Structural change in the post-socialist transformation of Central European agriculture: Studies from the Czech and Slovak Republics
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Chapter 5

Fieldwork and Primary Data

In new areas, and transition is definitely a new area, research starts with exploration: theory comes later.

Zvi Lerman, 2000

5.1 Sources

The primary data analysed in this study come from two groups of data sets. One is taken from the official statistics on agriculture of the Czech Republic\(^1\). The other was generated during fieldwork.

On Czech agriculture, the 1996 round of the regular surveys conducted by the Czech Research Institute for Agricultural Economics (VUZE, in the Czech abbreviation) at Prague in the framework of its ongoing monitoring of Czech agriculture was used. This set consists of observations for 411 farms, including data on size category, area, product specialisation, labour and wages, a detailed overview of input cost categories, revenues, yields and production efficiency, and regional location.

The second set comprises three surveys conducted in 1998 by the author in co-operation with staff of the Mendel University at Brno, Czech Republic and of the Agricultural University at Nitra, Slovak Republic. The surveys were part of a larger programme of fieldwork on structural changes in Czech and Slovak agriculture, which started in late 1996.

5.2 Fieldwork Chronology

The first part of this research project included identification of the main research issues in the field of the economics of agricultural transformation. The next step was to decide the empirical, and specifically geographical contents of the study. Therefore in November 1996 contacts with Nitra Agricultural University were established and a first research trip was made. The aim of the
visit was to conduct interviews with the academic staff, carry out literature research, and visit some farms. The idea was to gain a clearer picture of the structure and state of Slovak agriculture as an example of Central and Eastern European agriculture.

One main result of the trip was a clear sense of the need for own empirical work. At the time, detailed micro-economic information was not available to outsider academic researchers. Data were produced by the Research Institutes for Agricultural Economics in the various countries, but these were mainly used in support of policy formulation. Dissemination in publicly available reports was in processed, often aggregate format only. For reasons explained earlier, it was decided to carry out fieldwork in the successor countries to Czechoslovakia. This was planned in three phases: (1) a series of interviews, (2) survey development, and (3) survey implementation.

During a stay at Brno and Nitra universities in September-December 1997, a first round of interviews in both countries was conducted. The interviewees included managers of co-operative and traditional farms, operators of individual farms, agribusiness managers both in the input and the processing industry, managers of food trade firms, bankers operating in agriculture, officials of regional government bodies and academic researchers. The conversations were structured around pre-identified research topics.

In the course of interview work, some issues not reported in the literature studied appeared to be additionally interesting. These were included for discussion in successive meetings. This series of interviews was completed by a second round during a visit to both countries in April-May 1998. The interviews both constituted a valuable source of information in their own right and provided the context for survey development, which started in spring 1998.

In order to collect a body of consistent data, it was decided to use mail surveys rather than continue with face-to-face interviews. Given the spatial dispersion of the target group and the limits on time and financial means of the research project, other methods (self-administered interview forms; group surveys; telephone surveys) were not practicable. The advantage of selecting the mail survey method was that, with the available time and money, uniform data on a relatively large group of farmers could be collected. The drawbacks of the mail procedure include a typically low response rate, the possibility of self-selection, and no control for the researcher over who is filling out the form (see e.g. Fowler, 1984; Singer and Presser, 1989). We will discuss the impact of these biases below.

The survey work targeted two types of agricultural producers. One questionnaire addressed operators of individual farms, the other managers of co-operative, joint-stock and limited-liability farms. As the focus of the research project was a comparative study of farming
structures, most questions on both forms were identical, such as those on product selection and area, financial structure, access to credit and subsides, and main problems in operating the farm.

Part of the questions was specific to the farm type. Traditional farm managers were questioned about their relationship with farm members and landowners, and about employment developments. Individual farmers were asked to give information on human capital and on their experiences with the restitution process. Also they were asked to compare various aspects of their own farm operation practice with comparable features of farms in the traditional sector. The complete questionnaires can be found in the Appendix to this chapter.

It was decided to investigate both individual and traditional farms in the Czech Republic, while in the Slovak Republic only traditional farms were targeted. This was both because of existing contacts, and because individual farming is of only marginal importance in the Slovak Republic, even more so than in the Czech Republic. Questionnaires were pre-tested in the Czech Brno area in a pilot study in May 1998 and some final adjustments were made. In July-August and November 1998 the surveys were mailed out.

5.3 Survey Methodology and Implementation

The surveys were set up as confidential, but not anonymous, so that the geographical origin of responses could be traced. In an accompanying letter, a brief explanation of the nature and objective of the survey was given (see Appendix). In order to increase both the quality of the responses and the response rate, survey participants were offered an overview of findings (Fowler, 1984:63).

The survey to private individual farmers was mailed out to members of the Czech Association of Private Farmers (SSZ), which had shown an interest in participation in the research project. This was done in two waves: one of 530 forms in July, another of 551 forms in November 1998. In total 193 responses (18% of mailings) were received by January 1999. As the basis for selecting the sample, the address database of the SSZ was used. Addresses of individual farmers in 38 of the 76 Czech administrative districts represented in the database were available; responses came from 31 districts. As the distribution of all Czech individual farmers over all regions was unknown (as many other data on individual farming were and are), the distribution of SSZ members’ addresses over the available districts was taken to be a good approximation. The survey sample consisted of draws out of each of the available districts proportional to the number of SSZ members in each district.
Chapter 5

The survey among management of traditional farms in the Czech Republic, mailed out in July-August 1998, could not be conducted on a similar scale as access to the address database of the Czech-Moravian Union of Agricultural Co-operatives was not possible. Hence, contacts established during interview work were used to solicit co-operation of regional representatives of the Agrarian Chamber, the overarching farm interest organisation of the Czech republic. These representatives mailed out the surveys to traditional farm management in their district. In that way 430 farm managers were addressed, of whom 69 (16 %) responded. As the survey progressed region by region, it took from July to December 1998 to complete the mailings and receive the responses.

The survey to Slovak managers of traditional farms was mailed out in November 1998. As there was no access to a regionally differentiated address database, traditional farms were randomly selected from the Agricultural Register. Of the 837 questionnaires sent, 102 valid responses (13 %) were received.

The response rates for all three surveys were rather low, although it is difficult to decide what the standard for comparison should be. In other survey work on the economics of agriculture in the region, the response rate is typically not reported⁴. In mail surveys in general in the Western European context a response rate “below 30 %” is normal (Fowler, 1984:67); but one can think of many reasons for both a higher and a lower percentage in the Central European agricultural setting. In the final analysis, it is the extent to which the sample represents the population that matters. A fair representation is suggested by a ‘normal’ response rate. Without such a standard, there are two methods to evaluate representation.

First, one can think of reasons why particular characteristics (both those observed in the sample and unobserved features) would be under- or over-represented in the sample, and how a possible divergence between sample and population matters to the analysis. Second, the sample can be compared to other samples, although these probably have biases of their own. Similarity between independent samples increases confidence in the extent to which both samples represent the population. Below the extent to which the surveys represent Czech and Slovak farms is considered in both ways.

5.4. Survey Representation: the Czech Surveys

In table 5.1 basic data on both Czech surveys are presented and compared to official data.

76
Table 5.1: Czech Survey Statistics and Official Figures

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
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<th></th>
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<tbody>
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<td>Mean size (ha)</td>
</tr>
<tr>
<td></td>
<td>count</td>
<td>%</td>
<td>count</td>
<td>%</td>
</tr>
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<td>farming companies</td>
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<td>11</td>
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</tr>
<tr>
<td>co-operatives</td>
<td>40</td>
<td>15</td>
<td>1,707</td>
<td></td>
</tr>
<tr>
<td>individual farmers*</td>
<td>193</td>
<td>74</td>
<td>79</td>
<td></td>
</tr>
<tr>
<td>of which** - professional</td>
<td>70</td>
<td>27</td>
<td>101</td>
<td></td>
</tr>
<tr>
<td>- other indiv.</td>
<td>123</td>
<td>47</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>Other farms***</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>all farms</td>
<td>262</td>
<td>100</td>
<td>494</td>
<td></td>
</tr>
</tbody>
</table>

* In the official information this figure comprises of agricultural primary production businesses with the legal form of 'physical person' (podniky fyzickych osob) in the 'Register of Economic Subjects'. In the survey information these are members of the Czech Association of Private Farmers.

** 'Professional' individual farms in the survey are farms where the owner both derives more than three-quarters of income from the farm and devotes over 40 hours weekly to farming. In the official data these are farmers registered in the 'Agricultural Register' as producing food (i.e. for the market). 'Other' individual farmers in both sources is the difference between the total number of individual farmers and the number of professional individual farmers.

*** In this category fall the remaining state-owned farms and farms for educational purposes.

Sources: survey findings, MACR (1999:TA 2.1), author's calculations

Was the survey representative of Czech agriculture, as far as the available figures in the table allow for a comparison? First, the survey sample has relatively fewer individual farms. Second, within the group of traditional farms, co-operatives are over-represented; and on average, farm size is considerably larger in both surveys, compared to the official figures. These divergences are related, since in the traditional-farm sample, as in the official figures, co-operative farms are on average larger than other traditional farms.

3.4.1. Explaining the Size Difference

It is important to note that the size difference between official and survey data cannot be explained by reference to the sample frame: addresses were obtained through regional representatives of both co-operative and other traditional farms, and the survey mailings were presumably addressed to a representative mix of both types. This is deduced rather than certain, since representatives reported the number of farms in their district – which number of questionnaires was then sent to them for further distribution - but not the distribution of farms in their district over farm types.
Chapter 5

In the case of the individual-farm survey, the size bias was probably one of selection as well as response. The individual-farm survey was framed on the basis of the SSZ database and addressed only those individual farmers who had chosen to become a member of that interest group. Plausibly, this included mainly those farmers who considered themselves professionals and find it worthwhile to become an SSZ member. The survey frame then probably underrepresented part-time, smaller-scale landowners registered as individual farmers (of whom many are probably gardeners). Since in the individual farming sector expansion is a condition for success, this implied a bias towards the more viable farms.

Although this should be noted, for the analyses in this thesis this bias will not be a problem. On the contrary: with proportional representation, the sample of individual farms would have been saturated with responses from small-scale farmers and gardeners. If the focus is on commercially viable businesses, one would not to like to have largely hobby farmers and other non-market oriented structures in the sample.

Other reasons for the size divergence relate to response rather than selection. Operators of larger individual farms more often are full-time farmers and therefore are likely to be more experienced in systematically evaluating the structure and performance of their businesses. In addition, in the individual-farmer group larger farm size is connected to a higher education level. Presumably therefore, these farmers both had more opportunity and less trouble to fill out the questionnaire than operators of smaller farms.

Likewise on larger traditional farms, there is often a (or several) member of the management team who deals exclusively with the economic and financial part of farm management. Obviously, these ‘farm economists’ (as they often signed the questionnaire) are both more skilled in producing the information solicited in the questionnaire and more interested in it than are non-specialised farm managers working on smaller farms.

5.4.2 Corporate and Co-operative Farms

As regards the explanation for the bias towards co-operative farms, this is partly accounted for by the above, given the fact that this type is on average considerably larger than other traditional farms. A second reason is that co-operative farms also were in general in a worse economic position than traditional farms (for reasons that will be explained below). Such less viable farms may have been more likely to respond for several reasons.

One may be that entrepreneurs like to report their problems more than their successes. Second, whether or not this tendency existed in general, it was likely to be stronger in the survey since managers reported to what is often perceived as a semi-official body (a university).
Respondents may have lumped this institution together with other official bodies like the tax authorities and subsidy allocators. In those cases it was presumably attractive to report problems and losses.

Third, this tendency was also stimulated by the presentation of the survey in the accompanying letter (see Appendix). This carried an emphasis on the ‘many problems specific for this sector’ and the ‘challenges of the present environment for farming businesses’ – a focus that returned in some of the questions (e.g. question 4/6).

This phrasing had been chosen for good reasons based on interview experiences. A considerable number of interviewees appeared surprised and pleased that someone would take the effort to visit them and question them on their situation. This surprise was often coupled with bitterness about the perceived neglect of representatives of official bodies and their lack of interest in the ‘real’ situation in agriculture in the face of the grave difficulties that these farmers were, they believed, going through. Satisfaction with this unexpected opportunity to discuss the problems of farming often appeared to be an important reason for the manager or operator to set aside a considerable share of his (sometimes her) time. They often went into great detail in explaining their situation. As this was very helpful for the research, a clear indication of the problem-oriented focus of the survey in the accompanying letter seemed an effective way of increasing the response. Inadvertently, however, this approach may also have appealed to the less successful practitioners of the agricultural profession more strongly than the others.

Apart from this direct concern with problem-sharing, the survey was also presented - correctly, one hopes - as an effort that might facilitate an improvement in agricultural policies through a better understanding of the situation of the sector. Again, this might have appealed to farm operators in problems (which they frequently attributed to those policies), more strongly so than others.

Why were these economically weaker farms also often co-operatives rather than farming companies? The main reason appears to be that in the process of restructuring, ‘old’ co-operatives were often divided into a corporate farm and a ‘new’ co-operative farm. The latter would typically inherit most debts and a less valuable production structure, and it was more or less destined to go bankrupt – or muddle through, if bankruptcy procedures could not be implemented because of legal and juridical deficiencies. Since claims on farm land and other assets were connected to the co-operative legal structure, the corporate successor farm was at once freed of such claims as well as endowed with a better asset/liability structure and a more promising production potential. Effectively, the opportunities for legal restructuring that the
reform legislation offered were used to block owners' use of their property rights to the farm assets, while leaving them mainly with the liabilities.

This process appeared to be intensifying in the period directly preceding the survey. The seven-year interim period for the sector was about to end in 1999, and owner claims to farm assets would have to be met in kind if required. One third of responding co-operative farm managers indicated they planned to transform their farm into a corporate structure within a year. A considerable number of corporate farms had presumably recently changed status. Also the authors of a World Bank report on Czech agriculture, which appeared shortly after the survey, noted that ‘transformation often leaves empty, skeleton co-operatives behind with most of the debts...' (Csaki et al., 1999:xxi).

Also some survey findings are in line with this presumed development. The figures show that co-operatives were more involved in loss-making activities (such as milk production) and had more debts in 1998 than corporate farms. They were considerably larger than corporate farms in a sector where contraction and cost decreases were survival strategies. Their profitability relative to that of corporate farms declined continuously over the years 1993-1997. The few farm managers who could not respond to the questionnaire because their farm was in liquidation all represented co-operative farms. In sum, it appears plausible that, since co-operatives were generally both larger and worse off than other traditional farms, this accounts for their over-representation in the survey.

5.4.3. Implications of the Biases

If the official figures in table 5.1 are assumed to be a better representation of Czech agriculture, the survey findings should be qualified in two respects. First, the survey depicts a group of traditional farms that is larger and faces more problems than does the average Czech traditional farm. Thus the results of this study on the problems and viability of the traditional part of the sector should be taken as a picture that is somewhat bleaker than reality. Second, the reverse is true for the individual farms; here is a bias towards the larger and more viable structures. Consequently the comparative picture studied in this thesis is drawn to the advantage of the individual-farming part of the Czech agricultural sector, which as a whole was in reality in a more problematic position.

The bias is regrettable, as all distortions in research data are. But its existence does not imply that the data are unfit for investigation of our topic. The object of this book is to explain why individual farming is apparently so problematic in Central Europe. In subsequent chapters, we will attempt to identify reasons for this problem by use of the present data. The bias in the
Fieldwork and Data

data tends to blur any relative disadvantages connected to individual farming, which we seek to identify. In consequence, if such disadvantages are nevertheless observed in the present samples, they are likely to be even more relevant, not less, for the genuinely average individual farm as compared to the average traditional farm.

5.5 Comparison to the VUZE data

Apart from the official, aggregate figures published in annual reports on the state of agriculture (MACR 1995, 1996, 1998), the other reference data that can be used to evaluate the representativeness of the survey findings is another sample: the 1996 round of panel data on 411 farms of the Czech Research Institute for Agricultural Economics (VUZE). Compatible information in this data set is restricted to data on size, product mix, and financial performance (table 5.2).

<table>
<thead>
<tr>
<th>Farm type</th>
<th>Individual farms</th>
<th>Co-operative farms</th>
<th>Other traditional farms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source</td>
<td>Survey</td>
<td>VUZE</td>
<td>Survey</td>
</tr>
<tr>
<td>Number in sample</td>
<td>193</td>
<td>238</td>
<td>40</td>
</tr>
<tr>
<td>Animals (head)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dairy cows</td>
<td>12</td>
<td>9</td>
<td>419</td>
</tr>
<tr>
<td>Beef cattle</td>
<td>19</td>
<td>5</td>
<td>680</td>
</tr>
<tr>
<td>Hogs</td>
<td>180</td>
<td>8</td>
<td>2,093</td>
</tr>
<tr>
<td>Area (hectares)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cereals</td>
<td>81</td>
<td>42</td>
<td>1,110</td>
</tr>
<tr>
<td>Root crops</td>
<td>5</td>
<td>14</td>
<td>73</td>
</tr>
<tr>
<td>Fodder crops, pasture</td>
<td>25</td>
<td>9</td>
<td>329</td>
</tr>
<tr>
<td>Other</td>
<td>10</td>
<td>8</td>
<td>175</td>
</tr>
<tr>
<td>Total area</td>
<td>116</td>
<td>73</td>
<td>1,707</td>
</tr>
<tr>
<td>Employees (number)</td>
<td>1</td>
<td>3</td>
<td>115</td>
</tr>
<tr>
<td>Profitable (1996, %)</td>
<td>52</td>
<td>26</td>
<td>56</td>
</tr>
</tbody>
</table>

*In the VUZE data set, information on animals was available for individual farms under 100 hectares only.

This decreased the number of observations from 238 to 195. Source: survey findings, VUZE(1996)

The table confirms that both individual and traditional farms in the survey sample were considerably larger - in terms of area and, especially, herd size – than in the VUZE data. Part of the differences within the crops group is related to the different monitoring moments. For
example, in 1996-1998, there was a shift towards grains production and away from potatoes and sugar beet (root crops) (Commission, 1998).

The most striking difference is in the profitability information figures: farms, especially traditional farms, in the VUZE panel much more often reported losses than farms in the survey sample. This profit reporting is inconsistent with observed production structures combined with available cost and price information. Such a calculation indicates that the VUZE-panel farms were less involved in loss-making activities than were the survey-sample businesses. Two observations may account for this contradiction and for the gap.

First, profit information in general is of limited reliability because of the considerable shares of costs and revenues that are not monetised. There are payment arrears and barter transactions at both the sales and the input side of the farm; there are ‘bad’ debts; and individual farm operators should take account both of their own labour and the value of own consumption from farm produce in profit reporting. Respondents may or may not have corrected for each of the above disturbances, and if so, the prices at which they valued produce and labour may have differed from case to case. Under these conditions it is unsurprising that different samples produce substantially different profitability figures, which both also differ from profitability figures calculated on the basis of official prices.

Second, why are profitability figures in the survey higher than the VUZE figures? The plausible explanation is that managers of the survey sample farms had less reason to expect their 1996 profit information to reach the tax authorities. This was so both because, at the time of surveying, 1996 was two years ago and because they were not reporting to an official Czech institution. In contrast, managers of the VUZE sample farms had more incentive to under-report profit levels, while the conditions described above gave them ample opportunity to do so. This would imply that the survey figures are the more reliable ones.

### 5.6 Geographic Distribution of Responses

Two types of regional units can be used in an analysis of the regional representation of the survey: the 76 administrative districts and 4 agricultural areas in the Czech Republic. Table 5.3 presents an overview of the geographic distribution of mailings, responses, response rates and farm sizes over administrative districts of the individual-farm survey.
Table 5.3: Geographic Distribution of the Czech Individual-Farm Survey

<table>
<thead>
<tr>
<th>district</th>
<th>Praha 1</th>
<th>Praha 2</th>
<th>Praha 4</th>
<th>Praha 6</th>
<th>Praha 7</th>
<th>Praha 9</th>
<th>Benešov</th>
<th>Beroun</th>
<th>Kolín</th>
<th>Kutná Horá</th>
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</thead>
<tbody>
<tr>
<td>mailed</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>44</td>
<td>41</td>
<td>8</td>
<td>48</td>
</tr>
<tr>
<td>returned</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>9</td>
<td>8</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>resp. %</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>20</td>
<td>20</td>
<td>25</td>
<td>13</td>
</tr>
<tr>
<td>size (ha)</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>51</td>
<td>74</td>
<td>15</td>
<td>29</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>district</th>
<th>Mělník</th>
<th>Ml. Bolešlady</th>
<th>Nymburk</th>
<th>Praha- oost</th>
<th>Praha- west</th>
<th>Přibram</th>
<th>Rakov- nik</th>
<th>C. Bu- Dějovice</th>
<th>Česky Krumlov</th>
<th>Pelhř- mov</th>
</tr>
</thead>
<tbody>
<tr>
<td>mailed</td>
<td>48</td>
<td>45</td>
<td>40</td>
<td>39</td>
<td>58</td>
<td>56</td>
<td>12</td>
<td>44</td>
<td>16</td>
<td>28</td>
</tr>
<tr>
<td>returned</td>
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<td>9</td>
<td>8</td>
<td>1</td>
<td>7</td>
<td>2</td>
<td>1</td>
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<td>243</td>
<td>38</td>
<td>40</td>
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<table>
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<th>Tábor</th>
<th>Karlovy Váry</th>
<th>Klátovy</th>
<th>Dečín</th>
<th>Zdář nad Sázavou</th>
<th>Bruntál</th>
<th>Fryde- místek</th>
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</thead>
<tbody>
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<td>mailed</td>
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<td>31</td>
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<tr>
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<td>0</td>
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<td>12</td>
<td>2</td>
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<td>11</td>
<td>1</td>
<td>17</td>
<td>11</td>
<td>5</td>
</tr>
<tr>
<td>resp. %</td>
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<td>32</td>
<td>5</td>
<td>60</td>
<td>19</td>
<td>100</td>
<td>29</td>
<td>25</td>
<td>16</td>
</tr>
<tr>
<td>size (ha)</td>
<td>n.a.</td>
<td>179</td>
<td>80</td>
<td>58</td>
<td>130</td>
<td>66</td>
<td>30</td>
<td>57</td>
<td>114</td>
<td>105</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>district</th>
<th>Karvina</th>
<th>Nový Jičín</th>
<th>Olomouc</th>
<th>Opava</th>
<th>Ostrava</th>
<th>Přerov</th>
<th>Šumperk</th>
<th>Všetín</th>
<th>Unknown*</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>mailed</td>
<td>8</td>
<td>28</td>
<td>55</td>
<td>46</td>
<td>2</td>
<td>62</td>
<td>35</td>
<td>19</td>
<td>1081</td>
<td></td>
</tr>
<tr>
<td>returned</td>
<td>1</td>
<td>5</td>
<td>9</td>
<td>6</td>
<td>1</td>
<td>14</td>
<td>7</td>
<td>4</td>
<td>3</td>
<td>193</td>
</tr>
<tr>
<td>resp. %</td>
<td>13</td>
<td>18</td>
<td>16</td>
<td>13</td>
<td>50</td>
<td>23</td>
<td>20</td>
<td>21</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>size (ha)</td>
<td>20</td>
<td>38</td>
<td>70</td>
<td>59</td>
<td>40</td>
<td>38</td>
<td>34</td>
<td>12</td>
<td>1262</td>
<td>72</td>
</tr>
</tbody>
</table>

* The 'unknown district' category obviously comprises three individual farms that are successor organisations of state farms.

The variation of the rates of return over regions is modest. For all 31 regions, the standard deviation is 19 on an average of 18. However, most of this variation is generated by the 12 regions where few (less than 10) questionnaires were mailed. If these are excluded, the standard deviation reduces to 9 on an average of 19.

Also regional non-response is not an important problem. Of the 38 regions mailed, no response was received from 7. This loss was insignificant both in terms of respondent number and in terms of the representation of agricultural activities. Of those 7 regions, one was mailed 2
questionnaires. The other 6 just one. On the 1081 sample, a full response in these regions could have improved the rate of return only from 17.8 to 18.4%. The reason for this low density of individual - and other - farmers is that 6 of these 7 regions are predominantly urban areas (districts of greater Prague).

5.7 Geographic Distribution of Farm Sizes

There was considerable variation in farm sizes, dependent on location. This is both a result of natural circumstances and an inheritance from the central planning era. As an illustration, table 5.4 shows the distribution of responses and farm sizes of the traditional-farm survey.

<table>
<thead>
<tr>
<th>district</th>
<th>nr. of respondents</th>
<th>mean farm size (ha)</th>
<th>district</th>
<th>nr. of respondents</th>
<th>mean farm size (ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plzeň-north</td>
<td>4</td>
<td>2,590</td>
<td>Prostějov</td>
<td>8</td>
<td>1,324</td>
</tr>
<tr>
<td>Strakonice</td>
<td>2</td>
<td>1,729</td>
<td>Nový Jičín</td>
<td>2</td>
<td>1,356</td>
</tr>
<tr>
<td>Klatovy</td>
<td>9</td>
<td>565</td>
<td>České Budějovice</td>
<td>5</td>
<td>1,651</td>
</tr>
<tr>
<td>Svitavy</td>
<td>3</td>
<td>2,606</td>
<td>Olomouc</td>
<td>1</td>
<td>1,570</td>
</tr>
<tr>
<td>Jičín</td>
<td>5</td>
<td>1,427</td>
<td>Blánsko</td>
<td>1</td>
<td>880</td>
</tr>
<tr>
<td>Nymburk</td>
<td>2</td>
<td>1,700</td>
<td>Přerov</td>
<td>7</td>
<td>1,383</td>
</tr>
<tr>
<td>Benešov</td>
<td>2</td>
<td>3,000</td>
<td>Chrudim</td>
<td>7</td>
<td>1,604</td>
</tr>
<tr>
<td>Havlickův Brod</td>
<td>1</td>
<td>540</td>
<td>Jihlavá</td>
<td>1</td>
<td>1,269</td>
</tr>
<tr>
<td>Uheřské Hradiste</td>
<td>1</td>
<td>1,440</td>
<td>Unknown</td>
<td>4</td>
<td>1,876</td>
</tr>
</tbody>
</table>

Source: survey findings
A complementary assessment of the geographical representation with regard to farm sizes is possible using the distribution over agricultural areas rather than administrative districts. Agricultural areas are considered to be relatively homogenous with respect to climatic and soil conditions and used in all sorts of agricultural descriptions. Three of them are named after the crop that is best produced there (sugar beet, potatoes and maize); the other comprises of the mountainous or sub-mountainous regions. In the VUZE data set, both the region and detailed cost structure for each unit is given, so that region-specific calculations of costs and revenues per hectare and per animal could be made (section 5.8 below). Table 5.5 presents some of the production conditions that define each of the regions. The distribution of farms and farm sizes, in both surveys, over these agricultural areas is shown in table 5.6.

**Table 5.5: Production Conditions in Agricultural Areas**

<table>
<thead>
<tr>
<th>Area</th>
<th>Temperature (°C)</th>
<th>Precipitation, mm annually</th>
<th>Soil type</th>
<th>Relief</th>
<th>Land cultivated in % of surface</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>July</strong></td>
<td><strong>Jan</strong></td>
<td><strong>Mean</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>'maize'</td>
<td>20</td>
<td>-2</td>
<td>10</td>
<td>530-650</td>
<td>Black earth</td>
</tr>
<tr>
<td>'sugar beet'</td>
<td>19</td>
<td>-4</td>
<td>8</td>
<td>600-715</td>
<td>Brown earth</td>
</tr>
<tr>
<td>'potato'</td>
<td>16</td>
<td>-5</td>
<td>9</td>
<td>600-800</td>
<td>Brown earth</td>
</tr>
<tr>
<td>'(sub-) mountainous'</td>
<td>14</td>
<td>-6</td>
<td>5</td>
<td>800</td>
<td>Varied</td>
</tr>
</tbody>
</table>

Source: VUEPP primary data
Table 5.6: Distribution of Farms and Farm Sizes over Agricultural Areas

<table>
<thead>
<tr>
<th>Sample size, Farm size</th>
<th>region*</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>individual farms</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VUZE size (ha)</td>
<td></td>
<td>48</td>
<td>80</td>
<td>57</td>
<td>65</td>
</tr>
<tr>
<td>number</td>
<td></td>
<td>2</td>
<td>87</td>
<td>138</td>
<td>11</td>
</tr>
<tr>
<td>Survey size (ha)</td>
<td></td>
<td>-</td>
<td>98</td>
<td>73</td>
<td>71</td>
</tr>
<tr>
<td>number</td>
<td></td>
<td>0</td>
<td>2</td>
<td>95</td>
<td>34</td>
</tr>
<tr>
<td><strong>co-operative farms</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VUZE size (ha)</td>
<td></td>
<td>-</td>
<td>1,478</td>
<td>1,179</td>
<td>1,233</td>
</tr>
<tr>
<td>number</td>
<td></td>
<td>0</td>
<td>51</td>
<td>84</td>
<td>4</td>
</tr>
<tr>
<td>Survey size (ha)</td>
<td></td>
<td>-</td>
<td>1,772</td>
<td>1,646</td>
<td>-</td>
</tr>
<tr>
<td>number</td>
<td></td>
<td>0</td>
<td>22</td>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td><strong>corporate farms</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VUZE size (ha)</td>
<td></td>
<td>911</td>
<td>995</td>
<td>891</td>
<td>-</td>
</tr>
<tr>
<td>number</td>
<td></td>
<td>5</td>
<td>12</td>
<td>26</td>
<td>0</td>
</tr>
<tr>
<td>Survey size (ha)</td>
<td></td>
<td>-</td>
<td>1,330</td>
<td>1,597</td>
<td>-</td>
</tr>
<tr>
<td>number</td>
<td></td>
<td>0</td>
<td>14</td>
<td>13</td>
<td>0</td>
</tr>
</tbody>
</table>

* Region codes: 1 = 'maize', 2 = 'sugar beet', 3 = 'potato', 4 = '(sub-)mountainous'.

Sources: survey findings, VUZE (1996)

Although average farm size in the survey was found to be considerably larger than the corresponding figure in the VUZE data, the distribution of farm sizes over agricultural areas appears to be similar, except for the corporate farms. This difference might well be connected to the on-going process of creation of corporate from co-operative farms, which appeared to accelerate in 1997-1998 (see section 5.4.2 for details).

The survey sampling pattern over agricultural areas roughly resembles the official sampling pattern for traditional farms; for individual farms it appears that region 4 is over-represented and region 2 under-represented. This implies that the survey represents individual farms that, on average, are not only larger, but also operate in less advantageous natural conditions, compared to the official data. This might be interpreted as removing the bias towards the more successful farms.

We now consider the relation between the distribution of farms over districts and over agricultural regions. In table 5.7, the distribution in the Czech Republic of administrative districts over various categories is compared to the corresponding categories in the two survey samples.
### Table 5.7: Distribution of Districts and Respondents over Production Conditions

<table>
<thead>
<tr>
<th>Sample</th>
<th>Czech Republic</th>
<th>traditional farm sample</th>
<th>individual farm sample</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td># districts</td>
<td># districts</td>
<td>% (#) responses</td>
</tr>
<tr>
<td>Category</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maize</td>
<td>3</td>
<td>0</td>
<td>0 (0)</td>
</tr>
<tr>
<td>sugar beet</td>
<td>29</td>
<td>7</td>
<td>52 (35)</td>
</tr>
<tr>
<td>Potatoes</td>
<td>33</td>
<td>10</td>
<td>42 (28)</td>
</tr>
<tr>
<td>(sub-)mountainous</td>
<td>11</td>
<td>0</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Unknown</td>
<td>0</td>
<td>-</td>
<td>6 (4)</td>
</tr>
<tr>
<td>All</td>
<td>76</td>
<td>17</td>
<td>100 (67)</td>
</tr>
</tbody>
</table>

#### Distribution of districts over agricultural regions

<table>
<thead>
<tr>
<th></th>
<th># districts</th>
<th>% (#) responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maize</td>
<td>0</td>
<td>0 (0)</td>
</tr>
<tr>
<td>sugar beet</td>
<td>3</td>
<td>31 (60)</td>
</tr>
<tr>
<td>Potatoes</td>
<td>19</td>
<td>50 (97)</td>
</tr>
<tr>
<td>(sub-)mountainous</td>
<td>9</td>
<td>17 (33)</td>
</tr>
<tr>
<td>Unknown</td>
<td>2 (3)</td>
<td></td>
</tr>
<tr>
<td>All</td>
<td>31</td>
<td>100 (193)</td>
</tr>
</tbody>
</table>

#### Distribution of districts over productivity areas (KCs/hectare, 1994)*

<table>
<thead>
<tr>
<th></th>
<th># districts</th>
<th>% (#) responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-12,000</td>
<td>6</td>
<td>24 (47)</td>
</tr>
<tr>
<td>12-16,000</td>
<td>8</td>
<td>17 (33)</td>
</tr>
<tr>
<td>16-19,000</td>
<td>6</td>
<td>17 (32)</td>
</tr>
<tr>
<td>19-21,000</td>
<td>4</td>
<td>28 (55)</td>
</tr>
<tr>
<td>21-28,000</td>
<td>7</td>
<td>12 (23)</td>
</tr>
<tr>
<td>Unknown</td>
<td>2 (3)</td>
<td></td>
</tr>
<tr>
<td>All</td>
<td>31</td>
<td>100 (193)</td>
</tr>
</tbody>
</table>

#### Distribution of districts according to agr. land owned by individual farmers (% in 1994):

<table>
<thead>
<tr>
<th></th>
<th># districts</th>
<th>% (#) responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>less than 10</td>
<td>7</td>
<td>22 (43)</td>
</tr>
<tr>
<td>10-15</td>
<td>7</td>
<td>28 (55)</td>
</tr>
<tr>
<td>15-20</td>
<td>8</td>
<td>23 (44)</td>
</tr>
<tr>
<td>20-35</td>
<td>4</td>
<td>7 (14)</td>
</tr>
<tr>
<td>Over 35</td>
<td>5</td>
<td>18 (34)</td>
</tr>
<tr>
<td>Unknown</td>
<td>2 (3)</td>
<td></td>
</tr>
<tr>
<td>All</td>
<td>31</td>
<td>100 (193)</td>
</tr>
</tbody>
</table>

n.a. = not applicable. * KCs denotes the Czech Crown. At the time of surveying KCs 30.0 = USD 1. In 1994, KCs 28.2 = USD 1. Sources: survey findings, Bicik and Götz (1998)

As districts vary greatly in size, a comparison of distribution of responses over districts to the Czech-Republic distribution is only a crude measure of representation. With this qualification, the percentages show that both surveys follow the national pattern with regard to the distribution of districts over agricultural areas.

We also consider productivity, as indicated by revenues per hectare. In the Czech Republic, 49 out of 76 (64 %) administrative districts are classified as located in one of the three most productive categories where the bulk of agricultural output is produced (16,000 - 28,000 KCs/ha). In the traditional-farm survey, 81 % of those responses that could be located come from...
these productive areas. In contrast, only 58% of located individual-farm responses come from the high-productivity areas. This reflects the fact that individual farms are in general located in the lower-productivity regions, for reasons inherent in the restitution process (further explained in chapters 6 and 7). This finding is also in line with the relatively large number of individual farms in (sub-)mountainous region 4 found in table 5.6.

Also the relative position in local agriculture of individual farmers is of interest. One indicator is the percentage of agricultural land owned by individual farmers in a particular area in 1994. The national distribution of this variable over the administrative districts is roughly reproduced in the survey responses, as is shown in the table. This means that in the survey, the mix of individual farmers operating in an environment dominated by traditional farming and those with relatively many individual farm colleagues in their vicinity, is quite representative of the Czech situation. The early date of the reference information is no problem here, as the regional structure of individual farming did not change much after 1994 (farm sizes and number of farmers did, as was shown earlier). Survey findings show that only 3 of the 193 individual farms from which responses came had been established after 1994.

5.8 Matching Data From Both Czech Data Sets

One drawback of the survey data is that information on revenues, and hence aggregate output levels, was not collected because of response rate concerns. In the survey, area and herd size were observed per farm, but not output levels or their money values. Since these data are important for analyses of e.g. farm sizes and market behaviour, revenues levels were computed using official figures. One option was to multiply area and animal numbers in the survey by all-Czech Republic yield and productivity figures from the official statistics. This method would, however, not take into account the significant variation over regions and farm types in productivity.

Therefore information on the per-hectare and per-animal revenues from the VUZE data set was used to calculate the share in revenues for each product, in each farm observed in the survey. To this end, each of the survey observations (farms) was matched to a VUZE observation. The criterion was that matching farms should be of the same governance type (individual or traditional farm), should be located in the same agricultural region, and be similar in total area, number of (dairy and beef) cattle, and hectares of cereals. For each 1998 survey observation, a set of 1996 VUZE observations that satisfied these criteria was identified.
Then within that group the closest match on the other common variables (which were: area fodder, meadows and pastures, and number of employees) was made. A prerequisite for valid matching as implemented here obviously is that the regional relation between scale, scope and location on the one hand and efficiency and regional price levels (the factors that control revenue levels) on the other hand did not change significantly in 1996-1998. This is indeed plausible, as factors determining this relation such as technical progress, regional development or climatic change are clearly longer-term processes.

Whereas livestock numbers were directly observed in the survey, for crops the matching process required some decomposition. In the survey, the area of crops was observed on a more aggregate level than was the case in the VUZE data. Survey respondents reported 3 groups of crops: cereals (including winter and summer wheat, winter and spring barley, rye, oats, and maize), root crops (potatoes and sugar beet), and a category 'other' (which turned out to contain almost exclusively pastures, meadows and fodder crops). These composite groups were disaggregated on the basis of the product shares observed within the same composite group in the matching VUZE farm. For example, the area winter wheat in a particular survey farm was determined as

\[
\{\text{area winter wheat (ha)}\}_\text{survey} = \{\text{area cereals (ha)}\}_\text{survey} \times \{\text{area winter wheat (ha)/area cereals (ha)}\}_\text{VUZE}
\]

After matching each survey farm to a VUZE farm, revenue information from the latter was used to supplement information on the survey farm. The assumption was that, given the usually close matches, the per-hectare and per-animal revenues of the VUZE farm would be a good proxy for the same variables in the survey farm, after correction for price and productivity trends because of the different years of observation.

The per-product revenues in survey farms were calculated as the product of actual production units observed in the survey farm (i.e. number of animals and number of hectares of crops) and compatible revenues per production unit (hectares or feeding days) in the matching VUZE data. In the VUZE data, total financial revenues per product as well as production units for each product were given. On this basis revenues per production unit were calculated. These productivity figures were then made compatible (e.g. feeding days were converted into animals) and multiplied with the number of hectares or animals in the matching survey farms. For example, revenues for a particular crop product were calculated as

\[
\{\text{revenue (KCs)}\}_\text{survey} = \{\text{value production (KCs) / area (ha)}\}_\text{VUZE} \times \{\text{area (ha)}\}_\text{survey}
\]
Sporadically, the survey farm would produce products that the VUZE farm did not, and hence there was no matching revenue information. In those cases, the per-hectare revenue level averaged over VUZE farms of the relevant type (i.e. either traditional or individual) in the same agricultural region was used as proxy.

There were - often considerable - differences between the volume of production and the volume sold. Especially in the 'fodder' category the bulk of production would be fed to the herd rather than sold; and in the case of non-perishable produce in general, initial and final stocks were not necessarily equally large. The issue in constructing the revenue figures for survey farms was whether sale figures or production figures from the VUZE data should be used. Since the resulting figures are used either as indications of farm size (in chapter 6) or as a measure for exposure to price risk (in chapter 10), sale figures were used. Thus fodder is considered not a farm output, but an intermediate input for the production of milk and meat. The actual revenues in Czech Crowns per hectare used in the calculations (where unsold production is not valued) are thus, in some cases, small compared to total production valued at market prices.

Note also that in using these figures in the multiplication with areas observed in the survey farm, the assumption was that the ratio of production volumes over sale volumes was identical in both the survey farm and the matching VUZE farm. Ideally, one would of course want to use the actual ratio for each survey farm. However, the survey framework did not allow for collecting financial information (which is precisely the reason for the whole matching exercise). Given the similarities between the matching farms with regard to size, production structure and region, it appears acceptable to use the above method in order to derive such information indirectly.

A final step in the construction of survey revenue data was taking the different observation moments into account. VUZE data were for 1996, while product information for survey farms was given for both 1998 and 1992. In the intervening years, both output prices and yield or productivity levels changed. The figures of, for example, imputed 1998 wheat revenues were therefore multiplied by the ratio of 1998 over 1996 product prices, and again with the ratio of 1998 over 1996 yield levels. These ratios were taken from the national statistics.

The different moments of observations are thus taken fully into account. The only factor assumed constant in 1992-1996 and 1996-1998 is the structure of composite crop groups in a particular farms: the decomposition figures from the 1996 VUZE data were applied to both the 1992 and 1998 survey data. Note again that this relates to the disaggregation rule only, not to the actual areas of the composite groups and of the products within those groups. These were directly reported in the survey for both 1992 and 1998.
The procedure resulted, for each farm in the survey, in shares in total revenues for each of the 28 products included in the VUZE data. Where shares of products are used in the analyses (as in chapter 10 on risk exposure), it should be noted that complete price information for the 1989-1998 years was available in the official statistics for 'only' 10 products. Consequently, only these products were actually used in, for instance, constructing the risk exposure measure in chapter 10, and the shares were recalculated accordingly. That selection implied hardly a loss in accuracy: the rest of the products consisted of marginal crops (e.g. poppy seed, sunflower and flax) that accounted for only between 0 and 3 % of total revenues.

5.9 Representativeness of the Slovak Survey

The examination of the degree to which the Slovak survey accurately represented Slovak agriculture is less elaborate than the exercise on the Czech surveys, for several reasons. First, only traditional farms were targeted in the fieldwork. Although there is a large number of individual farmers in Slovakia, they are insignificant economically compared to the other farm types, much more so than in the Czech case (see chapter 7 for details and explanation).

The average scale of operation of Slovak individual farmers was 11.4 hectares in 1997, while they worked a mere 8 % of agricultural land in 1998 (Swinnen and Mathijs, 1999:24). According to estimates by Wolz et al. (1998:75), two thirds of individual farmers work less than 5 hectares of land, while only 5 % have over 50 hectares of land. This implies that only a few percent of agricultural land in Slovakia is used for commercial private farming. Another part is worked by hobby farmers and other own-consumption producers, and the bulk of area is used for production by traditional farms. Studying garden rather than farm production was simply not the aim of the research.
A second circumstance which simplifies this presentation is that location is not a variable that will be used in the comparative analyses of the Czech and Slovak Republics in chapter 7. In the initial analysis of responses, the geographical origin of the majority was identified. Most of these turned out to come from the ‘potato’ or from the ‘(sub-) mountainous’ zones, which are rather similar in production conditions. This is in line with the more homogeneous and less attractive conditions for agricultural production in Slovakia compared to the Czech Republic, mainly because the country is smaller and more mountainous. Variation in natural circumstances within Slovakia is not likely to be a major factor in explaining differences between Czech and Slovak farm performances or structures.

Third, the presentation of the Slovak data can be shorter because a number of explanations of the peculiarities in the Czech findings also apply to the Slovak setting. These are not repeated here. The survey data are compared to official data on some main, comparable dimensions in table 5.8.

<table>
<thead>
<tr>
<th>Table 5.8: Slovak Survey Statistics And Official Figures, 1998</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Farm type</strong></td>
</tr>
<tr>
<td><strong>Data source</strong></td>
</tr>
<tr>
<td>Number (in sample / in Slovakia)</td>
</tr>
<tr>
<td>Average size (ha)</td>
</tr>
<tr>
<td>Average labour force (number)</td>
</tr>
<tr>
<td>% Profitable*</td>
</tr>
</tbody>
</table>

* 1996 figures for both sources. Sources: survey findings, MASR (1996), Blaas (1999)

Companies were clearly under-represented in the survey. Given the random survey design, it is not easy to see why this is so. Furthermore, the difference in size of farm types is smaller in the survey than in the official figures, while the size of the labour force and percentage of profitable farms resembles the corresponding official figures. It is somewhat surprising, given the small number of observations of farm companies, that this information is so similar to official information. One reason may be the lower variation in farm characteristics in general in Slovak as compared to Czech agriculture.

The survey data are also compared to data from the Slovak Research Institute for Agricultural Economics (VUEPP). The latest observations in this data set are from 1996. VUEPP observations were not labelled by type, and so the corporate/co-operative distinction could not be used. The main findings here are that farms in the survey were smaller both in terms of cattle herd size, labour force, and area, but had more pigs and beef cattle. Profitability indicators were again of similar magnitude.
### Table 5.9: 1998 Slovak Survey Sample and 1996 VUEPP Sample

<table>
<thead>
<tr>
<th>data source</th>
<th>survey (n=95)</th>
<th>VUEPP (n=80)</th>
</tr>
</thead>
<tbody>
<tr>
<td>number in sample</td>
<td>95</td>
<td>80</td>
</tr>
<tr>
<td>dairy cows (head)</td>
<td>266</td>
<td>446</td>
</tr>
<tr>
<td>beef cattle (head)</td>
<td>450</td>
<td>401</td>
</tr>
<tr>
<td>hogs (head)</td>
<td>1,445</td>
<td>1041</td>
</tr>
<tr>
<td>cereals (# ha)</td>
<td>553</td>
<td>965</td>
</tr>
<tr>
<td>root crops (# ha)</td>
<td>56</td>
<td>73</td>
</tr>
<tr>
<td>fodder crops, pasture (# ha)</td>
<td>344</td>
<td>1373</td>
</tr>
<tr>
<td>total area (# ha)</td>
<td>1,453</td>
<td>2,410</td>
</tr>
<tr>
<td>employees (number)</td>
<td>101</td>
<td>187</td>
</tr>
<tr>
<td>profitable (1996, %)</td>
<td>56</td>
<td>59</td>
</tr>
</tbody>
</table>

Sources: survey findings, VUEPP data

### 5.10 Conclusions

In this chapter the fieldwork organisation and primary data that form the basis for subsequent analytical chapters were presented and evaluated. The data describe 193 individual farms and 69 traditional farms in the Czech Republic and 102 traditional farms in the Slovak Republic. They were compared to official data, both primary data sets from agricultural research institutes in both countries, and published, aggregate data. Also the extent to which they are regionally representative was evaluated for the Czech data. Various differences between farms in the surveys and those in the official data were identified and mostly explained.

Some of these are not problematic; for instance, Czech survey data do not reflect the relative numbers of individual and traditional farmers, which would lead to a saturation of the data set with small-scale, non-commercial individual farmers. Other differences concern variables that are probably inaccurately observed in both the survey and the official data, such as profitability. Yet other biases, such as those in size and economic viability, are relevant and should be borne in mind in interpreting the results of this book; but they are unlikely to undermine the validity of its conclusions.
Appendix to chapter 5:
The Survey Questionnaires

I. Covering letter and questionnaire for managers of co-operative, joint stock and limited liability farm businesses in the Czech and Slovak Republics

Amsterdam, The Netherlands, June 1998

To: managers of a.s./s.r.o./co-operative farm businesses
Concerns: Research Project

Dear Reader,

As a manager of a co-operative farm or of an a.s. or s.r.o. farm business, you are herewith receiving a questionnaire. It is part of a study carried out by the economics department of the University of Amsterdam, The Netherlands. The aim of this project is to document the experience of farm managers in the present situation of the Czech agricultural sector. As many problems specific to this sector are not generally well-understood, your information will be very helpful in directing further research and policy proposals. These could create an environment facilitating the further development of Czech agriculture.

Filling in the questions below should take you not more than about 20 minutes. You can send the ready forms in the pre-stamped, pre-addressed envelope sent with this letter and the questionnaire. Also if you have any questions, you can use the telephone number given at the end of the questionnaire. Your answers will be treated with strict confidentiality.

As a token of our gratitude for your co-operation, we would be happy to send you an overview of the findings of this study. In this way, you could learn how your colleagues are dealing with challenges of the present environment for farming businesses. If you are interested in this, fill in your name and postal address below. You can send it as a separate slip with the filled questionnaires so as to ensure confidentiality.

Thank you for your co-operation,

(signature)

Dirk J. Bezemer, M.Sc.
Research Associate
Department of Economics
University of Amsterdam, the Netherlands

YES, I would like to receive an overview of the findings of this study
Name of my business: ..................................................
Postal address: ..........................................................
NOTE: When boxes are used, you can tick one box only, unless otherwise specified.

1. Activities

1a. Of which legal type is your farm?  □ co-operative
      □ a.s. or s.r.o. Go to question 1d.

1b. Do you plan to change the farm into an a.s. or s.r.o within a year?  □ yes  □ no

1c. How many of the members of your farm are also workers?

<table>
<thead>
<tr>
<th>Number of members who are workers</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>number of members who are not workers</td>
<td></td>
</tr>
<tr>
<td>total number of members</td>
<td></td>
</tr>
</tbody>
</table>

1d. Please indicate the development of the number of cattle and crop area numbers since the start of your farm as a.s. or s.r.o. business or as a 'new' co-operative.

<table>
<thead>
<tr>
<th>ANIMALS:</th>
<th>NUMBER (1998):</th>
</tr>
</thead>
<tbody>
<tr>
<td>dairy cows:</td>
<td></td>
</tr>
<tr>
<td>other horned cattle:</td>
<td></td>
</tr>
<tr>
<td>pigs:</td>
<td></td>
</tr>
<tr>
<td>poultry:</td>
<td></td>
</tr>
<tr>
<td>goats</td>
<td></td>
</tr>
<tr>
<td>other, namely:</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GROUP OF CROPS:</th>
<th>HECTARES (1998):</th>
</tr>
</thead>
<tbody>
<tr>
<td>grains (wheat, barley, oat, etc.), corn, oilseeds, leguminous plants</td>
<td></td>
</tr>
<tr>
<td>potatoes, sugarbeet</td>
<td></td>
</tr>
<tr>
<td>fruit and vegetables (including grapes)</td>
<td></td>
</tr>
<tr>
<td>other, namely:</td>
<td></td>
</tr>
<tr>
<td>total number of hectares cultivated:</td>
<td></td>
</tr>
</tbody>
</table>

1e. How important were the following reasons for product change decisions in this period? You can indicate importance by placing a cross on a scale from 1 (important) to 5 (unimportant).

<table>
<thead>
<tr>
<th>changes in output prices</th>
<th>Important</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>unimportant</th>
</tr>
</thead>
<tbody>
<tr>
<td>changes in input prices</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>changes in subsidy policies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(un)availability of technology</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(un)availability of labour</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>changes in area</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Chapter 5

If. Please indicate your opinion on the following statements by placing a cross on a scale from 1 (agree) to 5 (disagree).

<table>
<thead>
<tr>
<th>Statement</th>
<th>Agree</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Under the current bank credit conditions, I would like to obtain bank credit.”</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>“With current machinery prices and wages, I would like to purchase more machinery and reduce the number of employees”</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1h. By how much did the number of employees change since the start of your farm as a.s. or s.r.o. business or as a ‘new’ co-operative? You can use approximate numbers.

<table>
<thead>
<tr>
<th>Labour force...</th>
<th>at the start (a.s./s.r.o./co-op)</th>
<th>now in 1998</th>
</tr>
</thead>
<tbody>
<tr>
<td>number of workers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>number of technical staff</td>
<td></td>
<td></td>
</tr>
<tr>
<td>number of management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL NUMBER</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1i. Many farms engage in other activities besides growing crops and rearing cattle. Please indicate the importance of these for the profitability of your business now and in 1992 by placing two crosses on each line.

<table>
<thead>
<tr>
<th>Contribution to profitability (in % of total profitability):</th>
<th>...in 1997</th>
<th>...in 1992</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-20</td>
<td>20-30</td>
<td>30-40</td>
</tr>
<tr>
<td>building construction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>food processing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>transport</td>
<td></td>
<td></td>
</tr>
<tr>
<td>wholesale trade</td>
<td></td>
<td></td>
</tr>
<tr>
<td>retail (own shop)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>machinery repair/sale/rent</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. Land Ownership

2a. For the change of area since the start of this farm, how important were the following developments? You can use approximate numbers.

<table>
<thead>
<tr>
<th>Change since the start:</th>
<th>Increase in land (ha):</th>
<th>decrease in land (ha):</th>
</tr>
</thead>
<tbody>
<tr>
<td>renting in or renting out land:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>buying or selling land:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>de-collectivisation and restitution:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>other, namely:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2b. If you would now have the opportunity to rent or buy extra land, would you do it?

[ ] yes
[ ] no, the price here is too high
[ ] no, I don’t want to expand area now.
2c. Please indicate below how many of the owners of the land that your farm cultivates are urban or rural dweller, and how many hectares these people own. You can use approximate numbers.

<table>
<thead>
<tr>
<th>Number of people</th>
<th>number of people</th>
</tr>
</thead>
<tbody>
<tr>
<td>+urban dwellers:</td>
<td>Owning less than 5 ha:</td>
</tr>
<tr>
<td>rural dwellers:</td>
<td>Owning 5-10 ha:</td>
</tr>
<tr>
<td>all land owners:</td>
<td>Owning more than 10 ha:</td>
</tr>
</tbody>
</table>

2d. How do you pay owners for using the land?  

☐ We pay most or all owners in money.  
☐ We pay most or all owners in products.

2e. Since 1992, how many land owners have indicated that they wanted to take their land out of the farm under the regulations concerning de-collectivisation and restitution?

<table>
<thead>
<tr>
<th>Group</th>
<th>number</th>
</tr>
</thead>
<tbody>
<tr>
<td>people who indicated they wanted to take out land, for which a procedure was started</td>
<td></td>
</tr>
<tr>
<td>people who actually took out their land since 1992</td>
<td></td>
</tr>
<tr>
<td>people who, after taking their land out of our farm, offered it to our farm again</td>
<td></td>
</tr>
</tbody>
</table>

3. Finances

3a. Below you can indicate whether your farm has been profitable in 1993-1997, and whether you obtained credit from a bank or direct subsidies, other than subsidy from the Support and Guarantee Fund for Forestry and Farming (PGRLF) on the bank credit and interest payment. You can place several crosses on one line.

<table>
<thead>
<tr>
<th>Year</th>
<th>Was your farm profitable?</th>
<th>Have you used bank credit?</th>
<th>Have you received direct subsidies (other than from PGRLF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1994</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1995</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1996</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1997</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3b. The last time you received bank credit, what did you offer the bank as security? You can tick several boxes.

☐ land
☐ buildings
☐ machinery or stocks
☐ future revenues
☐ other, namely: ...
☐ the Support Fund for Forestry and Agriculture supported the credit
☐ another, private, person or business guaranteed the credit

3c. What was the maturity of the loan?

☐ 3 till 6 months
☐ 6 months till one year
☐ 1 to 4 years
☐ more than 4 years
Chapter 5

3d. Did you ever have a loan appliance rejected?
☐ Never. Go to question 3f.
☐ Yes, once or several times

3e. Did the bank give a reason for the rejection?
☐ No, they gave no reason. Please indicate below what you think the reason was.
☐ Yes, they gave the following reason or reasons (you can tick several boxes):
  ☐ profitability was not high enough
  ☐ risk was too high
  ☐ there was no adequate collateral (such as land or buildings)
  ☐ there was no adequate bookkeeping information
  ☐ nobody guaranteed my loan
  ☐ I did not know the bank management personally beforehand
  ☐ other, namely ...

3f. How much did the following components contribute to total financial inflow in 1997?

<table>
<thead>
<tr>
<th>Component</th>
<th>0-15%</th>
<th>16-30%</th>
<th>31-45%</th>
<th>46-60%</th>
<th>60-75%</th>
<th>more than 75%</th>
</tr>
</thead>
<tbody>
<tr>
<td>profits</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>subsidies</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>credit from banks</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>credit from other firms or</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
| friends

4. Conclusion

Many people active in agriculture think that the sector is going through difficult times. What would you indicate as problems for the functioning of your farm? You can for each item place a cross on a scale from 1 (big problem) to 5 (no problem at all).

<table>
<thead>
<tr>
<th>Problem</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>no problem</th>
</tr>
</thead>
<tbody>
<tr>
<td>time lag between delivery and payment of products</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>finding and keeping good employees</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>obtaining credit from a bank</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>finding firms to sell my product to</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>acquiring access to subsidies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>finding information on prices</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>finding information on government regulations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>other, namely:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please send us your filled form in the pre-stamped, pre-addressed envelope today. Don’t forget to include the slip of paper with your address if you are interested in the results of this study. For any questions, contact: Barbora Kysilkova, tel. 05-746457.

THANK YOU FOR COMPLETING THIS FORM!
II. Covering letter and questionnaire for operators of individual farms in the Czech Republic

Amsterdam, The Netherlands, June 1998

To: private individual farmers  
Concerns: Research Project

Dear Reader,

The Association of Private Farmers is interested in the problems and performance of its members. If we are well-informed about the specific challenges that our members have, we can do a better job in servicing to you with information, and also in representing your interests with governmental bodies. Therefore we recommend to your attention the questionnaire that is sent with this letter. In it, you have the opportunity to inform us on a number of issues that are highly relevant in the current situation of the agricultural sector in the Czech Republic. The questionnaire is part of an academic research project in co-operation with the University of Amsterdam, The Netherlands, and will not be used for business purposes. Your answers are treated completely confidentially. Filling in and sending us the questionnaire costs you nothing, and should take not more than 25 minutes.

We would be very grateful for your co-operation. In return, we offer to send you a report on the outcome of this research. In this way you can learn about common problems that private farmers face, and about the way your colleagues cope with them. If you wish to receive an overview of the findings of this study, please fill in your address on the slip of paper below. Then post it separately with the completed form in the pre-addressed, pre-stamped envelope.

If you have any questions, or wish to receive additional information on our research procedures, please do not hesitate to contact the telephone number mentioned at the end of the questionnaire.

We thank you for your co-operation!

(signature) (signature)

Dirk J. Bezemer, M.Sc. Mr. P. Kudláček
Research Associate Director,
Department of Economics Association of Private Farmers
University of Amsterdam, the Netherlands Prague

YES, I would like to receive an overview of the findings of this study

Name of my business: .............................................
Postal address: .................................................
Chapter 5

NOTE: When boxes are used, you can tick one box only, unless otherwise specified.

1. General information

1a. In which year did you start your private farm? 19...

1b. What part of your time is devoted to work on your farm? Please place a cross in one box.

<table>
<thead>
<tr>
<th>Number of hours worked per week:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 20</td>
</tr>
</tbody>
</table>

1c. What percentage of your total income derives from your own farm?

<table>
<thead>
<tr>
<th>income derived from own farm (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 50</td>
</tr>
</tbody>
</table>

1d. What is your age? ... ... year

1e. What is the highest level of education that you completed?
   - preliminary and/or high school
   - college or university

2. Factors of Production

2a. Please indicate whether you increased, decreased, or kept constant the number of cattle and crop area numbers since the start of your farm.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>dairy cows:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>other horned cattle:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>pigs:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>poultry:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>goats</td>
<td></td>
<td></td>
</tr>
<tr>
<td>other, namely:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>grains (wheat, barley, oat, etc.), corn,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>oilseeds, leguminous plants</td>
<td></td>
<td></td>
</tr>
<tr>
<td>potatoes, sugarbeet</td>
<td></td>
<td></td>
</tr>
<tr>
<td>fruit and vegetables (including grapes)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>other, namely:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>total:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2b. How important were the following reasons for product change decisions in this period? You can indicate importance by placing a cross on a scale from 1 (important) to 5 (unimportant).

<table>
<thead>
<tr>
<th>Reason</th>
<th>Important</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>unimportant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Changes in output prices</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Changes in input prices</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Changes in subsidy policies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(un)availability of technology</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(un)availability of labour</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Changes in area</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2c. Many farms engage in other activities besides growing crops and rearing cattle. Please indicate the importance of both groups of activities for the profitability of your business.

<table>
<thead>
<tr>
<th>Contribution to profitability in % of total profitability of...</th>
<th>0-15</th>
<th>16-30</th>
<th>31-45</th>
<th>46-60</th>
<th>more than 60</th>
</tr>
</thead>
<tbody>
<tr>
<td>Growing crops</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rearing cattle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Building construction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food processing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transport</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wholesale trade</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retail (own shop)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Machinery repair/sale/rent</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2d. Please indicate in the table below how you acquired your land.

<table>
<thead>
<tr>
<th>Method of acquiring land:</th>
<th>Number of hectares:</th>
</tr>
</thead>
<tbody>
<tr>
<td>I claimed in the de-collectivisation process:</td>
<td></td>
</tr>
<tr>
<td>I bought from an individual, a farm or the state:</td>
<td></td>
</tr>
<tr>
<td>I rent from a co-operative, a.s. or s.r.o. farm:</td>
<td></td>
</tr>
<tr>
<td>I rent from the state:</td>
<td></td>
</tr>
<tr>
<td>I rent from an individual:</td>
<td></td>
</tr>
<tr>
<td>I can use free of charge:</td>
<td></td>
</tr>
<tr>
<td>Other method of acquiring, namely...</td>
<td></td>
</tr>
</tbody>
</table>

2e. If you would now have the opportunity to rent or buy extra land, would you do it?

\[ \square \text{yes} \quad \square \text{no} \]

2f. Please indicate how many employees you have. Employees can be permanent (employed all year round) or temporary (employed at busy times or for special jobs, e.g. harvesting in summer). Note that 40 hours work per week or more counts as one full-time job.

<table>
<thead>
<tr>
<th>NUMBER OF EMPLOYEES:</th>
<th>FULL-TIME</th>
<th>PART-TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permanent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Temporary</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2g. Do you own the machinery that you use yourself?

\[ \square \text{Yes, I own all machinery that I use} \]
\[ \square \text{Yes, but not all. I rent extra machinery in busy times (during harvest etc.)} \]
\[ \square \text{No, nothing. I rent or borrow all the machinery that I need.} \]

3. Private and Corporate Farming

3a. In what function were you before taking up private farming?

\[ \square \text{worker in the agricultural sector.} \]
\[ \square \text{manager in the agricultural sector.} \]
\[ \square \text{worker outside the agricultural sector.} \]
\[ \square \text{manager outside the agricultural sector.} \]
Chapter 5

3b. How does your present personal income compare to the wage you made in your previous position? ‘Personal income’ is here defined as after-tax farm profits minus investments.

☐ My present personal income is higher than my previous income.
☐ My present personal income is lower than my previous income.
☐ My present personal income is the same as my previous income.

3c. Are the prices that you pay for inputs and receive for your products better, the same, or worse than those of co-operative, a.s and s.r.o farms in your region? You can indicate this by placing a cross on a scale from 1 (higher prices) to 3 (same prices) to 5 (lower prices).

<table>
<thead>
<tr>
<th>Prices: higher (1), the same (3) or lower (5)?</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>paid fertiliser and pesticides prices</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>price for buying or renting land</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>price for using or buying machinery</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>price for building construction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>salaries of my employees</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>received product prices</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. De-collectivisation and Restitution

4a. Did you apply for the obtaining of land or machinery under the regulations regarding restitution and de-collectivisation? You can tick several boxes.

☐ No.
☐ Yes, but received nothing. Go to question 4c.
☐ Yes, I obtained land. Go to question 4c.
☐ Yes, I obtained machinery. Go to question 4c.

4b. Why did you not apply for obtaining property in the de-collectivisation or restitution process?

☐ Because I had no claim on any property in use by state or co-operative farms.
☐ Because I did not expect to obtain land or assets of sufficient quality within a reasonable time period, although I could have claimed them.

4c. How long did you wait between claiming and obtaining your property?

☐ less than three months
☐ between three and six months
☐ between six months and a year
☐ more than a year (also tick this box if you are still waiting for over a year now)

5. Banks and Subsidies

5a. Below you can indicate whether your farm has been profitable in 1993-1997, and also whether you obtained credit from a bank or obtained direct subsidies (other than subsidy from the Support and Guarantee Fund for Forestry and Farming (PGRLF) on the bank credit and interest payment). You can place several crosses on one line.

<table>
<thead>
<tr>
<th>Year</th>
<th>Was your farm profitable?</th>
<th>Have you used bank credit?</th>
<th>have you received direct subsidies (not from PGRLF)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>yes</td>
<td>no</td>
<td>yes</td>
</tr>
<tr>
<td>1993</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1994</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1995</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1996</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1997</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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5b. The last time you received bank credit, what did you offer the bank as security? You can tick several boxes.

☐ land  ☐ future revenues
☐ buildings  ☐ the Support Fund for Forestry and Agriculture supported the credit
☐ machinery or stocks  ☐ another, private, person or business guaranteed the credit.
☐ other, namely: ...

5c. What was the maturity of the loan?

☐ 3 till 6 months  ☐ 6 months till one year
☐ 1 to 4 years  ☐ more than 4 years

5d. Did you ever have a loan appliance rejected?

☐ Never. Go to question 3f.  ☐ Yes, once or several times

5e. Did the bank give a reason for the rejection?

☐ No, they gave no reason. Please indicate below what you think the reason was:

☐ Yes, they gave the following reason or reasons (you can tick several boxes):

☐ profitability was not high enough  ☐ risk was too high
☐ there was no adequate bookkeeping  ☐ nobody guaranteed my loan
☐ there was no adequate collateral  ☐ I did not know the bank management personally beforehand

5f. How much did the following components contribute to total financial inflow in 1997?

- profits
- subsidies
- credit from banks
- credit from other firms or from friends

<table>
<thead>
<tr>
<th></th>
<th>0-15%</th>
<th>16-30%</th>
<th>31-45%</th>
<th>46-60%</th>
<th>61-75%</th>
<th>more than 75%</th>
</tr>
</thead>
<tbody>
<tr>
<td>profits</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>subsidies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>credit from banks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>credit from other</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

6. Conclusion

Many people active in agriculture think that the sector is going through difficult times. What would you indicate as problems for the functioning of your farm? You can for each item place a cross on a scale from 1 (big problem) to 5 (no problem at all).

<table>
<thead>
<tr>
<th>problem</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>no problem</th>
</tr>
</thead>
<tbody>
<tr>
<td>time lag between delivery and payment of products</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>finding and keeping good employees</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>obtaining credit from a bank</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>finding firms to sell my product to</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>acquiring access to subsidies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>finding information on prices</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>finding information on government regulations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please send us your filled form in the pre-stamped, pre-addressed envelope today. Don't forget to include the slip of paper with your address if you are interested in receiving an overview of the results of this study.

Thank you for completing this form!
Chapter 5

Notes to chapter 5

1 In addition, official primary data from the Slovak Research Institute for Agricultural Economics (VUEPP) will be used in this chapter to evaluate the validity of the survey data (section 5.9.). Due to their limitations, these VUEPP data are not used in subsequent analyses, as the Czech VUZE data are.

2 Since then, there has been a rapid growth of research groups and institutions engaging in both empirical work of their own and co-operation with the state research institutes. Access to data of sufficient quality has markedly improved.

3 For an overview of interview findings, see Bezemer (1999).

4 The two-wave set up was not planned beforehand: initially a higher rate of return in the first wave was expected.

5 See on this Majerová (1997) for Czech agriculture; World Bank (1995) for various CEE countries; Davis and Gaburici (1999) for Romania; Wolz et al. (1998) for Slovakia; Mathijs et al. (1999) for the Czech Republic; and Lerman et al. (1998) for Armenia. In most of these studies it is not mentioned which survey method was used (mail survey, self-administered survey, group survey, telephone survey, etc.)

6 See Chapter 7 for an analysis of the official attitude towards agriculture in the Czech Republic.

7 See Chapter 3 for an explanation of the Czech de-collectivisation procedure.

8 More precisely: managers of traditional farms reported their 1998 and 1992 production structure, operators of individual reported the production structure in 1998 and 'at the start of the farms'. Most individual farms were established in 1990 (27), 1991 (66), 1992 (48), or 1993 (24). In the 182 responses to this question, six farms were started after 1993 and eleven before 1990 – going as far back as 1943.

9 The questionnaires presented in the Appendix are translations from the original questionnaires, which were in the Czech and Slovak languages.