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Rural Business Research

Farm Business Survey

2018/2019

Horticulture Production in England



Richard Crane, Tim Adams
and David Deans

RBR

independent research, data and analysis

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Farm Business Survey

2018/19

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March 2020

Foreword to the First Series

This report is one of a series being produced based on the results of the Farm Business Survey (FBS) for England. The annual Farm Business Survey is the most comprehensive and independent survey of farm incomes and provides a definitive data source on the economic and physical performance of farm businesses in England. It is conducted by a Consortium comprising the Universities of Cambridge, Newcastle upon Tyne, Nottingham and Reading, and Askham Bryan, Duchy and Imperial Colleges. The Consortium is led by the University of Nottingham and its members work in partnership, using uniform and standard practices in reporting on their findings to ensure consistent data quality, accuracy and validity. The Survey is financed by Defra and the Consortium values greatly the input of their staff.

These detailed reports for various farm types and enterprises are in addition to the comprehensive Farm Business Survey Reports for Government Office Regions published at www.farmbusinesssurvey.co.uk. The Consortium is seeking by these additional reports to ensure that timely and relevant information is available to farmers, consultants, advisers and other organisations and individuals interested in farming and land management. The analysis and publication of these reports uses data from farm businesses across England, with an individual member of the Consortium undertaking the research analysis. In line with the ethos of the Consortium, these reports present results in such a way as to ensure a significant element of continuity and consistency from one report to the other, whilst also ensuring that each report captures the contemporary issues of relevance to the sector of agriculture in England to which it relates.

We believe these reports will make a valuable and useful contribution to the farming industry and we commend them to you.

Prof. Martin Seabrook

(Chief Executive of the Consortium)

Spring 2007

Foreword to the Fourteenth Series

Now in its fourteenth year of production, our series of reports on the economics of agriculture and horticulture in England from *Rural Business Research (RBR)* has now arguably greater relevance to the farming and horticultural sectors in England than ever before. Following a general election in December 2019, the UK Government has now passed legislation through parliament which will result in the UK leaving the EU at the end of January 2020. A transition period will then follow, with the expectation that by the end of December 2020 the UK will have completed the transition phase of fully leaving the EU.

The new era will impact on many areas of activity in the UK; UK agriculture will witness and experience one of the largest transitions it has seen in decades. The new Agriculture Bill 2019-20 will be translated into policies and subsequently implemented, with an “Agricultural Transition” starting on the 1st January 2021 and being completed by 2028. During this agricultural transition, English agricultural and horticultural businesses will experience a phased decline in the Basic Payment Scheme support, that many businesses have received, while new opportunities for payments for public goods will be introduced and implemented, all against a backdrop of a need to reduce agriculture’s ‘carbon footprint’ and increase productivity performance. Alongside this change in emphasis, trade deals will be negotiated with the EU, the USA and other countries with which we currently, and intend to, trade with. This change in the UK’s agricultural policies and trading relationship will lead to both challenges and opportunities for business. Irrespective of the challenges and opportunities that lay ahead, most industry commentators note the need for businesses to adapt and to be fully aware of their costs and returns. We hope that RBR’s core focus on independent analysis of the economics of agricultural and horticultural sectors will continue to provide the industry with the data on enterprise and sectoral returns to aid business decision making.

For the 2018/19 year, average Farm Business Income (FBI), derived from our work on the Farm Business Survey (FBS), fell to £50,400 per business from £54,100 in 2017/18. The 2018/19 year relates to the 2018 harvest year, which witnessed an exceptionally cold spring “The Beast from the East” followed by one of the driest summers on record (almost in line with the 1976 drought). These weather impacts led to forage shortage and thus increased livestock feeds costs in the grazing sectors, and reduced cropping yields, albeit with an increase in crop prices. The dairy and grazing livestock sectors witnessed the largest percentage decreases in FBI, as they faced the higher costs of feed and lower prices for stock, particularly in the less favoured areas (LFAs).

As with our previous editions of these reports, available at www.ruralbusinessresearch.co.uk, our core aim is to inform agricultural and horticultural businesses about the economics in their sector. This series of reports, and our work on the FBS more generally, would not be possible without the cooperation of the farmers and growers who participate in the FBS to ensure that the data we provide for policy making, and in our reports and free to use online data services at www.farmbusinesssurvey.co.uk, is truly representative of the sectors. Our sincere thanks therefore go to the farmers and growers for their most valuable contribution.

Professor Paul Wilson

Chief Executive Officer, Rural Business Research
January 2020

www.ruralbusinessresearch.co.uk

Acknowledgements

Rural Business Research thanks sincerely all those farmers and growers who have voluntarily provided records and information on which the annual Farm Business Survey, and this report, is based.

The basic information on which this report is based was collected on behalf of, and largely financed by, the Department for Environment, Food and Rural Affairs and is Crown Copyright.

The views expressed in this publication are those of the authors and are not necessarily shared by other members of the University or by the University as a whole.

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SUMMARY

Section 1

An overview of the horticultural industry in the United Kingdom (UK) using external data, including government published statistics and information from the press.

The report illustrates the importance of horticulture to UK agriculture output, the composition of its sectors and highlights historical and current trends in the output, prices and the areas used for crop production. The review also includes price indices for key products and inputs. The numbers that appear in square brackets relate to the sources of information and these references are fully listed on Page 66.

Highlights:

- In 2018, the output from horticulture was £3,525 million, 13% of total agricultural output [1]
- During the last decade, there has been an average annual increase of 2.1% in output (based on current prices) for total horticultural production [1]
- Vegetable production remains the largest horticultural sector, in terms of both land use and output, accounting for 40% of total UK horticultural output and 72% of total productive outdoor horticultural area in 2018 [1,2]
- The proportion of vegetable production has reduced over the last 30 years, from a decade average of 54% in 1989 to 1998, to 42% in the most recent decade, 2009 to 2018 [1,2]
- Output from ornamentals was an average of 37% during the decade 2009 to 2018, which was equal to the previous decade [1,2]
- Fruit output, at 21%, has shown an increase from the 16% average in the previous decade [1,2]
- In 2018, the UK was 38% self-sufficient in all vegetables, 17% in all fruit and 52% in all ornamentals, in terms of value [1,2]
- The index of producer prices showed some wide variability between 2017 and 2018 with indices for fresh fruit up four points and fresh vegetables up thirteen points [3]
- The index of purchase prices saw fuel for heating increase continue to rise, from 100.7 to 107.5, whilst fertilisers & soil improvers jumped from 89.6 to 100.8 [4]

Section 2

A review of the financial results derived from the Farm Business Survey (FBS) for the 2018/19 financial year.

The stratification of the FBS horticulture sample is explained and key trends are shown for the businesses included, both as a whole, and for the four main groups of Glass, Fruit, Hardy Nursery Stock (HNS) and Other Horticulture. The results for each group are presented in tables reporting on output, costs and Farm Business Income (FBI) at a business level, per hectare and per £100 of gross output basis.

Highlights:

- The number of FBS eligible horticultural businesses in 2018/19 was 2,752, while the total FBS sample was 172 businesses, representing 6.3% of the national population of eligible horticultural businesses

- Weather conditions for the 2018/19 financial year were variable through the season; early spring brought very cold, wet and stormy conditions, whilst the summer was very hot amongst short, sharp periods of rain
- Profitability for all horticultural businesses, as measured by Farm Business Income (FBI), rose by 11.5%, to an average of £52,075 per business in 2018/19
- Specialist Glasshouse and Specialist Hardy Nursery Stock businesses increased profitability by 36% and 31% respectively
- Specialist Fruit businesses on average saw a 26% drop in Farm Business Income
- Average total costs for all business fell slightly this year, from £373,843 in the 2017/18 year, to £369,389 in 2018/19

SECTION 1: THE HORTICULTURAL SECTOR

An overview of the horticultural industry in the United Kingdom (UK) using external data, including government published statistics and information from the press. The numbers that appear in square brackets relate to the sources of information and these references are fully listed on Page 66.

1.1 The contribution of horticulture to UK agricultural output

- Total agricultural output in the UK in 2018 was £26,651 million, up 0.4% from the previous year
- Total horticultural output in the UK in 2018 was £3,525 million, contributing 13% to total agricultural output
- Total horticultural output decreased by £105 million between 2017 and 2018, down by 3.1%
- Average horticultural output in the ten-year period 2009 to 2018 was £3,336 million, an increase of £667 million (25%) compared with the previous 1999 to 2008 period average

1.2 Historic changes in the composition of the main sectors of horticulture

- Horticulture can be sub-divided into its three main sectors of fruit, vegetables and ornamentals for reporting purposes
- The area used by each sector has varied over the past thirty years, however, during the past decade from 2009 to 2018 the vegetable sector accounted on average for the largest proportion of land use (72%), followed by fruit (21%) and ornamentals (7%)
- The total area of land utilised for horticultural production since 1988 averaged 178,004 ha; down from a peak of 208,054 ha in 1988, to a low of 161,945 ha in 2016. The total area decreased by 2% from 2017 to 164,970 ha in 2018
- Output has also varied over the past thirty years, which on average has seen the vegetable sector as the greatest contributor (47%), followed by ornamentals (36%) and fruit (17%)
- In 2018 actual output for the sectors was:

○ Vegetables	40%		41% }
○ Ornamentals	38%	compared to	38% } in 2017
○ Fruit	22%		21% }
- In value terms, horticultural output in 2018, (compared with 2017) was:

○ £1,417 million for vegetables	(down 4.4% from £1,481 million)
○ £1,339 million for ornamentals	(down 3.6% from £1,388 million)
○ £769 million for fruit	(up 0.4% from £766 million)

1.3 Horticultural production in the past decade (in current terms)

- The value of total annual horticultural production in the UK has averaged £3,097 million in the decade since 2009
- In this decade, production started at a low of £2,494 million in 2009, and increased to a peak of £3,569 million in 2017

- Between 2009 and 2018, total horticultural production grew in value by 41% with the different sectors showing a wide variation in growth rates as noted below:
 - Vegetables from £1,093 million to £1,417 million, up 30%
 - Fruit from £522 million to £769 million, up 47%
 - Ornamentals from £879 million to £1,339 million, up 52%

Figure 1.1 Value of horticultural production (current prices: £m)¹

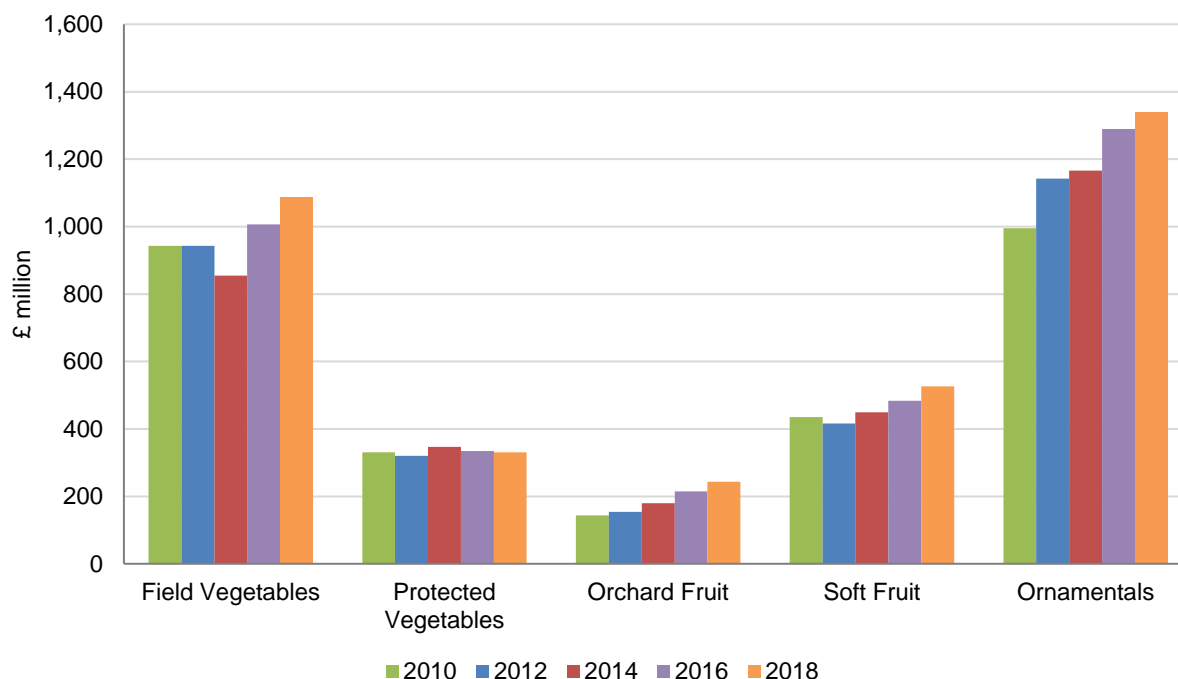


Table 1.1 Area of outdoor and protected crops in the UK (ha)^{1,2}

	2010	2012	2014	2016	2018
Glasshouse fruit	185	202	225	217	245
Protected Vegetables	691	755	855	829	803
Outdoor Ornamentals	11,718	12,308	11,996	11,508	11,673
Field Vegetables	121,142	123,460	116,112	112,554	115,938
Orchard Fruit	23,960	24,185	23,437	25,144	23,930
Soft Fruit	10,365	9,334	9,376	9,991	10,562

Note: The area of crops in table 1.1 relate to the total area, which for some crops will be for more than one crop harvested from the same area of land in the same cropping year (multiple cropping).

- The area of glasshouse fruit increased by 32.5% since 2010
- The area of protected vegetables increased by 16.2% since 2010
- The area of outdoor ornamentals increased by less than 1% since 2010, with some fluctuation between years
- The area of field vegetables decreased by 4.3% since 2010, despite a 3% increase since 2016
- The area of orchard fruit in 2018 was very similar to that in 2010, but fell by 5% since 2016
- The area of soft fruit has grown by 2% since 2009, with 6% growth between 2016 and 2018 alone

1.4 The horticultural sector in 2018

- The total value of horticultural output in 2018 amounted to £3,525 million
- Field scale vegetables comprised the largest share of total output at 31%
- Flowers and bloom accounted for the lowest share of the total output at 3%

Figure 1.2 Value of horticultural produce in 2018 by proportion of total output ¹

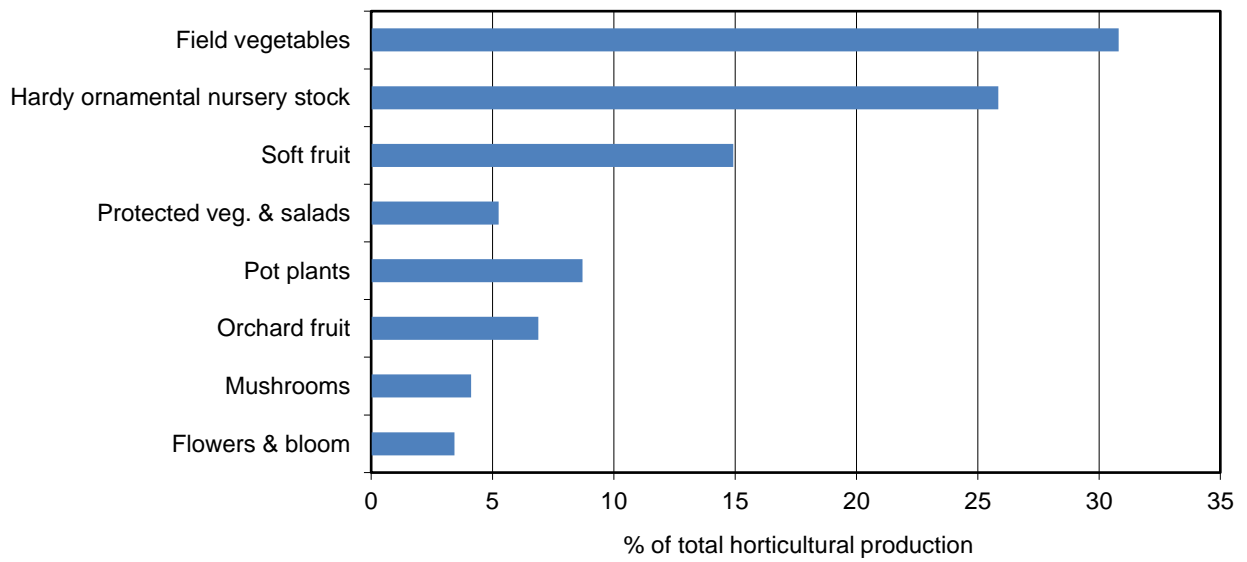
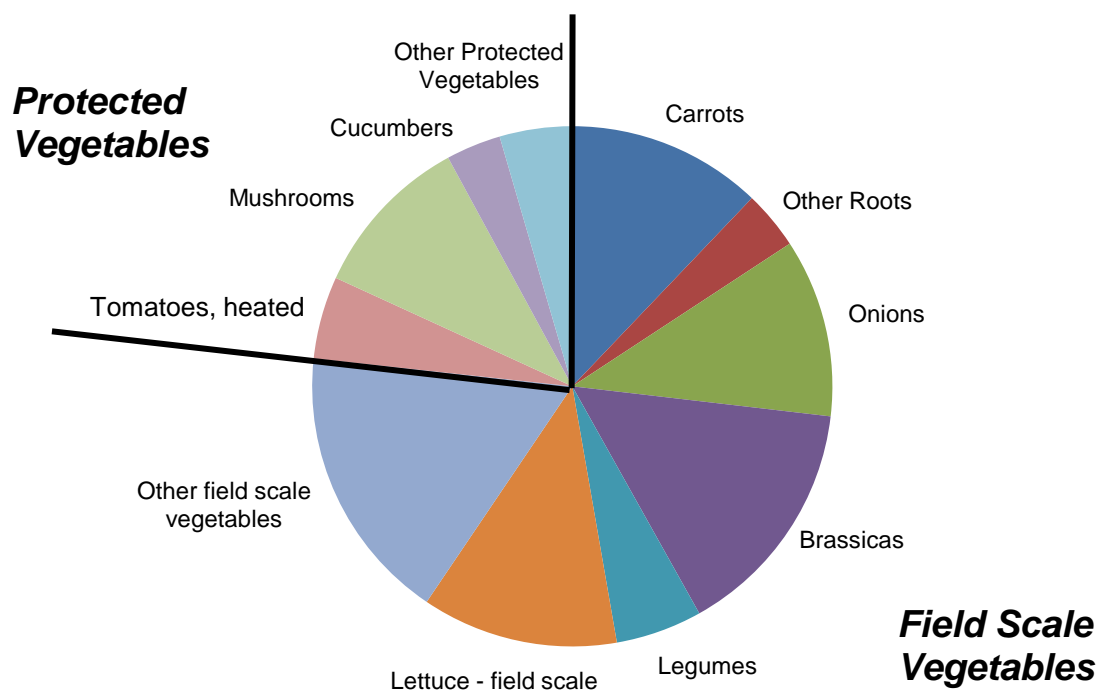
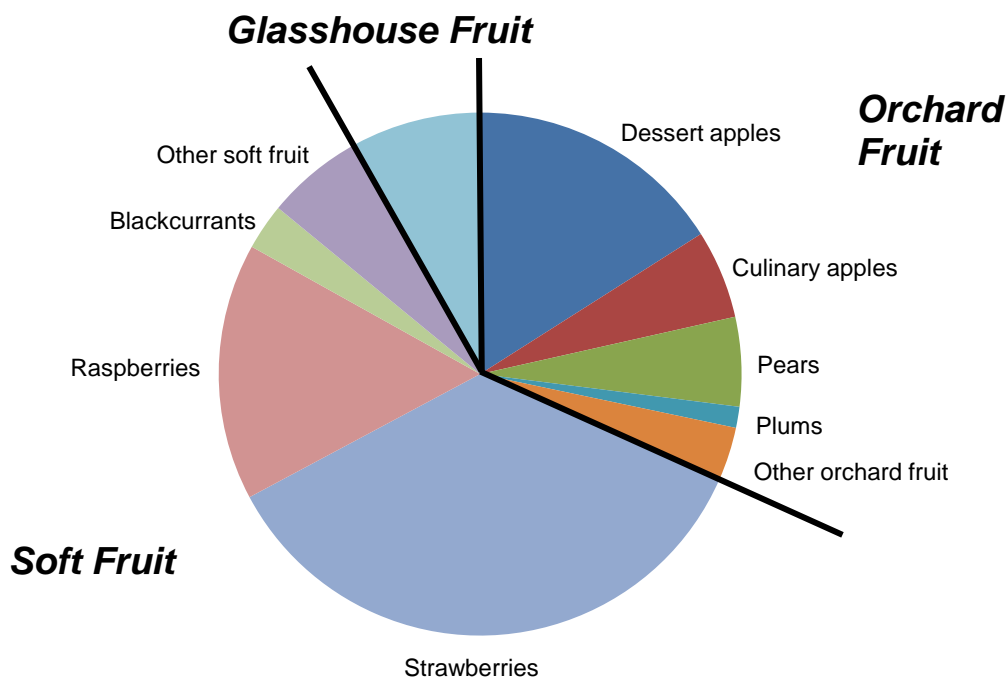


Figure 1.3 Composition of vegetable output in 2018²



- Field scale vegetable production account for 77% of total value of vegetable produce, including brassicas, carrots, legumes, parsnips, turnips, swede, asparagus, watercress, leeks, lettuce, rhubarb, celery and onions (dry bulb and green)
- Brassicas account for the largest single proportion by category of the total vegetable value, at 15%
- Protected vegetables include crops grown in both heated and cold glasshouses and polythene tunnels, and account for 23% of total vegetable value
- Mushrooms and tomatoes are the highest contributing protected vegetables to the total vegetable production value, at 10% and 5% respectively

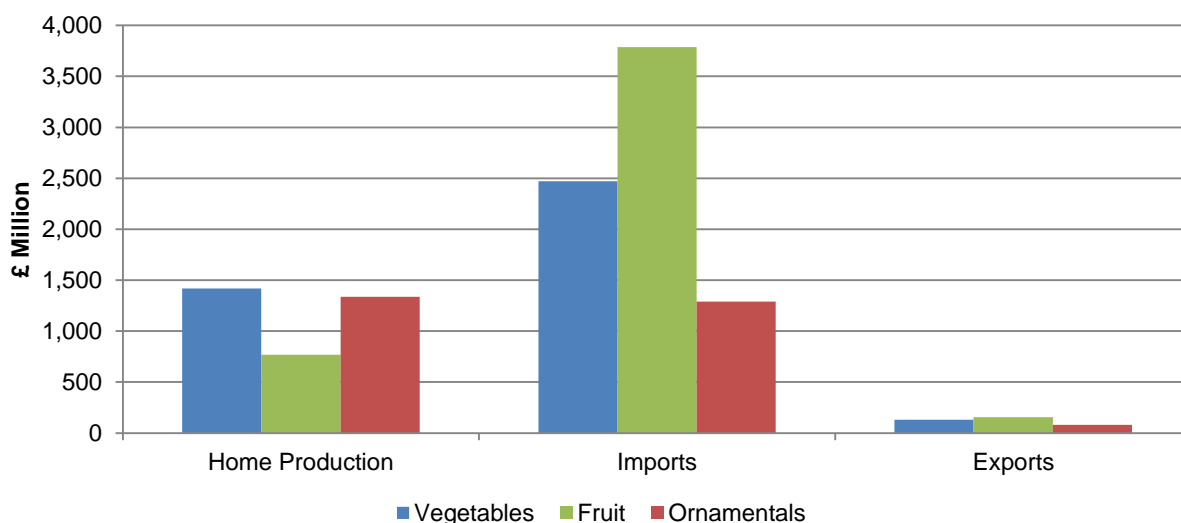
Figure 1.4 Composition of fruit output in 2018²



- Total fruit output by value was £769 million, with the production of field grown soft fruit generating £465 million (60.5%), orchard fruit £243 million (31.5%) and glasshouse fruit £61 million (8%)
- Strawberry production contributed the greatest share of all soft fruit production at £274 million (59%), and 36% of total fruit production
- Dessert apples accounted for 51% of orchard fruit output in 2018, and was equal to raspberries at 16% of total fruit production
- Plums accounted for the lowest proportion of orchard fruit, at 4%, and of total fruit value, at 1%

1.5 Imports and exports of horticultural products

Figure 1.5 Value of vegetables, fruit and ornamentals 2018 (£m)^{1,2}



Vegetables

- The UK was 38% self-sufficient in all vegetables in terms of value in 2018, averaging 40% between 2009 and 2018
- Both imports and exports are at their all-time highest in value, and between 2017 and 2018 the value of imports increased by 3% to £2,472 million, whilst the value of exports rose by 18% to £130 million
- The value of home-produced vegetables in actual prices increased by 30% between 2009 and 2018, to £1,419 million

Fruit

- In 2018, in terms of value, the UK was around 17% self-sufficient in fruit, 1% below the average over the past decade since 2009
- Exports and imports of fruit are of the greatest value for the three groups of horticultural produce. Between 2017 and 2018 these exports increased by 4%, whilst the value of imports fell by 1%
- The value of home production in actual prices increased between 2009 and 2018 by 38%, and is now at the highest level of £769 million

Ornamentals

- In terms of value, self-sufficiency for ornamentals in 2018 was 52%, averaging 53% since 2009
- Between 2017 and 2018 the value of imports increased by 8% to the highest level ever recorded, at £1,290 million, whilst the value of exports fell by 3%
- The value of home production in actual prices increased between 2009 and 2018 by 52%, falling 2% from 2017 to £1,339 million

1.6 Farm gate prices (actual): recent trends

- The fruit and vegetable sectors have seen significant price fluctuations between 2010 and 2018. As shown in Figure 1.6, strawberries are now at their highest price within this period, at 250 p/kg, whereas raspberries are also at their highest price since 2010, at 786 p/kg
- Top fruits shown in Figure 1.7 are also all at their highest value in the 2010 to 2018 period. Overall, top fruit has seen an average 66% rise in prices through this period. Plums & gages have seen the largest increase, from 87 p/kg in 2010 to 158 p/kg in 2018
- Brassicas, namely brussel sprouts, cabbage and calabrese, have shown considerable inter-year variability, with an average price fluctuation between lowest and highest prices of 152% between 2010 and 2018
- Vegetables excluding brassicas, namely carrots and parsnips, also showed inter-year variability, with an average price changes of 39%, since 2010
- Salad crops, i.e. lettuce, tomatoes and cucumbers, recorded price changes between lowest and highest prices of 115%, 67% and 48% respectively over the period 2010 to 2018

Figure 1.6 Average soft fruit farm gate actual prices³

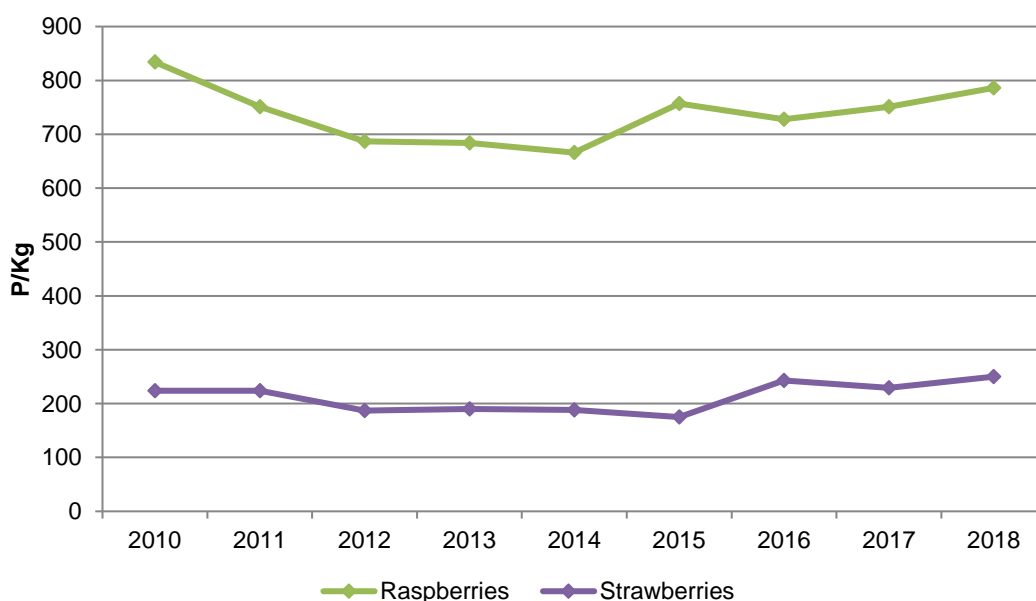


Figure 1.7 Average top fruit farm gate actual prices³

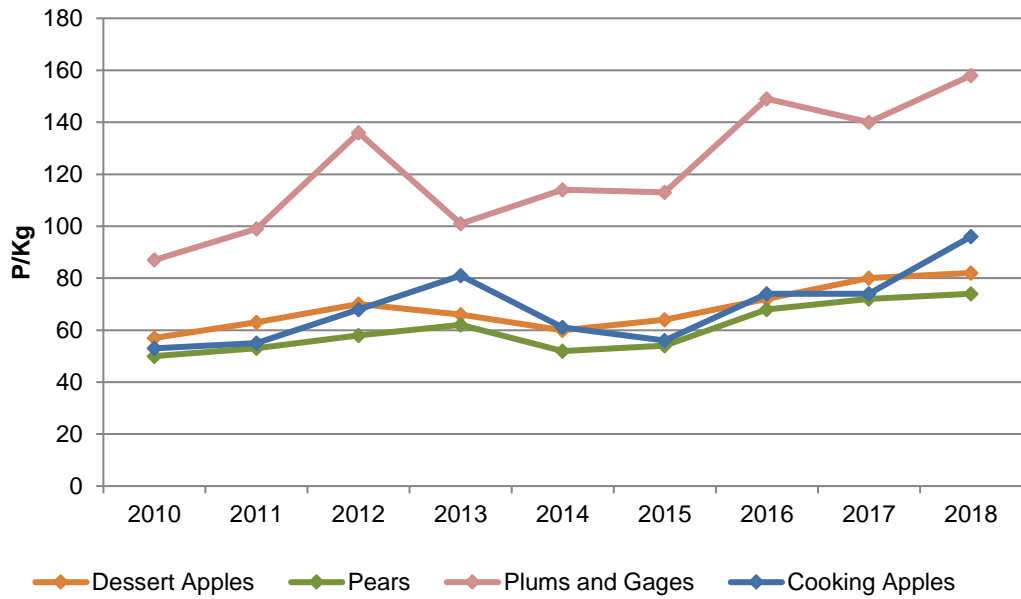
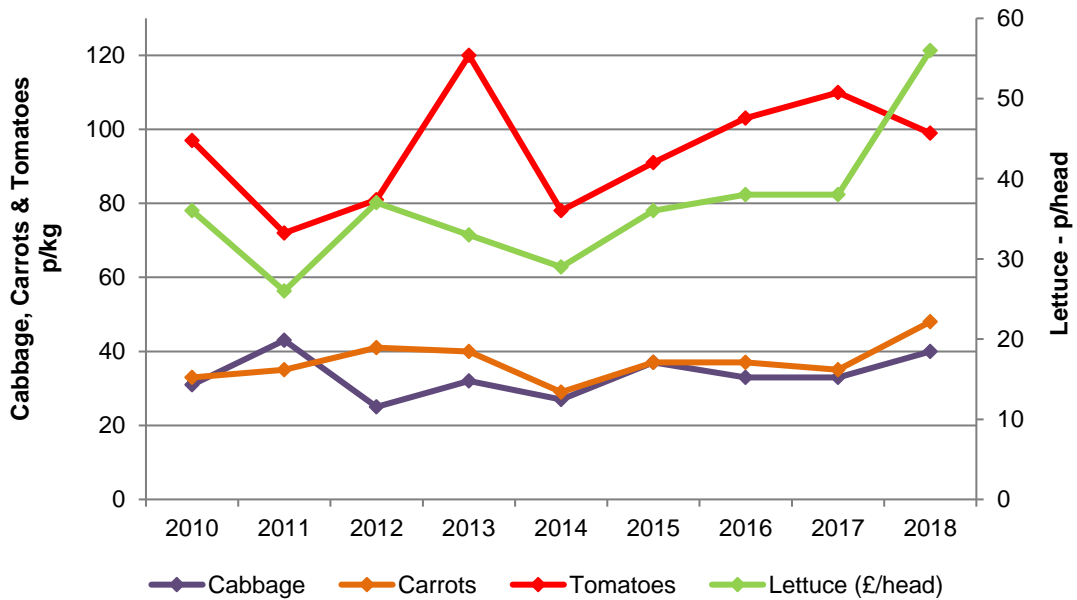


Figure 1.8 Average vegetable farm gate actual prices³



1.7 Price Indices in the UK

Table 1.2 Index of producer prices (Index: 2015 =100)⁴

	2015	2016	2017	2018
Dessert apples	100.0	102.4	115.5	123.0
Dessert pears	100.0	110.7	127.4	131.2
Strawberries	100.0	111.8	117.6	116.5
All fresh fruit	100.0	107.6	115.3	119.5
Lettuce	100.0	111.1	107.9	138.2
Onions	100.0	114.4	116.6	130.4
Cabbage	100.0	109.7	113.4	126.1
All fresh vegetables	100.0	110.2	106.9	119.4
Flowers & plants	100.0	100.8	105.1	105.3

- Data based on a calendar year. These periods most closely resemble the FBS data
- Output indices reflect the price farmers and growers receive for their produce at farm gate price. Because of the fluctuating value of inputs and outputs over a longer period, some years are often reset, so future movements can be compared against a baseline
- In this case, the index price for 2015 are all set to 100.0 to show the rise, or fall, in prices since
- The 2018 indices show an increase for all fresh fruit, vegetables and flowers & plants from 2017, with the exception of strawberries

Table 1.3 Index of purchase prices (index 2015 =100)^{4,5}

	2015	2016	2017	2018
Current Inputs				
Seeds	100.0	101.5	100.0	104.8
Fertilisers & soil improvers	100.0	82.6	89.6	100.8
Plant protection	100.0	100.0	103.2	105.2
Fuel for heating	100.0	97.1	100.7	107.5
Full-Time hired labour*	100.0	102.5	104.5	108.3
Capital inputs				
Machinery & other equipment	100.0	100.0	100.8	106.0
Buildings	100.0	99.4	103.4	107.9

* Farm Business Survey figures

- Input indices reflect the prices farmers and growers pay for goods and services, either used in the production process or investments required towards production
- As in Table 1.2, the 2015 figures are set to a baseline of 100.0 to show the change in input prices for the following three years
- The index of purchase prices have shown an increase of eleven points for fertilisers, seven points for heating fuel and five points for seeds between 2017 and 2018
- Full-time hired labour costs are for Agricultural & related trades and continue a steady year on year increase, this year of four points to 108.3. It should be noted that within the Horticultural industry there is a strong reliance on casual labour which is not included in this index
- After a negligible change for machinery & other equipment between 2015 and 2017, there was a five point increase in 2018
- Buildings inputs showed a similar increase of five points as there had been the previous year

SECTION 2: FINANCIAL RESULTS FOR HORTICULTURE IN ENGLAND

2.1 Introduction to the data

The following series of tables are drawn from a sample of farmers and growers who participate in the Farm Business Survey (FBS) in England and whose businesses are classified under one of the four main Defra horticultural type groups. These four type groups of Specialist Glass, Specialist Fruit, Specialist Hardy Nursery Stock and Other Horticulture are defined below.

For the purposes of the Defra classification, farms growing field scale vegetables and arable crops are classified as General Cropping farms, and so their results are not included in these tables, although farms growing field scale vegetables without arable crops are recorded in the 'Other Horticulture' typology group.

The data in this report were compiled from the 2017/18 and 2018/19 FBS and can be accessed at:

- www.farmbusinesssurvey.co.uk and at
- <https://www.gov.uk/government/collections/farm-business-survey>

2.2 Definition of horticultural type groups

Horticultural businesses are defined as businesses where horticultural crops or permanent crops including fruit, either alone or in combination, account for over two thirds of total standard output.

Specialist glass

- Market garden vegetables and flowers under glass (either alone or in combination) accounting for more than two thirds of the total standard output of the business, including walk-through polythene tunnels
- The specialist glass businesses have been further sub-divided into those businesses with mainly edible crops (more than 50% of crop output from edible crops) and those with mainly ornamental crops (more than 50% of crop output from ornamental crops)
- In addition to this, the specialist glass group has been sub-divided by the level of intensity of glasshouse production, showing both '50% or more' and '90% or more' of total crop output produced from protected crops

The results from these businesses are found in the following tables:-

- Table 2.4 All specialist glass businesses
- Table 2.5 Specialist glass businesses, mainly edible crops
- Table 2.6 Specialist glass, mainly ornamental crops
- Table 2.7 Specialist glass (50% or more of crop output from glasshouse production)
- Table 2.8 Specialist glass (50% or more of crop output from glasshouse production), mainly edible crops
- Table 2.9 Specialist glass (50% or more of crop output from glasshouse production), mainly ornamental crops
- Table 2.10 Specialist glass (90% or more of crop output from glasshouse production)
- Table 2.11 Specialist glass (90% or more of crop output from glasshouse production), mainly edible crops
- Table 2.12 Specialist glass (90% or more of crop output from glasshouse production), mainly ornamental crops

Specialist fruit

- Fruit (top and soft fruit) accounting for more than two thirds of total standard output of the business
- The specialist fruit group has three sub-groups of mainly top fruit businesses; mainly top fruit, top fruit excluding cider apples and specialist cider

The results from these businesses are found in the following tables:-

- Table 2.13 All specialist fruit businesses
- Table 2.14 Specialist fruit businesses, mainly top fruit
- Table 2.15 Specialist fruit businesses, mainly top fruit-excluding cider
- Table 2.16 Specialist fruit businesses, cider

Specialist hardy nursery stock

- Hardy nursery stock (HNS) accounting for more than two thirds of total standard output of the business
- The specialist HNS group has two sub-groups; intensive HNS crops with output more than £175,000 per hectare and extensive HNS crops with output less than £175,000 per hectare

The results from these businesses are found in the following tables:-

- Table 2.17 All specialist HNS businesses
- Table 2.18 Intensive HNS crops – crop output more than £175,000 per hectare
- Table 2.19 Extensive HNS crops – crop output less than £175,000 per hectare

Other horticulture

- Businesses in which none of the above categories accounts for more than two thirds of standard output
- The 'other horticulture' group has one sub-group of mainly outdoor vegetable growers

The results from these businesses are found in the following tables:-

- Table 2.20 All other horticulture businesses
- Table 2.21 Mainly outdoor vegetables – 50% or more of crop output derived from outdoor vegetables

2.3 The Sample

The Farm Business Survey (FBS) covers businesses with a Standard Output (SO) of 25,000 euros and above. SO is representative of the level of output that could be expected on the average farm under "normal" conditions (i.e. no disease outbreaks or adverse weather) and measures the total value of output of any one enterprise – it is calculated on a per head basis for livestock and per hectare basis for crops.

The sample is drawn from a stratified population of seven regions in England by the four main horticultural typologies of Specialist Glass, Specialist Fruit, Specialist Hardy Nursery Stock and Other Horticulture. Within each stratum, a single weight is calculated as the ratio of numbers of businesses in the population and in the sample. The weighting of the FBS results is a two-stage process with, firstly, an initial weight being produced and, secondly this initial weight then being adjusted by a calibration procedure. The weights are based on population data from the June business register (see Table 2.1) and are calculated for each design stratum. The initial weights for the FBS are based on the inverse sampling fraction. Suppose for example, there were 250 Cereal farms in the population and of these, 50 were sampled then these 50 sampled farms would be given an initial sample weight of 5 (250/50). These weights are then adjusted (Calibration Weighting) so that they produce representative population totals for a series of calibration variables for which accurate population values are known from other sources. This ensures that the weights produce precise estimates of other variables, with minimal bias, despite the inevitable imperfections of the

sampling strategy. This weight when applied to each business represents the number of times that the business' data must be replicated in order to 'represent' the businesses not selected for the sample, so as to reflect the entire population. This weight is applied to all variables.

Since 2010, the classification to farm type for the June Survey database has been based on Standard Output (SO). A minimum size threshold is also used in order to eliminate those businesses which are not deemed to be commercially active. For horticultural crops, the threshold is: 1.0 hectare of orchard, 0.5 hectare of vegetable crops or 0.1 hectare of protected crops.

As the FBS sample is drawn from a business level dataset with a minimum Standard Output (SO) of 25,000 euros, the smallest 'commercial' horticultural businesses by June Survey definition are therefore not eligible for the FBS. From 2018/19, the classification of farms is based on 2013 standard output coefficients. 2017/18 results have been recalculated and presented in this release to allow comparability between 2017/18 and 2018/19. The results published here are therefore not directly comparable with those published in earlier years which are based on previous standard output coefficients.

For more information please see

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/365564/fbs-uk-farmclassification-2014-21oct14.pdf

The number of FBS eligible horticultural businesses in 2018/19 was 2,752, while the total FBS sample for the 2018 cropping year was 172 businesses, representing 6.3% of the national population of eligible horticultural businesses.

Table 2.1 FBS sample compared with eligible* horticultural businesses for 2018

(*Businesses with Standard Output of 25,000 euros and above)

	England population 2018 June Survey (number of businesses)	FBS sample 2018 (number of businesses)	FBS sample as a % of population
Specialist Glass	266	49	18.4%
Specialist Fruit	609	49	8.0%
Specialist HNS	668	28	4.2%
Other Horticulture	1,209	46	3.8%
All Horticulture	2,752	172	6.3%

The 'All Horticulture' group results are based on a sample of 172 businesses and no outliers have been removed from this group.

Within the four broad horticulture groups, 70 crop types are recorded and they are grown in varying systems ranging from heated glasshouses to orchard fruit production, with market garden and Spanish tunnel production in between. Such diversity makes the raising of a representative sample very difficult, resulting in reporting often being based upon groups of a variety of similar but not identical activities to ensure minimum sample size criteria are met and the robustness of the data is maintained.

2.4 Overview of 2018/19

- The average profitability as measured by Farm Business Income (FBI) increased by 11.5% to £52,075 per business for the whole sample of businesses in 2018/19, when compared with 2017/18
- Three of the four horticultural groups (Specialist glasshouse, Specialist hardy nursery stock & Other horticulture businesses) experienced an increase in profitability, although Specialist fruit businesses saw a decrease
- Weather conditions in the 2018 harvest year were mixed across the seasons
 - In February/March the UK experienced the 'Beast from the East', bringing severely cold and wet weather along with strong winds and snow
 - From April through until August, temperatures were far warmer than average, with some periods of extreme heat. Although generally dry, short, sharp storms meant that areas of central and southern England experienced close to normal rainfall levels
 - Autumn and winter were relatively mild and also saw further wet, unpredictable weather patterns. In total, ten named storms affected the UK in 2018

2.5 Financial results for 2017/18 and 2018/19

- The results in this section are shown for businesses classified according to the Defra classification system, as described in section 2.3 of this report and are shown on a:
 - 'per business', 'per hectare' and 'per £100 of gross output' basis
 - results are based on the productive cropping area of the business
- Average results are shown for the 2017 and 2018 harvest years, together with premium results for the 2018 harvest year, where the sample size is large enough for publication:
 - The premium results are for the top quartile of businesses, as measured by a ratio of farm business output to farm business costs (including unpaid labour) and are shown on a per hectare basis
 - Note that the farm weights are used to allocate farms into quartiles, so the number of farms in a quartile will not necessarily be equivalent to a quarter of the sample; this methodology provides for a better representation of the full farm population
- The horticultural sector represents a very diverse group of growers, with some operating highly intensive glasshouse operations and others engaged in more extensive top fruit and vegetable production
- Overall, average Farm Business Income (FBI) of horticultural businesses increased by 11.5%, to £52,075 per business in 2018; average total gross output for the sector increased by 0.6%, to £397,014 per business, compared with 2017, while total costs decreased by 1.2%:
 - There was a rise in profitability for Specialist glasshouse, Specialist hardy nursery stock and Other horticulture businesses in 2018
 - Specialist glass businesses again saw the largest increase, up 35.6% to an average of £67,525 per business, followed by Specialist hardy nursery stock up 31.4%, to £82,209
 - Other horticulture businesses recorded a slight increase of 6.8%, to £46,305 per business
 - Specialist fruit businesses had a decrease of 25.9% in profitability, with FBI at an average of £23,727 per business
- Where the data is derived from a sample of less than 15 holdings, there is a lower degree of confidence in the figures

Figure 2.1 Average FBI for horticultural businesses by type

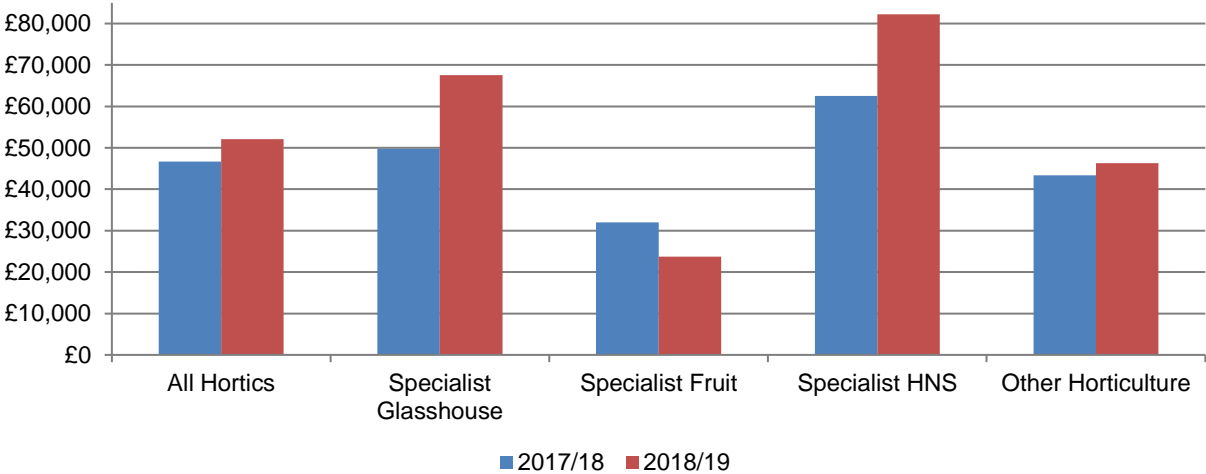
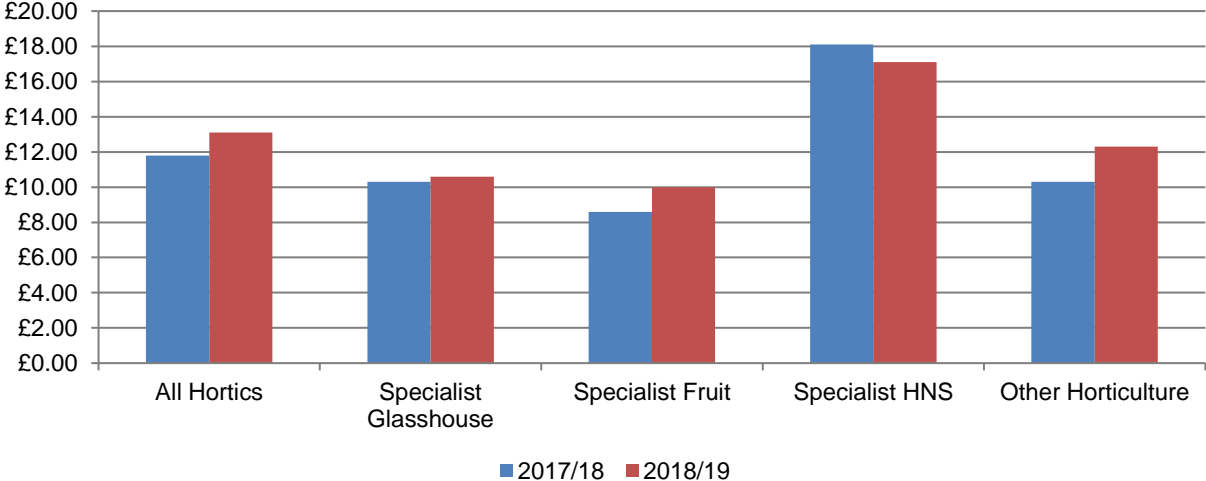


Figure 2.2 Average FBI per £100 of gross output for horticultural businesses by type



2.6 Specialist Glass [Tables 2.4 to 2.12]

There are nine tables reporting on the financial results of specialist glass businesses, differentiating between crop types (edible crops vs. ornamentals) and the level of glasshouse production.

- A number of businesses within the specialist glasshouse group have some outdoor crop production; the group has been sub-divided according to the intensity of glasshouse production between businesses with 50% or more of crop output derived from glasshouse production (Tables 2.7 to 2.9) and those with 90% or more of crop output derived from glasshouse production (Tables 2.10 to 2.12)
- Specialist Glass, all crops [Table 2.4]
 - The group includes both heated and unheated glasshouses and polytunnels
 - Average productive cropping area in 2018 was 3.21ha, of which protected production was 1.07ha
 - The sample of 49 specialist glass businesses is split between 22 businesses specialising in edible crops and 27 businesses specialising in ornamental crops

- On a per business basis in 2018, Farm Business Income (FBI) increased by 35.6% to £67,525. Both sub-groups saw profitability increase, with edible sector businesses seeing an average FBI increase of 39.7%, whilst the average ornamental FBI rose by 27.9%
- However, FBI showed a decrease of 8% on a per hectare basis, as the cropping area increased from 2.2ha to 3.2ha
- The composition of cropping for these holdings varied slightly between 2017 and 2018; flowers & nursery stock increased both under glass and outdoor, as did glasshouse tomatoes, with soft fruit falling the most significantly
- The financial performance of the premium group (top quartile) fell by 35% on per hectare basis on the previous year; average FBI per hectare for these 17 businesses in the group in 2018 was £31,279/ha, compared with £48,103/ha for the 16 businesses in the premium group in 2017

Figure 2.3 Average FBI for all specialist glasshouse businesses with edible & ornamental sub-groups

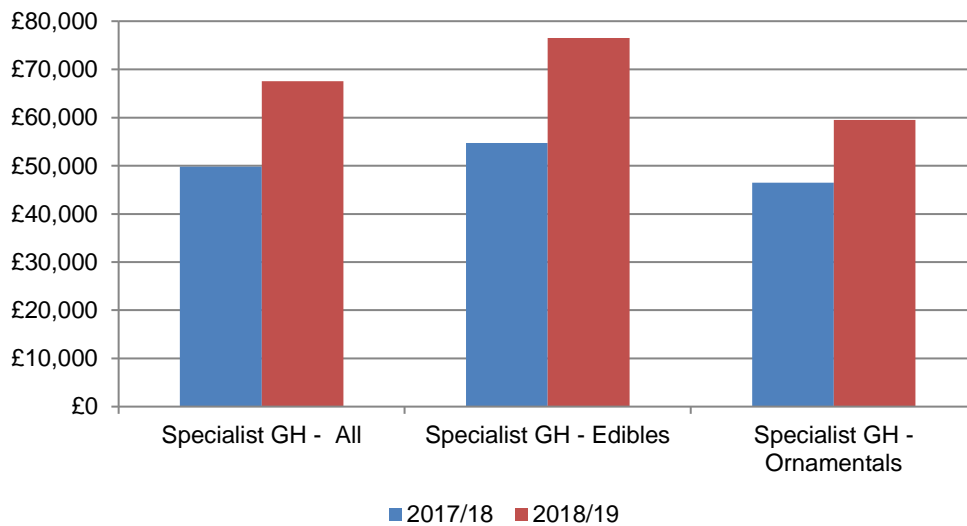
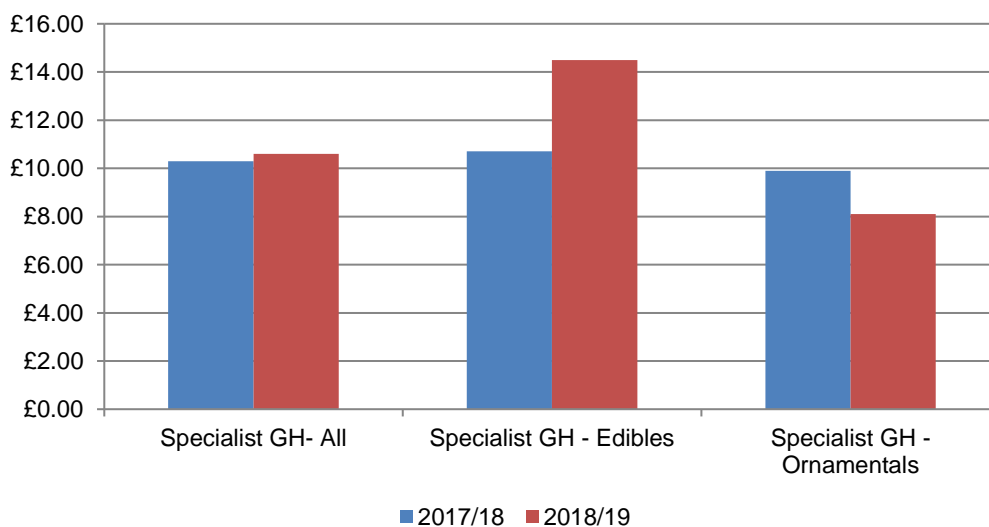


Figure 2.4 Average FBI per £100 of gross output for all specialist glasshouse businesses with edible & ornamental sub-groups



- *Specialist glass, mainly edible crops [Table 2.5]*
 - Profitability for this group, at £76,492 per business, showed an increase of 40% on the previous year
 - Although productive cropping area increased by 30%, there was a 7% rise in Farm Business Income (FBI) on a per hectare basis, to £19,091
 - Costs moved very little; per £100 of output total costs rose from £87.90 to £88.50

- *Specialist glass, mainly ornamental crops [Table 2.6]*
 - Profitability for this group increased by 28% to £59,487 per business
 - Total variable and fixed costs both rose, by 62% and 48% respectively, but an average 56% rise in output made up for this difference
 - The productive cropping area increased by 57% to 2.49ha, leading to a 19% decrease in Farm Business Income (FBI) on a per hectare basis, to £23,916

- *Specialist glass businesses (50% or more crop output from glasshouse production) [Tables 2.7 – 2.9]*
 - These three tables provide the results for all specialist glasshouse businesses where 50% or more of the output is derived from glasshouse production, and for the sub-groups of those specialising in the production of edible and ornamental crops
 - The average profitability per business of this group, at £41,696, is slightly below those with 90% or more output from glasshouse production, at £46,996; yet, on a per hectare basis the gap widens, with 50%+ at £46,088 and 90%+ at £58,227

- *Specialist glass businesses (90% or more crop output from glasshouse production) [Table 2.10]*
 - These tables provide the results for specialist glasshouse businesses where 90% or more of the output is derived from glasshouse production
 - Average Farm Business Income (FBI) increased by 10% to £46,996 per business

- *Specialist glass businesses (90% or more crop output from glasshouse production) – Mainly edible crops [Table 2.11]*
 - Tomato production accounted for 66% and soft fruit 21% of all glasshouse output for this sample of businesses in 2018
 - This group had a much better year with profitability increasing from £32,824 in 2017/18 to £51,751 per business in 2018/19
 - There was just a slight reduction in cropping area from 1.15ha to 1.0ha, hence Farm Business Income per hectare increased from £28,527 to £51,875 per hectare

- *Specialist glass businesses (90% or more crop output from glasshouse production) – Mainly ornamental crops [Table 2.12]*
 - This group of businesses derived 100% of their output from ornamental crops and had a lower average cropping area, at 0.67ha, than their mainly edible counterparts
 - Although the area is smaller, the value of ornamental crop production is much higher, illustrated by the total gross output per hectare and subsequent profitability per hectare
 - Total costs for this group averaged £409,176, slightly higher than total costs for mainly edibles of £403,133

2.7 Specialist Fruit [Tables 2.13 to 2.16]

- There are four tables reporting on the financial results for this type group and its sub-groups:
 - Table 2.13 shows the results for all specialist fruit businesses
 - Table 2.14 shows a sub-group of this sample for businesses with over 90% of their total crop output derived from top fruit
 - Tables 2.15 and 2.16 splits this down further to a group excluding cider apple growers and a group of predominantly cider apple growers

Figure 2.5 Average FBI for all specialist fruit businesses and sub-groups

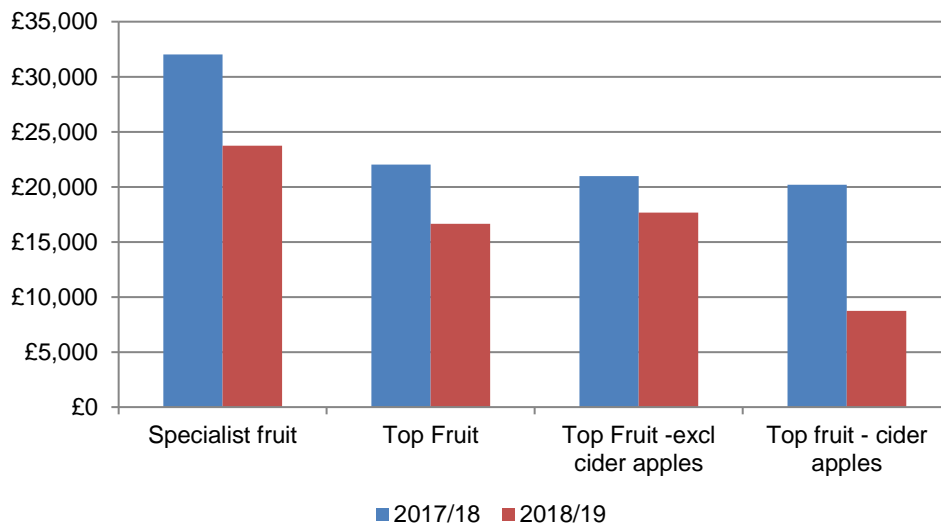
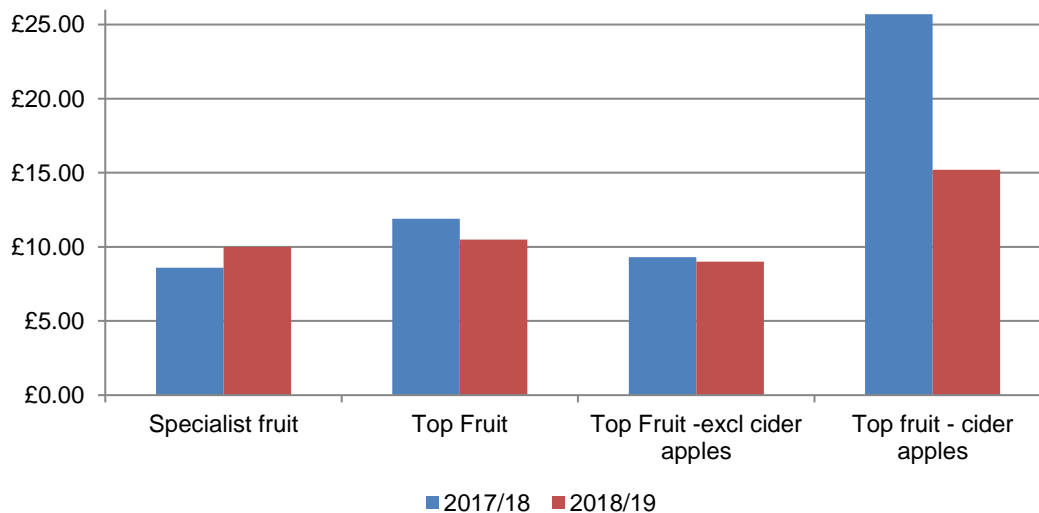


Figure 2.6 Average FBI per £100 of gross output for all specialist fruit businesses and sub-groups



- *Specialist fruit businesses [Table 2.13]*
 - Within the specialist fruit group in 2018, the proportion of crop output reverted to previous years where top fruit was greater than soft fruit, with 52% and 47% of the total respectively
 - The average cropping area fell significantly by 36% to 12.94ha and equally the total gross output fell by 36% to an average of £238,256
 - Although total output fell, the proportion derived from other activities continues to rise from 18% in 2017 to 20% in 2018; this may be, for example, adding value to the crop by means of on-farm processing of fruit or offering customised pack house services to other growers
 - Total variable costs were 43% lower than the previous year's average, whilst total fixed costs were 30% lower than 2017
 - FBI per hectare in 2018 was £3,211/ha for businesses in the premium group, compared with the average of £1,834/ha

- *Mainly top fruit businesses - 90% or more crop output derived from top fruit [Table 2.14]*
 - This group includes businesses that specialise in top fruit production, with 90% or more of their total crop output derived from top fruit
 - In 2018, approximately 65% of crop output was derived from dessert apples & pears and 11% from cider apples
 - Yields increased significantly for both culinary and dessert apples in the 2018 harvest year, with culinary apples seeing a rise in value per tonne, whilst falling for dessert apples, yet both had higher outputs per hectare
 - Cider apple yields fell by 15%, with a slight drop in price, resulting in a fall of £791 per ha
 - Pear yields also reduced from 10.6t/ha to 8.3t/ha, yet saw a rise in value of more than £100 per tonne
 - Average Farm Business Income (FBI) was £16,648 per business and £1,529 per hectare, in contrast to the £22,021 per business and £1,609 per hectare in 2017/18

- *Mainly top fruit businesses – 90% or more crop output derived from top fruit, excluding cider apple growers [Table 2.15]*
 - This sub-group of specialist top fruit growers consists of 23 growers in 2018, predominantly growing top fruit for eating
 - In 2018, around 72% of crop output was from dessert apples, 9% from pears, 9% from plums and 8% from culinary apples for processing and the fresh market
 - Approximately 30% of the total gross output was derived from other output, i.e. not from cropping
 - A 20% drop in productive cropping area saw FBI per hectare rise to £1,754 per hectare, although FBI per business fell 16% to £17,672

- *Mainly top fruit businesses – 90% or more crop output derived from cider apples [Table 2.16]*
 - Cider apple growers saw a decrease in Farm Business Income (FBI) of 57% to £8,727 per business in 2018
 - Total cropping area for this group fell by an average of 19%, hence the fall in total output
 - Both total variable and fixed costs decreased by 16%; however, with the decrease in cropping area, total costs per hectare only rose from £5,327 in 2017 to £5,524 in 2018
 - In comparison, dessert & culinary top fruit producers averaged total costs of £19,636 per ha, yet were more than twice as profitable, highlighting the disparity in crop value

Table 2.2 Top fruit yields, prices and output* – 2017/18 and 2018/19

Top Fruit		2017/18	2018/19
Culinary Apples	tonnes/ha	19.0	26.6
	£/tonne	572.7	603.5
	£ output/ha	10,910	16,074
Dessert Apples	tonnes/ha	24.7	28.3
	£/tonne	652.0	625.1
	£ output/ha	15,181	17,312
Cider Apples	tonnes/ha	35.3	30.2
	£/tonne	119.7	113.8
	£ output/ha	4,229	3,438
Pears	tonnes/ha	10.6	8.3
	£/tonne	608.2	714.2
	£ output/ha	6,441	5,944

Note: * The areas used when calculating the per hectare figures are field areas (not tree areas) and the fruit tonnage is for all the fruit sold either fresh or for processing and juice.

2.8 Specialist Hardy Nursery Stock [Tables 2.17 to 2.19]

- There are three tables reporting on the financial results of Specialist Hardy Nursery Stock (HNS) businesses:
 - Table 2.17 covers all HNS businesses in the sample with tables 2.18 and 2.19 being sub-groups of the main sample
 - Table 2.18 is for businesses that have a crop output of more than £175,000 per hectare
 - Table 2.19 is for businesses that have a crop output of less than £175,000 per hectare

- *Specialist HNS businesses [Table 2.17]*
 - This group of businesses include growers of young HNS plants under protection, those growing plants outdoors and on hard standings, and a combination of these production systems
 - For these businesses, crop output was divided between outdoor production at 73% and protected production at 27%
 - Total gross output rose by 39%, leading to a 31% increase in Farm Business Income (FBI) per business, despite a rise in both variable and fixed costs
 - In 2018/19 there was a change in the group typology so that Field grown Christmas Trees were no longer categorised as Hardy Nursery Stock, but instead they are included with the 'Other Horticulture' group.

- As a consequence of this, the total cropping area has more than halved whilst the glasshouse production area has increased.
- Subsequently, the per hectare results for this group show very different results between the two years
- However, in per £100 of gross output terms, FBI fell by just £1 to £17.10

Figure 2.7 Average FBI for all specialist HNS businesses with intensive & extensive sub-groups

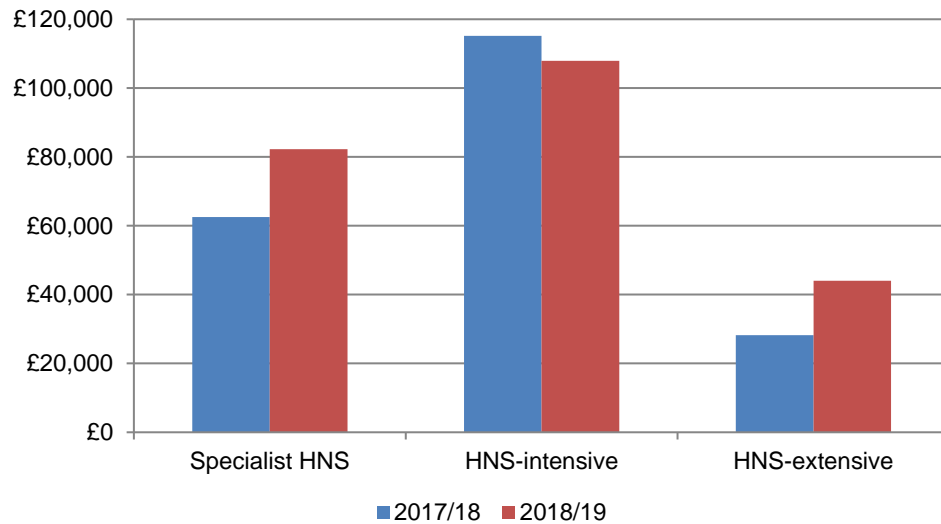
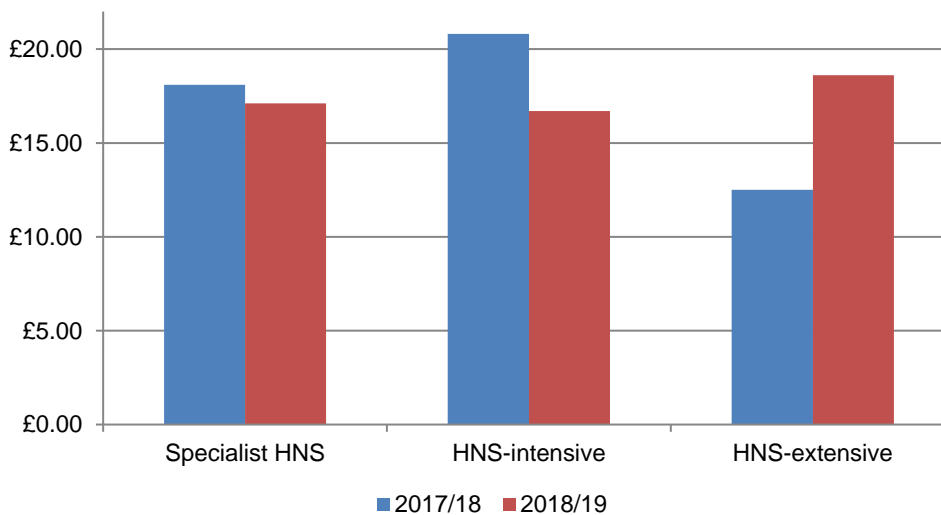


Figure 2.8 Average FBI per £100 of gross output for all specialist HNS businesses with intensive & extensive sub-groups



- *Intensive HNS businesses (crop output more than £175,000 per hectare) [Table 2.18]*
 - The sub-group covers businesses with a crop output of more than £175,000 per hectare
 - These businesses grow a significant amount of HNS under glass or walk-through polythene tunnels as well as outdoors on hard standings, and also higher value field crops
 - Average Farm Business Income (FBI) per business fell by 6% to £107,882, owing to an increase in costs when total gross output increased by 17%

- *Extensive HNS businesses (crop output less than £175,000 per hectare) [Table 2.19]*
 - The table refers to a group of businesses with crop output of less than £175,000 per hectare, including rootstock and larger trees, as well as shrubs and smaller nursery stock
 - The average cropping areas for extensive production rose by 16% in 2018/19, with glasshouse areas rising by 52%, yet there was little change in total output
 - Farm Business Income (FBI) per business increased by 56% to £44,014, predominantly due to a fall in total variable costs; however, this FBI is still more than half of the intensive businesses average

2.9 Other Horticulture [Tables 2.20 and 2.21]

- *Other horticultural businesses [Table 2.20]*
 - The table refers to a diverse group of farms, for which crop output is comprised of a combination of outdoor vegetables, ornamentals, soft fruit, top fruit and farm crops
 - Due to changes to Defra typology groups, Christmas tree growers have moved into the other horticulture group, which were previously classified as specialist HNS
 - In 2018/19, the output from soft fruit was the greatest proportion at 31%, followed by outdoor vegetables and farm crops both at 21% and glasshouse crops at 13%
 - Total gross output fell by 10%, but subsequent decreases in total variable costs of 14% and total fixed costs of 12% enabled FBI to rise by 7% to £46,305
 - Premium businesses recorded a FBI per hectare of £2,374, compared to the average of £1,793, and derive the majority (66%) of their output from other crops, including Christmas trees
- *Mainly outdoor vegetables – 50% or more output derived from outdoor vegetables [Table 2.21]*
 - Sub-group of other horticultural businesses with more than 50% of output derived from outdoor vegetable production
 - Average cropping area of this group fell to 14.91ha in 2018/19, with the area of specialist glass rising by 9%
 - Farm Business Income (FBI) per business fell by 22%, as total gross output fell more significantly than variable and fixed costs
 - However, the fall in average cropping area resulted in a £15 rise in FBI per hectare

Figure 2.9 Average FBI for other horticulture businesses and sub-group of outdoor vegetable growers

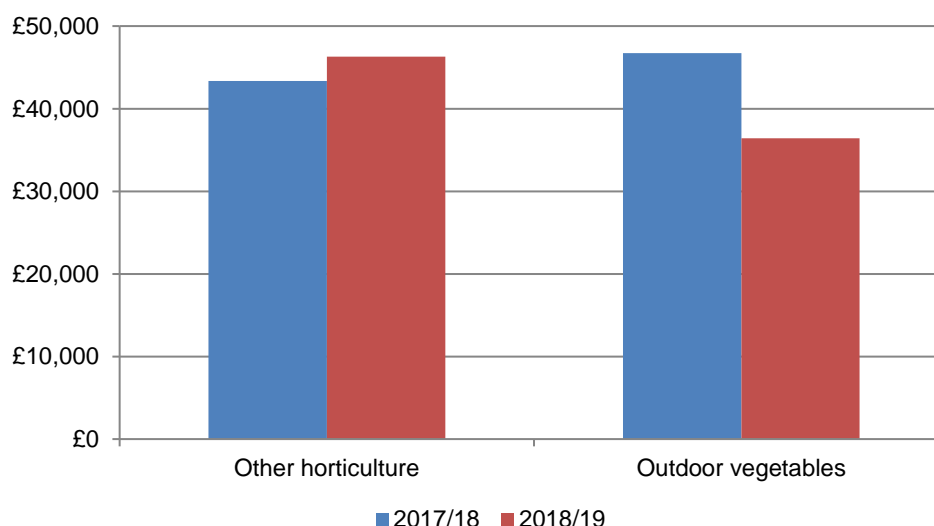
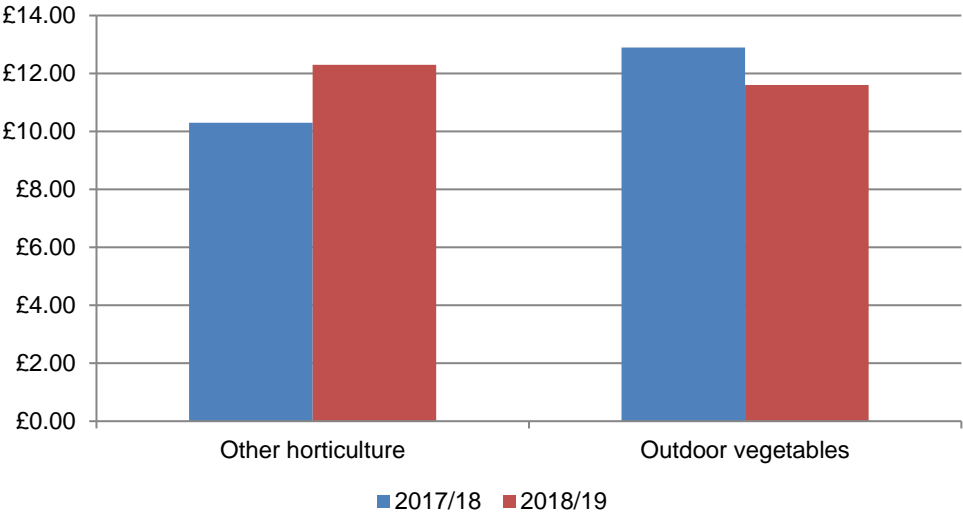


Figure 2.10 Average FBI per £100 of gross output for other horticulture businesses and sub-group of outdoor vegetable growers



2.10 Balance Sheet Information [Tables 2.22 and 2.23]

- The assets, liabilities and net worth for the horticulture sample are reported in table 2.22
- The percentage equity in the business remained much the same during the year for all horticultural businesses types, falling from 84.3% to 83.2%
- The value of the balance sheet total assets rose by just under 2% to an average of £875,719 for all horticulture businesses in 2018/19, while the year-on-year change for total external liabilities was up by 8.6% to £146,841 for the period
- Table 2.23 reports on the net worth and percentage equity for the Defra main farm type classifications used in England; the average net worth for all farm types is approximately £1,814,293 per business, representing 88.5% equity (proportion of assets over liabilities)
- Those businesses that are predominantly land based have the highest net worth, while those with intensive livestock systems and less land have a lower net worth and percentage equity
- Consequently, lowland cattle & sheep farms and cereal farms have the highest percentage equity, at 91.9% each; while pig and poultry farms respectively have the lowest percentage equity at 73.0% and 64.9%, with horticulture in mid-range at 83.7%

Table 2.3 All horticultural businesses

	<i>Per business</i>		<i>Per hectare</i>		<i>Per £100 of gross output</i>	
	2017/18	2018/19	2017/18	2018/19	2017/18	2018/19
Number of businesses	187	172	187	172	187	172
Productive cropping area (ha)	18.26	15.11	18.26	15.11		
	<i>Average £/business</i>		<i>Average £/hectare</i>		<i>Average %</i>	
Gross output	394,763	397,014	21,624	26,278	100.0	100.0
Variable costs						
Seed & young plants	48,133	51,388	2,637	3,401	12.2	12.9
Fertilisers & composts	11,286	12,372	618	819	2.9	3.1
Crop protection	9,397	8,311	515	550	2.4	2.1
Market charges	25,678	21,597	1,407	1,429	6.5	5.4
Packing materials	21,815	17,346	1,195	1,148	5.5	4.4
Horticultural sundries	14,301	12,839	783	850	3.6	3.2
Glasshouse fuel	2,561	4,143	140	274	0.6	1.0
Other variable costs	1,195	313	65	21	0.3	0.1
Total variable costs	134,366	128,310	7,360	8,493	34.0	32.3
Total gross margin	260,398	268,704	14,264	17,785	66.0	67.7
Fixed costs						
Labour:						
Regular paid	66,861	81,990	3,662	5,427	16.9	20.7
Regular unpaid	31,543	31,318	1,728	2,073	8.0	7.9
Casual labour	53,246	39,904	2,917	2,641	13.5	10.1
Power & machinery costs:						
Contract & hire	8,114	7,947	444	526	2.1	2.0
Fuel & electricity	11,840	13,088	649	866	3.0	3.3
Repairs	9,755	9,084	534	601	2.5	2.3
Machinery depreciation	12,209	11,992	669	794	3.1	3.0
Glasshouse depreciation	1,752	2,345	96	155	0.4	0.6
Rent (incl. imputed)	16,402	15,512	898	1,027	4.2	3.9
Other costs:						
Occupier's repairs	6,063	6,083	332	403	1.5	1.5
Permanent crop depreciation	1,484	1,143	81	76	0.4	0.3
Water	1,666	2,018	91	134	0.4	0.5
Sundries	18,544	18,654	1,016	1,235	4.7	4.7
Total fixed costs	239,478	241,079	13,118	15,957	60.7	60.7
Management & investment income	20,920	27,626	1,146	1,828	5.3	7.0
Minus: management salaries	422	455	23	30	0.1	0.1
Plus: farmer & spouse labour	24,932	24,690	1,366	1,634	6.3	6.2
Net farm income	45,430	51,861	2,489	3,433	11.5	13.1
Farm business income	46,693	52,075	2,558	3,447	11.8	13.1

Crop output per cent of total crop output (%)

	Average 2017/18	Average 2018/19
Glasshouse crops		
Flowers & nursery stock	12.8	18.5
Tomatoes	1.2	1.5
Lettuce	0.1	0.1
Soft fruit	3.1	3.1
Other glasshouse crops	3.4	3.9
Outdoor crops		
Flowers and nursery stock	25.7	28.5
Vegetables	8.8	9.4
Other outdoor crops	10.9	9.5
Top fruit		
Dessert apples and pears	7.4	4.7
Culinary apples	0.7	0.5
Cider apples	1.2	0.6
Plums	0.8	0.5
Other top fruit	1.1	0.6
Soft fruit		
Strawberries	13.5	12.6
Raspberries	7.0	3.3
Blackcurrants	0.1	0.1
Other soft fruit	2.1	2.7
Total	100.0	100.0

Distribution of tenant's type capital (%)

	Average 2017/18	Average 2018/19
Crops and tillages	17	20
Stores	6	6
Glasshouses	6	7
Equipment	28	25
Livestock	1	0
Other	43	42
Total	100	100
Tenant's capital (£)	516,385	558,811

Table 2.4 All specialist glass businesses

	<i>Per business</i>		<i>Per hectare</i>		<i>Per £100 of gross output</i>	
	2017/18	2018/19	2017/18	2018/19	2017/18	2018/19
Number of businesses	55	49	55	49	55	49
Productive cropping area (ha)	2.18	3.21	2.18	3.21		
	<i>Average £/business</i>		<i>Average £/hectare</i>		<i>Average %</i>	
Gross output	485,822	634,175	223,019	197,842	100.0	100.0
Variable costs						
Seed & young plants	75,081	118,209	34,466	36,877	15.5	18.6
Fertilisers & composts	17,634	21,294	8,095	6,643	3.6	3.4
Crop protection	4,217	4,744	1,936	1,480	0.9	0.7
Market charges	17,486	18,109	8,027	5,650	3.6	2.9
Packing materials	21,727	18,627	9,974	5,811	4.5	2.9
Horticultural sundries	16,630	18,186	7,634	5,673	3.4	2.9
Glasshouse fuel	14,727	31,980	6,760	9,977	3.0	5.0
Other variable costs	0	0	0	0	0.0	0.0
Total variable costs	167,502	231,150	76,893	72,111	34.5	36.4
Total gross margin	318,320	403,025	146,126	125,731	65.5	63.6
Fixed costs						
Labour:						
Regular paid	120,721	154,925	55,417	48,332	24.8	24.4
Regular unpaid	36,145	37,651	16,592	11,746	7.4	5.9
Casual labour	29,258	31,322	13,431	9,772	6.0	4.9
Power & machinery costs:						
Contract & hire	3,589	6,193	1,648	1,932	0.7	1.0
Fuel & electricity	17,709	23,706	8,130	7,395	3.6	3.7
Repairs	8,990	13,474	4,127	4,203	1.9	2.1
Machinery depreciation	11,088	16,267	5,090	5,075	2.3	2.6
Glasshouse depreciation	9,115	14,712	4,184	4,590	1.9	2.3
Rent (incl. imputed)	11,637	15,130	5,342	4,720	2.4	2.4
Other costs:						
Occupier's repairs	8,666	12,434	3,978	3,879	1.8	2.0
Permanent crop depreciation	125	0	57	0	0.0	0.0
Water	2,421	2,836	1,111	885	0.5	0.4
Sundries	25,353	28,472	11,638	8,882	5.2	4.5
Total fixed costs	284,816	357,123	130,746	111,411	58.6	56.3
Management & investment income	33,504	45,903	15,380	14,320	6.9	7.2
Minus: management salaries	612	784	281	245	0.1	0.1
Plus: farmer & spouse labour	31,815	32,159	14,605	10,033	6.5	5.1
Net farm income	64,707	77,278	29,704	24,108	13.3	12.2
Farm business income	49,801	67,525	22,861	21,066	10.3	10.6

Premium businesses	Per hectare	Per £100 of gross output	Crop output per cent of total crop output (%)		
			Average 2017/18	Average 2018/19	Premium 2018/19
	2018/19	2018/19			
Number of businesses	17	17			
Productive cropping area (ha)	8.29				
	£ per hectare	average %			
Gross output	166,990	100.0			
Variable costs					
Seed & young plants	35,632	21.3	Glasshouse crops		
Fertilisers & composts	3,645	2.2	Flowers & nursery stock	48.1	52.8
Crop protection	1,184	0.7	Tomatoes	9.7	10.3
			Lettuce	0.3	0.4
Market charges	2,623	1.6	Soft fruit	16.7	10.4
Packing materials	3,577	2.1	Other glasshouse crops	15.2	15.0
Horticultural sundries	2,630	1.6	Outdoor crops		
Glasshouse fuel	9,478	5.7	Flowers & nursery stock	8.1	8.9
Other variable costs	0	0.0	Vegetables	0.1	0.1
			Fruit	1.0	1.4
			Other outdoor crops	0.7	0.9
Total variable costs	58,770	35.2	Total	100.0	100.0
Total gross margin	108,220	64.8			
			Distribution of tenant's type capital (%)		
				Average 2017/18	Average 2018/19
Fixed costs					Premium 2018/19
Labour:			Crops & tillages	8	6
Regular paid	34,446	20.6	Stores	11	10
Regular unpaid	4,408	2.6	Glasshouses	25	30
Casual labour	8,615	5.2	Equipment	21	22
Power & machinery costs:			Livestock	0	0
Contract & hire	1,252	0.7	Other	36	31
Fuel & electricity	4,082	2.4	Total	100	100
Repairs	3,362	2.0			
Machinery depreciation	4,458	2.7	Tenant's capital (£)	612,493	827,016
Glasshouse depreciation	4,050	2.4			1,807,928
Rent (incl. imputed)	3,053	1.8			
Other costs:					
Occupier's repairs	2,974	1.8			
Permanent crop depreciation	0	0.0			
Water	662	0.4			
Sundries	6,888	4.1			
Total fixed costs	78,252	46.9			
Management & investment income	29,969	17.9			
Minus: management salaries	349	0.2			
Plus: farmer & spouse labour	3,491	2.1			
Net farm income	33,110	19.8			
Farm business income	31,279	18.7			

Table 2.5 Specialist glass businesses, mainly edible crops*

	<i>Per business</i>		<i>Per hectare</i>		<i>Per £100 of gross output</i>	
	2017/18	2018/19	2017/18	2018/19	2017/18	2018/19
Number of businesses	24	22	24	22	24	22
Productive cropping area (ha)	3.07	4.01	3.07	4.01		
	<i>Average £/business</i>		<i>Average £/hectare</i>		<i>Average %</i>	
Gross output	511,787	526,079	166,554	131,302	100.0	100.0
Variable costs						
Seed & young plants	42,802	44,230	13,929	11,039	8.4	8.4
Fertilisers & composts	17,740	19,146	5,773	4,779	3.5	3.6
Crop protection	7,009	6,033	2,281	1,506	1.4	1.1
Market charges	15,263	10,183	4,967	2,542	3.0	1.9
Packing materials	16,299	9,886	5,304	2,467	3.2	1.9
Horticultural sundries	20,891	24,166	6,799	6,032	4.1	4.6
Glasshouse fuel	24,775	44,547	8,063	11,118	4.8	8.5
Other variable costs	0	0	0	0	0.0	0.0
Total variable costs	144,779	158,192	47,116	39,482	28.3	30.1
Total gross margin	367,008	367,888	119,438	91,820	71.7	69.9
Fixed costs						
Labour:						
Regular paid	113,839	126,196	37,047	31,497	22.2	24.0
Regular unpaid	31,631	33,100	10,294	8,261	6.2	6.3
Casual labour	52,882	31,576	17,210	7,881	10.3	6.0
Power & machinery costs:						
Contract & hire	2,170	2,222	706	555	0.4	0.4
Fuel & electricity	25,909	24,160	8,432	6,030	5.1	4.6
Repairs	12,739	15,743	4,146	3,929	2.5	3.0
Machinery depreciation	12,167	15,551	3,960	3,881	2.4	3.0
Glasshouse depreciation	11,274	12,179	3,669	3,040	2.2	2.3
Rent (incl. imputed)	13,680	15,648	4,452	3,905	2.7	3.0
Other costs:						
Occupier's repairs	9,142	9,683	2,975	2,417	1.8	1.8
Permanent crop depreciation	312	0	102	0	0.1	0.0
Water	3,370	3,619	1,097	903	0.7	0.7
Sundries	16,140	17,520	5,253	4,373	3.2	3.3
Total fixed costs	305,254	307,196	99,341	76,672	59.6	58.4
Management & investment income	61,753	60,691	20,097	15,148	12.1	11.5
Minus: management salaries	629	701	205	175	0.1	0.1
Plus: farmer & spouse labour	27,430	29,339	8,927	7,323	5.4	5.6
Net farm income	88,554	89,329	28,819	22,295	17.3	17.0
Farm business income	54,751	76,492	17,818	19,091	10.7	14.5

Crop output per cent of total crop output (%)

	Average 2017/18	Average 2018/19
Glasshouse crops		
Flowers & nursery stock	1.5	3.6
Tomatoes	21.9	25.9
Lettuce	0.7	0.9
Soft fruit	37.9	26.2
Other glasshouse crops	34.1	37.9
Outdoor crops		
Flowers & nursery stock	0.0	0.0
Vegetables	0.3	0.3
Fruit	2.3	3.5
Other outdoor crops	1.4	1.6
Total	100.0	100.0

Distribution of tenant's type capital (%)

	Average 2017/18	Average 2018/19
Crops & tillages	2	1
Stores	6	6
Glasshouses	34	32
Equipment	24	28
Livestock	0	0
Other	33	33
Total	100	100
Tenant's capital (£)	548,535	652,836

** no premium figures, sample too small*

Table 2.6 Specialist glass businesses, mainly ornamental crops*

	<i>Per business</i>		<i>Per hectare</i>		<i>Per £100 of gross output</i>	
	2017/18	2018/19	2017/18	2018/19	2017/18	2018/19
Number of businesses	31	27	31	27	31	27
Productive cropping area (ha)	1.58	2.49	1.58	2.49		
	<i>Average £/business</i>		<i>Average £/hectare</i>		<i>Average %</i>	
Gross output	468,472	731,075	296,359	293,928	100.0	100.0
Variable costs						
Seed & young plants	96,650	184,525	61,142	74,188	20.6	25.2
Fertilisers & composts	17,563	23,219	11,110	9,335	3.7	3.2
Crop protection	2,351	3,589	1,488	1,443	0.5	0.5
Market charges	18,971	25,214	12,001	10,137	4.0	3.4
Packing materials	25,354	26,464	16,039	10,640	5.4	3.6
Horticultural sundries	13,783	12,825	8,719	5,156	2.9	1.8
Glasshouse fuel	8,013	20,716	5,069	8,329	1.7	2.8
Other variable costs	0	0	0	0	0.0	0.0
Total variable costs	182,685	296,551	115,568	119,228	39.0	40.6
Total gross margin	285,787	434,523	180,791	174,699	61.0	59.4
Fixed costs						
Labour:						
Regular paid	125,320	180,678	79,278	72,641	26.8	24.7
Regular unpaid	39,161	41,731	24,773	16,778	8.4	5.7
Casual labour	13,473	31,095	8,523	12,502	2.9	4.3
Power & machinery costs:						
Contract & hire	4,537	9,754	2,870	3,921	1.0	1.3
Fuel & electricity	12,230	23,298	7,737	9,367	2.6	3.2
Repairs	6,484	11,439	4,102	4,599	1.4	1.6
Machinery depreciation	10,366	16,910	6,558	6,798	2.2	2.3
Glasshouse depreciation	7,673	16,983	4,854	6,828	1.6	2.3
Rent (incl. imputed)	10,272	14,666	6,498	5,896	2.2	2.0
Other costs:						
Occupier's repairs	8,347	14,900	5,281	5,990	1.8	2.0
Permanent crop depreciation	0	0	0	0	0.0	0.0
Water	1,786	2,135	1,130	858	0.4	0.3
Sundries	31,509	38,289	19,933	15,394	6.7	5.2
Total fixed costs	271,159	401,878	171,537	161,574	57.9	55.0
Management & investment income	14,628	32,645	9,254	13,125	3.1	4.5
Minus: management salaries	600	858	380	345	0.1	0.1
Plus: farmer & spouse labour	34,745	34,688	21,980	13,946	7.4	4.7
Net farm income	48,773	66,475	30,854	26,726	10.4	9.1
Farm business income	46,493	59,487	29,412	23,916	9.9	8.1

Crop output per cent of total crop output (%)

	Average 2017/18	Average 2018/19
Glasshouse crops		
Flowers & nursery stock	85.0	84.9
Tomatoes	0.0	0.0
Lettuce	0.0	0.0
Soft fruit	0.0	0.0
Other glasshouse crops	0.2	0.0
Outdoor crops		
Flowers & nursery stock	14.5	14.7
Vegetables	0.0	0.0
Fruit	0.0	0.0
Other outdoor crops	0.3	0.4
Total	100.0	100.0

Distribution of tenant's type capital (%)

	Average 2017/18	Average 2018/19
Crops & tillages	11	9
Stores	13	12
Glasshouses	20	29
Equipment	19	19
Livestock	0	0
Other	37	31
Total	100	100
Tenant's capital (£)	612,493	827,016

** no premium figures, sample too small*

Table 2.7 Specialist glass businesses (50% or more of crop output from glasshouse production)

	<i>Per business</i>		<i>Per hectare</i>		<i>Per £100 of gross output</i>	
	2017/18	2018/19	2017/18	2018/19	2017/18	2018/19
Number of businesses	44	34	44	34	44	34
Productive cropping area (ha)	0.96	0.90	0.96	0.90		
	<i>Average £/business</i>		<i>Average £/hectare</i>		<i>Average %</i>	
Gross output	386,089	377,125	402,184	416,841	100.0	100.0
Variable costs						
Seed & young plants	61,090	52,279	63,637	57,784	15.8	13.9
Fertilisers & composts	12,525	12,011	13,048	13,276	3.2	3.2
Crop protection	3,176	2,218	3,308	2,451	0.8	0.6
Market charges	16,870	12,137	17,573	13,415	4.4	3.2
Packing materials	21,571	14,187	22,470	15,681	5.6	3.8
Horticultural sundries	15,686	12,300	16,340	13,596	4.1	3.3
Glasshouse fuel	15,291	33,887	15,928	37,456	4.0	9.0
Other variable costs	0	0	0	0	0.0	0.0
Total variable costs	146,209	139,018	152,303	153,658	37.9	36.9
Total gross margin	239,881	238,107	249,880	263,183	62.1	63.1
Fixed costs						
Labour:						
Regular paid	81,576	89,752	84,977	99,205	21.1	23.8
Regular unpaid	37,271	38,382	38,825	42,424	9.7	10.2
Casual labour	28,807	11,658	30,008	12,886	7.5	3.1
Power & machinery costs:						
Contract & hire	2,214	1,825	2,306	2,017	0.6	0.5
Fuel & electricity	12,309	17,431	12,822	19,267	3.2	4.6
Repairs	6,237	10,763	6,497	11,897	1.6	2.9
Machinery depreciation	9,049	10,105	9,426	11,169	2.3	2.7
Glasshouse depreciation	9,359	11,475	9,750	12,684	2.4	3.0
Rent (incl. imputed)	8,111	6,486	8,449	7,169	2.1	1.7
Other costs:						
Occupier's repairs	8,507	8,731	8,862	9,650	2.2	2.3
Permanent crop depreciation	169	0	176	0	0.0	0.0
Water	2,221	2,134	2,313	2,358	0.6	0.6
Sundries	18,296	14,826	19,059	16,387	4.7	3.9
Total fixed costs	224,127	223,568	233,470	247,113	58.1	59.3
Management & investment income	15,754	14,539	16,411	16,070	4.1	3.9
Minus: management salaries	641	547	668	604	0.2	0.1
Plus: farmer & spouse labour	32,816	33,681	34,184	37,228	8.5	8.9
Net farm income	47,929	47,674	49,927	52,695	12.4	12.6
Farm business income	42,401	41,696	44,168	46,088	11.0	11.1

Premium businesses	Per hectare	Per £100 of gross output	Crop output per cent of total crop output (%)		
			Average 2017/18	Average 2018/19	Premium 2018/19*
	2018/19*	2018/19*			
Number of businesses	13	13			
Productive cropping area (ha)	1.07				
	£ per hectare	average %			
Gross output	703,691	100.0			
Variable costs					
Seed & young plants	99,793	14.2	Glasshouse crops		
Fertilisers & composts	22,069	3.1	Flowers & nursery stock	59.4	60.7
Crop protection	3,739	0.5	Tomatoes	13.0	24.2
			Lettuce	0.5	0.9
Market charges	17,995	2.6	Soft fruit	12.9	7.6
Packing materials	25,847	3.7	Other glasshouse crops	12.4	4.9
Horticultural sundries	9,917	1.4	Outdoor crops		
Glasshouse fuel	67,174	9.5	Flowers & nursery stock	1.4	1.3
Other variable costs	0	0.0	Vegetables	0.2	0.2
			Fruit	0.0	0.0
			Other outdoor crops	0.1	0.3
Total variable costs	246,534	35.0	Total	100.0	100.0
					100.0
Total gross margin	457,157	65.0	Distribution of tenant's type capital (%)		
				Average 2017/18	Average 2018/19
Fixed costs					Premium 2018/19*
Labour:			Crops & tillages	4	2
Regular paid	171,930	24.4	Stores	11	10
Regular unpaid	29,238	4.2	Glasshouses	29	34
Casual labour	10,913	1.6	Equipment	20	20
Power & machinery costs:			Livestock	0	0
Contract & hire	4,190	0.6	Other	35	33
Fuel & electricity	15,877	2.3	Total	100	100
Repairs	17,294	2.5			100
Machinery depreciation	19,671	2.8	Tenant's capital (£)	530,295	573,776
Glasshouse depreciation	28,921	4.1			1,323,918
Rent (incl. imputed)	8,852	1.3			
Other costs:					
Occupier's repairs	14,047	2.0			
Permanent crop depreciation	0	0.0			
Water	3,118	0.4			
Sundries	22,186	3.2			
Total fixed costs	346,238	49.2			
Management & investment income	110,919	15.8			
Minus: management salaries	1,434	0.2			
Plus: farmer & spouse labour	25,056	3.6			
Net farm income	134,541	19.1			
Farm business income	122,246	17.4			

* Data is derived from a modest sample size and thus there is a lower degree of confidence in the figures

Table 2.8 Specialist glass businesses (50% or more of crop output from glasshouse production) - mainly edible crops*

	<i>Per business</i>		<i>Per hectare</i>		<i>Per £100 of gross output</i>	
	2017/18	2018/19	2017/18	2018/19	2017/18	2018/19
Number of businesses	19	15	19	15	19	15
Productive cropping area (ha)	1.26	1.08	1.26	1.08		
	<i>Average £/business</i>		<i>Average £/hectare</i>		<i>Average %</i>	
Gross output	352,657	321,163	279,028	298,379	100.0	100.0
Variable costs						
Seed & young plants	32,484	18,975	25,702	17,629	9.2	5.9
Fertilisers & composts	9,892	9,628	7,827	8,945	2.8	3.0
Crop protection	4,680	2,014	3,703	1,871	1.3	0.6
Market charges	17,696	10,723	14,001	9,963	5.0	3.3
Packing materials	12,401	4,529	9,812	4,208	3.5	1.4
Horticultural sundries	14,325	10,177	11,334	9,455	4.1	3.2
Glasshouse fuel	24,964	51,075	19,752	47,452	7.1	15.9
Other variable costs	0	0	0	0	0.0	0.0
Total variable costs	116,441	107,120	92,130	99,521	33.0	33.4
Total gross margin	236,215	214,043	186,897	198,858	67.0	66.6
Fixed costs						
Labour:						
Regular paid	58,341	62,172	46,160	57,761	16.5	19.4
Regular unpaid	30,817	32,966	24,383	30,627	8.7	10.3
Casual labour	47,595	15,823	37,658	14,700	13.5	4.9
Power & machinery costs:						
Contract & hire	1,532	1,829	1,212	1,700	0.4	0.6
Fuel & electricity	15,052	21,215	11,910	19,710	4.3	6.6
Repairs	9,508	15,767	7,523	14,649	2.7	4.9
Machinery depreciation	9,337	10,283	7,388	9,553	2.6	3.2
Glasshouse depreciation	13,361	14,950	10,571	13,889	3.8	4.7
Rent (incl. imputed)	7,500	5,588	5,934	5,192	2.1	1.7
Other costs:						
Occupier's repairs	8,156	5,105	6,453	4,743	2.3	1.6
Permanent crop depreciation	388	0	307	0	0.1	0.0
Water	2,723	2,207	2,155	2,051	0.8	0.7
Sundries	14,558	10,559	11,518	9,810	4.1	3.3
Total fixed costs	218,867	198,465	173,171	184,385	62.1	61.8
Management & investment income	17,348	15,578	13,726	14,473	4.9	4.9
Minus: management salaries	770	156	609	145	0.2	0.0
Plus: farmer & spouse labour	26,590	29,264	21,039	27,187	7.5	9.1
Net farm income	43,168	44,685	34,155	41,515	12.2	13.9
Farm business income	34,747	38,362	27,493	35,641	9.9	11.9

Crop output per cent of total crop output (%)

	Average 2017/18	Average 2018/19
Glasshouse crops		
Flowers & nursery stock	0.7	0.0
Tomatoes	33.0	63.7
Lettuce	1.3	2.2
Soft fruit	32.9	19.9
Other glasshouse crops	31.2	12.8
Outdoor crops		
Flowers & nursery stock	0.0	0.0
Vegetables	0.6	0.6
Fruit	0.0	0.0
Other outdoor crops	0.4	0.7
Total	100.0	100.0

Distribution of tenant's type capital (%)

	Average 2017/18	Average 2018/19
Crops & tillages	2	1
Stores	3	3
Glasshouses	44	44
Equipment	21	22
Livestock	0	0
Other	30	31
Total	100	100
Tenant's capital (£)	503,697	576,523

** no premium figures, sample too small*

Table 2.9 Specialist glass businesses (50% or more of crop output from glasshouse production) - mainly ornamental crops*

	<i>Per business</i>		<i>Per hectare</i>		<i>Per £100 of gross output</i>	
	2017/18	2018/19	2017/18	2018/19	2017/18	2018/19
Number of businesses	25	19	25	19	25	19
Productive cropping area (ha)	0.72	0.73	0.72	0.73		
	<i>Average £/business</i>		<i>Average £/hectare</i>		<i>Average %</i>	
Gross output	412,046	433,071	569,094	590,713	100.0	100.0
Variable costs						
Seed & young plants	83,300	85,573	115,048	116,722	20.2	19.8
Fertilisers & composts	14,570	14,393	20,123	19,633	3.5	3.3
Crop protection	2,008	2,421	2,773	3,302	0.5	0.6
Market charges	16,228	13,549	22,413	18,481	3.9	3.1
Packing materials	28,691	23,842	39,626	32,521	7.0	5.5
Horticultural sundries	16,742	14,423	23,123	19,673	4.1	3.3
Glasshouse fuel	7,781	16,704	10,746	22,784	1.9	3.9
Other variable costs	0	0	0	0	0.0	0.0
Total variable costs	169,320	170,906	233,854	233,117	41.1	39.5
Total gross margin	242,727	262,165	335,240	357,596	58.9	60.5
Fixed costs						
Labour:						
Regular paid	99,616	117,325	137,584	160,033	24.2	27.1
Regular unpaid	42,283	43,796	58,398	59,738	10.3	10.1
Casual labour	14,220	7,494	19,639	10,222	3.5	1.7
Power & machinery costs:						
Contract & hire	2,743	1,820	3,789	2,482	0.7	0.4
Fuel & electricity	10,178	13,648	14,058	18,616	2.5	3.2
Repairs	3,697	5,761	5,106	7,858	0.9	1.3
Machinery depreciation	8,825	9,927	12,188	13,541	2.1	2.3
Glasshouse depreciation	6,253	8,002	8,636	10,915	1.5	1.8
Rent (incl. imputed)	8,586	7,384	11,858	10,071	2.1	1.7
Other costs:						
Occupier's repairs	8,780	12,355	12,126	16,852	2.1	2.9
Permanent crop depreciation	0	0	0	0	0.0	0.0
Water	1,831	2,060	2,528	2,810	0.4	0.5
Sundries	21,199	19,092	29,279	26,042	5.1	4.4
Total fixed costs	228,210	248,664	315,191	339,180	55.4	57.4
Management & investment income	14,516	13,501	20,049	18,415	3.5	3.1
Minus: management salaries	540	937	746	1,277	0.1	0.2
Plus: farmer & spouse labour	37,649	38,098	51,999	51,966	9.1	8.8
Net farm income	51,625	50,662	71,301	69,104	12.5	11.7
Farm business income	48,343	45,030	66,768	61,421	11.7	10.4

Crop output per cent of total crop output (%)

	Average 2017/18	Average 2018/19
Glasshouse crops		
Flowers & nursery stock	97.3	97.9
Tomatoes	0.0	0.0
Lettuce	0.0	0.0
Soft fruit	0.0	0.0
Other glasshouse crops	0.3	0.0
Outdoor crops		
Flowers & nursery stock	2.3	2.1
Vegetables	0.0	0.0
Fruit	0.0	0.0
Other outdoor crops	0.0	0.0
Total	100.0	100.0

Distribution of tenant's type capital (%)

	Average 2017/18	Average 2018/19
Crops & tillages	6	4
Stores	18	18
Glasshouses	19	25
Equipment	19	18
Livestock	0	0
Other	39	35
Total	100	100
Tenant's capital (£)	612,493	827,016

** no premium figures, sample too small*

Table 2.10 Specialist glass businesses (90% or more of crop output from glasshouse production)

	<i>Per business</i>		<i>Per hectare</i>		<i>Per £100 of gross output</i>	
	2017/18	2018/19	2017/18	2018/19	2017/18	2018/19
Number of businesses	35	29	35	29	35	29
Productive cropping area (ha)	0.82	0.81	0.82	0.81		
	<i>Average £/business</i>		<i>Average £/hectare</i>		<i>Average %</i>	
Gross output	372,763	431,691	456,009	534,858	100.0	100.0
Variable costs						
Seed & young plants	56,843	58,872	69,537	72,942	15.2	13.6
Fertilisers & composts	13,117	14,106	16,046	17,477	3.5	3.3
Crop protection	2,629	2,433	3,216	3,015	0.7	0.6
Market charges	16,722	14,482	20,457	17,943	4.5	3.4
Packing materials	21,225	16,082	25,965	19,925	5.7	3.7
Horticultural sundries	12,212	14,423	14,940	17,870	3.3	3.3
Glasshouse fuel	15,592	39,639	19,074	49,112	4.2	9.2
Other variable costs	0	0	0	0	0.0	0.0
Total variable costs	138,341	160,037	169,235	198,283	37.1	37.1
Total gross margin	234,422	271,654	286,774	336,575	62.9	62.9
Fixed costs						
Labour:						
Regular paid	78,358	102,600	95,857	127,120	21.0	23.8
Regular unpaid	36,112	35,004	44,177	43,369	9.7	8.1
Casual labour	25,187	12,857	30,812	15,930	6.8	3.0
Power & machinery costs:						
Contract & hire	2,252	2,182	2,755	2,704	0.6	0.5
Fuel & electricity	13,256	20,310	16,216	25,164	3.6	4.7
Repairs	6,362	12,335	7,782	15,283	1.7	2.9
Machinery depreciation	8,382	10,939	10,254	13,553	2.2	2.5
Glasshouse depreciation	10,020	13,703	12,258	16,978	2.7	3.2
Rent (incl. imputed)	7,750	7,217	9,481	8,941	2.1	1.7
Other costs:						
Occupier's repairs	8,516	10,282	10,418	12,740	2.3	2.4
Permanent crop depreciation	199	0	244	0	0.1	0.0
Water	2,173	2,304	2,658	2,854	0.6	0.5
Sundries	17,936	16,837	21,942	20,861	4.8	3.9
Total fixed costs	216,502	246,571	264,852	305,497	58.1	57.1
Management & investment income	17,920	25,083	21,921	31,078	4.8	5.8
Minus: management salaries	462	666	565	825	0.1	0.2
Plus: farmer & spouse labour	33,030	31,761	40,406	39,351	8.9	7.4
Net farm income	50,487	56,178	61,762	69,604	13.5	13.0
Farm business income	42,685	46,996	52,217	58,227	11.5	10.9

Table 2.11 Specialist glass businesses (90% or more of crop output from glasshouse production) - mainly edible crops*

	<i>Per business</i>		<i>Per hectare</i>		<i>Per £100 of gross output</i>	
	2017/18**	2018/19**	2017/18**	2018/19**	2017/18**	2018/19**
Number of businesses	14	12	14	12	14	12
Productive cropping area (ha)	1.15	1.00	1.15	1.00		
	<i>Average £/business</i>		<i>Average £/hectare</i>		<i>Average %</i>	
Gross output	352,919	444,402	306,721	445,472	100.0	100.0
Variable costs						
Seed & young plants	20,674	23,779	17,968	23,837	5.9	5.4
Fertilisers & composts	9,910	13,571	8,613	13,604	2.8	3.1
Crop protection	3,689	2,794	3,206	2,801	1.0	0.6
Market charges	22,168	15,370	19,266	15,407	6.3	3.5
Packing materials	14,807	6,364	12,869	6,379	4.2	1.4
Horticultural sundries	8,083	13,594	7,025	13,627	2.3	3.1
Glasshouse fuel	29,042	73,200	25,240	73,376	8.2	16.5
Other variable costs	0	0	0	0	0.0	0.0
Total variable costs	108,372	148,672	94,186	149,030	30.7	33.5
Total gross margin	244,547	295,730	212,535	296,442	69.3	66.5
Fixed costs						
Labour:						
Regular paid	53,908	89,113	46,851	89,327	15.3	20.1
Regular unpaid	27,003	25,268	23,468	25,329	7.7	5.7
Casual labour	52,476	19,515	45,606	19,562	14.9	4.4
Power & machinery costs:						
Contract & hire	1,790	2,529	1,556	2,535	0.5	0.6
Fuel & electricity	18,660	29,382	16,217	29,452	5.3	6.6
Repairs	11,148	21,988	9,688	22,041	3.2	4.9
Machinery depreciation	9,479	14,163	8,238	14,197	2.7	3.2
Glasshouse depreciation	16,497	21,148	14,337	21,199	4.7	4.8
Rent (incl. imputed)	6,406	7,452	5,568	7,470	1.8	1.7
Other costs:						
Occupier's repairs	8,055	7,005	7,001	7,022	2.3	1.6
Permanent crop depreciation	522	0	454	0	0.1	0.0
Water	2,912	2,875	2,531	2,882	0.8	0.6
Sundries	13,561	14,023	11,786	14,057	3.8	3.2
Total fixed costs	222,416	254,460	193,301	255,073	63.0	57.3
Management & investment income	22,131	41,270	19,234	41,369	6.3	9.3
Minus: management salaries	273	224	238	225	0.1	0.1
Plus: farmer & spouse labour	24,038	22,553	20,891	22,608	6.8	5.1
Net farm income	45,896	63,599	39,888	63,752	13.0	14.3
Farm business income	32,824	51,751	28,527	51,875	9.3	11.6

** Data is derived from a modest sample size and thus there is a lower degree of confidence in the figures

Crop output per cent of total crop output (%)

	Average 2017/18**	Average 2018/19**
Glasshouse crops		
Flowers & nursery stock	0.0	0.0
Tomatoes	44.5	66.3
Lettuce	1.7	2.3
Soft fruit	44.4	20.7
Other glasshouse crops	9.4	10.7
Outdoor crops		
Flowers & nursery stock	0.0	0.0
Vegetables	0.0	0.0
Fruit	0.0	0.0
Other outdoor crops	0.0	0.0
Total	100.0	100.0

Distribution of tenant's type capital (%)

	Average 2017/18**	Average 2018/19**
Crops & tillages	1	0
Stores	2	3
Glasshouses	49	44
Equipment	19	22
Livestock	0	0
Other	29	31
Total	100	100
Tenant's capital (£)	554,635	804,316

* no premium figures, sample too small

Table 2.12 Specialist glass businesses (90% or more of crop output from glasshouse production) - mainly ornamental crops*

	<i>Per business</i>		<i>Per hectare</i>		<i>Per £100 of gross output</i>	
	2017/18	2018/19	2017/18	2018/19	2017/18	2018/19
Number of businesses	21	17	21	17	21	17
Productive cropping area (ha)	0.61	0.67	0.61	0.67		
	<i>Average £/business</i>		<i>Average £/hectare</i>		<i>Average %</i>	
Gross output	385,001	422,296	629,126	633,775	100.0	100.0
Variable costs						
Seed & young plants	79,149	84,811	129,337	127,283	20.6	20.1
Fertilisers & composts	15,095	14,501	24,666	21,762	3.9	3.4
Crop protection	1,976	2,167	3,229	3,252	0.5	0.5
Market charges	13,363	13,825	21,837	20,748	3.5	3.3
Packing materials	25,183	23,265	41,152	34,916	6.5	5.5
Horticultural sundries	14,759	15,035	24,118	22,565	3.8	3.6
Glasshouse fuel	7,297	14,833	11,924	22,261	1.9	3.5
Other variable costs	0	0	0	0	0.0	0.0
Total variable costs	156,823	168,437	256,263	252,787	40.7	39.9
Total gross margin	228,177	253,859	372,862	380,987	59.3	60.1
Fixed costs						
Labour:						
Regular paid	93,437	112,569	152,684	168,942	24.3	26.7
Regular unpaid	41,731	42,200	68,192	63,333	10.8	10.0
Casual labour	8,357	7,937	13,655	11,911	2.2	1.9
Power & machinery costs:						
Contract & hire	2,536	1,926	4,144	2,891	0.7	0.5
Fuel & electricity	9,923	13,605	16,215	20,419	2.6	3.2
Repairs	3,410	5,201	5,572	7,805	0.9	1.2
Machinery depreciation	7,706	8,555	12,592	12,840	2.0	2.0
Glasshouse depreciation	6,026	8,200	9,847	12,307	1.6	1.9
Rent (incl. imputed)	8,579	7,043	14,019	10,570	2.2	1.7
Other costs:						
Occupier's repairs	8,800	12,705	14,380	19,068	2.3	3.0
Permanent crop depreciation	0	0	0	0	0.0	0.0
Water	1,717	1,881	2,806	2,823	0.4	0.4
Sundries	20,635	18,917	33,719	28,390	5.4	4.5
Total fixed costs	212,855	240,739	347,824	361,298	55.3	57.0
Management & investment income	15,322	13,119	25,038	19,689	4.0	3.1
Minus: management salaries	578	993	945	1,490	0.2	0.2
Plus: farmer & spouse labour	38,575	38,566	63,035	57,880	10.0	9.1
Net farm income	53,319	50,693	87,128	76,079	13.8	12.0
Farm business income	48,766	43,482	79,689	65,257	12.7	10.3

Crop output per cent of total crop output (%)

	Average 2017/18	Average 2018/19
Glasshouse crops		
Flowers & nursery stock	99.6	100.0
Tomatoes	0.0	0.0
Lettuce	0.0	0.0
Soft fruit	0.0	0.0
Other glasshouse crops	0.4	0.0
Outdoor crops		
Flowers & nursery stock	0.0	0.0
Vegetables	0.0	0.0
Fruit	0.0	0.0
Other outdoor crops	0.0	0.0
Total	100.0	100.0

Distribution of tenant's type capital (%)

	Average 2017/18	Average 2018/19
Crops & tillages	5	5
Stores	18	17
Glasshouses	19	27
Equipment	18	16
Livestock	0	0
Other	40	36
Total	100	100
Tenant's capital (£)	506,146	542,376

** no premium figures, sample too small*

Table 2.13 All specialist fruit businesses

	<i>Per business</i>		<i>Per hectare</i>		<i>Per £100 of gross output</i>	
	2017/18	2018/19	2017/18	2018/19	2017/18	2018/19
Number of businesses	49	49	49	49	49	49
Productive cropping area (ha)	20.23	12.94	20.23	12.94		
	<i>Average £/business</i>		<i>Average £/hectare</i>		<i>Average %</i>	
Gross output	370,859	238,256	18,330	18,413	100.0	100.0
Variable costs						
Seed & young plants	10,039	5,615	496	434	2.7	2.4
Fertilisers & composts	3,975	2,193	196	169	1.1	0.9
Crop protection	14,141	10,700	699	827	3.8	4.5
Market charges	53,787	28,863	2,658	2,231	14.5	12.1
Packing materials	36,175	20,603	1,788	1,592	9.8	8.6
Horticultural sundries	18,169	9,066	898	701	4.9	3.8
Glasshouse fuel	0	0	0	0	0.0	0.0
Other variable costs	622	880	31	68	0.2	0.4
Total variable costs	136,908	77,920	6,767	6,022	36.9	32.7
Total gross margin	233,952	160,336	11,563	12,391	63.1	67.3
Fixed costs						
Labour:						
Regular paid	26,818	21,234	1,325	1,641	7.2	8.9
Regular unpaid	20,788	19,063	1,027	1,473	5.6	8.0
Casual labour	89,876	52,672	4,442	4,071	24.2	22.1
Power & machinery costs:						
Contract & hire	8,426	6,564	416	507	2.3	2.8
Fuel & electricity	10,712	8,944	529	691	2.9	3.8
Repairs	9,552	5,640	472	436	2.6	2.4
Machinery depreciation	11,745	7,908	580	611	3.2	3.3
Glasshouse depreciation	189	96	9	7	0.1	0.0
Rent (incl. imputed)	15,333	11,587	758	895	4.1	4.9
Other costs:						
Occupier's repairs	6,628	5,719	328	442	1.8	2.4
Permanent crop depreciation	5,255	3,261	260	252	1.4	1.4
Water	1,406	1,449	69	112	0.4	0.6
Sundries	15,619	11,124	772	860	4.2	4.7
Total fixed costs	222,345	155,262	10,989	11,999	60.0	65.2
Management & investment income	11,607	5,074	574	392	3.1	2.1
Minus: management salaries	324	195	16	15	0.1	0.1
Plus: farmer & spouse labour	18,229	17,791	901	1,375	4.9	7.5
Net farm income	29,511	22,670	1,459	1,752	8.0	9.5
Farm business income	32,031	23,727	1,583	1,834	8.6	10.0

Premium businesses	Per hectare	Per £100 of gross output	Crop output per cent of total crop output (%)		
			Average 2017/18	Average 2018/19	Premium 2018/19
	2018/19	2018/19			
Number of businesses	18	18			
Productive cropping area (ha)	21.82				
	£ per hectare	average %			
Gross output	12,985	100.0			
Variable costs					
Seed & young plants	109	0.8	Top fruit		
Fertilisers & composts	138	1.1	Dessert apples	28.7	34.3
Crop protection	634	4.9	Culinary apples	3.0	3.8
			Cider apples	5.6	4.7
Market charges	1,881	14.5	Plums	3.9	4.2
Packing materials	469	3.6	Other top fruit	5.2	4.6
Horticultural sundries	332	2.6	Soft fruit		
Glasshouse fuel	0	0.0	Strawberries	17.2	14.4
Other variable costs	2	0.0	Raspberries	26.7	21.4
			Blackcurrants	0.5	0.6
Total variable costs	3,565	27.5	Other soft fruit	8.1	10.9
			Other crops	1.2	1.1
Total gross margin	9,420	72.5	Total	100.0	100.0
Fixed costs			Distribution of tenant's type capital (%)		
Labour:				Average 2017/18	Average 2018/19
Regular paid	805	6.2	Crops & tillages	7	8
Regular unpaid	890	6.9	Stores	3	4
Casual labour	2,194	16.9	Glasshouses	0	0
			Equipment	27	24
Power & machinery costs:			Livestock	1	1
Contract & hire	253	1.9	Other	61	62
Fuel & electricity	524	4.0	Total	100	100
Repairs	329	2.5			
Machinery depreciation	477	3.7	Tenant's capital (£)	522,575	381,962
Glasshouse depreciation	0	0.0			
Rent (incl. imputed)	573	4.4			
Other costs:					
Occupier's repairs	285	2.2			
Permanent crop depreciation	224	1.7			
Water	111	0.9			
Sundries	520	4.0			
Total fixed costs	7,185	55.3			
Management & investment income	2,236	17.2			
Minus: management salaries	12	0.1			
Plus: farmer & spouse labour	774	6.0			
Net farm income	2,998	23.1			
Farm business income	3,211	24.7			

Table 2.14 Specialist fruit businesses, mainly top fruit

	<i>Per business</i>		<i>Per hectare</i>		<i>Per £100 of gross output</i>	
	2017/18	2018/19	2017/18	2018/19	2017/18	2018/19
Number of businesses	34	34	34	34	34	34
Productive cropping area (ha)	13.68	10.89	13.68	10.89		
	<i>Average £/business</i>		<i>Average £/hectare</i>		<i>Average %</i>	
Gross output	185,075	158,891	13,525	14,591	100.0	100.0
Variable costs						
Seed & young plants	1,626	852	119	78	0.9	0.5
Fertilisers & composts	1,927	1,323	141	122	1.0	0.8
Crop protection	9,134	9,392	667	863	4.9	5.9
Market charges	26,279	17,891	1,920	1,643	14.2	11.3
Packing materials	8,416	7,485	615	687	4.5	4.7
Horticultural sundries	11,190	6,409	818	589	6.0	4.0
Glasshouse fuel	0	0	0	0	0.0	0.0
Other variable costs	911	1,398	67	128	0.5	0.9
Total variable costs	59,484	44,751	4,347	4,110	32.1	28.2
Total gross margin	125,591	114,141	9,178	10,482	67.9	71.8
Fixed costs						
Labour:						
Regular paid	19,807	17,636	1,447	1,620	10.7	11.1
Regular unpaid	20,077	18,072	1,467	1,660	10.8	11.4
Casual labour	23,790	21,646	1,738	1,988	12.9	13.6
Power & machinery costs:						
Contract & hire	7,497	8,298	548	762	4.1	5.2
Fuel & electricity	6,569	7,456	480	685	3.5	4.7
Repairs	5,527	4,475	404	411	3.0	2.8
Machinery depreciation	8,347	7,493	610	688	4.5	4.7
Glasshouse depreciation	40	42	3	4	0.0	0.0
Rent (incl. imputed)	10,511	11,290	768	1,037	5.7	7.1
Other costs:						
Occupier's repairs	3,572	5,781	261	531	1.9	3.6
Permanent crop depreciation	6,087	3,827	445	351	3.3	2.4
Water	629	663	46	61	0.3	0.4
Sundries	11,296	9,175	825	843	6.1	5.8
Total fixed costs	123,749	115,853	9,043	10,639	66.9	72.9
Management & investment income	1,842	-1,713	135	-157	1.0	-1.1
Minus: management salaries	257	112	19	10	0.1	0.1
Plus: farmer & spouse labour	17,416	16,716	1,273	1,535	9.4	10.5
Net farm income	19,002	14,892	1,389	1,368	10.3	9.4
Farm business income	22,021	16,648	1,609	1,529	11.9	10.5

Table 2.15 Specialist fruit businesses, mainly top fruit-excluding cider

	<i>Per business</i>		<i>Per hectare</i>		<i>Per £100 of gross output</i>	
	2017/18	2018/19	2017/18	2018/19	2017/18	2018/19
Number of businesses	23	23	23	23	23	23
Productive cropping area (ha)	12.66	10.08	12.66	10.08		
	<i>Average £/business</i>		<i>Average £/hectare</i>		<i>Average %</i>	
Gross output	225,648	196,018	17,822	19,453	100.0	100.0
Variable costs						
Seed & young plants	2,379	1,223	188	121	1.1	0.6
Fertilisers & composts	1,629	1,367	129	136	0.7	0.7
Crop protection	11,030	11,245	871	1,116	4.9	5.7
Market charges	33,411	22,380	2,639	2,221	14.8	11.4
Packing materials	12,447	10,915	983	1,083	5.5	5.6
Horticultural sundries	15,820	8,187	1,249	812	7.0	4.2
Glasshouse fuel	0	0	0	0	0.0	0.0
Other variable costs	83	1,077	7	107	0.0	0.5
Total variable costs	76,799	56,394	6,066	5,596	34.0	28.8
Total gross margin	148,848	139,625	11,756	13,856	66.0	71.2
Fixed costs						
Labour:						
Regular paid	26,681	23,322	2,107	2,314	11.8	11.9
Regular unpaid	22,091	20,629	1,745	2,047	9.8	10.5
Casual labour	33,529	30,107	2,648	2,988	14.9	15.4
Power & machinery costs:						
Contract & hire	5,534	8,054	437	799	2.5	4.1
Fuel & electricity	8,410	9,842	664	977	3.7	5.0
Repairs	5,945	5,049	470	501	2.6	2.6
Machinery depreciation	10,085	8,985	797	892	4.5	4.6
Glasshouse depreciation	59	61	5	6	0.0	0.0
Rent (incl. imputed)	11,341	12,924	896	1,283	5.0	6.6
Other costs:						
Occupier's repairs	3,588	6,443	283	639	1.6	3.3
Permanent crop depreciation	7,156	4,360	565	433	3.2	2.2
Water	749	881	59	87	0.3	0.4
Sundries	13,553	10,814	1,070	1,073	6.0	5.5
Total fixed costs	148,721	141,472	11,746	14,040	65.9	72.2
Management & investment income	128	-1,847	10	-183	0.1	-0.9
Minus: management salaries	364	143	29	14	0.2	0.1
Plus: farmer & spouse labour	19,414	19,411	1,533	1,926	8.6	9.9
Net farm income	19,178	17,421	1,515	1,729	8.5	8.9
Farm business income	20,985	17,672	1,657	1,754	9.3	9.0

Table 2.16 Specialist fruit businesses, cider*

	<i>Per business</i>		<i>Per hectare</i>		<i>Per £100 of gross output</i>	
	2017/18**	2018/19**	2017/18**	2018/19**	2017/18**	2018/19**
Number of businesses	10	10	10	10	10	10
Productive cropping area (ha)	14.42	11.62	14.42	11.62		
	<i>Average £/business</i>		<i>Average £/hectare</i>		<i>Average %</i>	
Gross output	78,390	57,288	5,437	4,929	100.0	100.0
Variable costs						
Seed & young plants	19	45	1	4	0.0	0.1
Fertilisers & composts	2,472	1,147	171	99	3.2	2.0
Crop protection	4,400	4,495	305	387	5.6	7.8
Market charges	2,265	1,724	157	148	2.9	3.0
Packing materials	2	0	0	0	0.0	0.0
Horticultural sundries	362	677	25	58	0.5	1.2
Glasshouse fuel	0	0	0	0	0.0	0.0
Other variable costs	2,758	2,154	191	185	3.5	3.8
Total variable costs	12,277	10,242	851	881	15.7	17.9
Total gross margin	66,113	47,046	4,586	4,048	84.3	82.1
Fixed costs						
Labour:						
Regular paid	3,826	4,255	265	366	4.9	7.4
Regular unpaid	16,222	12,620	1,125	1,086	20.7	22.0
Casual labour	964	806	67	69	1.2	1.4
Power & machinery costs:						
Contract & hire	12,085	8,753	838	753	15.4	15.3
Fuel & electricity	2,228	1,865	155	160	2.8	3.3
Repairs	4,155	2,945	288	253	5.3	5.1
Machinery depreciation	3,421	3,133	237	270	4.4	5.5
Glasshouse depreciation	0	0	0	0	0.0	0.0
Rent (incl. imputed)	8,213	7,391	570	636	10.5	12.9
Other costs:						
Occupier's repairs	3,628	4,415	252	380	4.6	7.7
Permanent crop depreciation	3,259	2,252	226	194	4.2	3.9
Water	379	182	26	16	0.5	0.3
Sundries	6,142	5,347	426	460	7.8	9.3
Total fixed costs	64,523	53,964	4,475	4,643	82.3	94.2
Management & investment income	1,590	-6,918	110	-595	2.0	-12.1
Minus: management salaries	0	24	0	2	0.0	0.0
Plus: farmer & spouse labour	13,474	10,922	935	940	17.2	19.1
Net farm income	15,065	3,980	1,045	342	19.2	6.9
Farm business income	20,183	8,727	1,400	751	25.7	15.2

** Data is derived from a modest sample size and thus there is a lower degree of confidence in the figures

Crop output per cent of total crop output (%)

	Average 2017/18**	Average 2018/19**
Top fruit		
Dessert apples	0.0	0.0
Culinary apples	0.4	1.7
Cider apples	98.2	97.1
Plums	0.0	0.0
Other top fruit	0.4	0.4
Soft fruit		
Strawberries	0.0	0.0
Raspberries	0.0	0.0
Blackcurrants	0.0	0.0
Other soft fruit	0.0	0.0
Other crops	1.0	0.8
Total	100.0	100.0

Distribution of tenant's type capital (%)

	Average 2017/18**	Average 2018/19**
Crops & tillages	1	1
Stores	7	5
Glasshouses	0	0
Equipment	21	25
Livestock	6	7
Other	65	63
Total	100	100
Tenant's capital (£)	213,645	146,610

** no premium figures, sample too small*

Table 2.17 All specialist hardy nursery stock businesses*

	<i>Per business</i>		<i>Per hectare</i>		<i>Per £100 of gross output</i>	
	2017/18	2018/19	2017/18	2018/19	2017/18	2018/19
Number of businesses	38	28	38	28	38	28
Productive cropping area (ha)	5.36	2.43	5.36	2.43		
	<i>Average £/business</i>		<i>Average £/hectare</i>		<i>Average %</i>	
Gross output	346,365	482,021	64,640	198,032	100.0	100.0
Variable costs						
Seed & young plants	83,091	98,631	15,507	40,521	24.0	20.5
Fertilisers & composts	13,203	19,439	2,464	7,986	3.8	4.0
Crop protection	2,962	3,936	553	1,617	0.9	0.8
Market charges	12,949	24,004	2,417	9,862	3.7	5.0
Packing materials	9,043	15,336	1,688	6,301	2.6	3.2
Horticultural sundries	13,641	13,268	2,546	5,451	3.9	2.8
Glasshouse fuel	786	1,752	147	720	0.2	0.4
Other variable costs	1,097	0	205	0	0.3	0.0
Total variable costs	136,773	176,365	25,525	72,457	39.5	36.6
Total gross margin	209,592	305,656	39,115	125,575	60.5	63.4
Fixed costs						
Labour:						
Regular paid	66,345	106,047	12,381	43,568	19.2	22.0
Regular unpaid	29,989	35,776	5,597	14,698	8.7	7.4
Casual labour	17,214	26,016	3,212	10,688	5.0	5.4
Power & machinery costs:						
Contract & hire	2,892	4,361	540	1,792	0.8	0.9
Fuel & electricity	6,859	10,192	1,280	4,187	2.0	2.1
Repairs	5,434	8,247	1,014	3,388	1.6	1.7
Machinery depreciation	8,258	10,764	1,541	4,422	2.4	2.2
Glasshouse depreciation	1,200	1,795	224	738	0.3	0.4
Rent (incl. imputed)	9,099	10,756	1,698	4,419	2.6	2.2
Other costs:						
Occupier's repairs	5,162	6,923	963	2,844	1.5	1.4
Permanent crop depreciation	56	0	10	0	0.0	0.0
Water	1,264	2,326	236	956	0.4	0.5
Sundries	18,350	25,123	3,425	10,321	5.3	5.2
Total fixed costs	172,121	248,325	32,122	102,021	49.7	51.5
Management & investment income	37,470	57,331	6,993	23,554	10.8	11.9
Minus: management salaries	67	165	13	68	0.0	0.0
Plus: farmer & spouse labour	24,861	28,406	4,640	11,670	7.2	5.9
Net farm income	62,264	85,572	11,620	35,156	18.0	17.8
Farm business income	62,550	82,209	11,673	33,775	18.1	17.1

Crop output per cent of total crop output (%)

	Average 2017/18	Average 2018/19
Hardy nursery stock		
Glasshouse crops	18.8	26.8
Outdoor crops	80.3	73.2
Other crops	1.0	0.0
Total	100.0	100.0

Distribution of tenant's type capital (%)

	Average 2017/18	Average 2018/19
Crops & tillages	36	40
Stores	8	7
Glasshouses	4	4
Equipment	19	16
Livestock	1	0
Other	32	33
Total	100	100
Tenant's capital (£)	495,612	745,946

** no premium figures, sample too small*

Table 2.18 Intensive hardy nursery stock - crop output more than £175,000 per hectare*

	<i>Per business</i>		<i>Per hectare</i>		<i>Per £100 of gross output</i>	
	2017/18	2018/19	2017/18	2018/19	2017/18	2018/19
Number of businesses	17	17	17	17	17	17
Productive cropping area (ha)	1.56	1.89	1.56	1.89		
	<i>Average £/business</i>		<i>Average £/hectare</i>		<i>Average %</i>	
Gross output	553,029	646,752	354,053	341,955	100.0	100.0
Variable costs						
Seed & young plants	121,147	136,969	77,559	72,419	21.9	21.2
Fertilisers & composts	24,514	27,690	15,694	14,641	4.4	4.3
Crop protection	3,482	5,061	2,229	2,676	0.6	0.8
Market charges	24,450	36,853	15,653	19,485	4.4	5.7
Packing materials	19,055	23,430	12,199	12,388	3.4	3.6
Horticultural sundries	20,694	16,160	13,249	8,544	3.7	2.5
Glasshouse fuel	1,835	2,749	1,175	1,453	0.3	0.4
Other variable costs	0	0	0	0	0.0	0.0
Total variable costs	215,177	248,911	137,758	131,606	38.9	38.5
Total gross margin	337,852	397,840	216,296	210,349	61.1	61.5
Fixed costs						
Labour:						
Regular paid	108,918	144,264	69,730	76,276	19.7	22.3
Regular unpaid	39,674	40,773	25,399	21,557	7.2	6.3
Casual labour	30,145	35,041	19,299	18,527	5.5	5.4
Power & machinery costs:						
Contract & hire	3,857	6,712	2,470	3,549	0.7	1.0
Fuel & electricity	8,587	11,686	5,498	6,179	1.6	1.8
Repairs	7,015	10,510	4,491	5,557	1.3	1.6
Machinery depreciation	12,183	14,803	7,800	7,827	2.2	2.3
Glasshouse depreciation	1,756	2,506	1,124	1,325	0.3	0.4
Rent (incl. imputed)	7,387	8,759	4,729	4,631	1.3	1.4
Other costs:						
Occupier's repairs	8,270	8,864	5,295	4,686	1.5	1.4
Permanent crop depreciation	0	0	0	0	0.0	0.0
Water	1,743	2,881	1,116	1,523	0.3	0.4
Sundries	23,422	29,690	14,995	15,698	4.2	4.6
Total fixed costs	252,959	316,489	161,947	167,336	45.7	48.9
Management & investment income	84,893	81,351	54,349	43,012	15.4	12.6
Minus: management salaries	165	275	106	146	0.0	0.0
Plus: farmer & spouse labour	28,504	28,449	18,248	15,042	5.2	4.4
Net farm income	113,231	109,525	72,491	57,908	20.5	16.9
Farm business income	115,148	107,882	73,719	57,040	20.8	16.7

Crop output per cent of total crop output (%)

	Average 2017/18	Average 2018/19
Hardy nursery stock		
Glasshouse crops	24.4	30.9
Outdoor crops	75.6	69.1
Other crops	0.0	0.0
Total	100.0	100.0

Distribution of tenant's type capital (%)

	Average 2017/18	Average 2018/19
Crops & tillages	38	42
Stores	6	5
Glasshouses	4	4
Equipment	19	17
Livestock	0	0
Other	32	32
Total	100	100
Tenant's capital (£)	708,038	953,799

** no premium figures, sample too small*

Table 2.19 Extensive hardy nursery stock - crop output less than £175,000 per hectare*

	<i>Per business</i>		<i>Per hectare</i>		<i>Per £100 of gross output</i>	
	2017/18	2018/19**	2017/18	2018/19**	2017/18	2018/19**
Number of businesses	17	11	17	11	17	11
Productive cropping area (ha)	2.79	3.24	2.79	3.24		
	<i>Average £/business</i>		<i>Average £/hectare</i>		<i>Average %</i>	
Gross output	225,645	236,940	80,794	73,096	100.0	100.0
Variable costs						
Seed & young plants	69,226	41,593	24,787	12,831	30.7	17.6
Fertilisers & composts	5,715	7,163	2,046	2,210	2.5	3.0
Crop protection	1,517	2,262	543	698	0.7	1.0
Market charges	6,073	4,888	2,174	1,508	2.7	2.1
Packing materials	2,642	3,294	946	1,016	1.2	1.4
Horticultural sundries	10,417	8,964	3,730	2,765	4.6	3.8
Glasshouse fuel	80	269	29	83	0.0	0.1
Other variable costs	16	0	6	0	0.0	0.0
Total variable costs	95,687	68,433	34,261	21,112	42.4	28.9
Total gross margin	129,958	168,508	46,532	51,985	57.6	71.1
Fixed costs						
Labour:						
Regular paid	44,561	49,189	15,955	15,175	19.7	20.8
Regular unpaid	21,818	28,341	7,812	8,743	9.7	12.0
Casual labour	9,561	12,588	3,423	3,883	4.2	5.3
Power & machinery costs:						
Contract & hire	1,903	863	681	266	0.8	0.4
Fuel & electricity	5,010	7,968	1,794	2,458	2.2	3.4
Repairs	4,348	4,880	1,557	1,505	1.9	2.1
Machinery depreciation	4,259	4,755	1,525	1,467	1.9	2.0
Glasshouse depreciation	1,000	737	358	227	0.4	0.3
Rent (incl. imputed)	8,468	13,727	3,032	4,235	3.8	5.8
Other costs:						
Occupier's repairs	3,003	4,034	1,075	1,245	1.3	1.7
Permanent crop depreciation	101	0	36	0	0.0	0.0
Water	1,001	1,501	358	463	0.4	0.6
Sundries	15,205	18,329	5,444	5,654	6.7	7.7
Total fixed costs	120,238	146,913	43,052	45,323	53.3	62.0
Management & investment income	9,720	21,595	3,480	6,662	4.3	9.1
Minus: management salaries	0	0	0	0	0.0	0.0
Plus: farmer & spouse labour	21,374	28,341	7,653	8,743	9.5	12.0
Net farm income	31,095	49,936	11,134	15,405	13.8	21.1
Farm business income	28,254	44,014	10,117	13,578	12.5	18.6

** Data is derived from a modest sample size and thus there is a lower degree of confidence in the figures

Crop output per cent of total crop output (%)

	Average 2017/18	Average 2018/19**
Hardy nursery stock		
Glasshouse crops	7.1	8.5
Outdoor crops	92.9	91.5
Other crops	0.0	0.0
Total	100.0	100.0

Distribution of tenant's type capital (%)

	Average 2017/18	Average 2018/19**
Crops & tillages	37	36
Stores	11	13
Glasshouses	5	3
Equipment	14	13
Livestock	0	0
Other	34	35
Total	100	100
Tenant's capital (£)	358,547	436,707

** no premium figures, sample too small*

Table 2.20 All other horticulture businesses

	<i>Per business</i>		<i>Per hectare</i>		<i>Per £100 of gross output</i>	
	2017/18	2018/19	2017/18	2018/19	2017/18	2018/19
Number of businesses	45	46	45	46	45	46
Productive cropping area (ha)	31.03	25.82	31.03	25.82		
	<i>Average £/business</i>		<i>Average £/hectare</i>		<i>Average %</i>	
Gross output	421,696	377,836	13,588	14,632	100.0	100.0
Variable costs						
Seed & young plants	39,055	33,641	1,258	1,303	9.3	8.9
Fertilisers & composts	12,820	11,631	413	450	3.0	3.1
Crop protection	12,585	10,311	406	399	3.0	2.7
Market charges	19,392	17,373	625	673	4.6	4.6
Packing materials	22,195	16,535	715	640	5.3	4.4
Horticultural sundries	11,677	13,327	376	516	2.8	3.5
Glasshouse fuel	2,233	1,427	72	55	0.5	0.4
Other variable costs	1,961	270	63	10	0.5	0.1
Total variable costs	121,918	104,514	3,928	4,047	28.9	27.7
Total gross margin	299,778	273,322	9,659	10,585	71.1	72.3
Fixed costs						
Labour:						
Regular paid	78,344	83,255	2,524	3,224	18.6	22.0
Regular unpaid	38,370	33,636	1,236	1,303	9.1	8.9
Casual labour	63,266	43,034	2,039	1,667	15.0	11.4
Power & machinery costs:						
Contract & hire	13,062	11,011	421	426	3.1	2.9
Fuel & electricity	14,707	14,440	474	559	3.5	3.8
Repairs	13,335	10,315	430	399	3.2	2.7
Machinery depreciation	15,777	13,787	508	534	3.7	3.6
Glasshouse depreciation	1,170	1,061	38	41	0.3	0.3
Rent (incl. imputed)	23,865	20,202	769	782	5.7	5.3
Other costs:						
Occupier's repairs	5,668	4,404	183	171	1.3	1.2
Permanent crop depreciation	501	958	16	37	0.1	0.3
Water	1,929	1,955	62	76	0.5	0.5
Sundries	18,720	16,712	603	647	4.4	4.4
Total fixed costs	288,714	254,771	9,303	9,866	68.5	67.4
Management & investment income	11,064	18,551	357	718	2.6	4.9
Minus: management salaries	698	674	23	26	0.2	0.2
Plus: farmer & spouse labour	27,423	24,469	884	948	6.5	6.5
Net farm income	37,788	42,346	1,218	1,640	9.0	11.2
Farm business income	43,373	46,305	1,398	1,793	10.3	12.3

Premium businesses	Per	Per £100	Crop output per cent of total crop output (%)			
	hectare	of gross	Average	Average	Premium	
	2018/19*	output	2017/18	2018/19	2018/19*	
		average %				
Number of businesses	13	13				
Productive cropping area (ha)	42.68					
Gross output	6,893	100.0				
Variable costs						
Seed & young plants	418	6.1	Glasshouse crops	11.4	13.1	2.9
Fertilisers & composts	206	3.0	Outdoor vegetables:			
Crop protection	262	3.8	Brassicas	4.4	4.2	0.5
Market charges	231	3.4	Legumes	3.8	0.2	0.4
Packing materials	87	1.3	Salad crops	0.1	0.1	0.0
Horticultural sundries	90	1.3	Other outdoor vegetables	20.3	20.8	3.1
Glasshouse fuel	0	0.0	Flowers & nursery stock	9.0	9.6	19.2
Other variable costs	3	0.0	Soft fruit	28.4	30.9	7.1
			Top fruit	0.1	0.1	0.3
			Other crops	22.5	21.0	66.4
Total variable costs	1,297	18.8	Total	100.0	100.0	100.0
Total gross margin	5,596	81.2				
Fixed costs			Distribution of tenant's type capital (%)			
Labour:				Average	Average	Premium
Regular paid	491	7.1	Crops & tillages	2017/18	2018/19	2018/19*
Regular unpaid	761	11.0	Stores			
Casual labour	531	7.7	Glasshouses	12	12	15
Power & machinery costs:			Equipment	5	6	6
Contract & hire	223	3.2	Livestock	4	4	0
Fuel & electricity	319	4.6	Other	38	33	38
Repairs	219	3.2	Total	100	100	100
Machinery depreciation	471	6.8				
Glasshouse depreciation	2	0.0	Tenant's capital (£)	501,870	485,488	590,632
Rent (incl. imputed)	529	7.7				
Other costs:						
Occupier's repairs	65	0.9				
Permanent crop depreciation	17	0.2				
Water	22	0.3				
Sundries	264	3.8				
Total fixed costs	3,913	56.8				
Management & investment income	1,683	24.4				
Minus: management salaries	0	0.0				
Plus: farmer & spouse labour	490	7.1				
Net farm income	2,173	31.5				
Farm business income	2,374	34.4				

* Data is derived from a modest sample size and thus there is a lower degree of confidence in the figures

Table 2.21 Other horticulture businesses, mainly outdoor vegetable crops*

	<i>Per business</i>		<i>Per hectare</i>		<i>Per £100 of gross output</i>	
	2017/18	2018/19	2017/18	2018/19	2017/18	2018/19
Number of businesses	20	17	20	17	20	17
Productive cropping area (ha)	19.24	14.91	19.24	14.91		
	<i>Average £/business</i>		<i>Average £/hectare</i>		<i>Average %</i>	
Gross output	362,051	314,546	18,822	21,103	100.0	100.0
Variable costs						
Seed & young plants	26,679	23,864	1,387	1,601	7.4	7.6
Fertilisers & composts	8,005	8,974	416	602	2.2	2.9
Crop protection	6,088	6,450	316	433	1.7	2.1
Market charges	14,050	13,967	730	937	3.9	4.4
Packing materials	28,596	20,031	1,487	1,344	7.9	6.4
Horticultural sundries	6,371	3,989	331	268	1.8	1.3
Glasshouse fuel	481	596	25	40	0.1	0.2
Other variable costs	1,516	565	79	38	0.4	0.2
Total variable costs	91,786	78,436	4,772	5,262	25.4	24.9
Total gross margin	270,265	236,109	14,051	15,841	74.6	75.1
Fixed costs						
Labour:						
Regular paid	71,580	89,329	3,721	5,993	19.8	28.4
Regular unpaid	40,588	38,419	2,110	2,578	11.2	12.2
Casual labour	53,062	13,732	2,759	921	14.7	4.4
Power & machinery costs:						
Contract & hire	11,263	13,296	586	892	3.1	4.2
Fuel & electricity	11,982	13,491	623	905	3.3	4.3
Repairs	12,599	9,432	655	633	3.5	3.0
Machinery depreciation	12,367	9,806	643	658	3.4	3.1
Glasshouse depreciation	601	753	31	51	0.2	0.2
Rent (incl. imputed)	18,996	15,008	988	1,007	5.2	4.8
Other costs:						
Occupier's repairs	3,053	3,248	159	218	0.8	1.0
Permanent crop depreciation	645	434	34	29	0.2	0.1
Water	1,343	1,574	70	106	0.4	0.5
Sundries	17,219	16,898	895	1,134	4.8	5.4
Total fixed costs	255,298	225,420	13,273	15,124	70.5	71.7
Management & investment income	14,967	10,689	778	717	4.1	3.4
Minus: management salaries	1,168	1,434	61	96	0.3	0.5
Plus: farmer & spouse labour	30,607	28,850	1,591	1,936	8.5	9.2
Net farm income	44,406	38,105	2,309	2,557	12.3	12.1
Farm business income	46,709	36,412	2,428	2,443	12.9	11.6

Crop output per cent of total crop output (%)

	Average 2017/18	Average 2018/19
Glasshouse crops	8.8	12.6
Outdoor vegetables:		
Brassicas	10.2	12.1
Legumes	8.3	0.0
Salad crops	0.2	0.4
Other outdoor vegetables	47.5	61.9
Flowers & nursery stock	0.0	0.1
Soft fruit	2.0	2.4
Top fruit	0.1	0.2
Other crops	22.8	10.4
Total	100.0	100.0

Distribution of tenant's type capital (%)

	Average 2017/18	Average 2018/19
Crops & tillages	2	3
Stores	4	3
Glasshouses	3	3
Equipment	40	28
Livestock	2	1
Other	49	63
Total	100	100
Tenant's capital (£)	385,870	412,839

** no premium figures, sample too small*

Table 2.22 Balance sheet data for horticultural businesses

Group	All horticulture		Specialist glass		Specialist fruit	
Number of businesses	172		49		49	
Harvest year	2018/19 Opening	2018/19 Closing	2018/19 Opening	2018/19 Closing	2018/19 Opening	2018/19 Closing
Assets						
Fixed assets						
Land,buildings & SPS entitlement	611,858	611,534	499,582	476,328	784,814	780,022
Breeding livestock	379	362	0	0	1,569	1,507
Machinery & glasshouses	68,711	69,097	89,808	92,698	46,537	46,552
Permanent crops	13,303	14,268	0	0	51,303	53,417
Miscellaneous business assets	232	258	383	543	196	243
Total fixed assets	694,483	695,519	589,773	569,570	884,418	881,741
Current assets						
Crops & trading livestock	55,609	56,051	25,803	23,622	13,641	19,442
Goods in store	16,102	19,840	38,880	44,390	6,337	9,913
Liquid assets	92,705	104,309	127,176	130,570	58,414	64,041
Total current assets	164,416	180,201	191,858	198,582	78,393	93,396
Total assets	858,900	875,719	781,632	768,152	962,811	975,137
Liabilities						
Bank term loan	35,110	37,054	88,366	65,757	22,558	23,519
Other loans	24,549	25,291	13,319	41,656	23,781	23,916
Bank overdraft	21,700	23,080	8,722	10,037	10,746	8,485
Other short term loans	53,798	61,417	84,955	74,255	29,518	37,582
Total external liabilities	135,157	146,841	195,363	191,705	86,603	93,502
Net worth	723,742	728,878	586,269	576,446	876,208	881,635
Percentage equity (%)	84.3%	83.2%	75.0%	75.0%	91.0%	90.4%

Table 2.23 A comparison of net worth and percentage equity by farm type

	Average Assets 2018/19	Average Liabilities 2018/19	Average Net Worth 2018/19	Average % Equity 2018/19
Defra main farm type				
Lowland cattle & sheep	1,293,566	104,400	1,189,166	91.9%
Cereals	2,826,396	230,142	2,596,254	91.9%
Mixed	2,332,763	292,385	2,040,378	87.5%
General cropping	3,172,208	310,472	2,861,736	90.2%
Horticulture	867,310	140,999	726,311	83.7%
Dairy	2,385,658	452,573	1,933,085	81.0%
Pigs	1,677,440	453,117	1,224,324	73.0%
Poultry	1,827,785	641,625	1,186,160	64.9%
All businesses	2,049,826	235,534	1,814,293	88.5%

Group	Specialist HNS		Other horticulture	
Number of businesses	28		46	
Harvest year	2018/19 Opening	2018/19 Closing	2018/19 Opening	2018/19 Closing
Assets				
Fixed assets				
Land, buildings & SPS entitlement	365,601	381,215	685,501	683,667
Breeding livestock	0	0	73	64
Machinery & glasshouses	61,290	60,687	79,339	79,908
Permanent crops	0	0	4,438	5,569
Miscellaneous business assets	625	625	1	1
Total fixed assets	427,515	442,527	769,353	769,209
Current assets				
Crops & trading livestock	154,913	146,801	28,440	31,486
Goods in store	21,380	28,748	13,092	14,518
Liquid assets	122,031	118,771	86,191	110,824
Total current assets	298,324	294,321	127,723	156,828
Total assets	725,840	736,848	897,076	926,037
Liabilities				
Bank term loan	29,400	34,939	32,870	38,726
Other loans	38,286	34,408	19,817	17,345
Bank overdraft	29,635	39,871	25,690	24,023
Other short term loans	51,069	50,194	60,681	76,799
Total external liabilities	148,390	159,412	139,057	156,892
Net worth	577,450	577,436	758,018	769,144
Percentage equity (%)	79.6%	78.4%	84.5%	83.1%

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Glossary

Costs

Expenditure plus opening valuation less closing valuation (where appropriate). Interest on borrowed capital, including bank overdrafts is not included in these calculations.

Farm Business Income (FBI)

Represents the return to all unpaid labour (farmers, spouses and others with an entrepreneurial interest in the farm business) and to all their capital invested in the farm business including land and farm buildings. It is defined as Total Farm Output (TFO) minus cost (C): where TFO is defined as the sum of output from: crop enterprises, adjustment for disposal of previous crops, livestock enterprises, separable non-agricultural diversifications, basic payment scheme, agri-environmental payments, other grants and subsidies, miscellaneous receipts; C is defined as variable costs plus fixed costs.

Farm crops

Comprise cereals and other non-horticultural cash crops, fodder crops and grassland.

Fixed costs

These include rent (or imputed rent), regular wages, unpaid manual labour, casual labour, power and machinery costs, glasshouse depreciation, building and general repairs, insurance, water, office expenses and miscellaneous expenditure.

Gross output

Total revenue inclusive of marketing charges, where known, adjusted for changes in valuation of crops and tillage, and less purchases of livestock, or produce for resale. Gross output per hectare reflects the intensity of the system as well as the yields and prices obtained.

Labour

Covers not only the costs of hired labour, but also an appropriate allowance for the unpaid manual labour of the grower and members of the family.

Management and investment income

Total gross output less all costs (including the value of unpaid labour) other than salaried management. It represents the reward to management and use of 'tenant's capital' whether that capital is borrowed or not.

Management salaries

Includes all paid managerial input and represents that part of total paid labour which relates to managerial work

Marketing charges

Include, where known, packhouse charges, paid carriage and commission and handling charges levied on sales.

Net farm income

Represents the return to the grower and spouse for their manual labour as well as for their management and capital investment.

Occupier's repairs

This includes maintenance of glass and the associated heating equipment, as well as traditional tenant type repairs.

Per £100 gross output

Shows the relative importance of the main resources used in each unit product, and in total provide a useful measure of profitability.

Power and machinery

Include contract and hire, fuel, electricity, repairs and an allowance for depreciation. A deduction is made for the private use of vehicles. Machinery depreciation is calculated on a 'replacement cost' basis.

Premium results

Farm performance is measured as the ratio of farm business output to farm business costs. An imputed value for unpaid manual labour, including that of the farmer and spouse is added to farm business costs. The value of paid managerial input is subtracted. The farms are ranked in descending order according to this ratio and allocated to quartiles with the top quartile (25 percent) representing the high performance band (Premium Group). Note that the farm weights are used to allocate farms to quartiles so the number of farms in a quartile will not necessarily be equivalent to a quarter of the sample.

Rent

In the case of an owner occupier, an imputed rent is charged in accordance with what a tenant in similar circumstances, including length of occupation, would be paying.

Standards

Average results are drawn from all businesses in a particular group.

Tenant's capital

Assets normally provided by tenants and includes growing crops, stores, machinery, livestock, cash and other assets needed to run the business. Permanent crops (including orchards) and glasshouses are also considered to be tenant-type capital. It represents approximately the capital currently invested in the horticultural business. The difficulties involved in making realistic assessments of tenant's capital, particularly of permanent fruit crops, should be kept in mind when interpreting these results.

Total gross margin

This is the difference between total gross output and total variable costs and measures the contribution of the business towards covering its fixed costs and providing for a profit.

Variable costs

These vary in direct proportion to the size of each business enterprise and include all purchased seed & plants, fertiliser & composts, crop protection, market charges, packing materials, horticultural sundries, glasshouse fuel and other variable costs.

Abbreviations used in this Publication

/	per
£	pounds (stirling)
Defra	Department for Environment, Food and Rural Affairs
Ave	Average
depn.	Depreciation
Fert	Fertiliser
ha	hectare
HNS	Hardy nursery stock
no.	number
n/a	not applicable

Rounding

Totals are calculated from unrounded components and may not therefore be the total of the rounded components shown.

Derivation of Farm Business Income

Net Farm Income

Plus:

Value of unpaid labour [excluding farmer & spouse; already taken into account in deriving Net Farm Income]

Imputed rent and rental value

Less:

Net interest payments

Ownership charges [buildings & works depreciation; insurance of farm buildings; landlord-type repairs and upkeep]

Director's remuneration

Equals:

Farm Business Income

Appendix 1: Reports in this series

- **Crop Production in England**
- **Dairy Farming in England**
- **Hill Farming in England**
- **Horticulture Production in England**
- **Lowland Grazing Livestock in England**
- **Organic Farming in England**
- **Pig Production in England**
- **Poultry Production in England**

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