53 to 71 hectares.

Table 4.12 shows the income creation and appropriation on the sample farm. During the period of the partnership the arable farm earned an agricultural income of about 44,000 Euro. This income was supplemented with 11,000 Euro of non-agricultural income. Because the antecedent and the successor had an equal contribution to the farm (the antecedent capital and the successor labour) the income was equally spread over the partners.

From the start of the partnership on, the successor is an entrepreneur for the tax department. This implies that he can make use of the self-employed persons’ allowance (‘Zelfstandigenaftrek’), ranging from 3,000 to 6,000 Euro per year, diminishing in case of a higher profit. If we assume that the fiscal profit equals the agricultural income, then the self-employed persons’ allowance amounts to 4,675 Euro per entrepreneur. The first three years after the start of the partnership, the successor can also make use of the supplemen-
tary starters’ allowance of about 1,800 Euro. The net benefit of the facility ranges from 0 Euro (in case no tax is paid) to 3,000 Euro. The successor is able to save 7,000 Euro per year during the period of the partnership. Part of this money will stay in the farm in the form of investments.

The farmers were able to generate 46,000 Euro of private means and with 22,000 Euro of outside means, the total average yearly means available were 68,000 Euro. A large share of these means is spent on investments, mainly land and tools. The investments made by the successor in the first three years of the partnership, the time when the starters’ allowance is applicable, can be depreciated arbitrarily. The investments made in production rights, land and livestock are excluded, so that on average an amount of 25,000 Euro a year is eligible. We assume that to benefit from this facility, relatively more was invested during the first three years, about 100,000 Euro, half of which was financed by the successor. The benefit of this facility is primarily a liquidity gain, since depreciation can take place at an earlier point in time, which raises a tax benefit. If it is possible to write off in a year when the marginal tax rate is higher than the average marginal tax rate over a depreciation period, an absolute tax benefit exists. However, since the averaging facility exists, this effect is rather limited.

Table 4.13 shows the balance sheet of the Dutch arable sample farm. The business economic value of the farm is 1.4 million of Euro. A large share of the value of the assets exists of land. The successor however only pays the leasehold value \textsuperscript{1} of the agricultural land, which for land-bound sector is only 40% of the economic value. In this case, the facility means a reduction of about 500,000 Euro of the take-over price for the successor. Above this benefit, the successor does not have to pay property transfer tax over the buildings and land has to be paid, since the successor and antecedent are family-related. In this case, this exception results in a benefit of 27,000 Euro.

Table 4.12 Income creation and appropriation on the Dutch arable farming sample farm during the period of the partnership

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Antecedent</th>
<th>Successor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural income</td>
<td>44,000</td>
<td>22,000</td>
<td>22,000</td>
</tr>
<tr>
<td>Non-agricultural income</td>
<td>11,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Including:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Property</td>
<td>3,000</td>
<td>2,000</td>
<td>1,000</td>
</tr>
<tr>
<td>- Labour</td>
<td>4,000</td>
<td>1,000</td>
<td>3,000</td>
</tr>
<tr>
<td>- Benefits</td>
<td>4,000</td>
<td></td>
<td>4,000</td>
</tr>
<tr>
<td>Total income</td>
<td>55,000</td>
<td>29,000</td>
<td>26,000</td>
</tr>
<tr>
<td>Taxes</td>
<td>12,000</td>
<td>7,000</td>
<td>5,000</td>
</tr>
<tr>
<td>Private spending</td>
<td>34,000</td>
<td>20,000</td>
<td>14,000</td>
</tr>
<tr>
<td>Savings</td>
<td>9,000</td>
<td>2,000</td>
<td>7,000</td>
</tr>
</tbody>
</table>

Source: Dutch FADN.

\textsuperscript{1} Since the actual rules for the calculation of the going concern value are still uncertain, we use the old valuation rules instead.
For this sample farm, we assume that all the reserve assets (the book value minus the fiscal value), which were built up during the partnership fall to the antecedent. The cessation profit is in this case 31,000 Euro (land and buildings). The discontinuance allowance ('Stakingsvrijstelling') is 3,600 Euro so that the antecedent has to pay taxes over the cessation profit. The tax rate depends on the height of the other income and will range from 0 till 52%. This results in a tax payment by the antecedent on the discontinuation profit from 0 to 14,000 Euro.

During the period of the partnership, the successor was able to save 7,000 Euro a year. Part of this money has been kept in the farm and has been invested in the farm (27,000 Euro). In addition to this amount, the successor and his partner have a bank account of 11,000 Euro, which is kept outside the farm. Including the gifts received, the total amount of financial means is 113,000 Euro.

Table 4.13 Balance sheet of the Dutch arable sample farm (in thousands of euro)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total assets</td>
<td>1,424</td>
<td>793</td>
<td>800</td>
</tr>
<tr>
<td>Fixed assets</td>
<td>1,211</td>
<td>598</td>
<td>630</td>
</tr>
<tr>
<td>Including:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Production rights</td>
<td>15</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>- Land</td>
<td>818</td>
<td>309</td>
<td>327</td>
</tr>
<tr>
<td>- Buildings</td>
<td>133</td>
<td>106</td>
<td>119</td>
</tr>
<tr>
<td>- Tools and installations</td>
<td>138</td>
<td>113</td>
<td>113</td>
</tr>
<tr>
<td>- Livestock</td>
<td>105</td>
<td>61</td>
<td>61</td>
</tr>
<tr>
<td>- Private residence</td>
<td>10</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>Other material fixed assets</td>
<td>10</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>Financial fixed assets</td>
<td>12</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Working capital</td>
<td>191</td>
<td>173</td>
<td>151</td>
</tr>
<tr>
<td>Liabilities</td>
<td>1,424</td>
<td>793</td>
<td></td>
</tr>
<tr>
<td>Including:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Net worth</td>
<td>1,179</td>
<td>549</td>
<td></td>
</tr>
<tr>
<td>- long term borrowed capital</td>
<td>233</td>
<td>233</td>
<td></td>
</tr>
<tr>
<td>- Including family</td>
<td>14</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>- Short term borrowed capital</td>
<td>11</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>Solvency</td>
<td>83</td>
<td>69</td>
<td></td>
</tr>
</tbody>
</table>

Source: Business economic data: Dutch FADN, other data: assumptions.

Table 4.14 shows the ultimate financing plan for the take-over of the arable farm. The antecedent is in this case very willing to help the successor. Besides the take-over price that is significantly lower than the market value of the farm, the antecedent also provides a family loan. For a part of this loan, the antecedent can provide from the venture capital facility ('Durfkapitaal'). This 'venture capital' is limited to 47,000 Euro per financier (or 94,000 Euro per married couple). The interest rate charged for this capital is at most 0.6% lower than the usual rate. Since the advantage also applies to capital borrowed
from the bank, the advantage is about 1,500 Euro in the first year. Due to redemption, this advantage gradually diminishes.

If the available securities are not sufficient to borrow the extra 164,000 Euro above the already borrowed amount of 244,000 Euro the successor might make use of the Foundation for Security ('Borgstellingsfonds'). However, in the case of the land-bounded sectors, the value of the land is often sufficient for the security of loans. Since the antecedent takes over the land for only 40% of the economic value, land provides a large amount of security.

| Table 4.14 Financing of the take-over of the Dutch arable sample farm (in thousands of euro) |
|---------------------------------------------|---------------------------------|
| Take over price                            | 800                            |
| Extra investments in first year            | 23                             |
| Necessary capital                          | 823                            |
| Private means                              | 113                            |
| Existing bank loan                         | 244                            |
| Family loan                                | 302                            |
| Including daring capital                   | 94                             |
| Necessary extra bank loan                  | 164                            |

Source: Van der Veen et al., (2001).

4.3.2 Arable farm in France

The French sample farm is an arable farm. From the FADN database, arable farms are selected based on 2 criteria. First of all, the farms of which the first owner is born between 1936 and 1952 are selected. From these farms, the ones that were larger than 66 ESU, but smaller than 206 were selected. The sample farm consists of 22 hectares owned land and 110 hectares leased land. The size is 114 ESU.

Table 4.15 shows the income creation and appropriation on the French arable sample farm. The figures are averages for the years 1996 and 1997. The gross agricultural income is 102,000 Euro and the savings are 25,000 Euro a year.

Table 4.16 shows the balance sheet of the French sample farm. The take-over price is based on the market value of the assets. If we assume that the book value approaches the market value of the assets, the take-over price of the farm is 327,000 Euro.

For help on the farm take-over, the successor can contact the Installation Welcome Points, where candidates for installation are prepared for the administrative, financial and practical problems they may face.

During the period of time that the successor worked at the farm, he received no loan or share in the profit. This implies that he can make use of the Salaire différé. Since he has worked for more than 10 years at the farm, the own capital he has assembled is about

---

1 Since the 1997 data are the latest available in the FADN database, we will show the data of that year and the preceding one. However, we will show the facilities related to take-over as actual as possible. We are aware that this might lead to some inconsistencies. However for the simplicity and the aim of the sample farms (primarily illustrative) we will not make adjustments to the data.
83,000 Euro. For the remaining amount of 234,000 money has to be borrowed. Part of this capital can be borrowed cheaper in the form of *Prêts de jeune Agriculteurs*: *PJA*. If we assume that the successor and his partner both work on the farm, the loan is maximised at 141,800 Euro. The benefit for the successor depends on the difference between the cheaper interest rate and the ordinary interest rate and will diminish due to redemption of the loan. In case of a 1% benefit, the yearly advantage is about 1,400 Euro.

The young farmer is also eligible for an *installation grant*. The farmer works together with his wife. Depending on the area, the grant ranges from 8,000 to 52,400 Euro in the mountain area.

<table>
<thead>
<tr>
<th>Table 4.15 Income creation and appropriation on the French arable sample farm average of 1996 and 1997 in Euro</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues 144,000</td>
</tr>
<tr>
<td>Subsidies on products 48,000</td>
</tr>
<tr>
<td>VAT net receipt 0</td>
</tr>
<tr>
<td>Direct costs 53,000</td>
</tr>
<tr>
<td>Overhead costs 34,000</td>
</tr>
<tr>
<td>Taxes (excluding income tax) 3,000</td>
</tr>
<tr>
<td>Gross agricultural income 102,000</td>
</tr>
<tr>
<td>Depreciation 27,000</td>
</tr>
<tr>
<td>Net added value 75,000</td>
</tr>
<tr>
<td>Subsidies on investment 0</td>
</tr>
<tr>
<td>Factor costs 26,000</td>
</tr>
<tr>
<td>Family income 49,000</td>
</tr>
<tr>
<td>Non-agricultural income a) 1</td>
</tr>
<tr>
<td>Income taxes a) 15,000</td>
</tr>
<tr>
<td>Private spending a) 25,000</td>
</tr>
<tr>
<td>Savings 25,000</td>
</tr>
</tbody>
</table>

* Source: FADN-CCE-DG VI/A-3; adaptation LEI.

The successor is allowed to reduce the taxable income by 50% during the first 5 years after the take-over. Due to the rising costs (especially the interest payments) after the take-over, the agricultural income during this period will in general be smaller than during the years before the take-over. Above this, the non-agricultural income will diminish since less time will be left to earn non-agricultural income. However, the successor might be able to improve the productivity since young farmers are usually better educated (Rattin, 1999b). If we assume that the total family income (agricultural and non-agricultural) decreases tot 50,000 Euro a year (now 65,000 Euro) a decrease of the income to this level can lead to a tax deduction of about 8,000 Euro. During 5 years (if the income stays about the same during this period) the benefit mounts to 40,000 Euro.

1 Assessment based on Delame and Lavigne (2000). This report states that non-agricultural income is about a quarter of the total income.

2 We assume that the income is divided over the successor and his partner. The income per person is reduced from 25,000 to 12,500 Euro. Leading to a tax reduction of about 4,000 Euro per person.
Additionally the farmers get a *discount on the payments for social securities* during a period of five years. The discount is reduced gradually and ranges from a reduction of 65% in the first year (maximum 2,278 Euro) to 15% (maximum 525 Euro) in the fifth year.

**Table 4.16 Balance sheet of the French arable sample farm (in thousands of Euro).**

<table>
<thead>
<tr>
<th></th>
<th>Business economic 1997</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total assets</strong></td>
<td>327,000</td>
</tr>
<tr>
<td>Fixed assets</td>
<td>196,000</td>
</tr>
<tr>
<td>Including:</td>
<td></td>
</tr>
<tr>
<td>- Production rights</td>
<td></td>
</tr>
<tr>
<td>- land, en buildings</td>
<td>100,000</td>
</tr>
<tr>
<td>- Tools and installations</td>
<td>90,000</td>
</tr>
<tr>
<td>- Livestock</td>
<td>7,000</td>
</tr>
<tr>
<td>- Private residence a</td>
<td>60,000</td>
</tr>
<tr>
<td>Working capital</td>
<td>131,000</td>
</tr>
<tr>
<td><strong>Liabilities</strong></td>
<td>32,000</td>
</tr>
<tr>
<td>Including:</td>
<td></td>
</tr>
<tr>
<td>- Net worth</td>
<td>202,000</td>
</tr>
<tr>
<td>- Long term borrowed capital</td>
<td>76,000</td>
</tr>
<tr>
<td>- Short term borrowed capital</td>
<td>49,000</td>
</tr>
<tr>
<td><strong>Solvency(%)</strong></td>
<td>62</td>
</tr>
</tbody>
</table>

a) Assessment.
Source: FADN-CCE-DG VI/A-3; adaptation LEI.

4.3.3 Arable farm in the UK

The English sample farm is an arable farm. From the FADN database, arable farms are selected based on 2 criteria. First of all, the farms of which the first owner is born between 1928 and 1945 are selected. From these farms, the ones that were larger than 85 ESU, but smaller than 584 were selected. The sample farm consists of 130 hectares of owned land and 74 hectares of leased land. The size is 205 ESU.

The family income generated from this farm is 54,000 Euro (Table 4.17). After the income taxes and private spendings, an amount of 28,000 Euro can be saved.

Table 4.18 shows the balance sheet for the sample farm. We can assume that the farm is transferred to the successor while the parents are still alive. The successor and his father agree to apply the *hold-over relief*. The successor does not pay anything for the takeover and he will be regarded as having acquired the farm at market values less the capital gain held over, i.e. the original cost of the assets to the donor.
### Table 4.17 Income creation and appropriation on the British arable sample farm average of 1996 and 1997 in Euro

<table>
<thead>
<tr>
<th>Item</th>
<th>1996</th>
<th>1997</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues</td>
<td>224,000</td>
<td>224,000</td>
</tr>
<tr>
<td>Subsidies on products</td>
<td>66,000</td>
<td>66,000</td>
</tr>
<tr>
<td>VAT net receipt</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Direct costs</td>
<td>85,000</td>
<td>85,000</td>
</tr>
<tr>
<td>Overhead costs</td>
<td>59,000</td>
<td>59,000</td>
</tr>
<tr>
<td>Taxes (excluding income tax)</td>
<td>1,000</td>
<td>1,000</td>
</tr>
<tr>
<td>Gross agricultural income</td>
<td>144,000</td>
<td>144,000</td>
</tr>
<tr>
<td>Depreciation</td>
<td>38,000</td>
<td>38,000</td>
</tr>
<tr>
<td>Net added value</td>
<td>106,000</td>
<td>106,000</td>
</tr>
<tr>
<td>Subsidies on investment</td>
<td>1,000</td>
<td>1,000</td>
</tr>
<tr>
<td>Factor costs</td>
<td>53,000</td>
<td>53,000</td>
</tr>
<tr>
<td>Family income</td>
<td>54,000</td>
<td>54,000</td>
</tr>
<tr>
<td>Non-agricultural income a)</td>
<td>8,000</td>
<td>8,000</td>
</tr>
<tr>
<td>Income taxes a)</td>
<td>6,000</td>
<td>6,000</td>
</tr>
<tr>
<td>Private spending a)</td>
<td>28,000</td>
<td>28,000</td>
</tr>
<tr>
<td>Savings a)</td>
<td>28,000</td>
<td>28,000</td>
</tr>
</tbody>
</table>

a) Assessment based on data of MAFF and National Statistics.

Source: FADN-CCE-DG VI/A-3; adaptation LEI.

### Table 4.18 Balance sheet of the British arable sample farm (in thousands of Euro), in case of transfer while parents are still alive

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total assets</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fixed assets</td>
<td>1,224,000</td>
<td>1,158,000</td>
<td>1,734,000</td>
</tr>
<tr>
<td>Including:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Production rights</td>
<td>(included below)</td>
<td>(included below)</td>
<td>(included below)</td>
</tr>
<tr>
<td>- Land on buildings a)</td>
<td>1,028,000</td>
<td>869,000</td>
<td>1,304,000</td>
</tr>
<tr>
<td>- Tools and installations</td>
<td>173,000</td>
<td>173,000</td>
<td>138,000</td>
</tr>
<tr>
<td>- Livestock</td>
<td>16,000</td>
<td>16,000</td>
<td>16,000</td>
</tr>
<tr>
<td>- Private residence b)</td>
<td>(included above)</td>
<td>100,000</td>
<td>80,000</td>
</tr>
<tr>
<td>Financial fixed assets</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working capital</td>
<td>196,000</td>
<td>196,000</td>
<td>196,000</td>
</tr>
<tr>
<td><strong>Liabilities</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Including:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Net worth</td>
<td>1,245,000</td>
<td>1,179,000</td>
<td>1,559,000</td>
</tr>
<tr>
<td>- Long term borrowed capital</td>
<td>65,000</td>
<td>65,000</td>
<td>65,000</td>
</tr>
<tr>
<td>- Short term borrowed capital</td>
<td>110,000</td>
<td>110,000</td>
<td>110,000</td>
</tr>
<tr>
<td><strong>Solvency (%)</strong></td>
<td>88</td>
<td>87</td>
<td>90</td>
</tr>
</tbody>
</table>

a) Value of land and buildings: 130*4000/0.5985 = 869,000 Euro (Source Scottish Executive Economic Report on Scottish Agriculture 1998); b) Assessment.

Source: FADN-CCE-DG VI/A-3; adaptation LEI.
The fiscal book values will be equal to the higher of the 1982 value or the original cost of the farm about which we do not have any information. The market value of land in 1982 is about 150% (EUROSTAT 1999) of the market value of land in 1997. If we assume that the other tangible assets in 1982 have a value of about 80% of the value in 1997, the fiscal value after take over is 1,734,000 Euro (see table 4.18 for the fiscal value of 1997), which is the value of 1982. This is caused by the sharp decrease in the prices of land in the period 1982-1997. This means that there is no capital gain, as the market value is lower than the fiscal value. This fiscal value is the base value for the Agricultural Buildings Allowances.

In case the farm is transferred on death, the market value has been applied (table 4.18) and inheritance tax has to be paid. All the assets are subject to Inheritance Tax (IT), however Agricultural Property Relief combined with Business Property Relief ensures that for most family run farms there is no IT to pay. The market value will become the new base value for the Agricultural Buildings Allowances.

The unused Agricultural Buildings Allowances can be passed on to the new owner, but we presume they will be nil, as they are limited.

The pre-trading expenditures paid by the successor are deductible on the commencement of trading. Losses made in the first three years, can be set back against the farmer's total income for the three preceding tax years.

In the UK, no other facilities for young farmers are available. However, the absence of gift tax enables the farmers to transfer the farm for free to the successor without paying taxes. If the farm is transferred on death of the antecedent, the allowances for the inheritance tax in many cases prevent the successor to pay inheritance tax. This creates a very beneficial situation for the successor.

4.4 Horticulture

4.4.1 Horticulture under glass in The Netherlands

The sample farm from the Dutch horticulture under glass is based on the Dutch FADN. The sample farm is based on the specialised glasshouses, where an eligible successor is present and the first owner is over 50 years of age. The sample farm is only illustrative for the take-over process of glasshouses in The Netherlands. The farm owns 4 hectares of land.

About 10 years ago, the successor started a partnership with his father. During this period the farm has grown from 2 to 4 hectares and from 227 to 405 ESU. During the period of the partnership the glasshouse generated a yearly income of 98,000 Euro (Table 4.19). Since the successor provided a large share of labour, the income is divided equally between the partners. Besides this horticultural income, the partners had a non-agricultural income of 10,000 Euro. Most of this income was generated from property. The total income for the successor was 53,000 Euro a year. The total taxes paid were 26,000 Euro a year. After the deduction of the private spending the successor was able to save 16,000 Euro a year. Part of these savings is invested in the farm.

\[ 1.5 \times 869,000 + 0.8 \times (173,000 + 100,000) + 16,000 \times 196,000. \]
From the start of the partnership onwards the successor can make use of the *self-employed persons' allowance* (‘Zelfstandigenaftrek’). This allowance decreases with the height of the profit and ranges from about 6,000 to 3,000 Euro. Under the assumption that the agricultural income equals the fiscal profit, the self employed persons' allowance for both the antecedent and the successor amounts to 2,984 Euro. Above this amount, the successor can make use of the supplementary starters' allowance for the first three years after the start of the partnership. The allowance involves an amount of 1,800 Euro. The two allowances are favourable in case of an official partnership. Without the partnership, the successor would not be eligible for them, which implies a higher tax payment.

About 65,000 Euro was yearly spent on investments. Part of the investments made during the first three years of the partnership are eligible for arbitrary depreciation. The investments in buildings, greenhouses and tools, which are qualified for *arbitrary depreciation*, are 53,000 Euro year, which are partially financed by the successor. The partners probably might invest more during the first three years to benefit more from this facility. As we already mentioned at the description of the arable and dairy sample farm from The Netherlands, the benefit from this facility primarily lies in a liquidity benefit, since depreciation can take place at an earlier moment in time. A theoretical benefit can be generated if it is possible to depreciate at a moment when a higher marginal tax rate is paid than in the situation without arbitrary depreciation. However, the averaging facility exists, which already provides a way to prevent large fluctuations in tax payments from year to year.

### Table 4.19  
**Income creation and appropriation on the Dutch glasshouse sample farm during the period of the partnership**

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Antecedent</th>
<th>Successor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural income</td>
<td>98,000</td>
<td>49,000</td>
<td>49,000</td>
</tr>
<tr>
<td>Non-agricultural income</td>
<td>10,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Including:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Property</td>
<td>7,000</td>
<td>5,000</td>
<td>2,000</td>
</tr>
<tr>
<td>- Labour</td>
<td>2,000</td>
<td>2,000</td>
<td></td>
</tr>
<tr>
<td>- Benefits</td>
<td>1,000</td>
<td>1,000</td>
<td></td>
</tr>
<tr>
<td>Total income</td>
<td>108,000</td>
<td>55,000</td>
<td>53,000</td>
</tr>
<tr>
<td>Taxes</td>
<td>26,000</td>
<td>14,000</td>
<td>12,000</td>
</tr>
<tr>
<td>Private spending</td>
<td>59,000</td>
<td>34,000</td>
<td>25,000</td>
</tr>
<tr>
<td>Savings</td>
<td>23,000</td>
<td>7,000</td>
<td>16,000</td>
</tr>
</tbody>
</table>

Source: Dutch FADN

Table 4.20 shows the balance sheet of the glasshouse sample farm. The business economic value is 1.7 million of Euro. The fiscal value is less due to the lower fiscal value of land. For take-overs of glasshouses, the land is also allowed to be transferred at *lease-
hold value\textsuperscript{1}, however in this case that value is 75\% of the economic value of the land. In this case, the reduction of 25\% diminishes the take-over price with 288,000 Euro. Above this benefit for the successor, the exemption of the property transfer tax in case of a take-over within family line yields a benefit of 6\% of the take-over price of land, glasshouses en buildings, in this case 33,000 Euro.

The reserve assets on the greenhouses, buildings and land, the discontinuance profit adds up to 199,000 Euro. However, in the contract of the partnership is stated that half of the reserves built up during the partnership fall to the successor with a reservation for the antecedent of 23,000 Euro for the glasshouses and buildings and 23,000 Euro for the land. The reserve assets for the successor are in that case 78,000 Euro and for the antecedent 121,000 Euro. The discontinuance allowance only involves an amount of 3,600 Euro. The actual tax duty on the discontinuance profit depends on the height of the other sources of income. The tax rate on the profit therefore ranges from 0 to 52\%, which is from 0 to 61,000 Euro.

\begin{table}[h]
\centering
\caption{Balance sheet of the Dutch glasshouse sample farm (in thousands of Euro).}
\begin{tabular}{lccc}
\hline
 & Business economic & Fiscal & Take-over price \\
\hline
\textit{Total assets} & 1,741 & 1,217 & 1,404 \\
Fixed assets & 1,224 & 737 & 936 \\
Including: & & & \\
- Land & 478 & 180 & 358 \\
- Greenhouses and buildings & 207 & 166 & 187 \\
- Tools and installations & 272 & 222 & 222 \\
- Plants & 50 & 43 & 43 \\
- Private residence & 217 & 127 & 127 \\
Other material fixed assets & 20 & 20 & 14 \\
Financial fixed assets & 106 & 106 & 106 \\
Working capital & 392 & 354 & 348 \\
\textit{Liabilities} & 1,741 & 1,217 & \\
Including: & & & \\
- Net worth & 1,214 & 690 & \\
- Long term borrowed capital & 445 & 445 & \\
  including family & 51 & 51 & \\
- Short term borrowed capital & 82 & 82 & \\
Solvency & 70 & 57 & \\
\hline
\end{tabular}
\end{table}

Source: Business economic data: Dutch FADN, other data: assumptions.

The successor was able to save 160,000 Euro during the 10-year period of the partnership. A part of this money is invested in the glasshouse. He and his partner also have a

\textsuperscript{1} Since the actual rules for the calculation of the going concern value are still uncertain, we use the old valuation rules instead.
bank account of 23,000 Euro, which is kept outside the farm. Including the reserve assets of 78,000 and gifts of 14,000 Euro, the private means sum up to 275,000 Euro.

Due to the rather large amount of private means and family loan, the additional bank loan is limited to 87,000 Euro (table 4.21). The antecedent is apparently very willing to help the successor, since he provides a family loan of over half a million of Euro. For a part of this loan, the antecedent can provide from the fiscal facility venture capital (‘Durfkapitaal’), which implies that no tax has to be paid on the property up to 47,000 Euro per financier (or 94,000 Euro per married couple). This also provides a profit to the successor of at most 0.6% lower interest rate. This reduction also applies to venture capital provided by banks. The total advantage is about 1,100 Euro in the first year, gradually diminishing due to redemption.

If the securities of the glasshouse are not sufficient to borrow the additional 87,000 Euro, the Foundation for Security (‘Borgstellingsfonds’) might offer a solution. However, in this case the amount of family loan is extremely large. Since these loans are often subordinated, the provision of security will in this case not be a large problem either.

Table 4.21 Financing of the take-over of the Dutch arable sample farm in thousands of euro

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Take over price</td>
<td>1,404</td>
</tr>
<tr>
<td>Extra investments in first year</td>
<td>23</td>
</tr>
<tr>
<td>Necessary capital</td>
<td>1,427</td>
</tr>
<tr>
<td>Private means</td>
<td>275</td>
</tr>
<tr>
<td>Existing bank loan</td>
<td>528</td>
</tr>
<tr>
<td>Family loan</td>
<td>537</td>
</tr>
<tr>
<td>Including daring capital</td>
<td>94</td>
</tr>
<tr>
<td>Necessary extra bank loan</td>
<td>87</td>
</tr>
</tbody>
</table>

Source: Van der Veen et al., (2001).

4.4.2 Horticulture in Spain

The Spanish sample farm is a glasshouse horticulture farm. From the FADN database, glasshouse horticulture farms are selected of which the first owner is born between 1939 and 1960. From these farms, the ones that were larger than 16 ESU, but smaller than 49 were selected. The sample farm consists of 2 hectares owned land. The size is 29 ESU. Table 4.22 shows the income creation of the Spanish sample farm. Before the take-over, the successor is not more than a farm aid and has an own job outside the farm. His income is not included in the table.

Small companies can choose to use a forfait for reckoning of the profit, if the turnover of the agricultural activities is less than 300,506 Euro. It is a single method to obtain the net income, by multiplying the turnovers of each issue by an index established by the Ministry of Finance. If the farmer chooses for this method, he has to do so for at least 3 years. This sample farm has a turnover of 66,000 Euro, therefore the tax is calculated with this system.
According to the INE (Spanish Statistics) a farm family has a part-time job of 50% off farm, which results in an off farm income of 10,000 Euro. However, this income is exclusive of the income of the successor. It results in an income tax which is virtually non and a social security contribution of about 9,000 Euro.

In Spain it is very common that the farm is not transferred until the death of the owner. For the sample farm we assume that this is also the case and that the successor has 2 other brothers. The farm is divided across the heirs, but they are willing to sell their parts to the successor. Due to the high allowances of the inheritance tax, no such taxes have to be paid and the take-over costs for the successor are consequently equal to the compensation paid to the other heirs.

In this case, the compensation is equal to 2/3 of the amount of 250,000 Euro (table 4.23) or 167,000 Euro (if we assume that the book value of land is equal to the market value). Since in this case the successor is much older than in the other countries, the amount of own capital generated before succession can be higher, which reduces the debt ratio.

To finance the take-over, first of all, an installation grant is available. Since this successor has to compensate the other heirs, the grant amounts 6,000 Euro. Besides this installation grant, the successor has saved during his whole working life to finance the take-over. Due to the late moment of farm transfer, the working period can be very long. If we assume that the successor has worked for 25 years and has saved a yearly amount of 3,000 Euro, this amount can be grown to more than 150,000 Euro (including interest) at the table 4.22

<table>
<thead>
<tr>
<th>Income creation and appropriation on the Spanish glasshouse horticulture sample farm average of 1996 and 1997 in Euro</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues</td>
</tr>
<tr>
<td>Subsidies on products</td>
</tr>
<tr>
<td>VAT net receipt</td>
</tr>
<tr>
<td>Direct costs</td>
</tr>
<tr>
<td>Overhead costs</td>
</tr>
<tr>
<td>Taxes (excluding income tax)</td>
</tr>
<tr>
<td>Gross agricultural income</td>
</tr>
<tr>
<td>Depreciation</td>
</tr>
<tr>
<td>Net added value</td>
</tr>
<tr>
<td>Subsidies on investment</td>
</tr>
<tr>
<td>Factor costs</td>
</tr>
<tr>
<td>Family income</td>
</tr>
<tr>
<td>Non-agricultural income a)</td>
</tr>
<tr>
<td>Income taxes b)</td>
</tr>
<tr>
<td>Private spending a)</td>
</tr>
<tr>
<td>Savings a)</td>
</tr>
</tbody>
</table>

a) Assessment, based on figures of INE (Spanish Statistics); b) Calculation, including social security contribution.
Source: FADN-CCE-DG VI/A-3; adaptation LEI.

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moment of farm transfer. After that, only the remaining borrowed capital (long and short) of 25,000 Euro and 49,000 Euro of new capital remains.

In Spain a system of incentives exists to improve the agricultural sector. The system exists among other out of capital subsidies and interest relief. If the successor makes an approved investment, the capital subsidy will be up to 24% of the first 24,000 Euros or 5,760 Euro. The interest relief may be up to 8.5%. The loans may be up to 90% of the difference between the cost of the approved investment and the subsidy. If we assume an investment of 100,000 Euro, the loan would be 68,400 Euro. A benefit of 8.5% would imply a benefit of 5,800 Euro in the first year, which will gradually reduce due to redemption.

During the first years after take-over they have a reduction of 25% of their net income for the calculation of the income tax.

Young farmers also enjoy also an extra reduction on the conveyance tax of 10%, they have an reduction of 85% instead of 75% with the transfer of a holding farm. The conveyance tax is 6% in case of movable assets and 4% in case of immovable assets; in this case in total 13,000 Euro. The reduction of 75% implies a benefit of about 10,000 Euro.

<table>
<thead>
<tr>
<th>Table 4.23</th>
<th>Balance sheet of the Spanish glasshouse horticulture sample farm (in thousands of Euro)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Business economic 1997</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td>250,000</td>
</tr>
<tr>
<td>Fixed assets</td>
<td>155,000</td>
</tr>
<tr>
<td>Including:</td>
<td></td>
</tr>
<tr>
<td>- Land en buildings</td>
<td>150,000</td>
</tr>
<tr>
<td>- Tools and installations</td>
<td>5,000</td>
</tr>
<tr>
<td>- Livestock</td>
<td>0</td>
</tr>
<tr>
<td>- Private residence</td>
<td>P.M.</td>
</tr>
<tr>
<td>Financial fixed assets</td>
<td></td>
</tr>
<tr>
<td>Working capital</td>
<td>95,000</td>
</tr>
<tr>
<td><strong>Liabilities</strong></td>
<td>250,000</td>
</tr>
<tr>
<td>Including:</td>
<td></td>
</tr>
<tr>
<td>- Net worth</td>
<td>225,000</td>
</tr>
<tr>
<td>- Long term borrowed capital</td>
<td>22,000</td>
</tr>
<tr>
<td>- Short term borrowed capital</td>
<td>3,000</td>
</tr>
<tr>
<td><strong>Solvency (%)</strong></td>
<td>90</td>
</tr>
</tbody>
</table>

a) Assessment.

Source: FADN-CCE-DG VI/A-3; adaptation LEI.
5. Comparison of installation costs, agricultural income and facilities

This chapter compares the process of farm take-over in six European countries. First we focus on a comparison of the status of the young farmer during the transition period. After that we compare the installation costs and the agricultural income. These are the two main problems in The Netherlands, which are strongly related, as the high take-over price is only a problem in case the rate of return is not sufficient to cover the costs of capital. The focus has to be on these two issues jointly. The main factors behind the height of the installation costs are the principals of inheritance and succession, the appraisal of the take-over value of the farm and the market value of the farm. The chapter ends with a comparison of the facilities offered to the young farmers in the various countries.

5.1 The status of the young farmer during the transition period

The period before farm take-over (transition period) differs between the countries in Europe. In some countries, the young farmer has an official status while in other the young farmer is just a farm hand.

In The Netherlands and the UK, the economic size of the farm is usually sufficient to offer the successor an official status in the farm. In The Netherlands this is called a *maatschap*, in the UK a *partnership*. During the period of official co-operation the successor is able to accumulate capital. In those countries the education of the son is sufficiently high to give the relationship between father and son an equivalent character. In Denmark an official co-operation between father and son is a possibility and is in fact sometimes used. However it is rare. Usually the son starts working at the father's or another farm as a paid worker. After that, he buys a little farm or a part of the one of his parents. Finally if they retire the successor either buys the rest of the farm or the complete farm in case the successor started a farm of his own. In the three mentioned countries, the professional status of the young farmers at the moment of their entrance in the active labour life perfectly suits with the level of professional training.

The status of farm hand, subservient to the parents is still very dominant in Spain, like in the other Mediterranean countries. However, a distinction has to be made between the very small farms of which the owner performs another job besides the farm and the small and medium sized farms, which take the majority of the working time of the owner. In case of the very small farms, the farm size is that small that the required labour force is small and often the parents work on the farm till the end of their days and the successor does not take over before the parents die. In the other cases, the small size and the weak protection of the older farmers preserve the status of farm hand during the long period of transition in the Mediterranean countries.

In Germany the successor is often only a farm hand for a period often longer than 10 years before he can take over the farm. However, in some cases the successor wants to
have more responsibility and the father and son can form a partnership or the antecedent leases the farm to the successor. In France, the economic size of the exploitations often does not permit an association between father and son. If the size is large enough, an association between father and son is common. In other situations the son starts working on a 'waiting' farm functionally related to the parents' one and situated in the neighbourhood. For the smaller farms, it is often difficult to give the successor an official status. However the young farmers less and less accept the status of farm hand (Blanc and Perrier, 1993a).

The status of the successor depends largely on the economic size of the farm. If the size is sufficient, official co-operation between father and son is possible. In The Netherlands, Denmark and the UK the relation between the father and the potential successor is more equal than in the other countries. This is favourable for the transfer of knowledge (in both directions) and of responsibility.

The Economic and Social Committee (1994) notes that phased transfer of ownership can help to make such transfers a success and, for instance, facilitates establishment in the legal form of a company. Establishment of a company makes it possible to transfer capital over several years and to give the future owner a proper business status.

The Commission of European Communities (1996) also recommended that legal forms of partnerships between parents and child (or other) person should be considered. These partnerships make it possible to involve the intended successor to the family farm in its management and allow the latter to acquire a measure of independence before taking on the management alone. If the farm is large enough, it will provide the young person a sufficient income which can be used to save money and built up own capital and above all a gradual transfer of responsibility for the farm, so that he can become established without pressing financial problems.

5.2 Installation costs

In many countries the market value of the farm is much higher than the transfer value of the farm. Various factors influence the transfer value of the farm. This paragraph describes the main factors: principals of inheritance and the appraisal of the value of the farm.

Principals of inheritance and succession
In all of the six countries, national laws regulate the transfer of property. Farm succession in family circle is ordered by two principals: equality and unity. These principals determine whether all heirs are treated equally and whether the unity of the farm is preserved. These principles lead to three main types of farm transfer (Table 5.1).

In France the principle of equality is firmly entrenched, and is reflected in the fact that non-successors receive equal or near equal monetary compensation for leaving the land in the hand of the successor (Type A). In Denmark, equality is preserved by the fact that the successor pays about the full price for the farm and usually no monetary compensation is paid by the successor. Often the old farmer tries to give as much as possible to the other children in order to keep peace amongst his children. However, he does not have the obligation to do this (expert information). For the successor this type means a relatively high level of indebtedness and consequently lower family income. Sometimes this indebt-
Edness is reduced by leasing land from the other heirs. For de Haan (1993) it is not clear whether this practice emanates from a deeply rooted cultural notion of equality, or reveals a recent change in family values. It may well be, according to de Haan, that practice is grounded in a modern form of individualism, which rejects attachment to family projects and goals and seeks individual status achievement. As such family behaviour reflects new patrimonial strategies, which lack any reference to collective economic or social projects.

| Table 5.1 | Main types of farm transfer (de Haan, 1993), adaptation LEI |
| Succession (transfer of use-rights) | Inheritance or endowment (transfer of property rights or their monetary value) | Equality | Single Succession | Multiple succession | Inequality |
| A. Preservation of the unity of the farm. Property is transferred to one heir: the other heirs receive monetary compensation or the successor pays about the market value. | France, Denmark |
| B. Preservation of the unity of the farm. Property is transferred to one heir, the other heirs get minor or no monetary compensation. | UK, Netherlands, Germany |
| C. Farm is dispersed into several units. Property is divided among heirs. | Spain |
| Table 5.1 | Main types of farm transfer (de Haan, 1993), adaptation LEI |

Economic pressures and financial problems oblige farm families to preserve the unity of the farm and to minimise claims from non-successor co-heirs. For type B, equality of heirs is absent. In the Northern countries, capital intensive farming puts significant pressure on keeping resources together and minimising loss of capital at farm succession and inheritance. Non-successors seem to relinquish high compensatory sums and willingly sacrifice themselves for the sake of farm continuity. De Haan (1993) suggests that the more agriculture becomes modernised and the more farmers conceptualise their land as an economic resource, the more they rely on family commitment. In the UK, the farm is even transferred for free.

Type C of family transfer is mainly found in the southern part of Europe. Here the farm is susceptible to division upon inheritance, resulting in a fragmentation of farms, although an exception should be made for parts of Spain. All heirs receive equal or near equal portions, and if siblings exchange land, the market price serves as the standard. Land is not conceptualised primarily as an asset for a modern commercial enterprise, but rather as a traditional family patrimony. In terms of ‘development’ this type is considered most traditional and it is predicted that with the commercialisation of farming, farm succession will respect the integrity of the farm and the position of the successor (de Haan 1993).

De Haan (1993) assumes that economic constraints determine practice, and that the underlying normative principles are economically determined or irrelevant. Consequently, the assumption is that with agriculture increasingly becoming subject to market forces and international competition the transmission of the farm in Europe will gradually evolve toward only one model characterised by single succession and inequality between heirs.
However, since the value of the farm, especially in The Netherlands and the UK (see figure 5.1) is very high, the brothers and sisters of the successor let go a large amount of capital. The inequality between the children of the antecedent, expressed in the amount of capital transferred raises. The acceptability of the factor inequality will diminish with the higher amount of capital at stake. If the factor inequality is accepted less and consequently the successor has to pay more for the farm, less farms will be taken over.

Figure 5.1  Book value of the average farm 1998 (production rights are not valued) p78
Source: FADN-CCE-DG VI/A-3; adaptation LEI.

**Appraisal of the value of the farm**

Inheritance law includes prescriptions about the appraisal of the value of the farm. If the transfer value is lower than it should be, based on these prescriptions, gift tax has to be paid. In that case, family capital is transferred from the family to the state, which often will be voided.

- The Netherlands: since 1987 it is possible to request for a transfer facility for production rights. In that case the successor only pays the book values for the production rights. Since that year, it is also possible to transfer land for the leasehold value (‘waarde in verpachte staat’). Nowadays for agricultural land a percentage of 40% is acceptable in some regions. For horticultural land this percentage is 60%. However, since 2002 the going concern value serves as a basis for inheritance law.

- Denmark: the successor can take over the vendor's basis of depreciation and tax obligations linked to depreciation or can choose to carry out a standard sale agreement. In transfers to family members, buyer and seller can always transfer real property at valuation price +/- 15% without paying gift tax.

- France: the successor has to compensate the other heirs based on the market value of the assets.
- Germany: the situation in Germany differs for the different Ländern. It can be based on either the Einheitswert, the potential value of comparable farms, the net revenue or the commercial value.
- Spain: if the successor buys from the other heirs their part of the estate, the compensation of the other heirs is based on the book value, except for land, which is valued according to the market value.
- UK: if the farm is transferred while the parents are still alive, it is possible that the successor pays nothing and no taxes have to paid. In case of a transfer on the death of the parents, the market value serves as a basis.

However, the appraisal of the value of the farm does in general not only depend on the prescriptions found in inheritance law, but also on the actual value of the farm. Figure 5.1 shows the value of the total assets of the average farm in the 6 countries in 1998. The production values are not valued in this figure. The Netherlands shows the highest value of total assets in 1998, followed by the UK. However, in this country the farm can be transferred to the successor for free.

**Price of land**
An important factor for the total value of an agricultural holding is land. The costs of land (either bought or leased) differ across the six countries. Figure 5.2 shows the nominal land prices in the 6 countries in 1990 and 1998. Striking is the high land price in The Netherlands of about 25,000 EURO per hectare in 1998, which is much higher than Denmark with 10,000 EURO per hectare in 1998. The rise in price (using deflated figures) in the period 1990-1998 is 18% in The Netherlands. In Denmark this percentage is 29%.

The lease of land is an instrument to reduce the installation costs. No means are needed to finance the acquisition of land, which reduces the payments of interest and redemption. On the other hand, if land is leased, a yearly rent has to be paid. However, the rents are usually much lower than the interest rate and no redemption has to be paid during the period of rent. It should be noted that the price paid for land at farm take-over is for most of the countries lower than the market value. This implies that the financial costs for the acquisition of land are not based on the market value. Still, the leasing of land offers an instrument to facilitate farm take-over. However, the leasing of land by the successor also has some drawbacks. The land can not be used for giving security of a loan, the successor can not benefit from increasing value of the land and the parents loose the control over the land, while the leasehold value of the land is lower than the market value (Vogelzang 1989).

The average size of the farm is the largest in the UK (figure 5.3). In all countries the average size of the agricultural farm has grown during the period 1990-1997. In all countries an important portion of the agricultural land is leased. In France this percentage is the highest (65% in 1997) while it is only 25% in Denmark and 28% in The Netherlands.
Figure 5.2 Nominal land prices in 1990 (Germany 1992) and 1998 in EURO
Source: EUROSTAT.

Figure 5.3 Hectares agricultural land owned and leased
Source: EUROSTAT.
Milk production rights

Due to CAP supported milk prices and relatively high operating margins, large economic rents associated with production rights have been incorporated into quota values. For new entrants and those wishing to expand their production, quota availability is a major problem. Rising quota values imply either higher fixed costs (if quotas are purchased as a permanent asset) or higher variable costs (through short-term lease and rent facilities) for new entrants and for those wishing to expand milk production and therefore a reduction in competitive advantage for these dairy farmers.

In general the price of milk quota does not only depend on the milk price itself (or even more on the margins on milk production) and the level of the additional levy. It also depends on the regulatory framework such as, for example, transfer restrictions or provisions for the depreciation of expenditure on quota. In this respect the economic consequences can be quite different from one Member State to the other (CEJA, 2000).

In The Netherlands, the price of milk quota is the highest (table 5.2) in Europe. This is partly due to the fact that the milk quota can fiscally be depreciated. However, this is also allowed in Germany, where the price is only one third of the price in The Netherlands.

<table>
<thead>
<tr>
<th>Price of milk quota in Euro per litre</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Netherlands</td>
</tr>
<tr>
<td>Denmark</td>
</tr>
<tr>
<td>France</td>
</tr>
<tr>
<td>Germany</td>
</tr>
<tr>
<td>Spain</td>
</tr>
<tr>
<td>UK</td>
</tr>
</tbody>
</table>

Source: LEI.

In The Netherlands, the impact of the high value of the milk production rights on the take-over value is limited by the fact that the successors can take-over the rights for the book value. On the other hand, in case of an expansion the young farmer faces high costs, either by buying or leasing rights. No special facilities for young farmers are available in The Netherlands and also not in Germany and the UK, contrary to for example Denmark, France and Spain. In Denmark young farmers are privileged in buying milk quota. Young farmers without milk production rights can claim 300,000 kg of milk quota and young farmer who already have milk production rights can claim up to 560,000 kg of rights. In both situations one third is for free (of the national reserve) and the rest has to be bought at the Exchange. In France, young farmers are privileged to receive milk production rights

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1 The average Dutch dairy farm had an amount of milk production rights of about 400,000 kg in 1998. The price of milk quota in 1998 was 1.67 Euro (NVM-data), which implies that the market value of milk production rights is 668,000 Euro. The book value of the milk quota was in 1998 207,000 Euro. The possibility to transfer the milk production rights for the book value to the successor represents for the successor on the average dairy farm successor an advantage of 461,000 Euro.
from the national reserve. They get them for free. In Spain, young farmers are entitled to receive quota for free or at a reduced price if they keep the quota for at least five years, develop an improvement plan on the farm and are able to provide the authorities with sustainable accounts.

5.3 Agricultural income

Figure 5.4 shows the average revenue cost ratios for the years 1990-1992 and 1996-1998 in the six countries. The figures are averages for the groups of young farmers (under 30 years of age) and the rest of the farmers. The revenue cost ratio gives an indication of the cost efficiency of the farm. However, we should notice that this figure does not include the calculated costs for the input of own capital and labour. In countries where farmers have on average a low debt ratio, the paid interest is much lower than in countries with a high debt ratio. This is especially the case in Spain (figure 5.7), while in Denmark the debt ratios are very high. Yet, this ratio tells us something about the returns detached from the size of the farm.

The higher the ratio, the more output is produced for every money unit of input that is actually paid. In Denmark, this ratio is the lowest of these countries and in Spain the highest. In The Netherlands, the ratio has declined during the nineties. In The Netherlands and in Denmark the ratio is lower for young farmers than older farmers.

![Figure 5.4 - Revenue cost (excluding calculated costs) ratio (%)](image_url)
The revenue cost ratio gives an indication of the cost efficiency of the production. However, it does not give an indication of the agricultural income of the farm, since this also depends on the economic size of the farm. Figure 5.5 shows the average economic size of the agricultural farm in the six countries. The average farm is in economic terms the largest in The Netherlands, followed by the UK. The Spanish farms are the smallest ones.

Combining the revenue cost ratio with the economic size of the farm lead to the agricultural income. Figure 5.6 shows the average agricultural income in the years 1990-1992 and 1996-1998 for the younger farmers and the rest of the group. For almost all situations, the agricultural income has grown in this period. However in the UK the income for the young farmers is diminished. In Denmark, The Netherlands, France and Germany the income of the young farmers is much lower than the income of the older ones. In Spain, the income of the young farmers is higher and in the UK the income of the young farmers has declined in the mentioned period while it has grown for the older ones. The higher income of the young farmers in Spain is caused by the fact that the young farmers often have not taken over an existing farm, since the transfer does not take place until the parents are rather old, but have started a new farm. Often this is an horticultural farm under plastic, since not much land is used for this. The income generated from these horticultural farms is in general higher than the income in the more traditional agricultural sectors.

![Figure 5.5: Average Economic size expressed in European Size Units (ESU), 1998](image)

Source: FADN-CCE-DG VI/A-3; adaptation LEI.
The height of the income can not be mentioned without relating to the height of the income tax and social security contributions. However, it is very complicated to make a good comparison of the tax burden in these six countries, since they do not only depend on the tax rate structure. The tax-deductible amounts differ over the six countries. To give an impression of the tax burden in the six countries, table 5.3 shows the percentage of taxes on income and profits of the Gross Domestic Product. This percentage only gives an indication, since it relates to income and corporate taxes aggregately and does not focus on the agricultural sector. Besides Denmark, where the ratio is much higher, the other countries pay on average about 10 to 15% taxes on income and profits. The percentage is 28.5% in Denmark.

Table 5.3 Percentage of taxes on income and profits of the Gross Domestic Product (2000)

<table>
<thead>
<tr>
<th>Country</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Netherlands</td>
<td>10.5</td>
</tr>
<tr>
<td>Denmark</td>
<td>28.5</td>
</tr>
<tr>
<td>France</td>
<td>11.4</td>
</tr>
<tr>
<td>Germany</td>
<td>11.4</td>
</tr>
<tr>
<td>Spain</td>
<td>9.9</td>
</tr>
<tr>
<td>UK</td>
<td>14.5</td>
</tr>
</tbody>
</table>

Solvency

Figure 5.7 shows the solvency in the six European countries. Denmark obviously has the lowest solvency. However it has improved during the nineties. Especially the young farmers have become more solvent. In all countries the young farmers show a lower solvency than the older ones. In Spain, farmers do have very low debt ratios. Almost the whole farm is financed by own capital.

The rents per hectare land are the highest in The Netherlands. However, the difference with Denmark is not as large as with the land price. Of the 5 countries in figure 5.8, France has the lowest rents of 128 EURO per hectare, which is about a third of the rents in The Netherlands. If the numbers of figure 5.2 and 5.8 are compared, the rental rates in 1998 range from 1.4% in The Netherlands to 3.9% in France.

Figure 5.9 shows the average interest rate paid during the period 1995-1998. In Denmark, this percentage is the highest with 8.3%, followed by Spain and the UK with 7.4%. In The Netherlands, the rate is 5.9%. It is striking that the country with the highest debt rate also has the highest interest rate. The interest burden is consequently very high.

Figure 5.10 shows the amount of paid interest and rents. This amount gives an indication of the annual burden of the installation costs, independent from whether the land is owned or leased. If land is owned instead of leased, this has to be financed and interest has to be paid. The amount not only depends on the installation costs, but also on subsequent investments made by the successor. However, it gives a good indication of the yearly burden of the initial installation costs.

In Denmark and The Netherlands, the total amount of money paid on interests and debts is the highest. For all countries except France, the amount of interest and rents paid is the highest for the group young farmers. The amount has explosively grown during the nineties in Denmark. Young farmers pay about 10,000 Euro a year more at the end of this period compared to the beginning of the period. In The Netherlands this difference is about 5,000 Euro and in France 3,000 Euro.

In Denmark the difference between young and old farmers is also the highest of the six countries involved in this research. In the period 1996-1999 young farmers pay 9,000 Euro a year more on interests and rents than older farmers. In The Netherlands and the UK this difference is about 2,000 Euro.

The cost efficiency, expressed in the revenue and cost ratio is in The Netherlands the lowest after Denmark, but the economic size of the Dutch farms is that large that the agricultural income of the Dutch agricultural farms is among the highest in Europe. However partly due to the increasing costs of land, the difference with the other countries has diminished. In Denmark, the agricultural income and the revenue cost ratio are the lowest of the six countries involved in the research. In this country the expenses on debts and rents has increased explosively during the nineties. Still, the cost efficiency has increased during this period, contrary to The Netherlands. The cost efficiency in Spain is very high. However the economic size of the farms is that small, that the agricultural income is the lowest after Denmark.
Figure 5.7  Average solvency in 1990/1991 and 1997/1998
Source: FADN-CCE-DG VI/A-3; adaptation LEI.

Figure 5.8  Nominal rent prices in 1990 and 1998 in EURO
(Germany: 1989 and 1997, Denmark 1992 and 1997, Spain not available)
Source: EUROSTAT.
Figure 5.9  Average interest rate 1995-1998
Source: FADN-CCE-DG VI/A-3; adaptation LEI.

Figure 5.10  Paid interest and rents
Source: FADN-CCE-DG VI/A-3; adaptation LEI.
5.4 Installation costs in relation to agricultural income

Installation costs do not tell the whole story of the perspectives of young farmers. High installation costs expressed in the amount of paid interests and rents will not be a problem if the income generation capability of a farm is high enough to cover these expenses. A ratio that gives an indication of the perspective of young farmers is the proportion of the net operating surplus\(^1\) that is paid on interest and rents.

The net operating surplus gives an indication of the technical income generating capacity detached from the financing of the farm. The net operating surplus depends among others on the size and the capital intensity of the farm.

The height of the amount spent on interests and rents also depends on those two factors: the higher the capital-intensity or the size of the farm the higher the income generating capacity. However, the amount spent on interests and rents also depends on the installation costs, separate from the size and the capital intensity of the farm. These installation costs depend on the principals of inheritance and succession, appraisal of the value of the farm and the facilities (subsidies, fiscal facilities, take-over values, etc.).

Since the net operating surplus depends on size and capital-intensity and the amount of paid rents depends on size, capital intensity and installation costs, the ratio of these two gives an indication of the relative installation costs compared to other countries\(^2\). If all facilities around farm take-over jointly would work out identical across Europe, the ratio of the annual installation costs (expressed in paid rents and interest) and the net operating profit would be about the same.

Figure 5.11 shows the costs of paid interest and rents as a percentage of the operating surplus. The first thing that strikes from this figure is the high share of these costs in Denmark and the large difference between young and old farmers. In this country 84% of the income generation capability (expressed in net operating surplus) of the young farmers is spent on rents and interests. For the older farmers this percentage is 74%. The Netherlands follows Denmark, with 44% for the young farmers and 39% for the older farmers. In Spain, only around 5% of the net operating surplus is spent on interests and rents.

The Committee of the Region of the EU (2001) also noticed this problem and stated that if the agricultural revenues are compared to the costs of land, either bought or leased, the costs of land are too high.

Since it is impossible to make a good comparison of the problem of high installation costs without referring to agricultural income, the problem is evaluated as a combination of installation costs versus agricultural income. Based on the analyses made above, the seriousness of the problem is assessed in the six countries (table 5.4). It is very clear that the problem of high installation costs versus agricultural income is very serious in Denmark. The amount spent on rents and interest is very large in that country and the agricultural in-

---

\(^1\) The net operating surplus is calculated as follows:
output - intermediate consumption - depreciation - compensation of employees - other taxes on production + other subsidies on production. The paid interests and rents are consequently not included in the calculation of the net operating surplus. Shortly said, all costs (except paid interests and rents) are subtracted from the revenues.

\(^2\) Annual installation costs Function of size, capital intensity and installation costs/
Income generation capacity Function of size and capital intensity
come is not very high. In The Netherlands, the installation costs expressed in the annual spending on rents and interests is also high, but the agricultural income is among the highest in Europe. However, the cost efficiency is decreasing and the costs of land are rising. In France, Germany and the UK, the proportion of the income generating capability spent on the annual rents and interests is acceptable. In Spain, the installation costs are that limited that they do not form a problem.

![Figure 5.11 Paid interest and rents as a percentage of the net operating surplus (1990-1998)](image)

*Source: FADN-CCE-DG VI/A-3; adaptation LEI.*

<table>
<thead>
<tr>
<th>Seriousness of the problem of high installation costs versus agricultural income</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Netherlands</td>
</tr>
<tr>
<td>Denmark</td>
</tr>
<tr>
<td>France</td>
</tr>
<tr>
<td>Germany</td>
</tr>
<tr>
<td>UK</td>
</tr>
<tr>
<td>Spain</td>
</tr>
</tbody>
</table>

### 5.5 Comparison of facilities

Table 5.5 states the facilities to build up equity before the actual take-over. In some countries (Germany, Spain and the UK), no special facilities to build up equity exist, while in The Netherlands, a number of facilities exists, which are related to the start-up of a matraschap. From that moment on, the successor is fiscally regarded an entrepreneur. In
France and Denmark, the successor can build up equity irrespective the successor has an official status.

Table 5.5 Facilities for the building up of equity

<table>
<thead>
<tr>
<th>Country</th>
<th>Fiscal benefits during period of 'maatschap':</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Netherlands</td>
<td>- self-employed persons' allowance ('Zelfstandigenaftrek')</td>
</tr>
<tr>
<td></td>
<td>- start-up allowance</td>
</tr>
<tr>
<td></td>
<td>The successor can built up capital if he shares in the reserve assets.</td>
</tr>
<tr>
<td>Denmark</td>
<td>Establishment account a)</td>
</tr>
<tr>
<td>France</td>
<td>Deferred wages a)</td>
</tr>
<tr>
<td>Germany</td>
<td></td>
</tr>
<tr>
<td>Spain</td>
<td></td>
</tr>
<tr>
<td>UK</td>
<td></td>
</tr>
</tbody>
</table>

a) These facilities might be possibilities for The Netherlands and will be analysed in chapter 7.

Table 5.6 Facilities for lower installation costs

<table>
<thead>
<tr>
<th>Country</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Netherlands</td>
<td>No property transfer tax in case of a transfer in direct family line</td>
</tr>
<tr>
<td></td>
<td>Leasehold value of land and transfer of production right for the book value (till 2002) or the going concern value (from 2002 on)</td>
</tr>
<tr>
<td>Denmark</td>
<td>The transfer value can be 15% less than of the market value</td>
</tr>
<tr>
<td>France</td>
<td>Installation grant a)</td>
</tr>
<tr>
<td></td>
<td>Young farmers are entitled to receive milk production rights for free a)</td>
</tr>
<tr>
<td>Germany</td>
<td>Installation grant a)</td>
</tr>
<tr>
<td></td>
<td>Transfer below market value is allowed in some Ländern</td>
</tr>
<tr>
<td></td>
<td>No lease of milk quota a)</td>
</tr>
<tr>
<td>Spain</td>
<td>Installation grant a)</td>
</tr>
<tr>
<td></td>
<td>Reduction of conveyance tax</td>
</tr>
<tr>
<td></td>
<td>Milk production rights can be bought at lower prices a)</td>
</tr>
<tr>
<td>UK</td>
<td>Transfer for market value (at death) or even for free (transfer during life)</td>
</tr>
</tbody>
</table>

a) These facilities might be possibilities for The Netherlands and will be analysed in chapter 7.

In all of the countries facilities exist, which improve the economic prospects of young farmers (table 5.7), although part of the facilities do not focus especially on young farmers, but on starting entrepreneurs in general. Especially in The Netherlands, the facilities focus on starting entrepreneurs in general. Only the Foundation for Security especially
focuses on the agricultural sector. In all of the countries, except for the UK, support for interest payment exists.

Table 5.7 Facilities for economic prospects

<table>
<thead>
<tr>
<th>Country</th>
<th>Facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Netherlands</td>
<td>Start-up allowance (in total up to three years)</td>
</tr>
<tr>
<td></td>
<td>'Daring' capital ('Durfkapitaal')</td>
</tr>
<tr>
<td></td>
<td>Arbitrary depreciation</td>
</tr>
<tr>
<td></td>
<td>Foundation for Security ('Borgstellingsfonds')</td>
</tr>
<tr>
<td>Denmark</td>
<td>Depreciation over 5 years of expenses of expanding or establishing a business</td>
</tr>
<tr>
<td></td>
<td>Installation grant in the form of a state loan</td>
</tr>
<tr>
<td>France</td>
<td>50% income reduction for income tax and a discount on the payments for social securities a)</td>
</tr>
<tr>
<td></td>
<td>Support for interest payment</td>
</tr>
<tr>
<td></td>
<td>Installation Welcome Points</td>
</tr>
<tr>
<td>Germany</td>
<td>Reserves for planned investments</td>
</tr>
<tr>
<td>Spain</td>
<td>Investment program (grant + interest rate subsidy) a)</td>
</tr>
<tr>
<td></td>
<td>Reduced income for tax calculation a)</td>
</tr>
<tr>
<td></td>
<td>System of investment incentives (subsidies and interest rate subsidy) a)</td>
</tr>
<tr>
<td>UK</td>
<td>Pre-trading expenditure can be deducted a)</td>
</tr>
</tbody>
</table>

a) These facilities might be possibilities for The Netherlands and will be analysed in chapter 7

5.6 Conclusion

The principals of inheritance, inheritance law and market values show large differences between countries. These differences seem to have a larger effect on the installation costs of young farmers than the variation in facilities mentioned above. The differences related to inheritance focus on two main elements: compensation to other heirs and appraisal of the take-over value. Dutch young farmers do not have to compensate other heirs and the appraisal of the take-over value of the farm is much lower than the market value of the farm. However, the high market prices of especially land lead to take-over values that are that high that a large proportion of the income generating capability is spent on interest and rents. Compared to the other 5 countries, only Denmark has a worse starting point for young farmers than The Netherlands.

The facilities aiming at young farmers or starters in The Netherlands seems to be at least comparable to the other countries, however, they are not able to reduce the disadvantages of the high installation costs due to the high market value in The Netherlands.
6. Main factors behind high installation costs in The Netherlands

Chapter 5 concludes that The Netherlands have the worst starting point for young farmers after Denmark. This is mainly caused by the high installation costs. The difference in facilities offered to young farmers in the six countries is rather limited compared to the principals of inheritance, appraisal of the value of the farm and the market value of the farm. Especially the market value of the farm is very high in The Netherlands. Despite the beneficial appraisal of the take-over value of the farm (land can be transferred for the leasehold value and production rights can be transferred at book value), the installation costs are still a problem. This chapter discusses two factors behind the high market value: the price of land and the production rights.

6.1 Price of land

The price of agricultural land is influenced by various factors. Some of these factors have an international character such as the CAP. However the price of the agricultural land in The Netherlands is mainly influenced by national factors such as speculation on changes in the zoning plans.

*National factors*

The production factor land is subject to intense competition in The Netherlands. The national factors influencing the price of agricultural land can be divided in factors that have a more or less agricultural background and the non-agricultural factors. On the other hand, extensification reduces the marginal revenue of the land. This consequently lowers the agricultural value of land. First of all, national measures and social pressure force the farmers to operate on a more extensive scale, the new manure legislation and the shift to biological production methods request for more land. The new manure legislation forces the intensive livestock farms to find land for the manure sale, which leads to an increase in the demand of land.

In The Netherlands, the high increases in the price of agricultural land can hardly be related to the agricultural returns on land alone. The non-agricultural factors have a bigger influence on the price of agricultural land. These factors, such as zoning plans have a major impact on the market values of agricultural land.

The price of agricultural land is theoretically equal to the discounted value of all future revenues. These revenues are quite certain in case of a future agricultural purpose of the land. However, the future purpose is uncertain in The Netherlands as a chance exists that the zoning plan will be changed, resulting in changes in the value of the land. The probability of a change in the zoning plan multiplied by the resulting change in the value of the land leads to the option value of the land. The market price of land consequently exists of the sum of the agricultural value and the option value of the land. Both components dif-
fer per area (Voskuilen and Luijt, 2001) and are dependent on the state of the conjuncture (Luijt, 2002). In periods of high conjuncture, the demand for red purposes is usually much higher.

At the moment of farm take-over, the successor has to find a way to also finance the option value of the land. The additional costs will not result in additional gains, leading to a deterioration of the agricultural income.

Polman et al. (1999) have calculated the agricultural value for the average dairy farm in The Netherlands in 1996. Since that time, the average cash flow of the average dairy farm has not changed to a great extent, which implies that the agricultural value has stayed about the same. They calculated an agricultural value of 437,000 Euro for the average dairy farm (using a discount rate of 5%). In 2000 the market value of an average dairy farm was 1,780,000 Euro if all the quota are valued at market value. These figures make clear that it will not be possible to take over a dairy farm at market value, since the future cash flows are only sufficient to make an investment of 25% of the market value profitable. If taking over the farm at the agricultural value would be allowed, the installation costs will consequently be reduced.

Keuzenkamp (1999) also states that the price of land is multiplied by a factor ranging from 40 to 80 if the purpose of the land is changed from agricultural to building land. If only a small part of this difference in price is incorporated in the price of agricultural land, then the market price of land will be much higher than the agricultural value of land. According to Keuzenkamp the only option to reduce the high prices of land is to reduce the shortage of land by reducing the area with an agricultural purpose with 5%.

It is not likely that the speculation on land will diminish since the demand is still high. Of the total area of land in The Netherlands (3,4 million hectares), 69% has an agricultural purpose, 16% has a green (forests, nature and recreation) purpose and 15% has a red (buildings, infrastructure and other) purpose. In the next 30 years, for recreation and nature an extra 0,5 million hectares is needed, which is about the same as the current claim of land. Depending on the growth of the population an extra 100,000 to 200,000 hectares is needed for red purposes. This need is concentrated in the west of the country and can only be fulfilled by agricultural land. It is not at all certain that these claims for land will be realised. Farmers, who need the land for more extensive agriculture, own a large share of the agricultural land. In recent years, about 100,000 hectares of agricultural land was traded yearly. About half of this trading is related to the transfer of land within families or the transfer of leased land. Only a small part (about 20%) of the agricultural land comes available for red purposes and consequently has an impact on the price of land. The price of land with red purposes is about triple the price of land with green purposes. The farmers, that are sold out, buy agricultural land elsewhere, resulting in increases in price in other areas of the country as well (Luijt, 2002).

International factors
The CAP has artificially increased start-up costs for young farmers. The introduction of production rights and the direct payments have made the factors of production more expensive. The extra costs have to be made in complete ignorance of what will happen to them at the time of the next reform (Economic and Social Committee 1994; Sanchez Miguel 2001).
Support payments that are coupled to arable area increase the value of land. Land ownership, where land is registered as eligible for arable payments or with quotas, acts as an income guarantee. The 1992 CAP reforms, where the farmers were compensated for declining commodity-prices, resulted in higher land prices. Since headage premium rights for livestock are held by a farmer and are not attached to the land, such premiums have no direct effect on land values. The OECD (1998) points out that arable area aids leads to a significant increase in land prices. Based on a 1% increase in wheat payments (measured in Producer Subsidy Equivalent), there is a 0.4% rise in land value\(^1\). Lower land prices resulting from lower subsidies could make agricultural land available for more environmentally friendly production systems, organic farming. With lower initial farmland investment costs, farmers would not be obliged to farm the land so intensively in order to make a return on their investment (Ross Gordon Consultants SPRL, 2000).

Another factor influencing the price of land is the fact that the conditions for premiums and subsidies of the EU are related to extensification criteria (e.g. livestock units per hectare). These conditions enlarge the demand for land and consequently lead to increases in land prices.

The Committee on Agriculture and Rural Development (Parish, 2000) state that it is unrealistic to suppose that EU policy could be changed, given the principals of subsidiary and political realities of the time. The land prices, which are an important factor affecting young farmers will therefore not likely be altered by changing EU policy.

### 6.2 Production rights

Production rights are regulating many agricultural markets. The introduction of production rights lead to an increase of the installation costs. The most valuable production right in The Netherlands is the milk quota. The value of this production right and the resulting costs at the moment of farm take-over differ across the 6 countries.

The rules applied for transfer of milk quotas vary considerably across Europe. While in some Member States, the milk quota market is relatively unregulated (as for example in the UK and The Netherlands), there is in some others (France for example) a 100% administrative redistribution of quota released from farms that cease production. It can be argued that a system of free tradable quotas could provide an economically optimal allocation of production rights, as the most efficient dairy farmers with high margins should be best able to bid for available quotas (CEJA, 2000). However, in any case, the production rights are only redistributed within countries or areas, so the optimal allocation only accounts for a certain area. A drawback for young farmers is that they are in general not the most efficient farmers due to high installation costs (figure 5.4 (revenue/cost ratio)), which implies that they will not have the financial means to buy or lease milk production rights.

If the quota can be freely traded, the marginal net revenues determine the value of the production rights. In case of milk quotas, this implies that the difference between the extra milk revenues and the marginal costs determines the market price of milk quotas. Many dairy farmers are faced with under-occupation of buildings, installation, machinery,

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\(^1\) Since the market value of agricultural land in The Netherlands is primarily influence by non-agricultural factors, the influence will be smaller for this country.
etc.. With an enlargement of the milk quotas the under-occupation is partially or completely removed. The extra costs of milk consequently only exist out of the variable costs such as feed, which leads to high market values for production rights (Polman, 1999). Additionally, the milk production per cow grows on average with 1.75% a year. For these extra production, farmers have to acquire production rights. The additional production costs of this milk also only exists out of the variable costs. However, these high market values of milk quotas can only be paid in case of expansion of the production and not in case of a transfer of a complete farm.

Yet, the consequence is that it is hard for young farmers to improve efficiency if they do not have enough access to the production rights. In some countries young farmers have privileged access to milk production rights. However this is not the case in The Netherlands. Instead of that, at the moment of take-over, the son has the opportunity to take over the rights at book value, which is much lower than the market value. This is caused by two factors, first of all the quotas that are received for free are not valued at the fiscal balance sheet and secondly it is allowed to depreciate the rights.
7. Discussion on possible facilities for The Netherlands

This chapter discusses some possible facilities to improve the situation of young farmers in The Netherlands. Besides the ideas proposed by the EU, the Dutch Agricultural Youth Organisation (NAYK), financial facilities already offered in other countries are also discussed.

7.1 Proposals of the EU

During the nineties, various commissions\(^1\) of the European Union have paid attention to the situation of the young farmers. Their main ideas, which are not already implemented in one of the six analysed countries, are mentioned here below:

a) incentives should be provided for the leasing of land. This means eliminating the numerous constraints on the leasing of land in the EU Member States;

b) the tax system should further encourage early transfers of ownership to young farmers. For instance, there should be no tax on transfers by farmers till the age of sixty, but thereafter the tax charged should increase with the age of the transferor;

c) early retirement measures can be implemented such that the take-over of farms by young people is stimulated. This can for example be done by granting a higher premium to farmers who hand over to young farmers, or by providing for a reserve of freed-up land available for young farmers.

These ideas have the following pros and cons:

a) in The Netherlands, the leasing of land from the parents to the successor is often used. However, since the introduction of the new fiscal system in 2001, this has become less attractive for the parents;

b) for The Netherlands, an early retirement scheme is not effective for all young farmers. The young farmer will not be able to finance the take-over, in case the antecedent wants to hand over the farm at an earlier point in time. The successor then will have less time to build up capital to finance the take-over. However, in case of high increases in the value of the production means (especially land), an earlier take-over can be attractive since the take-over price will then be lower. This measure only works in case the height of the installation costs is at the same time diminished;

c) see b).

7.2 Suggestions Dutch Agricultural Youth Organisation

To improve the prospects for farmers, either the revenues have to increase or the costs have to decrease. To improve the revenues, a reward for the more collective functions such as water storage and collection, nature and recreation might be an option, however, only a small part of the farmers can generate a limited revenue from these functions. A decrease in costs can be generated if the price of land would go down. The NAJK (Dutch Agricultural Youth Organisation) have some ideas, which according to them will lead to a controllable price of land. Some of the ideas related to fiscal facilities and levies will be mentioned here:

a) extension of the reinvestment reserve. At this moment a limited possibility exists to reinvest the cessation profit in other means of production without settling the taxes (the reinvestment reserve). Only production means that are depreciated within 10 years can be replaced by means that are not of the same kind. The NAJK wants an extension of this reserve in the sense that also reinvestments in another sector or abroad should fall under this rule. The aim of the extension is that farmers that are bought out will have a smaller claim on land, since they can also reinvest in another line of business or in another country;

b) land as a speculation object should be less attractive. More and more farmers who want to discontinue their business keep their land to sell it more expensively later on. That land is used very extensively and consequently partly disappears as a means of production. Also speculators enter the land market to make a profit out of the rising prices. This speculative behaviour reduces the land mobility. Two means to decrease the attractiveness of speculation is that resting farmers will be no longer eligible for subsidies and premiums (e.g. McSharry) and to levy a tax on the increase in the value of land in case of non-economic use;

c) levy on building in the countryside. This levy will reduce the drive to build in the countryside and will reduce the speculation of property developers. The revenues of the levy can be invested in green in and around the city and in improvement of agricultural structures;

d) Continuation Allowance. In case of farm take-over instead of termination, the cessation allowance should be transformed in a continuation allowance of about 27,000 Euro. In case that the farm is terminated within 5 years after take-over, the allowance expires (partially). The idea is that the take-over price decreases as the tax duty decreases.

Comments on the suggestions:

a) basically, this is a good suggestion, especially the extension related to the fact that the reinvestment does not have to be made in the same means of production. It is not very likely that the reinvestments will be made in another agricultural sector, due to the experience of the farmer. The extension to reinvestment abroad is not a very realistic one. This implies that the Treasury must give up large claims, and our country will not benefit from the reinvestments, since they are made abroad. With this extension the government would be promoting farmers to sell their farm in The Netherlands and start over in a foreign country. This might result in lower prices in
The Netherlands and less renewal of the Dutch agriculture as the more progressive entrepreneurs will move abroad;
b) it is rather difficult to determine whether a farmer is resting or not. In some sectors resting farmer really form a problem as they prevent renewal and restructuring. This especially applies for the horticulture under glass and the dairy farming, where the resting farmers often still own their milk production rights and land;
c) it is already rather difficult to build the countryside, as the zoning plan has to be changed for a permission.;
d) the Dutch Ministry of Finance (2002) already mentioned some drawbacks of this idea. The most important one in relation to this research is the fact than another facility (transfer facility or 'doorschuijfamiteit' mentioned in 3.1.3) results in the same effect.

7.3 Facilities in other countries

Chapter 3 describes the subsidies and the financial and fiscal facilities related to farm take-over. Some of the facilities might lead to an improvement of the position of the young farmers.

Facilities to build up equity before take over

a) Establishment account (Denmark).
b) Deferred wages (France).

Comments on these facilities:
a) the establishment account helps the young farmer to build up equity during the period before farm take-over. It reduces depreciation after farm take-over, which implies that the amount of paid taxes will increase. However, the amount of taxes paid by the successor in the first years after take-over is limited in The Netherlands;
b) this facility might be an additional aid for the young farmer to build up equity: succeeding farmers who have worked unpaid at the farm after the age of 18, can claim a share of the land sale profits. Although in the maatschapscontract remuneration is settled, the paying of not all the young farmer before take-over is always arranged correctly. For these young farmers, the system of deferred wages might be interesting.

Facilities to lower installation costs

a) Installation grants (various countries).
b) Privileged milk quota transfer (various countries).
c) No lease of milk quota (Germany).
Comments on these facilities:

a) an installation grant lowers the installation costs. However, the installation costs in The Netherlands are that high that an installation grant only makes sense if it concerns a substantial amount;

b) privileged milk quota transfer would enable some young farmers to optimise the scale of production. Especially in the period close after farm take-over, young farmers have difficulty financing investments in production rights. During the period of the \textit{maatschap}, the partners often invest in milk quota. It would be helpful for them if they would already be eligible for this arrangement during this period;

c) if the leasing of milk quota would be forbidden in The Netherlands, more production rights would be offered on the market. Not all farmers who want to lease production rights would also want to purchase these rights (for example due to insufficient financial means, risks, or the discontinuation of the farm). This implies a higher increase in the supply than in the demand of rights, resulting in a lower price. On the other hand, leasing would no longer be available for young farmers.

\textit{Facilities to improve economic prospects}

a) Subsidies for investments made under the 'Material Improvement Plan' (various countries).

b) Tax reductions. 50\% income reduction for income tax and a discount on the payments for social securities In Spain the percentage for income tax reduction is 25\%.

c) Pre-trading expenditure paid by the successor are deductible on the commencement of trading (UK). These expenditures can be carried forward and will result in a tax-benefit for the young farmer.

Comments on these facilities:

a) this investment incentives could improve the agricultural income. However, many general tax incentives already exist in The Netherlands;

b) Tax reductions would not help many young farmers in The Netherlands, since they hardly pay any taxes in the first years after take over;

c) See b).
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Appendix 1 General description of the countries and their tax systems

This appendix gives a brief general description of the tax systems in the six relevant countries. First of all, the structure of the agricultural sector will be described. The second paragraph of each country concentrates on income and tax calculation and will describe issues such as the tax rates, taxation on capital gains, depreciation and deductibility of losses and income equalisation. The following part brings up special agricultural issues. The last paragraph of each country mentions other taxes and fees.

A1.1 The Netherlands

Structure
In 2000, there were about 97,500 farms in The Netherlands. Recent developments in the sector are the development of a number of sidelines in the rural areas such as recreation and nature conversation and a tendency towards fewer and bigger farms. The last development is due to environmental and other measures. Environmental protection is very important in The Netherlands, which is also visible in the tax system.

Most of the farms are one-man businesses. In family situation, especially in case of transferring a business, partnerships are common. The number of (limited) companies is restricted and they are primarily found in the glasshouses. Main sectors in The Netherlands are horticulture under glass and dairy farms.

Income and tax calculation
All farmers have to have accounts and consequently have a duty to keep books. However, very few fiscal rules exist regarding to accounting. The general principle for calculating the annual profits is that the profit made in the calendar year is calculated with consistent application of generally accepted accounting principles. The usual method of calculating the annual profits is to prepare a balance sheet and a profit and loss account. Productions for own use has to be taxed. The capital labelling model is used to decide which assets and liabilities must be shown on the balance sheet. The significance of such a distinction lies in the fact that operating costs may be deducted from the income, operating assets can be depreciated. Fixed or operating assets are valued by calculating the total of the purchase or productions costs less depreciation. If the purchase or production was effected with the aid of a subsidy or grant, this is then deducted from the depreciation base. From the moment the equipment is put into operation, the depreciation must be allocated to the appropriate years. The assets are depreciated over the period of (estimated) economic useful life. Rapid depreciation is allowed for some investments. The investments are environmental investments, health & safety investments and new buildings in certain areas.

1 This appendix is primarily based on EFAC (2000) except for Spain.
Land in property and in the use of the farmer in the farm business is always considered a business asset. Depreciation on land is not allowed. However, temporary land improvement (drains etc.) are depreciable. Animals used within the business for agricultural production (breeding cattle, milk cows, and hens) are treated as fixed assets and can be valued individually or valued at average. These animals are depreciated during the lifetime. Plantations are sometimes classified as operating capital, sometimes as stock-in-trade. If classified as operating capital, plantations have to be depreciated over several years. Milk quotas and manure production rights are operating assets. Given that these are liable to wear and tear (in principle, they are not infinite) these items can also be depreciated. Intangible assets are not included in the balance sheet, if a price to acquire or transfer the intangible asset into business has not been paid.

The selling of business assets at a higher (lower) price than the book value is taxed (deducted). However, capital gains on shares, houses and assets that do not belong to business property, are not directly taxed in The Netherlands. Once the choice between operating and private capital is made, the decision cannot be changed, unless there are exceptional circumstances that justify a review of the choices made in the past.

If a business makes a loss in any year the negative income may be set off against the positive incomes from one of the three preceding calendar years (tax loss carry-back facility) or (if the incomes are inadequate) against incomes made in future years (tax loss carry-forward facility). If the tax loss carry-back facility is used, the losses must be set off against the incomes made in the oldest year for which this facility is available.

If a business has an operating income that varies from year to year during a three-year-period, it may opt to use the averaging facility. This facility allows a business to calculate an average operating income on the basis of the results achieved in those three years; the tax rate is then applied to those new amounts, which may lead to a refund of taxes paid.

Income tax is levied on persons who are living or have certain properties in The Netherlands. Most of the agriculturists are subject to individual income tax. Taxation is levied on individuals and not on families. The old income tax system is based on just one taxable income. This taxable income is made up of all the income that you receive in a year. Under the new system, you will have not one, but three taxable incomes, each of which falls into a ‘box’. Each box has its own tax rate:

- box 1: taxable income from work and home ownership (progressive rate ranging from 32.55 to 52% for tax subject younger than 65 years old);
- box 2**: taxable income from a substantial (business) interest (fixed rate of 25%);
- box 3: taxable income from savings and investments (fixed rate of 30%).

Each form of income is taxed in one box only: there can never be double taxation. If the income in a box is negative, this can not be set off against a positive income in one of the other boxes. However, it is possible to set the negative amount off against a positive income in the same box in past or future years.

In box 1, taxable income from employment and home ownership is taxed, which comprises for instance profits, salaries and wages. The tax rate on income in box 1 is pro-

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1 This box will not be further described. Most people will not be affected by the taxation in box 2, in which income deriving from a substantial (business) interest is taxed.
gressive; i.e. there is a sliding scale whereby the tax burden becomes greater in proportion to your income. In The Netherlands no special tax regimes for farmers exist.

Private assets are taxed in box 3. The system is based on a fixed yield (or return) on your assets and it is this yield which becomes taxable by means of the investment yield tax. Interest paid and other costs cease to be deductible. The taxable income in box 3 is calculated at 4% of the economic value of your property, minus the amount of your outstanding debts, based on the average balance over the course of the year. The tax rate of box 3 is a fixed rate of 30% over the taxable income in box 3 that is calculated at 4% of the economic value of the property, minus the amount of outstanding debts, based on the average balance over the course of the year.

Only a small number of agricultural farms is companies, or 'open' limited partnerships. Those farms are subject to the corporate income tax.

Special agricultural issues
Apart from the Agricultural Allowance ('Landbouwvrijstelling'), which exempts capital gains on land from taxation, hardly any facilities exist that specifically apply to agriculture. The background to the Agricultural Allowance is that changes in value resulting from inflationary development or boom period are exempt. In principle the gains made by a farm on account of the value of land (including land which has been built on) remain free from tax. However, the law provides for two exceptions to this:
- changes in value arising in the course of business (e.g. irrigation) and;
- non-agricultural changes in the value of land. Only changes of the value of the land that the land would have with an agricultural continuation are exempt. Anything above this value is taxable.

Agricultural land, forestry, manors and nature are also excluded from the taxation on real estate and taxation in box 3. The municipalities annually levy a real estate tax ('ondererende zaakbelasting'). The tax consists of (i) a part levied on owners of immovable property and (ii) a part levied on users of immovable property.

Some general regulations are mentioned below:
- to encourage the investments by small businesses, some investment allowances exist. First of all, all investments less than 247,310 Euro are subject to investment allowance. The percentage that can be deducted varies from 3% to 24%. Energy and environmental investments are subject to extra allowances;
- self-employed persons have an extra allowance. This is a fixed amount that can be deducted from the taxable income, in accordance with a special table if certain requirements are met. After 2000, the amounts are reduced, since self-employed persons also get an employment rebate;
- an additional deduction is granted for the cost of training of the entrepreneur and his employees;
- costs that are made in the period before the actual start of a firm that can be assigned to the firm can under certain conditions be deducted from the income in the first year of the firm.
**Inheritance and gift tax**

This tax is imposed when property is acquired by gift or inheritance if the donor or the deceased was a resident of The Netherlands. The inheritance tax is levied on the beneficiary. The taxable base is the fair market value of all property received less liabilities. Inheritance and gift taxes are levied at the same progressive rates. Progression depends on two factors, the proximity of the relationship between the deceased/donor and the beneficiary/donee and the value of the property received. In case of a parent-child relationship the rates range from 5 to 27% (over 761,800 Euro).

**Costs of social security**

In The Netherlands, social security contributions are included in the income tax.

**Real estate and net wealth tax**

The municipalities annually levy a real estate tax (onroerende zaakbelasting). The tax consists of (i) a part levied on owners of immovable property and (ii) a part levied on users of immovable property. Where the owner and the user are the same person, that person is liable for both parts of the tax. Real estate tax is deductible. Agricultural land, forestry, manors, nature and greenhouses are exempt from real estate tax. The net wealth tax was abolished in 2001.

**Value added tax (VAT)**

VAT is levied on all entrepreneurs, liberal professionals and importers. The deliveries of goods and rendered services are taxable at two rates, 6% and 19%. The basic rate is 19%. Basic goods of livings are taxed at 6%, which explains why most agricultural products and basic needs are taxed to 6%. However, agriculturist automatically make use of the Agricultural Arrangement (Landbouwregeling). In that case no VAT registration is necessary and no VAT is transferred to Treasury. On the other hand the VAT of the purchased products (including investments) can not be balanced with the VAT of the sales. However they may opt for full taxation.

**Conveyance tax**

Real property transfer tax is levied on persons who acquired immovable properties in The Netherlands. Taxable is the value of the immovable property and the tax-rate is 6%. For the acquirement of farmland are several exemptions as well as for the acquirement of business real estate by children from the parents. There is a double taxation relief with regard to the inheritance and gift tax.

**Environmental taxes**

Environmental taxation is levied on the following:
- ground water;
- energy;
- waste matter;
- fuel.
Taxation is based on the rate of the cost to the environment. Groundwater tax in The Netherlands is levied on withdrawal of groundwater. The taxable person is the person who withdraws groundwater, including farmers.

A1.2 Denmark

Structure
Danes have always had to cultivate the soil and sail the sea. This has helped to create an extremely efficient agricultural sector and industries, trades and transports business, which had to compensate for the lack of resources by well-trained staff, ingenuity and a strong sense of quality. More than half of Denmark’s surface is covered with cultivated area. In 1997 the number of agricultural farms was more than 60,000 of which more the half were part-time holdings. In Denmark the ownership is characterised with a dominant position of owner-occupied farms (private farm). In 1995 about 91% of the Danish holdings were owner-occupied.

Income and tax calculation
In principle, the demands on accounting and other registrations within agriculture do not differ from the demands made on other trades. Only the person with title in an asset or, where relevant, the holder of a depreciable right is entitled to depreciate. Buildings used for business purposes may, as a rule, be depreciated. Depreciation is computed using the straight-line method. Plant, machinery and equipment, including ships, used for business purposes are depreciated on a pool basis using the declining-balance method. Depreciation may be taken at a rate of up to 25% per year at the option of the taxpayer. In some sense the rules encourage investment in machines (and to some extent buildings), since relatively large tax-depreciation in the first year(s) is allowed, followed by less depreciation when the asset is older. The costs of purchasing land are not depreciable. For large capital investments in machinery and equipment, including ships, advance depreciation may be taken prior to delivery and actual use in a business. The costs of purchasing animals are deductible and sales are taxable.

Intangible assets (the most commons are potato delivery rights, sugar beet delivery rights and property related hunting rights) are not fixed assets, but current assets in Denmark. The different kinds of intangible assets can not be written off in the balance sheet. Special tax rules apply to milk quotas. The value of a milk quota is considered part of the value of the real property (recently suggestions have been made, that milk quota might be treated as other intangible assets as for instance goodwill. The quota would then be depreciable).

The tax treatment of capital gains and losses depends on the type of the asset sold. If an individual's activity of buying and selling a certain type of asset constitutes a trade or business, the profits and losses of such transactions will always be taxable or deductible, normally as personal income. Capital gains from selling single-family houses, summer quarters etc. in which the owner has been living, are tax-exempt. Taxable capital gains are included in the company's total taxable profits. The realisation of a capital gain on the disposal of depreciable machinery or equipment does not give rise to immediate taxation
because the sale proceeds are deducted from the depreciable-pooled basis, thus only reducing the scope for future depreciation.

Complicated rules exist in case of negative income. The essence of the rules is that losses may be carried forward for 5 years. No carry back is allowed. Losses may also be transferred to a spouse. The carry forward and transfer of losses to a spouse also applies for purposes of local income taxes. The deductibility and carry-forward of certain capital losses are restricted. If a business is not carried out on a professional basis, a surplus is to be taxed whereas a deficit cannot be deducted.

In Denmark no distributing systems to equalise income exist. But there is another possibility to equalise income. That is if the Company Scheme is used. Income can be saved in the scheme in years with high income and withdrawn in years with none or low income.

Married persons are taxed separately. If a married couple runs a business jointly or if one’s spouse is assisting in the business, the starting point is that the business profit is taxed on the spouse who is working most in the business.

The total national income tax liability is the aggregate of taxes levied on six different tax bases. Local income taxes are levied by the municipal tax district and by the county tax district. For 2000, the national average of the aggregated county and municipal income tax rates is 32%.

Only about 2% of the Danish holdings are private or public limited companies. These farms are subject to corporate tax of 32%.

Special agricultural issues
The trends in Denmark are that the farmers are more and more treated as any other businessmen are.

Inheritance and gift tax
The gift tax rate is 15% and the tax-free amount is 5,700 Euro. Every year both spouses can make tax-free gifts up to 5,700 Euro to each child. The gift tax rules apply to gifts made to children, grandchildren and parents. These rules do not apply to gifts given to sisters or brothers as in this case the value of the gift has to be added to the income. The same applies to gifts made to more distant relatives or persons not related to the donor.

The inheritance tax is 15% when the heir is closely related to the deceased person. If the heir is a distant relative or not related to the deceased, the rate is 36.25%. A tax-free amount of 25,700 Euro is deducted from the total net property left by the deceased. If for instance there are three heirs, each of them are not to pay inheritance tax on the first 25,700/3 Euro.

Costs of social security
Social security contributions are payable by employees and self-employed persons. For 2000 the rate of the labour market contribution is 8% of the gross salary. For employees the employer withholds the contribution. A pension contribution of 1% is levied together with the general social security contributions on the same taxable base. For employees, the employer withholds the contribution. Both of the contributions are deductible for individual income tax.
**Real estate and net wealth tax**

Immovable property situated in Denmark can be subject to three types of real estate tax:
- municipal real estate tax;
- county real estate tax;
- municipal real estate tax on buildings used for offices, hotels, plant, work shops and for other similar business purposes.

The owner of immovable property is normally the taxable person. For municipal and county real estate tax purposes, the taxable base is the value of the land. No wealth tax exists.

**Value added tax (VAT)**

Denmark applies a VAT system under which tax is levied at all levels of the supply of goods and services. Individuals and companies are taxable if they carry on a business. Self-employed people with a turnover below 2,700 Euro can choose not to be included within the VAT system. This limit is so low that it is of no importance in practice. The rate is 25% on all goods.

**Conveyance tax**

On conveying real property a stamp duty of 0.6% (from the year 2000 on) is paid on the assessed value of the real property. When raising a loan on real property a tax of 1.5% is paid on the money borrowed.

**Environmental taxes**

Energy taxes are divided into an energy tax, a special CO2 tax and a electricity tax. The energy tax and the CO2 tax on energy used for space heating in business enterprises and fuel for motor vehicles (e.g. lorries) are not refunded. The same applies to energy used for private purposes. Water from a waterworks is taxed at 0.66 Euro per m³. Farmers are paying tax on pesticides, fertilisers and growth promoters.

**A1.3 France**

**Structure**

In France the share of agriculture in the GNP is about 5%. The number of farms is very fast decreasing (in 1997: 680,000). Of all the farms about 25% has more than 50 ha, with a part in agricultural area of nearly 65%. France has about 30% of the agricultural area in the EU. Landowners cultivate 43% of the area, tenants about 56%. About half of the agricultural production are vegetables, the other half is animal production. The share of the agricultural population in total working population is decreasing to 3.7% in 1997. About 45% of the farmers are older than 55 years. Individuals and sociétés run about 80% of the French farms. In France, special legal forms exist for the agricultural sector. These legal forms are on the one hand legal bodies, but on the other hand fiscal benefits of the partnerships are available to the Sociétés. So the farmers know limited liability and dissociated capital, but do not pay company tax but income tax.
Income and tax calculation

The farming benefits are taxed in the fiscal home's income as farming income. General accounts give insight in the profit of a period and the account position of assets and debts. Taxable income is the total of the net results of each of the taxpayer's income category, such as employment income, business income, capital gains, and agricultural income. The net result of each category is then the gross income less the expenses incurred in acquiring the taxable income. Income is first computed and adjusted according to each category's own rules.

One of the categories of income is the agricultural income. As a rule, any income received from running any rural real estate by the tenant farmer or owner is considered farming income. Benefits from non-agricultural activities are taxed according to the rules of other income categories. When this part is less then 30% of the turnover or a certain amount it can be taken into account of the farming income.

Concerning agricultural farms, a professional comity has settled a General Agricultural Accounting Scheme. About one-third of the farms (70-80% of the production) have an actual farming income taxation regime: 50% of this group has a simple actual regime and 50% a standard actual regime (actual bookkeeping) Two-third of the French farmers (20-30% of the production) doesn't have accounts. When earnings are below a certain amount the valuation is applicable. A valuation system calculates the fiscal income in two phases. First per region/department an average is settled per production-unit. Afterwards a personal valuation is calculated, depending on type of soil, number of units, tenant farmer or land owning farmer.

Beside the sale of farm products, also compensations by insurance companies, EEC grants (CAP) and incidental proceeds from assets are included in the farming benefit. Charges and expenses necessary to practise are deductible from this benefit, also provisions (under certain rules), loan interest (when buying land a fast deduction of interest scheme is possible), and expenses for obligatory contributions such as health and pension. Extra pension contributions also, only with reservations.

For all fixed assets other than land (in France considered as a private asset) and intangible assets (mostly not written on the balance sheet, only right to replant vine, soil improvements) depreciation is part of the tax rules. It is possible to use the straight-line method or the reducing balance system. The depreciation-base is the purchase or the production cost. Basis is the economic useful life, determined in accordance with business practice.

The gross aggregate income is determined by adding up results of all categories of income after applying the specific relief measures. The income of the household is the income of the spouses and their unmarried children under 18 years (French income tax system is based on the fiscal home!). The net aggregate income is determined by applying the personal deductions (some related to the family situation) and allowances.

A loss in one category may normally be set off against income of another category, but there are exceptions. Excess loss, which cannot be set off against the income of a given year, may be carried forward for 5 years. There is no opportunity for individuals to carry back losses, only legal persons paying corporation tax. In case of an exceptional farming income (more than 1.5 times the average of the three previous years) the excess can be taxed according to the quotient system. The three years averaging system is an other op-
tion. It applies to all sources of farming income obtained by the farmer on his own and as a partner in an association or a society.

The progressive income tax-rate ranges from 0% to 54% (in 2000 over the 1999 income). Certain types of income, such as gains on certain sales of shares, are subject to flat rate taxes. Besides the income tax, residents must pay the social taxes (see later). There are no local income taxes.

Company tax is levied on profits and has to be paid by public and private limited companies. The standard rate is 33.3%. The rate for long term capital gains is 16% plus 10% for social fees. An annual lump-sum tax based on companies turnover is payable and is creditable against the corporate tax of that and the following two tax years.

Special agricultural issues
The normal rule for depreciation is linear depreciation. Handling machinery, water-purifying equipment, energy production equipment and other specific assets can be depreciated with the reducing balance method. Many farmers may claim exceptional depreciation that is allowed for buildings and equipment that purify water, save energy, preserve environment or to fight pollution.

Actual tax paying farmers can deduct an investment allowance from their income, within certain limits and restrictions. Farmers that are member of chartered accounting organisation and taxed on an actual income get a reduction of the taxable income (up to certain amount) of 20%.

Inheritance and gift taxes
Inheritance and gift tax is imposed by the state on property acquired by inheritance or gift. The rules of the two taxes differ slightly. Gifts and inheritance between family (parents, children, grandparents) are due to a standard deduction. Rates are determined on the basis of the proximity of relationship between the donor and the donee.

In most cases, tax is imposed on the fair market value of the assets. Certain assets are wholly or partly exempt from inheritance tax (related to nature of assets, the quality of the deceased and/or beneficiary). Inheritance tax is levied on the value of the transferred assets less related liabilities. In the case of gifts the liabilities are not deductible.

Costs of social security
Social security contributions are based on earned income and are paid by employers, employees or both. Paid contributions are deductible from the taxpayer's employment income. The overall rate is nearly 40% of gross wages (=28% of overall wage costs for the employer). The aggregate rate (employer and employee contributions) is freely apportioned between both. Since the eighties there is a trend towards a sort of mixture between taxes and social fees. The calculation of the social security contributions of the sociétés are based on the profit of the farm and not on the earned income.

A new contribution, the generalised social contribution (CSG), based on overall income is gradually replacing part of the social contributions based on earned income. The 'social' part is deductible from taxable income. The rate of the CSG is 7.5% (2000).
Real estate and net wealth tax

The property tax and the dwelling tax (both local taxes) are distinct taxes and may be levied cumulatively. The owner is subject to both taxes. The property tax is due annually on all properties owned on 1 January of the relevant year. The tax is due by the owner and applies to both developed and undeveloped property located in France. The tax is based on a part of the notional rental value.

In France there is also a land tax, which is gradually decreasing. The tax is based on an annual evaluation (about 10% of market value). The rate varies from region to region but can be as high as 20-40%. It is not a heavy burden to French farmers. In northern-France there is a polder-tax of 15 Euro/ha.

When real estate is transferred in return for payment, a transfer tax is paid at 4.8% rate (unless VAT has been collected). For farm estate the rate may be lowered to 0.6% if the tenant farmer buys land he used to rent.

Resident individuals are subject to an annual net wealth tax on the fair market value of assets owned on 1 January of the tax year, minus liabilities, if the net value of these assets exceeds 717,000 Euro (in 2000). However, various assets are exempt from the tax, including business assets, substantial shareholding (more than 25%) held by managing directors, and certain life insurance policies. For 2000 the rate is between 0.55 till 1.8% (above 15 million Euro)

Value Added Tax (VAT)

The VAT is an indirect tax and it's rate ranges from 19.6% (base rate) to 5.5% (food, agricultural goods, forestry goods, water). Exceptionally 2.1 is the percentage.

Conveyance tax

When real estate is transferred in return for payment, a transfer tax is paid at a 4.8% rate (unless VAT has been collected). For farm estate the rate may be lowered to 0.6% if the tenant farmer buys land he used to rent.

Environmental taxes

Taxes are levied on energy, water and waste. Taxes on pesticides, herbicides and fertilisers are introduced recently. Fuel for heating and diesel for tractors is taxed at a special low rate

A1.4 Germany

Structure

In 1997, 525,000 agricultural businesses were recorded in Germany. Since 1993, this number has decreased with about 11 percent. The decrease is related to the development in the western part of Germany while in East Germany there is an increasing number of businesses as a result of the recovering and restructuring of smaller agricultural units since unification. About 90% of the agricultural businesses are run as family businesses.

The German farmers can choose different legal forms and types of companies. A regional difference has to be considered. In 1997 in the western part of Germany more than 95% of the farms are individual businesses. Businesses structured as companies or legal
persons are mostly situated in East Germany. The most used form of partnerships in agricultural businesses is partnerships due to private law. It is a flexible form of partnership mostly used in a family business.

Income and tax calculation
Almost 191,000 agricultural businesses, that is about 36% of all farms in Germany are obliged to accounting or use it deliberately for taxation or economical reasons. Opposite to this there are about 260,000 small agricultural businesses to determine profits with a simplified flat rate method and about 75,000 farms are using a third profit calculating method. This last method is an excess of receipt over expenditure system. Accounting obligations for tax purposes are not in all steps equal to commercial accounting after trade law. The most important differences are the valuation of stocks, provisions, reserves and so on, and the right or obligation of choosing a special accounting period as well. The taxable income of corporate taxpayers is the total amount of income whether from domestic or foreign sources after deduction of business expenses. Regarding the taxation of capital gains, German income tax law distinguishes between capital gains derived during the course of a business and capital gains realised through private transactions of resident individuals. The first are treated as ordinary business income whereas the second are mostly not subject to income taxation. However, people who speculate on the stock market and sell within 12 months and make a profit would liable to pay tax. The same goes to the selling of property (real estate) within 10 years, if the real estate is not part of the business or farm assets. Capital gains on the alienation of certain fixed assets, which are replaced with similar assets, may be rolled over.

Depreciation is compulsory and must take place whether the company is profitable or whether it incurs losses. The normal methods of depreciation for movable fixed assets are the straight-line method, the declining-balance method and the production method. They may be used alternatively, provided the required conditions are met. A change from the declining-balance method to the straight-line method is permitted, but not vice versa. In general all machinery and equipment are depreciated according to their useful economic life. If the movable assets acquired or manufactured are depreciated according to the declining-balance method, the annual rate of depreciation is limited to two times the allowable straight-line rate with an overall maximum of 20%. Accelerated depreciation may be taken instead of ordinary depreciation. Accelerated depreciation up to 10% is available in the year of renovation and in the following 9 years for modernising and maintenance measures with respect to buildings situated in areas declared as development areas and buildings qualifying as historical monuments.

The land is mostly part of the business assets. Land is not depreciable. But it is possible to adopt a reduced value in a case where the market value is constantly decreasing. Animals are part of the fixed assets if appointed to be used within the business for agricultural production. Depreciable fixed assets are for instance breeding cattle, milk cows and hens. Permanent plantations are regarded as depreciable fixed assets and must be included. In general depreciation of permanent installations starts in the year of the first use, that is the first harvest. Livestock has to be valued individually as any other asset. For simplification livestock groups are allowed to be divided into age classes. Plants with a period of growth of more than a year are obliged to be included with the costs of acquisition or pro-
duction. Inventory may be valued at its cost of acquisition or manufacture, or at going-concern value, whichever is lower.

Intangible assets are only to be accounted for if acquired or transferred into business. On the contrary, granted delivery right such as milk quota (directly granted) or sugar beet delivery rights (indirectly granted) are not to be accounted for in a balance sheet. Milk quota and to a certain extend planting rights for winegrowers are regarded as depreciable.

As from 1999 new rules were introduced which restrict the set-off of losses and the loss carry-over. Optionally, the taxable income in case of extraordinary income can be calculated differently and this is done in 3 steps. First the taxable income and the tax on that amount has to be determined without the extraordinary income. Secondly 1/5 of the extraordinary income has to be added to the taxable income and again the tax on that amount has to be determined. Thirdly the difference resulting from both steps of tax determination is multiplied by the factor 5 and the result added to the tax amount already determined in the first step of the calculation.

Individuals are subject to income tax and a solidarity surcharge levied on that tax. The personal income tax is a federal tax. Individuals carrying on a trade or business are also subject to a trade tax on income. However, since the Tax Reform of 2000 the majority of small and medium sized enterprises are fully relieved from trade tax (Federal Ministry of Finance, 2000).

Part of the income is defined as 'profit'. By definition of the German Income Tax Act 'profit' is defined as the difference between the business assets at the end of the tax year and the end of the preceding tax year, plus withdrawals and minus contributions. 'Income' is defined as the excess of receipt over expenditures to acquire, secure and maintain revenue.

Agricultural income is not subject to trade tax. The shifting over to business or trade income is related to the income tax regulation on partnerships due to commercial or private law estimating that any commercial activity will lead to business or trade income no matter of what scale it is. Then it is subject to the trade tax on income whilst agricultural income is not.

The German personal income tax rate schedules are based on a formula approach. Individuals pay taxes according to a progressive rate at between 19.9% and 48%. Those subject to corporate income tax include corporations such as stock companies, limited partnerships with shares and limited liability companies. All income earned by those corporations is defined as income from trade or business. Partnerships, including a limited partnership with a corporate general partner are not subject to corporate income tax.

In general, every company, which carries on a business in Germany, is subject to trade tax. Companies are always presumed to carry on a business. The taxable income for the business tax is generally determined in the same manner as for income tax purposes, subject to certain adjustments. The effective rate of business tax depends on a federal rate and a multiplier. The amount of the business tax is determined by first applying the basic federal rate of utmost 5% to the taxable business income which results in a basic tax amount. The multiplier is then applied to this basic tax amount to determine the actual tax burden. The multiplier is fixed by the municipalities and may vary according to their financial needs from 250% to 550%. The business tax on income is deductible both from its own base and for corporate income tax purposes.
Special agricultural issues
Small agricultural or forestry enterprises not obliged to do bookkeeping or keep an inventory are allowed to fix the taxable profit based on an 'average' amount based on a flat method. This method can be applied if:
- there is no bookkeeping obligation;
- the area of farmland is less than 20 hectares;
- livestock is be no more than 50 livestock units.

The structure of the method requires a fixed estimated profit based on the hectare value of the land that is officially registered for any farm business and valued in Deutsche Mark. A tax-rate reduction for voluntarily bookkeeping agricultural enterprises is granted.

To a certain extent agricultural and forestry taxation in general has benefits in relation to business taxation. Therefore there is a need to separate taxation on income on agricultural and forestry businesses from trade or business income. The benefits are as follows:
- agricultural and forestry businesses are exempt from trade tax on income as a special tax for businesses levied by the German municipalities;
- special rules for bookkeeping obligations are only valid for agricultural and forestry business;
- special exemptions and tax rate reductions are only available within the agricultural and forestry income taxation regime;
- a fixed facility on VAT taxation is used for agricultural and forestry businesses;
- the valuation base for heritage taxation an real estate tax is related to a specially structured profit related valuation.

When farmland and property is inherited or given, a deduction of about 250,000 Euro from the base for inheritance tax can be made and a 40% reduction of the remaining value. If the successor is a direct descendant a further 200,000 Euro is deductible. Usually because deductions for inheritance and gift duties are cumulative, inheritors pay no duties on farmland.

Gains on the sale of an entire farm business are not treated separately from the gains on the sale of business assets. They are only taxed at half of the usual rate, after a deduction allowance of about 31,000 Euro, if the vendor is over 55 years old or not able to continue the work, because he is permanently unable to work. Gains regarded as speculative are treated separately.

Losses caused by animal diseases can be settled with the losses of all other kinds of income.

Inheritance and gift tax
Inheritance and gift tax is imposed on:
- acquisitions by way of inheritance, gift or on donations encumbered with a charge for a particular purpose and;
- once in every 30-year period on the property of a family foundation.
The liability to pay inheritance tax is incurred at the time of death of the deceased. The liability to pay gift tax is incurred at the time the gift is made. In the case of a family foundation the liability recurs once in every 30-year period following the transfer of capital to the foundation or society. In general, the taxable base is a reduced fair market value of the assets. The rates of the inheritance and gift tax are determined on the basis of marriage or the proximity of relationship between the deceased/donor and the beneficiary/donee and on the basis of the value of the acquisition. In case of business property, the successor could claim the lowest rates of the inheritance or gift tax, irrespective of whether he is a direct descendant.

In the German inheritance law (not only in agriculture) you can find something called *Pflichtteilergänzungsanspruch*. This means, that a successor could get an asset (or a farm) and the person, who gives this asset (the farm) to the successor, is still alive. If the death of this person is more than 10 years after the date of this gift – the other heirs have no claims/demands against the successor.

*Costs of social security*
German social security contributions currently amount to 42.5% of the wages, salaries and other compensations paid to employees up to a fixed amount. In 1999, the social security rates amount to 19.5% for pension insurance contributions, 13.8% on average for health insurance contributions, 6.5% for unemployment insurance and 1.7% for care insurance contributions. The social security contributions are equally shared between the employer and the employee. Farmers are obliged to pay a fixed contribution to their farmers pension scheme. They are exempt from the general pension scheme.

*Real estate and net wealth tax*
The real estate tax is levied annually by the municipalities on immovable property whether held as a private or business asset. It is imposed on the fiscal value at a basic federal rate of 0.35%. The result is multiplied by a municipal coefficient, which ranges from 280% to 600% and brings the effective rate to between 0.98 and 2.1% of the fiscal value. The average rate is around 1.5%. The net wealth tax was abolished in 1997.

*Value added tax (VAT)*
Taxable persons are all entrepreneurs and importers. The following transaction are taxable: the supply of goods and services in Germany, the self-supply of goods and services, the free supply of goods and services to personnel and other persons the import of goods. The standard VAT rate is 16%. A reduced rate of 7% applies to essential goods and services, such as food and beverages (but 16% if consumed on the spot). The rates as from 1st April 1999 are 9% for agricultural goods and 5% for forestry goods.

*Conveyance tax*
In Germany, the Real estate transfer tax is 3.5%. However, the transfer of a farm from parents to children is exempt from this tax.


Environmental taxes
In the state Baden-Württemberg, taxes are levied on energy and water. Farmers are partly exempt from taxes on light fuel oil and for diesel oil. Normally they have to pay about 0.45 Euro tax per litre. But farmers only pay 0.26 Euro tax per litre diesel oil. No taxes are levied on pesticides and fertilisers. The waste charge is not yet definitive.

A1.5 Spain

Structure
In 1997, there were about 2.3 million farms in Spain. Almost all of these farms are subject to income tax. About half of the farms are one-man businesses. The role of agriculture for Spain has decreased in the second half of the last century. Nowadays, only 8% of the people is active in this sector, while 50 years ago this was about half of the people. However, still structural problems exist in Spain such as: not optimal sized farms; farm structures that are out-of-date, low revenues, low degree of co-operation and high costs of production means. The production of meat is economically the most important sector, followed by agriculture, fruit growing and horticulture.

Income and tax calculation
Income is taxable and related expenses are deductible in the year of accrual of the income and the year in which expenses are incurred, regardless of the time of cash receipt and payment. Taxable income is classified into five categories according to the source or origin: employment income, investment income, business income, capital gains and imputed income. The business income includes the profits obtained from agricultural activities. Three methods are available for the calculation of income:
1. direct income calculation;
2. simplified direct income calculation;
3. fixed index numbers for the calculation of the profit.

In general, the first method is used for the calculation of income. The second and third methods are only allowed for the smaller farms, depending on the amount of turnover.

It is allowed to use either linear or digressive depreciation. However, digressive depreciation is not allowed for all kinds of assets. The depreciation rates of assets depend on the type of asset, linear or digressive depreciation and method of profit calculation. Production rights are only valued if they are purchased. When they are sold, the profit is taxable. But if the profit of selling rights is invested in any kind of business, this profit is free of taxes. Land is not depreciable. Tax authorities may accept special depreciation plans with higher annual rates of depreciation for new assets subject to an effective depreciation greater than the one calculated at normal rates. Certain types of assets may be freely depreciated. Intangible assets can only be depreciated if the third method for income calculation is used.

Capital gains and losses are classified as either short-term or long-term. Short-term capital gains include gains arising from a transfer of a property which was owned for 2
years or less. Short-term losses may only be set off against short-term capital gains of the current year. Any remaining loss may only be set off against 10% of the net income from other sources, excluding long-term capital gains. Any excess may be carried forward for 4 years to set off against the positive balance of short-term capital gains and losses, or against 10% of the net income form other sources (excluding long-term capital gains) each year. Long-term capital losses may only be set off against long-term capital gains. Any excess may be carried forward for 4 years. Ordinary losses can be carried forward for 4 years. No carry back is allowed.

Members of a family can choose to be taxed as a unit or separately. If the spouses file separate returns, the determination of income and deductible expenses attributable to each taxpayer takes account of the category or source of that income. The taxpayer's income from the various categories is divided into ordinary and special tax base. The ordinary tax base comprises the net amount of ordinary income plus the positive balance of capital gains less losses on assets held for less than 2 years. The special tax base comprises capital gains and losses from the disposal of assets owned for more than 2 years and of preemptive right to a share subscription owned for more than 2 years. Farmers using the third method for income calculation can get reduction of the income of 7% in case of illness of the farmer, fire, flooding or a break down of the means of production. Losses can be carried forward for four years and can not be carried backwards.

The income tax rates are progressive and range from 18 to 48%. Social security contributions are not included in the income tax. Agricultural legal personalities are subject to corporate income tax.

**Special agricultural issues**

Spanish income tax law offers small entrepreneurs the opportunity to calculate income in an easier way. This possibility also exists for farmers. The initiatives to foster the diversification of rural life consist of incentives for investments, employment and other related activities (Garrigues, 2001):

- investment incentives consist of interest relief on loans obtained to finance investments of up to 72,000 Euros for each job created on a full-time basis during the natural year, and not exceeding 90% of such qualifying investment. These benefits are granted by the Ministry of Agriculture, Fisheries and Food (MAFF);
- employment incentives take the form of direct subsidies of up to 50% of the labour cost of the job created during the first year of activity (subject to a ceiling of 3,600 Euros). Subsidies must be approved and paid by the relevant Autonomous Communities;
- other types of incentives are envisaged for related activities (business studies, business training and retraining, technical assistance for company management, etc.) up to a maximum of between 50% and 90% of the costs incurred in carrying out the activity (with maximum limits that vary depending on the type of activity subsidised). Payment of these aids is made by the Autonomous Communities.

Farmers that provide statistical, accounting and pricing data to the MAFF may obtain an annual subsidy of at most 2,152 Euros per recipient and year for statistical data and 123 Euros for accounting data. The above figures are the maximum amounts for 2000.
To promote the use of new technologies in the agricultural area, incentives are provided for the acquisition of new machines and equipment that involve technological innovation. The incentive consists of a subsidy (the amount of which varies) which is granted as long as the investment in the new machinery is made within a year and the machinery or the equipment acquired are not sold within five years.

_Inheritance and gift tax_
Inheritance and gift tax is levied on property passing to individuals by way of gift or on death. Inheritance tax is payable on 'mortis-causa' transfers of property on the net value of the estate. The law allows a reduction in the taxable base depending on the heir's degree of relationship to the deceased. Transferred assets are valued at their fair market value. The tax rates may vary from region to region.

Where the recipient is the spouse or child of the deceased an additional deduction applies in case of a family business and the permanent resident of the deceased. This deduction is 95% of the value of such property. The deduction of the deceased residence is limited to 123,000 Euro.

_Costs of social security_
All residents employed and self-employed individuals must pay monthly contributions to the social security system, which consists of a general contribution system and special contribution schemes for agricultural workers. The general system divides employees into professional categories for the purpose of determining their social security contribution. For each professional category a minimum and a maximum contribution base is determined. For employee contributions, the rate for 2000 is 6.4%. The employers must make social security contributions at a rate of 30.8%. For self-employed individuals, the social security contribution for 2000 is in general calculated at an effective rate of 28.3%. A minimum monthly taxable base of 681 Euro and a maximum of 2,403 Euro. Compulsory social security contributions are deductible for individual income tax purposes.

_Real estate and net wealth tax_
The real estate tax is levied on an annual basis by the municipalities on the possession of immovable property. It can be deducted from the income. The taxable base is the cadastral value. This value is adjusted every 8 years with reference to the market value of the land and buildings. The general tax rates are 0.4% for urban land and 0.3% for agricultural land. For rural land, the maximum rate depends on the number of inhabitants of the municipality.

Net wealth tax is levied on behalf of the autonomous regions. If a region fails to set its own deductible amount, a standard deduction of about 108,000 Euro applies. The rates vary between 0.2% to 2.5% (over 10,7 million Euro).

_Value added tax (VAT)_
The VAT is levied on most business and professional transactions carried out within Spain and on all goods imported into Spain. The standard VAT rate is 16%. A reduced rate of 7% applies to food, animals, some goods used in agricultural activities, water, most ornamental plants, medicines, first transfer of houses and many transport services. A super-reduced
rate of 4% applies to various basic necessities. A special system exists for farmers. The agricultural goods they sell, are taxable at a rate of 7%. For their supplies they pay the standard rates. Farmers can also choose to use the general VAT-system. It can be profitable to switch to the general VAT-system before investments are made.

Conveyance tax
A duty is levied on capital transfers, corporate transactions and documented legal acts. The rate on the transfers of immovable assets is 6% and for movables the rate is 4%.

Environmental taxes
In Spain, environmental taxes are levied on energy and water consumption. No taxes are levied on pesticides and fertilisers.

A1.6 United Kingdom

Structure
The topography and climate of the UK splits the country into two main areas for agriculture: the north and west are more usually used for livestock farming, while arable farming is more often found in the south and east. As in many other European countries, the trend is towards fewer, larger farms. A mere 17% of the almost 240,000 holdings farm 67% of the agricultural land. Both the farming on occupied land as on tenanted land occur often in the UK. Over the last 50 years there has been a marked decrease in the number of tenant farms and now the farmers own around 67% of land. Tenants farm the remaining 33% of land. In the United Kingdom the most common business form in agriculture is the partnership. Agricultural businesses conducted by husband and wife are by definition a partnership.

Income and tax calculation
Legally unincorporated businesses are not required to produce a full set of accounts and are only required to prepare a statement of profit or loss for the Inland Revenue. In practice even the smallest UK farm business will also produce a balance sheet. There are special rules for small companies, which require less stringent accounting and do not require an audit. Such companies are required to satisfy a size test based on a combination of turnover, profit and/or asset value.

The profit for accounting purposes is derived by deducting trading expenses from the overall receipts, adjusting for opening and closing stock and tenant-right and amounts owing at the beginning and end of the period. A reasonable payment to a farmer's wife as an employee for duties on the farm may be allowed. Examples of expenses, which cannot be deducted from profit for tax purposes, are depreciation, loss on sale of capital items, payments relating to capital items and the proportion of expenses relating to private use. An adjustment will also be made to include the market value of any produce used by the farmer and his family.

Tax legislation provides for specific allowances on capital expenditure known as 'capital allowances' to be claimed against the taxable profit derived from above. The rate of
allowance depends on the type of expenditure incurred. The aggregate of the unclaimed expenditure is known as the 'pool'. The remaining cost (balance of costs) for the plant or machinery is written off over the following years at 25 percent on the reducing balance each year. The 'pool' is consequently reduced and what's left is known as the written down value. The base for next years allowance is this value and at the end of the year the farmer can claim up to 40% of the purchases he has made during the year plus up to 25% of the pools remaining value. He can take less than 25 percent in any year. When items of plant and machinery are sold the proceeds normally up to original cost of the item must be deducted from the pool before calculating the writing down allowance for the year in which he sells. The excess is a capital gain. A balancing charge or allowance may arise on part of the allowances given if the sale proceeds exceed or are lower than the value of the relevant pool or item. The balancing charge is added to the taxable profit.

For short-life assets (life of less than five years) the farmer can elect to have the writing down allowance on that plant calculated separately from your pool of plants and machinery (de-pooling). De-pooling must be made within two years of the year of acquisition. When he sells the asset there will be a balancing allowance or charge, which normally does not arise. The plant or machinery has however to be sold within five years, otherwise the written down value would be transferred to the general plant pool.

Land is not relevant for income tax purposes in the UK. However, the Inland Revenue Statement of Practice deals with expenditure on farm drainage where land is made available for cultivation by the restoration of drainage or by re-draining. Unless there is any substantial element of improvement or the land was acquired at a depressed price due to its swamplike condition then the expenditure on drainage, net of any grant, will be allowed as a revenue deduction rather than an item qualifying for capital allowances.

Acquiring the right to produce is regarded a capital expense and similarly the disposal of the right in quotas is a capital receipt by the vendor. This capital acquisition is not deductible in computing the profits in an accounting period in which the transaction takes place. In the case of milk quota, it is a disposal that is deemed to be a separate asset from the land to which the quota relates. As a consequence quotas allocated free of charge in 1983 have no base value, this results in the whole of the proceeds of the quota being taxable as a capital gain, with no deduction for a cost, when it is sold. Where any quota has been purchased since 1983, the acquisition cost will be allowable expenditure but this will be allocated to the entire quota on a pooled basis with deductions strictly in accordance with the proportion sold. Other livestock quotas are also taxable on the same basis, as there is not attribution of cost, or deemed devaluation of the land, which can be deducted. Sugar beet quota has only recently been allowed to be traded in the UK but will be treated in a similar way to other quota.

Capital gains are subject to tax at the normal rates. Gains realised on the disposal of a business asset may be rolled over, provided that the consideration received upon the disposal is applied towards the cost of acquisition of a new asset of a qualifying class, and the new asset is acquired or unconditionally ordered within 12 months before or 3 years after the disposal (roll-over relief).

Trade losses may be set off against other income of the current or preceding year, or be set off against capital gains of the current year only. Losses may be carried back 1 year and forward indefinitely in the same and continuing trade. There is also a special restric-
tion for farmers and market gardeners under which losses will not normally be allowed against other income if a loss has been incurred in each of the preceding five tax years. This profit is adjusted for tax purposes but is before the deduction of capital allowances.

The legislation recognises that the profits of farms tend to fluctuate from year to year more than those of other businesses and this could result in unfair tax consequences. Farmers are able to average profits of two tax years in some circumstances. Where the profits of one tax year do not exceed 70% of those of the other year, or are nil, full averaging is available and the profits of each year are adjusted to equal 50% of the aggregate of the two years. Partial averaging is available where the profits for one year fall between 70% and 75% of those of the other year.

Each person is a separate legal entity for tax purposes and everyone over the age of 18 must file a tax return of their total income worldwide. Husband and wife often form a partnership when working in a farm. The income is split according to the share of the profit determined on the partners. The basic principle is that husband and wife are taxed separately on all income and capital gains. The tax rates are progressive and range from 10 to 40%. Social security contributions are paid separately.

Since the partnership is the most common farming business structure, not many farmers pay corporate taxes.

Special agricultural issues
Where farmers receive compensation for slaughtered animals (such as during the recent foot and mouth disease slaughter), there are some specific rules. Where the animals form part of the farmer's trading stock, the compensation will be taxed as a trading receipt in the accounting period in which the animal was slaughtered. Where the animals are members of a herd forming the subject of a herd basis election (see below) the compensation will be taxed as proceeds of sale. In addition, where the receipt of such compensation would show abnormal profits and give rise to increased tax, there is an extra-statutory concession from the Inland Revenue. This allows the compensation profit to be removed from the accounts of the year in which it is received and one third is included in each of the three subsequent years, unless the farmer prefers to include all of the profit in the year of slaughter.

At the end of each farm accounting period, it is necessary to value crops in store, growing crops, livestock and stores of consumable goods such as sprays and feedstuffs. Generally the basic principle of valuation applied will be the lower of cost and market value. It is, however, possible to elect to have production stock taxed on a 'herd basis' which treats the animals as capital assets instead of trading stock. In such circumstances, the cost of the initial animals, together with the cost of additional animals, is not deductible from profits, but the cost of maintaining the herd, including replacement animals, is deductible. The sale of the produce is treated as taxable income in the usual way and so is the sale of any young stock as well as the sale of herd animals which are replaced.

Allowances are available for capital expenditure on farm buildings, farmhouses, cottages, fences and other works. The Agricultural Buildings Allowance is 4 per cent of the value per annum. The value of the buildings depend on whether the farm was transferred while the parents were alive or as an inheritance. When the farm was transferred while the parents are alive, the buildings are valued at the base value of the parents. When the farm is transferred at death, the current market value becomes the new base value. These are
capital allowances and are aggregated with other standard capital allowances available. Furthermore, any unused agricultural buildings allowances are available to a purchaser, so in the event of a takeover, there may be such benefits available to the purchaser in addition to the usual capital allowances available. In order to be eligible for the special agricultural buildings allowance, capital expenditure must be by a farmer on the construction of farm buildings and fences for the purposes of farming. Agricultural Buildings Allowances which have not been used at the date of sale can be transferred to the new owner.

*Inheritance and gift tax*

It is necessary to consider whether the assets are being passed down on the death of the owner or while the owner is still alive. In the UK no real gift tax exists. There are no specific fiscal measures for farms or young farmers, however the following measures do apply to reduce CGT:

- principal private residence is exempt and this may apply to farm houses;
- hold-over relief. Capital gains arising on a gift can be passed onto the receiver of the gift provided the giver and the receiver both agree. Thus no capital gains tax will be payable for the gift but the recipient of the asset will be regarded as having acquired it at market value less the capital gain held over (i.e. the original cost of the assets to the donor). On a subsequent disposal this will be the base value on which the subsequent capital gain is calculated. Gift relief applies only to business assets (including owner-occupied farmland and buildings, unquoted shares or shares in family companies). It also applies to tenanted land, so landlords are eligible for relief;
- if a farm was originally purchased by the parents before 1982, then under UK tax law the original cost of the farm is deemed to be the higher of the 1982 value and the original cost of the farm. Holdover relief effectively locks in the capital gain and the potential liability to CGT such that the capital tax liability is deferred to a future generation rather than eliminated completely. This is known as a Potentially Exempt Transfer (PET) as the donor has to live for at least seven years to avoid Inheritance Tax (IT) (see below). If the donor survives for less than seven years then IT (see below) is applied at a scaled rate depending on how many years the donor survives beyond the gift date.

If the farm is transferred to the successor on the death of the parents the principal tax on the estate of the deceased is Inheritance Tax. The two main types of relief available to farm businesses are agricultural property relief and business property relief.

- Agricultural Property Relief (APR). Agricultural property includes 'such cottages, farm buildings and farm houses, together with land occupied with them, as of a character appropriate to the property'. Relief may be denied to excessively big farm houses however additional commercial development may qualify for Business Property Relief (see below). To qualify for this, the transferor must either have farmed the agricultural property for two years before the transfer or should have owned it for seven years before the transfer during the whole of which time it should have been occupied by someone for the purposes of agriculture. A 100% relief applies to owner-occupiers and land let after 1st Sept 1995 and where the landowner has vacant
possession within the next twelve months and a 50% relief applied to all other tenanted property.

- Business Property Relief (BPR). This is a relief against IT on business assets. This would include capital items such as machinery and livestock (including those owned by tenant). Landlords do not benefit from this relief in respect of rented land. To qualify for business property relief the property must either have been owned by the giver for two years before the transfer or replaced other property owned for at least two out of the five years before the transfer. A 100% relief applies to sole businesses, partnership interests and shareholdings in companies not listed on the stock exchange and a 50% relief applies to controlling shareholding in a quoted company on the stock exchange and business assets used in a business but owned by a partner or controlling shareholder.

When death has occurred within seven years of a lifetime transfer, business property relief will be available if the property is still owned by the donee at the time of the donor’s death. Relief will be given on the proportion of the original property which the donee still holds at the date of the donor’s death. The relief will also be available if the donee has sold the original qualifying property but, within 36 months of the original sale uses the proceeds to buy similar assets.

Inheritance tax is levied on world-wide property of domiciled individuals and trusts. Non-domiciled individuals are liable to tax only on assets situated in the United Kingdom. A trust created by a non-domiciled individual and owning only property situated outside the United Kingdom is excluded from inheritance tax (excluded property settlement).

Costs of social security
The nearest equivalent costs in the United Kingdom are The National Insurance Contributions. These were originally intended to fund the National Health Service, unemployment benefits and the State Pensions but in the course of time this direct link has been lost. Social security contributions are not deductible for income tax. The contributions to be paid by the employer are fixed by reference to the wages of the employee. Self-employed persons pay a flat rate of 10.94 Euro per week.

Real estate and net wealth tax
Local authorities levy a council tax based on the type of house occupied or based on the type of property occupied by the business. Agricultural businesses pay no Council tax except for their residential properties. No net wealth tax is levied.

Value added tax (VAT)
Each person who in the course of a trade or profession carried on by him makes taxable supplies of goods and services within the United Kingdom is taxable. The registration threshold is 85,213 Euro as from 1 April 1999. The standard rate of VAT is 17.5%. Supplies of agricultural produce and food (but not meals supplied in a restaurant), construction of non-commercial buildings, books, newspapers, and fuel and power are zero-rated. However some supplies made by farmers give rise to standard-rate taxation:

a) hay and straw offered for sale as bedding;
b) animal keep (e.g. livery);
c) contracting;
d) holiday letting including the hire of camping facilities;
e) sale of milk quota unless the sale is with the land and no separate amount is attributable to quota.

Conveyance tax
In the UK stamp duty is levied on certain transactions. The purchaser is liable for stamp duty on the purchase price on transfers of land and property in excess of Euro 85,716. The rates range from 1 to 3% depending on the value of the transferred.

Environmental taxes
A landfill tax is levied on every tonne of material disposed of into a landfill site. The rate levied is dependent on the type of material. A pesticide and an energy tax might be imposed in the next few years. Farmers are exempt from tax on light fuel oil and diesel oil (red diesel), the tax for the private consumer is much higher. This tax is normally levied (primarily) on the manufacturers and importers of fuel. The tax is deducted when calculating taxable income.
Appendix 2  Method of composition and analysis of sample farms

This appendix describes the different methods presented in EFAC (2000). The advantages and disadvantages of these methods are given, leading to the method used in this research.

The study 'Taxation of agriculture in Europe' (EFAC, 2000) uses sample farms for the comparison of tax systems. To arrive at this approach an intensive discussion was necessary:

- which size and type of farm should be examined;
- should it be the typical national 'average' farm;
- the average farms of different countries would be totally different. Should one of them be chosen and compared to a similar farm in the other nations;
- even if the comparison of one typical farm were possible, what would this prove? If we investigate a dairy farm of for example 50 ha, what information would this give about other types of farms and of farms of different sizes?

These discussions lead to an analysis of 4 feasible methods in which sample farms are used for the comparison:

a) taking one real case of one country and using these figures for a calculation in other countries;
b) constructing a sample farm for all countries;
c) taking a real existing farm for every country and using them as a base for an investigation and summary;
d) taking real existing farms of all countries and using these figures for calculations in all other countries. Using the results of this mixture for a summary.

An analysis of these 4 methods shows the advantages and disadvantages for the comparison of taxation of agriculture in general:

Ad a
The advantages of taking one real case of one country are that the figures are real for at least one country and most of the data required for comparison exist in this national example. The disadvantages are that the example is only real in one country and might not be realistic for other countries. The reader might get the false impression that this example can lead to direct comparison of tax pressure in the involved European countries. The use of an example of one country can also have the result that all the other countries are only compared to the real case of one country, which was not the intention of that research.
Ad b
Constructing a sample farm for all countries raises problems about the economic data, which could be acceptable as an average for all countries. Some of these figures are hard to estimate.

Ad c
Taking a real existing farm for every country and using them as a base for an investigation and summary brings up problems related to consistency. For the reader it is difficult to get an overview, because there is no consistency between the sample farms. This also makes a comparison between the countries more difficult. However, it makes the work for the experts easier since they can focus on an example, which is realistic for them and is calculated according to familiar systems.

Ad d
Taking real existing farms of all countries and using these figures in all other countries makes the research to immense. However, a greater number of real cases would improve the scientific proof.

EFAC chose in their research for the first option. However it was clear to the researchers that the results of the examination could not be used to compare the different national tax burdens by reference to detailed figures and percentages. The example gives an overview of the income tax calculation and the different features in the countries. A French real existing dairy farm was chosen for the comparison, so that all the necessary information was available. If necessary, the figures were recalculated for the other countries. In case of lack of information estimates were made. The farm was a kind of middle of the range average for all countries.

Before taking the mentioned advantages and disadvantages into account, some specific aspects of our research have to be mentioned. First of all, we can make use of FADN. However, it is not allowed to present individual farms out of this database, so it can only be used to construct sample farms, based on an average of a certain group of farm. Secondly, our comparison will emphasise on farm take-overs. This is more complicated than a general comparison of tax systems. Farm take-over is a complex process, which can work out divergently in different situations. Maybe a comparison of the tax systems between an average dairy farm in France of a certain size and an average dairy farm in The Netherlands is to a certain extent possible, but in case of farm take-over this seems to be impossible. Comparisons based on other types of farms or take over under different conditions might lead to remarkably different conclusions. The sample farms will therefore only have an illustrative function. Consequently, comparing sample farms of the various countries does not lead directly to conclusions about how favourable or unfavourable the farm take-overs in the different countries are, since this can differ from farm to farm.

Taking these considerations into account an elaboration of comparison of sample farms seems to be a solution to make a comparison possible. The value of sample farms lies in an illustration of the take-over process in the various countries and the related fiscal aspects. Based on these sample farms and additional expert information a more general comparison is possible. However this comparison will not state much detailed information.
about figures and percentages, but will give an indication of advantageous and disadvanta-
geous characteristics of farm take-overs in the involved countries. The comparison will
ultimately lead to a summarising table demonstrating characteristics of the tax system and
financing options relevant for the farm take-over. Relevant characteristics of the tax sys-
tems are not only related to the successor but also related to the antecedent. This research
first of all focuses on a comparison between the Dutch situation contrasted and the other 5
countries. A comparison from the Dutch point of view is not an obstacle for answering the
research question. Moreover, it has the advantage that for the 5 other countries sample
farms of diverse agricultural sectors can be used, which are typical for that country and are
also important sectors in The Netherlands. The 5 involved countries can be compared to
The Netherlands on relevant aspects for the farm take-over.

For our research sample farms are used to illustrate the take-over process in the dif-
ferent countries and to analyse the scores of the countries on the relevant characteristics.
Based on the study of EFAC in combination with the current research question and the fact
that we can only use averages of the farm in FADN and not single farms, 2 possible ap-
proaches to arrange sample farms are explored:
I. sample farms for The Netherlands (for a number of agricultural sectors), using the
figures for calculations in other countries;
II. for every country and every examined sector a sample farm is arranged and analysed.
The focus is on the process of farm take over instead of on the farm.

The decision, which of the two options for sample farms might be the best for this re-
search, will be based on the following criteria:
 a) how much time does it take to arrange the sample farms;
b) how much time does it take to analyse the sample farms;
c) which option has the most illustrative value for the take-over process;
d) which option facilitates the comparison of the relevant characteristics between the
countries?

The scores for the 2 options are the following:
I. Taking sample farms of one country and using the figures for other countries
 a) Sample farms can be based on averages of groups of farms in FADN. These
groups have to be quite homogeneous, to avoid unrealistic average farms. How-
ever transposing these farms to other countries might result in cases that
are unrealistic to foreign experts. This might imply that the cases have to be
adjusted, which increases the time required for the analysis. Translation to
other countries might lead to discussions. The comparison of the take-over fo-
cuses on the whole process, which differs between countries. To make a good
comparison, the differences in the various stages of the process have to be
made clear. If only one sample farm will be used for all countries, it will be
hard to adjust this sample farm so that is a realistic case for all countries.
b) For a good analysis, the sample farm must be realistic to the experts. If the
sample farm is primarily based on the Dutch situation, then it might not be fa-
miliar to the expert.
c) The value of the sample farms to illustrate the take-over process is reduced by the fact that the sample farms are not in all countries realistic cases.

d) Since the sample farms are based on one country, comparison is easier since the differences are already discovered during the translation of the sample farm of one country towards the other countries.

II. Sample farms for every country and sector examined.

a) Compared to the other option, the estimation is that arranging sample farms for every country takes less time. Since the picking up of data out of FADN is an automated process, it can be done for various sectors and countries simultaneously. If the groups, on which the sample farms are based, are not homogeneous enough, then it might be necessary to make adjustments. Experience with Dutch average sample farms teaches us that this is not a large shortcoming, since the group of farms can be chosen so that it is quite homogeneous.

b) The sample farms will in general be realistic to the experts, except for unfamiliar things due to the averaging of farms.

c) The illustrative value of this option is bigger compared to option I, because the sample farms are realistic in all countries, although they are based on averages of groups of farms.

d) Comparison of the mentioned relevant aspects is possible since the examples are dissimilar for all countries.

Table A2.1 summarises the evaluation of the potential samples cases for the comparison of taxes in different countries. From this table can be concluded that method II is more favourable. Especially the fact that the construction of sample farms takes less time and that the sample farms will be more familiar to the foreign experts.

<table>
<thead>
<tr>
<th>Option</th>
<th>Arranging sample farms</th>
<th>Time for analysis</th>
<th>Illustrative value</th>
<th>Comparative value</th>
</tr>
</thead>
<tbody>
<tr>
<td>I One case → other countries</td>
<td>+</td>
<td>0</td>
<td>0</td>
<td>++</td>
</tr>
<tr>
<td>II Cases for every country</td>
<td>++</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
</tbody>
</table>

a) +: favourable.