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THE OSLO REGISTER DATA CLASS SCHEME (ORDC). FINAL REPORT FROM THE CLASSIFICATION PROJECT

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Foreword

This report describes the background for and construction of the Oslo Register Data Class Scheme. The intention behind this class scheme is to use the unique possibilities for class research provided by the population data made available by Statistics Norway. In the beginning of the 2000's Statistics Norway started to use a new and better occupational classification based on ISCO-88. Moreover, high quality data on income that could supplement the data on occupations were available. In order to do research on class based on the register data, class classifications using the new occupational classification as well the other available registers had to be developed. Professor Marianne Nordli Hansen therefore initiated a class classification project, the ORDC-project. The idea behind the project was to follow up her work on classification based on register data in the 1990's, a work that drew inspiration from Bourdieu's division between economic and cultural capital. The data used in the classification project was made available for the Department of Sociology and Human Geography for the research project *Educational Careers*, headed by Professor Arne Mastekaasa. The intention was to supplement the analyses of the impact of social origin based on parental income and education done in this project with class analyses made possible by the ORDC-project.

The ORDC-project received grants from the University of Oslo's support for small-scale research ("småforskmidler") in 2007-2008. Magne Flemmen and Patrick Lie Andersen have during their time as master students at the Department of Sociology and Human Geography worked as research assistants on the project, financed by these grants. Marianne Nordli Hansen has been the superviser of the project - she has provided guidelines based on ideas in her previous research on class as well as on strategies for the combination of data registers. As every member of the project group she has also suggested classification solutions and commented on the work of the other participants in the project. Magne Flemmen was in charge of the operationationalisation of the first version of the ORDC-scheme, and did the practical work of writing SPSS-syntaxes for this version of the scheme. Patrick Lie Andersen has contributed to the development of a revised version, as well as to increasing the accessibility of the classification. Among other things he has implemented the classification

on data sets from 2001 to 2006, and on parents as well as their sons and daughters. He has also constructed a user-friendly display of the class categories. Both Magne Flemmen and Patrick Lie Andersen have written their master theses in relation to the ORDC-project (Flemmen 2008, Andersen 2009, forthcoming). We are thankful to PHD student Øyvind Wiborg and Professor Arne Mastekaasa, who both have contributed with valuable suggestions.

A purpose of this report is to make the ORDC-classification available for class research. This presupposes that one has legal access to register data from Statistics Norway, or other comparable data. This report is intended as a standard documentation for users of the ORDC-scheme.

Oslo, May 2009

Introduction: Social Inequality Studies Based on Register Data

During the last decade register data sets consisting of the entire Norwegian population have become available, and used in studies of social inequality. These data are made available for researchers by Statistics Norway, who has the responsibility for assembling and administrating a wide range of information on individuals. These data provide unique possibilities, among other things: (1) Data on the total population is available over a long time span. (2) A great deal of information is available, due to linkages between different registers such as those on income, education and social welfare. (3) It is possible to link individuals to other family members, parents, children, siblings, spouses and cohabitants, as well as parents-in-law, etc. (4) The large sample means that smaller groups that usually disappear in smaller surveys may be studied, such as smaller elite groups.

Social inequality studies based on register data have been an important part of the research carried out at the Department of Sociology and Human Geography, University of Oslo, mainly organized through the research projects *Recruitment to Higher Education* and *Educational Careers*. The studies on social inequality have documented the impact of social origin on various aspects of educational attainment and on labour market success. In most of these studies social origin has been measured by parental education and/or economic resources. Parental education is measured in great detail in the register data and when the children are 16 years old. Parental earnings are registered on an annual basis from the 1960's and onward, thus making it possible to construct measures based on several years and when the children are at a specific age (e.g. 12-16 or 10-18 years old).

Some studies have also applied a class classification consisting of ten classes, developed by Hansen in the mid 1990's (Hansen 1995). The idea behind this class scheme was to distinguish classes according to their amount and composition of economic and cultural capital, the inspiration being Bourdieu's ideas on class and culture (Bourdieu 1984). In addition, the idea of a division between the public and the private sector was influential, and moreover, that this division might be especially crucial in Norway and other Scandinavian countries. A consequence of this idea was, for example, that middle level employees in the public and the private sector were placed in different classes.

This class classification was based on the Nordic Occupational Classification (NYK), a classification that was at the time used by Statistics Norway. The NYK classification was somewhat old fashioned in the 1990's: It distinguished between manual workers in great

detail, whereas the newer middle class occupations were assembled in larger categories. Moreover, the occupational category "manager", the largest category in the economic higher class, was very inclusive, and contained mangers of very small businesses as well as of the largest corporations. Some additional information was used to distinguish between managers of small and larger companies, but the inclusive manager category in the NYK scheme still meant that the economic elite became broader than one might have wished.

Even so, the classification seemed to work satisfactory, as the differences expected according to the basic ideas behind the scheme appeared in the analyses. A large extent of class inequality was documented. Sons and daughters of unskilled workers are worse off than all other groups in the educational system, and with respect to occupational success. A clear division between top level classes was also found. Those originating in the cultural capital faction, the sons and daughters of professionals and academics, have more success in the educational system than sons and daughters of managers. The latter category, however, are those with the greatest economic success (e.g. Hansen 2001, Hansen & Mastekaasa 2006).

The Hansen classification of parental social class was made on the basis of population censuses of 1970 and 1980, in which all adults had to give information about their occupation. In 1990 there was no population census, because Statistics Norway by then gathered so much administrative data on a routine basis about the population that a population census was considered unnecessary. A census was performed on a 10 percent sample of the population, and information about occupation is available only for the respondents in this smaller sample, as information on occupation was not a part of Statistics Norway's routine package.

The lack of more recent information on occupation had consequences for the possibilities for doing class research based on register data. The class classification based on the 1980 census becomes less reliable and problematic to apply to younger cohorts born after, say, the mid 1970s. A classification was made on the basis of the 1990 10 percent census sample, but this has as yet not been used in any studies. One reason is that there are few studies that include so young cohorts, so the 1980 version has performed adequately. Another reason is that the smaller sample means that it becomes somewhat more problematic to focus on small elite groups. If, for example, one wishes to study students in elite fields at some point in time, such as professional education in law or medicine, one has to rely on a ten percent sample of these already small groups. Finally, it was not the least important that very good information on parental earnings became available. The topic of the importance of

economic origin for educational and occupational success was so to speak unexplored, so the availability of high quality earnings information provided new and exciting possibilities.

New Possibilities for Class Research

Recent developments also opened new possibilities for doing class research. Statistics Norway now provides data on an annual basis of occupation from 2003 and onwards. The classification of occupation no longer is based on the old Nordic Occupational Classification NYK, but a new classification based on the International Standard Classification of Occupations - ISCO-88. The EU version of this scheme is the foundation for the Norwegian standard STYRK (cf. Standard Classification of Occupations, Official Statistics of Norway 1998).

An attractive feature of STYRK compared to NYK, is that also top level occupations are recorded in great detail and not only manual labour. Managers, for example, are distinguished accoding to both the size of the firm, and according to type of job, e.g. "directors and chief executives" and "production" managers. Moreover, specific elite groups such as "legislators", "senior government officials", and "senior officials of humanitarian organizations" are singled out, something that makes these data very well suited for elite studies.

The data on occupation is provided by information given by employers about their employees to the authorities, among other things on earnings, working hours and occupation. This method of collecting data has great advantages, most obviously concerning reliability, but also disadvantages. The greatest disadvantage with respect to class research is that only information about employees are recorded – those who are self-employed have no employers sending in information about them. This means that there is no information on occupation for owners of small firms, farmers, independent artists, etc., but also large independent capitalists. These are groups one would want to include in a class scheme. There is of course neither occupational information for those who are outside the labour market, whether they are homemakers, students, pensioners or social welfare recipients. These are usually not included in class schemes, but as we see it, it would be a positive addition to a class scheme to include these groups.

Another problem is that some employers use classification systems other than STYRK. This is first, the classification system used in the state sector, which of course is a very large employer. Special classifications are also used for the municipal employees in

Oslo as well as for the employees in the maritime sector. We have therefore had to base the ORDC-scheme on these classifications in addition to STYRK. This is in many cases unproblematic, but sometimes the titles in the other classification systems may be rather vague or encompassing (e.g. "consultant"). Such problems may sometimes be solved by using information on industry, classified by the industry code NACE. In many cases the occupation in question is placed directly into a class category. If this is unfeasible the occupation is regarded as unclassifiable.

Finally, the register on occupations may include more than one occupation on individuals in a single year. This is either because the person simultaneously is employed in different occupations, or because the person has changed occupation during the year. To avoid unnecessary complications we have sought to limit the number of occupations to one during one single year. As the employers also have to report earnings, we have been able to use earnings as a criterion to pick out the most important occupation: In the case where individuals have more than one occupation in one year we have singled out the occupation that has yielded the highest earnings, and which therefore can be regarded as the most important occupation.

Below we first describe the basic ideas behind the categories of the Oslo Register Data Class scheme (ORDC). Then we move on to an account of how we have proceeded in order to include the groups about which there is no information on occupation in the STYRK register. Thirdly, we give a detailed description of how the STYRK categories are classified in the class scheme. In the final section we consider the patterns of mobility from one year to another (2003 to 2004).

The Oslo Register Data Class Scheme

The basic idea behind the ORDC scheme is that classes can be distinguished both vertically, according to the amount of capital, and horizontally, according to the composition of capital. As earlier mentioned, this is one of the main ideas in Bourdieu's work on class and culture and on different forms of power (Bourdieu 1984, 1996). However, this idea is not followed up by correspondence analysis, as in many of the works inspired by Bourdieu, but by evaluating occupational titles and assembling the most similar occupations into class categories. Bourdieu's description of the positions of occupational groups in the "social space" is one foundation for this classification. Another is Hansen's previous classification of occupations

based on the NYK-scheme (Hansen 1994). The ORDC-scheme is somewhat more complex than this older scheme, however. In addition, Rosenlund's work on Stavanger has provided ideas on class positions of specific occupational groups that are difficult to place on the basis of Bourdieu's account of the social space (Rosenlund 2000).

Figure 1 shows the categories in the class scheme. We see that three classes are distinguished on the first three levels – those having more cultural than economic capital, those having more economic than cultural capital, and in the middle those having a symmetrical composition of capital. Examples of occupations are listed in each class category; the detailed classification is listed in Appendix. Horizontal divisions are not distinguished in the lower level classes of farmers and skilled and unskilled (or partly skilled) workers. An additional class of those living on welfare transfers is distinguished.

Figure 1: The ORDC categories, with examples of occupations

Elite		
Cultural elite Professors, artists, executives in publishing etc.	**Professional elite** Doctors, assistent doctors, judges, pilots	**Economic elite** High capital income Executives and managers with salaries above NOK 1 million
Middle classes		
Cultural upper-middle Teachers with BA ("adjunkt"), special teachers, librarians, lecturers, journalists, musicians in entertainment	**Professional upper-middle** Consultants, engineers, lower executives, special nurses (higher ed), physiotherapists,	**Economic upper-middle** Medium capital income Various executives and managers in the private sector, financial brokers, accountants etc with salaries ranging from NOK 0,5 to NOK 1 mill
Cultural lower-middle Teachers, primary school teachers, child welfare pedagogues, social workers, children's nurses	**Professional lower-middle** Nurses, authorized social educators, first secretaries, chefs, machinists,	**Economic lower-middle** Small capital income Occupational titles similar to higher economic class, but with incomes below NOK 0,5 million
Working classes		
Skilled workers Auxiliary nurse, milieu therapist (somewhat similar to social workers), electricians		
Unskilled and partly skilled workers Assistants, cleaners, private security officers, janitors, drivers, waiters,		
Farmers, foresters, fishermen Larger primary sector income than income from salaries, wages, and capital income		
Welfare transfers Larger welfare transfers than income from salaries, wages, and capital income		

The Classification of Categories with Incomplete or no Information on Occupation

Many of the categories in the class scheme can be classified in a satisfactory way solely on the basis of the available information on occupations. This is not so for the economic sector classes however. First, the occupational titles may be an insufficient indicator of vertical position. "Production and operations department manager" for example, may indicate a position that gives access to very high rewards if it is in a large company, but not necessarily if in a small one. Second, as pointed out above, those who are self-employed have no occupational titles. This is also so for the category of farmers and other self-employed in the primary sector, as well as those living on welfare transfers, which would be an empty categories if we were to rely solely on the register on occupation.

The basic strategy to include those with incomplete or no information on occupation is to use other available registers. The most important is the Income Tax Register, which contains information on income that is reported to the tax authorities and used to estimate the size of taxes. Different types of income is included – earnings of employees and self-employed, capital income and welfare subsidies. A great advantage with the tax register, moreover, is that income information is available for a number of years. This means that the income information becomes more reliable – using income over a number of years implies that one comes closer to a measure of permanent income than when using information from one point in time only (cf. Mazumder 2005). We have chosen to construct average measures based on incomes in three years.

The Tax Register information is used, first, to distinguish the categories in the economic sector according to vertical position. A simple rule is then applied: Those having occupational titles placing them in this sector are categorized at the top level if the three-year average of the sum of earnings and capital income is above NOK 1 million; at the middle-level if the sum of earnings and capital income is between NOK 500.000 and 1 million; and in the lower-middle level if the sum of earnings and capital income is below NOK 500.000. All estimates of income are based on the 2005 value of NOK. In future revisions of the scheme we plan to distinguish between vertical levels according to a relative measure. For example, those having the ten percent highest incomes might be allocated to the economic elite,

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whereas a medium level position might require incomes above the median but below the highest decile.

Second, the Income Tax Register is used to classify self-employed who do not have occupational titles in the register on occupation. Those whose three-year average sum of earnings of self-employed and capital income is greater than their earnings are classified as self-employed. Those without occupational titles but who do not fulfill this criterion are regarded as unclassifiable and placed in a "missing" category. The same rule as above is used to distinguish between self-employed on different vertical levels. Those above NOK 1 million are placed in the top category. Many among them must be regarded as capitalists as they acquire large incomes through some sort of ownership, either of firms or as stockholders in various firms. Those having between NOK 500.000 and NOK 1 million are placed in the middle-level economic sector class and those with three-year average incomes below that, but above NOK 100.000, are placed in the lower-middle level economic sector class.

The Income Tax Register is also used to single out recipients of welfare transfers, who receive income from some sort of welfare arrangement, whether pensions, unemployment support or social welfare benefits. Those who do not have occupational titles, and who obtain a larger three-year average income from some sort of welfare benefits than from their earnings, are placed in this category. This is a simple definition, that in some cases may be problematic. For example, all mothers with children below the age of 16 receive child support benefits, irrespective of their economic situation. If they do not work outside the home, at all or very little, their child support benefits will mean that they end up in the category of recipients of welfare transfers. This may be considered a sensible choice, as welfare transfers in fact is their largest source of income. It may also be considered problematic. The homemakers with limited welfare transfers do not have a difficult life situation as many of the others in this category do. They may have health problems, experience unemployment, or some other social problem leading so that they need welfare transfers. We have chosen not to make any further distinctions in the category of recipients of welfare transfers in this context. It is possible, however, to develop more detailed classifications distinguishing different groups within the category of recipients of welfare transfers, for example in analyses focusing especially on social welfare clients, the unemployed, or homemakers.

The classification of primary sector occupations, farmers, foresters, and fishermen, is also based on tax information. The income of self-employed working in the primary sector is reported in the tax register. Those whose self-employed primary sector income is higher than

the sum of their wages and capital income are classified as self-employed in the primary sector.

The distribution among classes in the 1955-1965 cohorts

Table 1 shows the distribution among classes in 2003 among the birth cohorts born between 1955 and 1965. A first question is whether the quality of the data registers is so good that they may serve as a basis for a construction of a comprehensive class classification. We see that we are able to classify approximately 87 percent of the population in the selected cohorts with the help of the procedures we have described. The criteria for being in the population is that one is registered at least in one of the three major registers on occupation, income, or education in 2003, and than one is not registered as dead or emigrated by 2003. That 87 percent of this population is classified must be regarded as a high proportion that bears evidence of the good possibilities for class analysis provided by register data, especially as some people must be expected to be outside both the labour market and the welfare support system. We see that only six percent of those who are missing have occupational codes that are unclassifiable, as they either are to broad or unrecognizable in any of the occupational classifications we have used. Another 7-8 percent have no occupational code, and moreover, do not fit in the category of "welfare transfers". That this category is so small may be surprising, since it consists of two major groups. (1) People who participate in the labour market but for whom there for some reason is no information about occupation, and (2) those who do not work but live on the economic support from other family members. Note that the typical female homemaker with small children does not fall into this second category, as she receives child support benefits that puts her into the category "welfare transfers". Homemakers without small children and who do not receive pensions, however, are placed in the category without occupational code and no welfare transfers.

	Frequency	Percent	Valid Percent
Cultural elite	5060	0.7	0.8
Professional elite	14259	2.0	2.3
Economic elite	7609	1.1	1.2
Cultural upper-middle	26257	3.7	4.3
Professional upper-middle	72121	10.1	11.7
Economic upper-middle	30657	4.3	5.0
Cultural lower-middle	21885	3.1	3.5
Professional lower-middle	61784	8.7	10.0
Economic lower-middle	72082	10.1	11.7
Skilled workers	86538	12.1	14.0
Unskilled and partly-skilled workers	130501	18.3	21.2
Farmers, foresters, fishermen	10807	1.5	1.8
Welfare transference	77295	10.8	12.5
Unclassifiable occ. code	40367	5.7	100.0
No occ. code	56122	7.9	
Total	713344	100.0	

Table 1. The distribution among classes 2003. The birth cohorts 1955-1965

The top categories in the class scheme are small; the cultural, professional, and economic elite comprise about 4-5 percent of the total population in the selected cohorts, when the missing categories are omitted. The purpose of using so small categories is that it provides opportunities for doing analyses on small elite groups. This is possible because of the large population sample – as wee see there are more than 700.000 individuals included in Table 1. It is of course always possible to do less detailed analyses by combining some of the categories in the scheme. This may either be categories on the same vertical level or categories in the same horizontal position but on different vertical levels (e.g. economic upper-middle and lower-middle classes).

The upper-middle and lower-middle class categories are of a relatively similar size, whereas the working classes consist of the largest part of the population – about 35 percent

are either skilled or unskilled workers. Finally, a large part of the population, 12-13 percent, population, receive a greater part of the income through welfare transfers than as income obtained through work.

	Men	Women	Men	Women
Cultural elite	0,8	0,7	0,9	0,8
Professional elite	2,8	1,2	3,2	1,4
Economic elite	1,8	0,2	2,1	0,3
Cultural upper-middle	2,5	4,9	2,9	5,6
Professional upper-middle	10,8	9,4	12,6	10,8
Economic upper-middle	7,0	1,5	8,2	1,7
Cultural lower-middle	0,9	5,3	1,0	6,1
Professional lower-middle	3,9	13,6	4,6	15,5
Economic lower-middle	12,2	7,9	14,3	9,0
Skilled workers	13,3	10,9	15,6	12,5
Unskilled and partly-skilled workers	18,7	17,9	21,9	20,4
Farmers, foresters, fishermen	2,3	0,6	2,7	0,7
Welfare transference	8,4	13,3	9,9	15,2
Unclassifiable occ. Code	6,4	4,8	100,0	100,0
No occ. Code	8,1	7,6		
	100,0	100,0		
Total	363897	349447		

Table 2. The distribution among classes 2003 by gender. The birth cohorts 1955-1965

Table 2 shows the distribution of men and women among classes. We see that more men than women are found in the top-level classes, and that far more men than women have economic sector occupations. The proportions of men and women in the skilled and unskilled worker categories are not so dissimilar, but a larger proportion of the women are found in the welfare transfer category. This is not so surprising, because some women will be placed there only because of their child support benefits. More women than men in this age group are also disability pensioners, so the category of receivers of welfare transfers is heterogeneous. However, in his context we will not put more effort into making distinctions within the category.

Class mobility

Above we have described some classification procedures that will have some elements of arbitrariness, as they involve setting boundaries based on income information recoded on continuous scales. The income information is especially crucial for the classification of the economic sector classes, the primary sector occupations, and the category of receivers of welfare transfers. Moreover, there may be some element in arbitrariness in our method of picking out the most important occupation in cases where individuals have more than one occupation. In order to evaluate the reliability of the class scheme, we have studied class mobility between 2003 and 2004. Some mobility across classes must be expected, but according to the ideas behind the class scheme the horizontal movements should be limited. For example, some proportion of those in the economic upper-middle class should be expected to move up to the economic elite or down to the economic lower-middle class. But movements into the cultural or professional upper-middle classes should be unusual, as well as into classes in these sectors on different levels.

ORDC 2003	ORDC 2004																
	CE	PE	EE	CUP	PUP	EUP	CLM	PLM	ELM	SW	UW	FFF	WT	UC	NO	Total	N
Cultural elite	88,02	1,15	0,10	2,02	1,58	0,65	0,28	0,40	0,55	0,20	0,30	0,02	0,16	1,13	3,46	100,00	2762
Professional elite	0,38	86,96	0,29	0,41	3,53	1,59	0,06	0,34	0,88	0,25	0,24	0,01	0,11	1,16	3,79	100,00	10108
Economic elite	0,05	0,17	84,65	0,07	0,80	9,42		0,12	0,55	0,11	0,25	0,08	0,11	0,81	2,81	100,00	6666
Cultural upper-middle	0,43	0,22	0,05	86,39	2,46	0,18	1,29	0,69	0,45	0,26	0,50		0,51	3,72	2,86	100,00	9143
Professional upper-middle	0,12	0,72	0,08	0,47	89,66	0,63	0,33	1,35	0,85	0,32	0,58	0,01	0,25	1,36	3,27	100,00	39213
Economic upper-middle	0,07	0,65	5,84	0,10	1,62	80,98	0,03	0,24	5,28	0,35	0,86	0,16	0,04	1,11	2,66	100,00	25377
Cultural lower-middle	0,05	0,07	0,00	3,89	1,48	0,05	80,04	0,89	0,52	2,20	3,63	0,05	1,34	1,87	3,91	100,00	3260
Professional lower-middle	0,04	0,10	0,03	0,49	4,19	0,27	0,29	84,78	1,47	1,01	1,39	0,02	0,96	0,99	3,97	100,00	14292
Economic lower-middle	0,05	0,16	0,11	0,19	1,06	5,33	0,16	0,88	82,25	0,93	2,42	0,61	0,97	0,84	4,04	100,00	44478
Skilled workers	0,01	0,06	0,02	0,09	0,50	0,19	0,26	0,79	0,66	87,26	2,46	0,04	1,05	1,60	5,02	100,00	48402
Unskilled and partly-skilled workers	0,01	0,05	0,02	0,10	0,40	0,31	0,37	0,67	1,35	2,70	85,18	0,07	2,11	1,07	5,58	100,00	68094
Farmers, foresters, fishermen		0,03	0,10	0,09	0,24	0,31	0,19	0,25	2,90	0,90	2,21	89,88	1,37	0,24	1,30	100,00	8542
Welfare transference	0,03	0,06	0,01	0,33	0,37	0,01	0,59	1,04	0,71	1,28	3,66	0,12	89,30	0,79	1,70	100,00	30703
Unclassifiable occ. code	0,30	1,03	0,29	1,21	6,08	1,74	1,89	3,53	3,62	6,43	7,04	0,06	2,49	55,11	9,19	100,00	23438
No occ. code	0,19	0,51	0,19	0,71	2,79	0,90	0,86	2,46	6,21	3,16	5,79	0,38	12,49	3,82	59,54	100,00	29419
Total	5076	14304	8727	25874	75404	32139	20857	59716	70999	86734	126738	10697	82784	32030	61265	713344	363897

Table 3. Mobility 2003-2004 in the birth cohorts 1955-1965. Outflow percentages

Table 3 shows mobility from 2003 to 2004 among men and women in the 1955-1965 cohorts. We see that the by far largest proportions are found on the diagonal: Between 80 and 90 percent of those classified in one of the classes end up in the same class based on the register of occupation in 2004. The second largest proportion tends to be the "missing" category of no occupational code. All in all these proportions would seem to strengthen the case for the reliability of the ORDC-scheme. This is especially so because those who move to other classes may be "real" movers, i.e. those who experience actual class mobility, as well as those who are movers due to methodological reasons – which probably is the case for those who move to a "missing" category.

Moreover, we might limit this category if we supplement classifications based on one year with information from other years: We see that the proportions stable between 2003 and 2004 are lower in our two "missing" categories of those with unclassifiable occupational codes or who lack an occupational code, and who do not fulfill the criteria to be placed in any of the class positions. Thus, many of those who are "missing" in one year can be registered on the basis of information from the following year.

If we consider the mobility among the class categories, the major impression is that the pattern of mobility is consistent with the idea that horizontal movements across the division of economic and cultural capital should be rather rare. We see, for example, that about 1 percent of those in the cultural elite in 2003 have moved to the professional elite in 2004, and 2 percent to the cultural upper-middle class, but hardly any of them have moved to the economic elite. Among those in the economic elite in 2003, 9 percent have moved downwards to the economic upper-middle-class in 2004, which is not so surprising as the boundary between these two classes is set by a specific income limit (NOK 1 million). Hardly any of them have moved to the other elite sectors or to the middle- or lower-level classes. The amount of mobility from the economic upper-middle class, in contrast, is about similar to economic elite and to the economic lower-middle classes.

That very few from the economic elite have moved all the way down to the Economic lower-middle class is of course not so surprising, given the conservative element of calculating income on a three-year basis (i.e. 2001-2003 for the year 2003, and 2002-2004, for the year 2004). The high stability of the primary sector occupations and the welfare transference category can also be seen in the light of this conservatism. To qualify for these

categories the average three-year income specific for the sector (primary sector income and welfare transfers) have to be higher than the average earnings in these years.

Table 4 and 5 show mobility patterns for men and women separately. The main impression is of similarity between the genders.

Our conclusion is that the mobility patterns showed in Table 3, 4 and 5 indicate that the methodological procedures behind the ORDC scheme must be considered reliable. Moreover, it would seem advantageous to combine classifications from more than one year, and thereby minimize the proportion of missing values, which is already is low when only based on one-year classification. Future studies will bear evidence of whether the OCDR-scheme will work as fruitful tool for class analysis.

ORDC 2003	ORDC 2004															Total	N
	CE	PE	EE	CUP	PUP	EUP	CLM	PLM	ELM	SW	UW	FFF	WT	UC	NO	Total	N
Cultural elite	89,43	1,01	0,14	1,56	1,34	0,98	0,14	0,25	0,62	0,18	0,25		0,11	1,01	2,97	100,00	2298
Professional elite	0,29	87,40	0,40	0,25	3,59	1,74	0,05	0,34	0,78	0,30	0,30	0,02	0,07	1,12	3,37	100,00	4151
	0,06	0,15	84,62	0,02	0,80	9,53		0,09	0,53	0,09	0,27	0,09	0,05	0,87	2,85	100,00	943
Cultural upper-middle	0,54	0,30	0,05	85,07	2,62	0,30	1,26	0,52	0,50	0,22	0,56		0,35	4,43	3,28	100,00	17114
Professional upper-middle	0,10	0,98	0,12	0,32	89,48	0,95	0,14	0,78	0,90	0,40	0,72	0,01	0,18	1,42	3,49	100,00	32908
Economic upper-middle	0,06	0,63	6,10	0,06	1,64	80,88	0,02	0,18	5,17	0,39	0,93	0,18	0,03	1,12	2,62	100,00	5280
Cultural lower-middle	0,12	0,31		6,04	2,33	0,12	76,99	1,17	0,98	1,96	2,58	0,15	0,89	2,02	4,33	100,00	18625
Professional lower-middle	0,05	0,27	0,07	0,25	5,21	0,64	0,21	82,00	1,60	1,21	2,23	0,01	0,64	0,90	4,71	100,00	47492
Economic lower-middle	0,04	0,18	0,12	0,15	1,00	6,76	0,10	0,37	80,88	1,22	2,57	0,80	0,90	0,86	4,05	100,00	27604
Skilled workers	0,01	0,08	0,03	0,06	0,55	0,31	0,11	0,42	0,94	86,77	2,60	0,05	0,66	2,17	5,24	100,00	38136
Unskilled and partly-skilled workers	0,00	0,07	0,04	0,07	0,48	0,51	0,10	0,39	1,83	1,89	86,20	0,09	1,41	1,21	5,71	100,00	62407
Farmers, foresters, fishermen		0,04	0,12	0,05	0,23	0,36	0,05	0,12	2,94	0,83	1,62	90,96	1,26	0,20	1,23	100,00	2265
Welfare transference	0,01	0,06	0,00	0,19	0,38	0,02	0,21	0,39	0,89	1,07	3,35	0,18	90,90	0,70	1,64	100,00	46592
Unclassifiable occ. Code	0,27	1,25	0,46	0,73	5,97	2,47	0,69	1,46	3,79	7,51	6,88	0,05	1,67	56,76	10,03	100,00	16929
No occ. Code	0,18	0,56	0,31	0,43	2,57	1,39	0,27	0,90	7,51	3,11	5,65	0,55	11,58	3,21	61,78	100,00	26703
Total	2765	10137	7600	8733	40346	26388	3204	13571	43397	47453	66569	8502	33740	18375	33117		363897

Table 4. Mobility 2003-2004 among men in the birth cohorts 1955-1965. Outflow percentages

ORDC 2003	ORDC 2004																
	CE	PE	EE	CUP	PUP	EUP	CLM	PLM	ELM	SW	UW	FFF	WT	UC	NO	Total	N
Cultural elite	86,34	1,31	0,04	2,57	1,87	0,26	0,44	0,57	0,48	0,22	0,35	0,04	0,22	1,26	4,05	100,00	2762
Professional elite	0,60	85,88	0,05	0,82	3,37	1,23	0,07	0,34	1,13	0,14	0,10		0,19	1,25	4,82	100,00	10108
Economic elite		0,32	84,84	0,42	0,85	8,70		0,32	0,74	0,21	0,11		0,53	0,42	2,55	100,00	6666
Cultural upper-middle	0,38	0,19	0,04	87,10	2,37	0,11	1,31	0,78	0,41	0,27	0,46		0,60	3,35	2,63	100,00	9143
Professional upper-middle	0,15	0,40	0,04	0,64	89,87	0,25	0,56	2,04	0,80	0,22	0,42	0,01	0,33	1,29	2,99	100,00	39213
Economic upper-middle	0,13	0,76	4,60	0,27	1,55	81,48	0,09	0,57	5,81	0,17	0,51	0,06	0,08	1,04	2,88	100,00	25377
Cultural lower-middle	0,04	0,03	0,01	3,51	1,33	0,04	80,57	0,84	0,43	2,24	3,82	0,04	1,42	1,85	3,83	100,00	3260
Professional lower-middle	0,04	0,04	0,02	0,56	3,88	0,16	0,32	85,62	1,43	0,96	1,14	0,03	1,05	1,01	3,74	100,00	14292
Economic lower-middle	0,07	0,14	0,08	0,26	1,16	3,02	0,24	1,70	84,48	0,45	2,20	0,30	1,08	0,82	4,02	100,00	44478
Skilled workers		0,03	0,01	0,12	0,43	0,04	0,45	1,26	0,30	87,89	2,29	0,02	1,54	0,88	4,73	100,00	48402
Unskilled and partly-skilled workers	0,01	0,03	0,00	0,13	0,31	0,08	0,67	0,97	0,84	3,60	84,07	0,05	2,87	0,92	5,44	100,00	68094
Farmers, foresters, fishermen			0,04	0,26	0,26	0,09	0,75	0,75	2,74	1,15	4,46	85,78	1,77	0,40	1,55	100,00	8542
Welfare transference	0,04	0,06	0,01	0,43	0,36	0,00	0,84	1,47	0,59	1,41	3,86	0,09	88,25	0,85	1,74	100,00	30703
Unclassifiable occ. code	0,33	0,72	0,06	1,87	6,22	0,73	3,54	6,39	3,38	4,93	7,26	0,07	3,64	52,83	8,02	100,00	23438
No occ. code	0,20	0,46	0,04	1,02	3,03	0,36	1,51	4,19	4,77	3,22	5,94	0,19	13,49	4,49	57,08	100,00	29419
Total	2311	4167	1127	17141	35058	5751	17653	46145	27602	39281	60169	2195	49044	13655	28148	349447	363897

Table 5. Mobility 2003-2004 among women in the birth cohorts 1955-1965. Outflow percentages

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