The average agricultural land prices in the countries of the European Union (EU) differ starkly both within and between the Member States. In several countries of Eastern Europe, land prices were below 5,000 euros per hectare in 2016 (figure 1). Moving towards the west, land prices climbed to over 20,000 euros in Denmark, the United Kingdom and Germany and up to 35,000 euros in Italy. The Netherlands tops the list with an average price of nearly 60,000 euros per hectare. This top position can be partly explained by the high land productivity of the Dutch farming sector.

Eurostat, the statistical office of the EU, is currently building a new set of land price statistics. Recently, the first datasets of most EU Member States were released (see explanation).

Figure 1 Average agricultural land price (euro/ha) EU countries, 2016 a)

a) Italy 2015.
Source: Eurostat and German statistical offices, processed by Wageningen Economic Research.
The disparity between average agricultural land prices is not only extensive between the EU Member States but also within these countries. Figure 2 indicates this at the level of the NUTS 2 regions. NUTS stands for Nomenclature des Unités Territoriales Statistiques, a regional division developed by Eurostat. The only exception made for a higher level of aggregation (NUTS 1) was for the United Kingdom, due to the available data.

The differences in the regional average agricultural land prices are the biggest in Germany, Italy, and Sweden. In Germany, the lowest prices are found in East and Central Germany (around
10,000 euros per hectare), and the highest prices were found in West Germany (exceeding 60,000 euros per hectare) and in the south of the country where prices could go over 80,000 euros per hectare. In Italy, prices vary between approximately 15,000 euros per hectare in the south to over 60,000 euros per hectare in the north. In Sweden the agricultural land price is between approximately 1,500 euros per hectare in the north and 15,000 euros per hectare in the south.

Productivity of the dairy sector as the driving force
In a previous report, a conceptual framework for the agricultural land market was defined explaining the driving forces behind the price formation (Silvis and Voskuilen, 2017). That report outlined the development of the affordability and financeability of agricultural land in the Netherlands. The same factors that were grouped together under market parties (buyers and sellers), international markets and societal context, can be used to explain the price differences in the EU mentioned above. Of course, natural production conditions such as soil fertility, climate and water, which can vary greatly, also play an important part.

Due to upscaling, the agricultural land price in the Netherlands is strongly influenced by the land income that expanding companies earn with their extra hectares. This marginal land income is higher than the average land income. This does not exclude that the land price depends on what the agricultural land can yield. As a global indicator of land productivity, the standard output (SO) of land-based farming in the Netherlands and seven other large agricultural countries has been compared to the acreage of agricultural land (see table 1).

Table 1  Characteristics of the Netherlands and seven EU Member States with the largest agricultural areas.

<table>
<thead>
<tr>
<th>Million ha</th>
<th>% of the EU</th>
<th>SO a) 2013 (euro/ha)</th>
<th>Land price 2016 (euro/ha)</th>
<th>Direct payment CAP 2016 (euro/ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>27.7</td>
<td>17</td>
<td>1,290</td>
<td>6,100</td>
</tr>
<tr>
<td>Spain</td>
<td>23.3</td>
<td>14</td>
<td>830</td>
<td>9,400</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>17.3</td>
<td>10</td>
<td>970</td>
<td>21,200</td>
</tr>
<tr>
<td>Germany</td>
<td>16.7</td>
<td>10</td>
<td>1,480</td>
<td>22,300</td>
</tr>
<tr>
<td>Poland</td>
<td>14.4</td>
<td>9</td>
<td>1,100</td>
<td>8,300</td>
</tr>
<tr>
<td>Romania</td>
<td>13.1</td>
<td>8</td>
<td>790</td>
<td>1,900</td>
</tr>
<tr>
<td>Italy b)</td>
<td>12.1</td>
<td>7</td>
<td>2,000</td>
<td>35,100</td>
</tr>
<tr>
<td>Netherlands</td>
<td>1.8</td>
<td>1</td>
<td>5,330</td>
<td>59,000</td>
</tr>
</tbody>
</table>

a) Standard output (SO), an indicator of the standardised output. The SO per hectare relates to arable farms and grassland-based livestock farms; b) Land price in 2015.
Source: Eurostat and German statistical offices, processed by Wageningen Economic Research.

For the EU as a whole, this indicator totalled 1,240 euros/ha in 2013. The two countries with the highest average agricultural land price, Italy and the Netherlands, far exceed this number. In the Netherlands this is partly attributable to dairy farming: the high output per hectare and the large share held by grassland-based farming which makes up more than half the acreage, result in two-thirds of the output (based on the SO). For the whole of the EU, the share of the dairy farming sector is 13% of the agricultural acreage and 30% of the output.

Variations in direct payments are decreasing
According to the European Commission, the direct payments of the Common Agricultural Policy (CAP) made up half of the income of farmers in the last ten years on average. For the EU as a whole, the average payment totalled 266 euros per subsidised hectare in 2015. As the direct payments per country in table 1 are divided by the total agricultural acreage, which is larger than...
the subsidised acreage, the reported amounts are somewhat less than what the recipient receives. In Romania, which has the lowest land price of the seven large countries, the lowest amount is received per hectare. In the CAP reforms for the 2015-2020 period, it was agreed to reduce the variations in average support per hectare between the EU Member States (external convergence). If this process is implemented and continued it could lead to somewhat less extensive price differences.
Explanation

European land price statistics
Eurostat, the office for statistics of the European Union, is building a new set of statistics about the prices of buying and renting agricultural land which covers most of the EU Member States. Data is collected on an annual basis. The shared methodology for the prices of agricultural land and renting prices in the European Union forms the basis for comparative statistics. In March 2018 the first data of 22 of the 28 EU Member States were released. The data from other countries, including Germany, will follow at a later stage. The data from Germany used here have been derived from statistics from that country and several of its states (Bundesländer). The numbers for Slovakia were published, but are still undergoing investigation and have therefore not been included here.

Agricultural land price
The agricultural land price is the price of one hectare of unrented agricultural land during the reference period of one year. The agricultural land prices are determined for arable land and permanent grassland. For France and Germany only the land prices for arable land and grassland combined are available. For this Memorandum, a common price was calculated for all countries weighted towards the acreage of arable land and permanent grassland.

Regional Units - NUTS
The regional division is based on the Nomenclature des Unités Territoriales Statistiques (NUTS) of 2013 as defined by the Commission Regulation (EU) No.1319/2013 of 9 December 2013. NUTS 2013 provides a uniform and consistent division of territorial units for the production of regional statistics for the EU. With the exception of the United Kingdom, all land prices are available at NUTS 2 level. This is the reason why the land prices for this country have been indicated at the higher NUTS 1 level in figure 2. In the Netherlands the NUTS 2 level equals the provinces while NUTS 1 divides the country into four regions based on the provinces. The national level is NUTS 0.

Standard Output (SO)
The standard output is an indicator for the standard output in euros of an agricultural business. The output of a farm is determined using SO standards per hectare and per animal. Revenue from agricultural subsidies and payments are not included as standard, and no separate standards have been created for organic production methods. The standard output per hectare as shown in table 1 has been calculated by dividing the SO of arable farms and pastoral farms by the acreage of agricultural land held by these farms. This method was selected to reflect the land prices that relate to arable land and grassland.

Sources
German statistical offices
- Landesamtes für Statistik Niedersachsen (statistik.niedersachsen.de).
- Statistisches Landesamt des Freistaates Sachsen (statistik.sachsen.de).

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