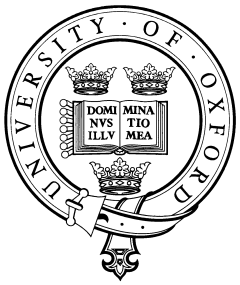

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An Occupational Status Scale for Russia

Alexey Bessudnov

Department of Sociology
University of Oxford
Manor Road
Oxford OX1 3UQ, UK
`www.sociology.ox.ac.uk/swp.html`

An Occupational Status Scale for Russia*

Alexey Bessudnov
D.Phil. candidate
Department of Sociology, Oxford University
alexey.bessudnov@sant.ox.ac.uk

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Abstract

In this paper I construct an occupational status scale for post-Soviet Russia using data from the ISSP for 1992–2006 and Goodman's RC type II model. The resulting scale is similar to the scales previously constructed for Western countries. The status scales for Russia and the United States were formally compared, with only minor differences found. In both countries non-manual occupations rank higher than manual, and professionals rank higher than managers. The scale for Russia is well correlated with education, subjective social class and self-placement on the scale of perceived social hierarchy, as well as with international occupational scales, in particular the ISEI. The scale can be used in further empirical research of social inequality in Russia.

1 Introduction

One does not need to be a social scientist to know that social status of occupations varies. Some occupations are more respected in society than others, and people who belong to high- and low-status occupations differ with respect to their lifestyles and cultural conventions. Since Weber and Veblen, social scientists interested in status inequalities have produced a variety of scales that aim to account for occupational status differences.

Most of this research has been focused on the US and Western European societies as data for those societies are usually of better quality and more easily accessible. Occupational status in other parts of the world has been studied only to a limited degree.

In this paper I construct and validate an occupational status scale for Russia. In the 1990s, Russia underwent a transition from socialist to a market-type economy. Socialist ideology denied status differences between non-manual and manual workers, at least at the level of official rhetorics.

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In the USSR, manual labour was glorified, and returns on education and earnings of professionals were lower than in Western industrial countries. Contrary to predictions of market transition theories, returns on education and earnings of professionals remained low in post-Soviet Russia (Gerber and Hout, 1998).

Did these facts have any effect on the occupational status order in Russia? Is it different compared to the West? Given the inertia from socialist past, we could expect skilled manual occupations to be ranked higher in Russia than in established market economies and professionals to be ranked lower. However, this is not the case. As shown in this paper, the occupational status order in Russia is very similar to that of Western industrial countries, with only minor differences found.

2 Previous research on occupational status

The major goal of this study is to construct an occupational status scale for Russia. There are three major approaches to constructing occupational scales: prestige scales, socio-economic indices and relational scales. First occupational scales were based on surveys of people who were asked to rank occupations according to their prestige. After that the ranks were aggregated and a scale was produced (see, for instance, Inkeles and Rossi, 1956; Treiman, 1977). In the 1960s, Duncan (1961) introduced an occupational socio-economic index (SEI), which was derived by regressing occupational prestige on occupational earnings and education. For the purpose of this paper, I do not review these two well-known approaches (for a review see Grusky and van Rompaey, 1992; Hauser and Warren, 1997), but focus on the third, relational approach.

The assumption of relational occupational scales is that people tend to form intimate associations (friendship and marriage) with those who are equal in terms of social status. Thus, using data on frequencies of intimate associations between occupations one can derive a scale that shows relative occupational distances. Contrary to SEI or prestige scales, relational scales do not depend on occupational income, education or subjective rankings of prestige, but only on the structure of "real-life" associations.

It was shown for prestige scales that they are very similar in all complex societies and fairly stable in different time periods (Treiman, 1977). This allowed Ganzeboom and Treiman (1996) to construct international versions of prestige and socio-economic scales that can be used in cross-national research (namely, SIOPS – Standard International Occupational Prestige Scale and ISEI – International Socio-Economic Index). Contrary to prestige scales and SEI, relational scales exist for individual countries (for a discussion of universal and specific scales see Lambert et al., 2005).

Starting from the 1960s, there has been a large number of studies that

used the relational approach to construct occupational scales (Laumann, 1966, 1973; Oldman and Illsley, 1966; Stewart et al., 1973; Feldman and El Houri, 1975). Those studies employed different types of data (on marriage, friendship or social mobility) as well as various statistical techniques, usually either multidimensional scaling, correspondence analysis or Goodman's RCII modelling. However, despite all technical differences, the approach has remained essentially the same.

In the recent years, two teams of researchers have produced relational scales for a number of countries. First, following initial research by Stewart et al. (1973, 1980) the Cambridge (or CAMSIS) scale has been upgraded for the UK and constructed for some other countries (Prandy and Lambert, 2003; Prandy and Jones, 2001). Second, as part of their project on cultural consumption in the UK Chan and Goldthorpe (2004, 2007) constructed a status scale that later was replicated at the international level (Chan, forthcoming). While statistical procedures used in both projects were similar, the interpretation of resulting scales differed substantially.

The authors of the CAMSIS scale treat the resulting scale as a measure of unidimensional generalized social advantage, both economic and cultural (Bottero and Prandy, 2003). They argue in favour of using the scale instead of a traditional class approach. On the contrary, Chan and Goldthorpe follow Weberian distinction between class and status and interpret their scale as a measure of social status in contrast to social class. According to them, social class is relevant for economic life-chances of individuals, while status matters for life-styles and cultural consumption.

Another difference between the scales is that CAMSIS scales have two separate sets of scores for men and women. On the contrary, in Chan and Goldthorpe's status scale scores are common for both sexes. While CAMSIS scales take several hundred occupations as units of analysis, status scales in most cases deal with more aggregated occupational groups.

A CAMSIS scale exists for Russia (Prandy, 2003). It was constructed with data from two waves of the Russian Longitudinal Monitoring Survey (RLMS), for 1992 and 1995. In an attempt to increase the sample size Prandy and his colleagues analyzed not only married couples, but all cross-gender couples found in the same household. However, the analytical sample still included only 4800 pairs, which is a relatively small sample for this type of analysis, especially if undertaken at the level of detailed occupational groups. Given these limitations, the CAMSIS scale for Russia is probably less reliable than for other countries.

I am not aware of other occupational scales of any type produced for post-Soviet Russia. Several studies of occupational prestige were conducted in the USSR in the 1960s (Yanowitch and Dodge, 1969). On the basis of this research, Treiman (1977, p.146) noted that in state socialist Eastern European countries, including the USSR, some manual occupations ranked higher and clerical occupations ranked lower than in industrial capitalist

states. However, it remains unclear if this difference is characteristic only of prestige scales and must be explained by the methodology employed for their construction or whether it is a genuine peculiarity of status order in socialist societies.

3 Data and methods

There are several requirements for data that can be applied to construct relational scales. First, the data must have detailed information on the occupations of respondents and their alters (either partners or friends). Second, the sample size must be large enough to allow for a meaningful statistical analysis of the contingency table of occupations of respondents and friends or partners.

The RLMS that has been used for constructing the CAMSIS scale for Russia satisfies the first condition, but does not satisfy the second. As the RLMS is a panel study, pooling samples across the waves would not considerably increase the sample size.

For an alternative to the RLMS in this study I use the Russian part of the International Social Survey Programme (ISSP)[1]. The ISSP is an annual cross-national survey that currently includes more than 40 countries. Russia has been taking part in the ISSP since 1992. A nationwide stratified sample has been used, and the average annual sample size is about 2000 individuals.

Occupations in the ISSP are coded according to the four-digit level of ISCO88, an international occupational classification developed by the ILO. Data on occupation are available for respondents and their spouses. To increase the sample size I pool the data for 15 years, from 1992 to 2006, and the final analytical sample size is 8016 couples.

To construct a scale from the data on occupations of spouses I use the statistical technique known as Goodman's RC type II model (Goodman, 1979; Powers and Xie, 2000). This is an extension to log-linear models that assumes that categories in both rows and columns are ordered, but their ordering is unknown to the analyst. The model assigns scores to rows and columns that describe the association between them in the best possible way. In its most general form the model can be formally expressed as

$$\log F_{ij} = \mu + \mu_i^R + \mu_j^C + \beta\phi_i\varphi_j \tag{1}$$

where F_{ij} is a frequency in the ij-cell of a contingency table, μ is a grand mean effect, μ_i^R and μ_j^C are marginal effects of rows and columns respectively, β is an association parameter and ϕ_i and φ_j are row and column scores (that we are mainly interested in).

[1]The RLMS is used for validation purposes in section 4.6.

To estimate model 1 normalization constraints have been set: $\Sigma\phi_i = 0, \Sigma\varphi_j = 0, \sigma_\phi = 1, \sigma_\varphi = 1$. All RCII models in this paper were estimated in ℓEM (Vermunt, 1997).

The input for an RCII model in our case is a contingency table where occupations of men are row categories and occupations of women are column categories. In all subsequent analysis, the categories for occupations of men and women are the same and input tables are square. The frequency in the ij-cell (F_{ij}) represents the number of married couples, where a husband is in the occupational group i and a wife is in the occupational group j.

4 Results

4.1 Selection of the model

Model 1 can be modified in several ways. First, people in the same occupational group may have higher probability of marrying within the group than predicted by model 1. In social mobility research, the main diagonal of mobility tables usually requires special treatment. In our case we can model this effect as well:

$$\log F_{ij} = \mu + \mu_i^R + \mu_j^C + \alpha_{ij}\delta_{ij} + \beta\phi_i\varphi_j \tag{2}$$

where $\delta_{ij} = 1$ if $i = j$ and δ_{ij}=0 if $i \neq j$ and α_{ij} is a paramater for the effect of the main diagonal.

Models 1 and 2 assume two separate sets of scores for rows and columns, in other words, different status scores for men and women in the same occupation. As we have a square table with the same occupational units in rows and columns, we can constrain scores for men and women to be equal. That would yield model 3 (without the term for the diagonal effect) and model 4 (with the term for the diagonal effect).

$$\log F_{ij} = \mu + \mu_i^R + \mu_j^C + \beta\phi_i\phi_j \tag{3}$$

$$\log F_{ij} = \mu + \mu_i^R + \mu_j^C + \alpha_{ij}\delta_{ij} + \beta\phi_i\phi_j \tag{4}$$

In all these models we assume that the solution is unidimensional. However, Model 4 can be extended to a RC(M) model that does not make this assumption.

$$\log F_{ij} = \mu + \mu_i^R + \mu_j^C + +\alpha_{ij}\delta_{ij} + \sum_m \beta_m\phi_{im}\phi_{jm} \tag{5}$$

Substantively model 5 implies that the association between occupations of husbands and wives can be explained by several uncorrelated factors (dimensions).

Table 1: Model fit for models 1-5

No	dim[a]	diag[b]	equal[c]	*df*	L^2	*BIC*	Δ^d
1	1	No	No	1024	1811	-7394	0.1445
2	1	Yes	No	990	1181	-7719	0.1073
3	1	No	Yes	1056	1839	-7654	0.1456
4	1	Yes	Yes	1022	1220	-7967	0.1094
5	2	Yes	Yes	990	1137	-7762	0.1032

[a] Number of dimensions.

[b] Effect of the main diagonal.

[c] Row and column scores equal.

[d] Dissimilarity index (proportion of incorrectly classified cases).

Which model should we choose? I have fitted all the models for a 34x34 contingency table of occupations of husbands and wives. (See section 4.2 for a discussion of occupational classifications). The results are presented in Table 1.

To choose the best model I use the Bayesian Information Criterion (BIC) (Raftery, 1995). A smaller BIC indicates better model fit. Table 1 shows that the models with the diagonal effect (2 and 4) fit the data better than the models without it (1 and 3) and the models with equal scores for men and women (3 and 4) should be preferred to the models with different scores (1 and 2). The one-dimensional solution (4) is statistically better than two-dimensional (5). Therefore, model 4 should be preferred to others.

4.2 Construction of occupational groups

An important issue for occupational scales is level of precision in construction of occupational groups. A limited sample size in most cases does not allow to produce precise status scores for all possible occupations. First, some occupations are rare and may not be well represented in the sample. We simply do not have enough cases to estimate meaningful status scores for them. Second, including too many occupations would lead to a very sparse contingency table. For instance, if we estimate the model for 500 occupations the contingency table would have 25000 cells. Given the sample of 8016 couples the average number of cases per cell would be less than one.

Therefore, some aggregation of occupations is inevitable. The degree of aggregation and the number of occupational categories used in the analysis may vary.

In this paper, I follow an empirical approach to selecting the degree of precision of occupational classification. In the original ISSP data set, occupations are coded at the four-digit ISCO88 level (approx. 390 unit

groups). I aggregated the four-digit unit groups in three different ways: (a) into 133 groups (four-digit level, some units merged within the same three-digit group), (b) into 86 groups (three-digit level, some units merged within the same two-digit group, some bigger units split at the four-digit level), (c) into 34 groups (two-digit level, some units split at the three-digit level[2]).

Separate status scales were estimated for each occupational classification. To choose the classification that fits the data better I apply the following validation procedure.

First, we would expect occupational status to be well correlated with education. Chan (forthcoming) showed that correlation between status scales and education is strong in the countries that he and his colleagues studied.

Second, the ISSP contains two questions on subjective assessment of a position in the social hierarchy that are related to the concept of social status. People were asked to attribute themselves to one of the following social classes or strata[3]: 1. Lower, 2. Working, 3. Lower middle, 4. Middle, 5. Upper middle, 6. Upper. This question is available in the Russian questionnaire in 1992-2001. In 2003, 2005 and 2006 another question was asked: "In our society there are people who occupy high social position, and there are people who occupy low social position. According to your opinion, which place do you occupy on this scale at the moment?", with possible answers ranging from 1 ("Highest") to 10 ("Lowest").[4]

As all three occupational scales measured with different degree of precision are measurements of the same concept, we expect that the "best" scale would show higher correlations with education, subjective social class and self-placement on the social hierarchy scale. Lower correlations would indicate more measurement noise.

Table 2 shows correlations between the scales based on three various occupational classifications. Table 3 shows correlations between the scales and validation variables.

The scale based on 34 occupational unit groups is better correlated with education and subjective social class than the other two scales (both at the individual and group levels). Self-placement in the social hierarchy is the only variable, with which the scale based on 86 groups is better correlated. However, correlation between status and self-placement variables is much lower than between status, education and subjective social class for all three versions of the status scale. In fact, as shown in section 4.4, the self-placement variable is affected by occupational earnings. If we compare

[2]In two cases I split the groups at the four-digit level, separating medical doctors from other health and life science professionals and economists from other social scientists. "Economist" in Russia is an occupational label usually used for middle-level business professionals.

[3]The exact wording of the question varied for different years.

[4]For convenience of the analysis the scale has been reversed.

Table 2: Pearson's correlations between scales with 34, 86 and 133 occupational units[a]

	34 units	86 units	133 units
34 units	1		
86 units	0.9374	1	
133 units	0.8612	0.9110	1

[a] At the four-digit ISCO88 level.

Table 3: Pearson's correlations between occupational scales and validation variables

	individual level			group level[a]		
	educ.[b]	subj. class[c]	self-plac.[d]	educ.[e]	subj. class[f]	self-plac.[g]
34 units	0.5630	0.4467	0.1860	0.9100	0.9335	0.6069
86 units	0.5518	0.4387	0.1873	0.8682	0.8901	0.6517
133 units	0.5394	0.4167	0.1813	0.8324	0.8311	0.6357

[a] Mean status at 86 unit level.

[b] Number of years spent in educational institutions.

[c] 6-point scale, from "Lower" to "Higher", treated as continuous.

[d] Self-placement on the 10-point scale of perceived social position, from "Lowest" to "Highest".

[e] Proportion with higher education.

[f] Proportion of middle class and higher.

[g] Proportion with self-placement > 4.

Table 4: Status scales with equal and different scores for men and women correlated with the validation variables[a]

	individual level			group level		
	educ.	subj. class	self-plac.	educ.	subj. class	self-plac.
equal scores	0.5630	0.4467	0.1860	0.9100	0.9335	0.6069
different scores	0.5508	0.4364	0.1816	0.9005	0.9283	0.5958

[a] Model with 34 occupational groups. All variables measured as in Table 3.

status scales with education and subjective class, the two variables that are most closely connected with status, the scale based on 34 occupational groups should be preferred.

4.3 Status scales for men and women

In section 4.1 I showed that the model with separate sets of status scores for men and women provides a worse fit to the data than the model with equal scores. The substantive analysis confirms this result. Although the difference in correlations with the validation variables between models with equal and different scores is very small, in all cases correlations are higher for the model with equal scores (see Table 4).

4.4 Properties of the status scale

The final status scale is presented in Table 9 in Appendix. In their study of the status order in the UK Chan and Goldthorpe (2004) showed two characteristics of the status scale. First, non-manual occupations rank higher than manual, while occupations of mixed non-manual/manual character are in the middle of the status hierarchy. Second, within the non-manual part of the status scale professionals rank higher than managers.

An examination of the Russian scale confirms both results. There is a clear tendency for non-manual occupations to rank higher than manual.[5] Professionals occupy first five positions on the scale, followed by general and corporate managers.

How reliable are the status scores? The relational scales have been traditionally produced without estimates of uncertainty for occupational scores. In fact, neither ℓEM nor other statistical software provide confidence intervals for association parameters in RCII models. However, we can test the hypothesis of two (or more) occupational scores being equal if we constrain

[5] Obviously, the statistical technique that we use does not indicate which end of the scale is "higher" or "lower". However, it is reasonable to assume that university professors have higher social status than agricultural labourers.

Table 5: Likelihood-ratio tests of equality of status scores

Model	$-2\log L^a$	LR^b	p^c
Full model	94689.54		
HET and LEG equal	94690.48	0.94	0.33
HET and BPR equal	94706.14	16.60	0.00
MSE and CMN equal	94689.54	0.00	1.00
SAL and PSW equal	94689.80	0.26	0.61
SAW and ALB equal	94692.16	2.62	0.11
CSC and SAW equal	94699.90	10.36	0.00
TEA and CSC equal	94701.22	11.68	0.00

[a] $-2*$log-likelihood of the model.

[b] $LR = -2\log L_{reduced} - (-2\log L_{full})$.

[c] Probability that full and reduced models equally well fit the data.

them and then conduct a likelihood-ratio test comparing full and reduced models.[6]

For the 34x34 table, testing all possible pairs of occupational groups for equality of scores would involve conducting 561 LR tests. I am not concerned with this kind of analysis in this paper. However, I demonstrate this technique by testing the equality of scores for several selected occupational pairs. The results are shown in Table 5.

As can be seen from the table, differences in status scores between some occupational groups should be treated with caution. When occupational groups are close on the status scale, the difference in status scores is not statistically significant, especially for groups with relatively small number of observations. For instance, we cannot reject the hypothesis of equality of status scores for university lecturers and legal professionals (HET and LEG), general and corporate managers (MSE and CMN), salespersons and personal and protective services workers (SAL and PSW), skilled agricultural workers and agricultural labourers (SAW and ALB). Only when the distance between two groups on the scale is large enough can we be confident that it is significant. This is the case with university lecturers and business professionals (HET and BPR), customer clerks and skilled agricultural workers (CSC and SAW), and secondary school teachers and customer clerks (TEA and CSC). Another reason to be careful with interpretation of status differences between the groups is that some of them are rather heterogeneous. While we can be quite confident that in general the scale

[6] I thank Jeroen Vermunt for this suggestion.

does indeed show the distribution of occupational status, direct comparisons between two groups, especially if they are close on the status scale, can be misleading. This is also an argument against using very detailed occupational classifications with limited samples.

In section 4.2 I have shown that status is well correlated with education, subjective social class and self-placement on the 10-point scale of social hierarchy. Now I explore these relationships in more details.

Figure 1 shows a scatter plot of occupational status vs. occupational education. As can be seen from the graph, the relation between status and education is very strong (r=0.94).[7]

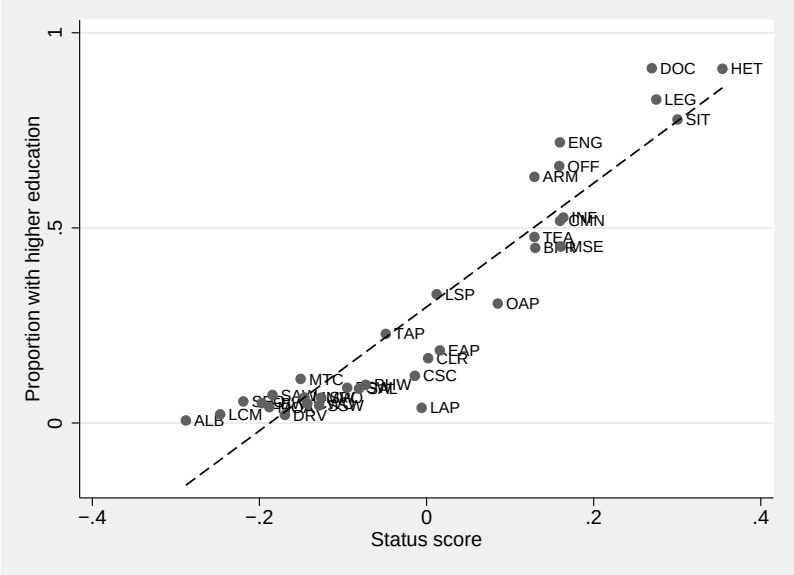

Figure 1: Occupational status vs. proportion with higher education (r=0.94)

To explore the relationship between status and occupational earnings I produce two separate graphs for men and women to account for effects of occupational segregation and gender gap in earnings (Figures 2 and 3). In both cases status is weaker related to earnings compared to education, though for women the relation between status and earnings is noticeably stronger than for men. Some occupational groups with higher proportion of well-educated people (university lecturers, doctors) have high status scores despite relatively low occupational earnings.[8] On the other hand, some

[7] In other countries studied in Chan (forthcoming) correlations between occupational status and education at the group level are also very high, ranging from 0.78 (the UK) to 0.96 (the US).

[8] While relatively low earnings of university lecturers would not be surprising in other countries, low earnings of medical doctors are clearly specific for Russia, at least compared with the US and Western Europe. The graphs also suggest interesting gender differences in occupational earnings. Male doctors are far worse paid than male legal and business

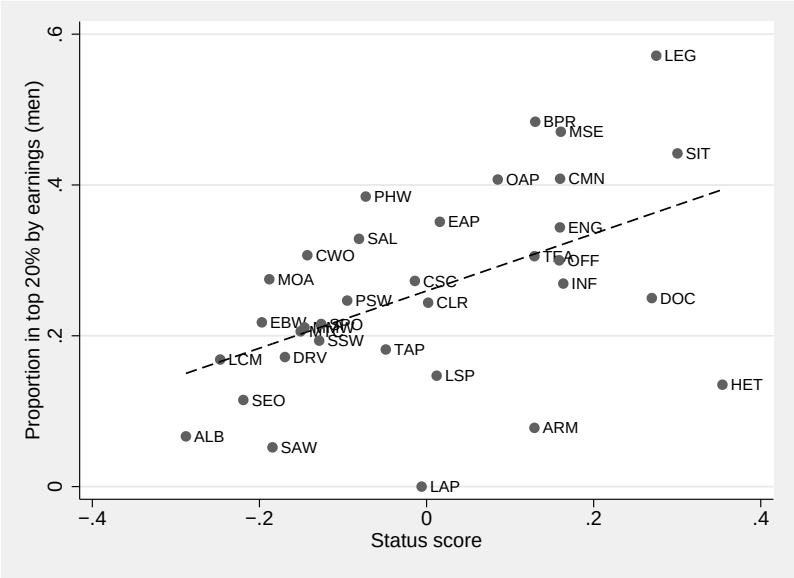

Figure 2: Occupational status vs. occupational earnings (men, r=0.50)

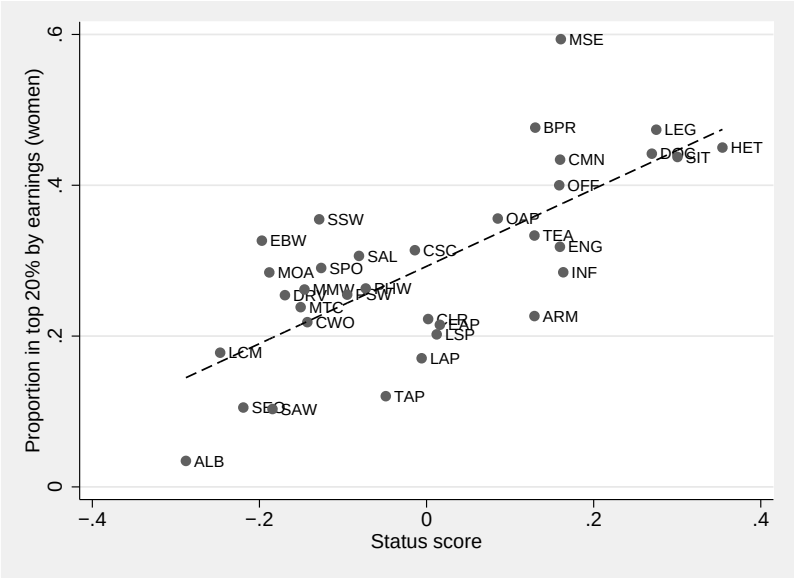

Figure 3: Occupational status vs. occupational earnings (women, r=0.72)

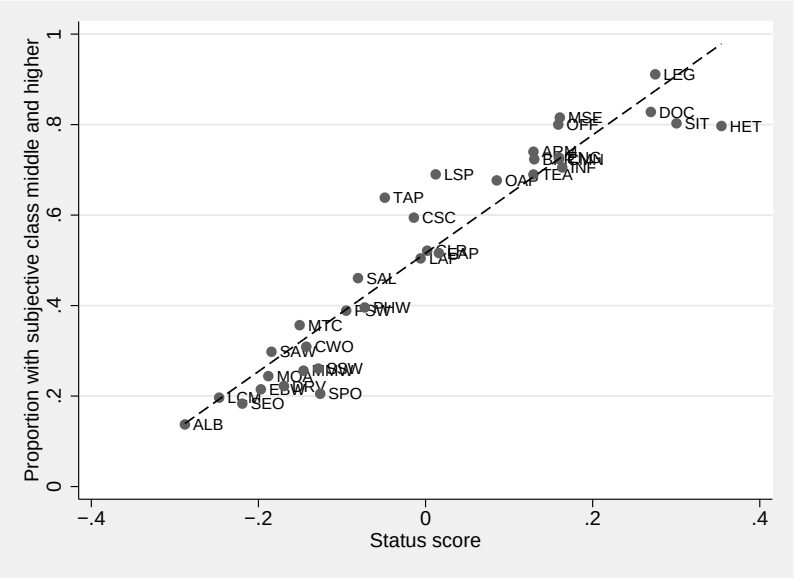

Figure 4: Occupational status vs. subjective social class (r=0.95)

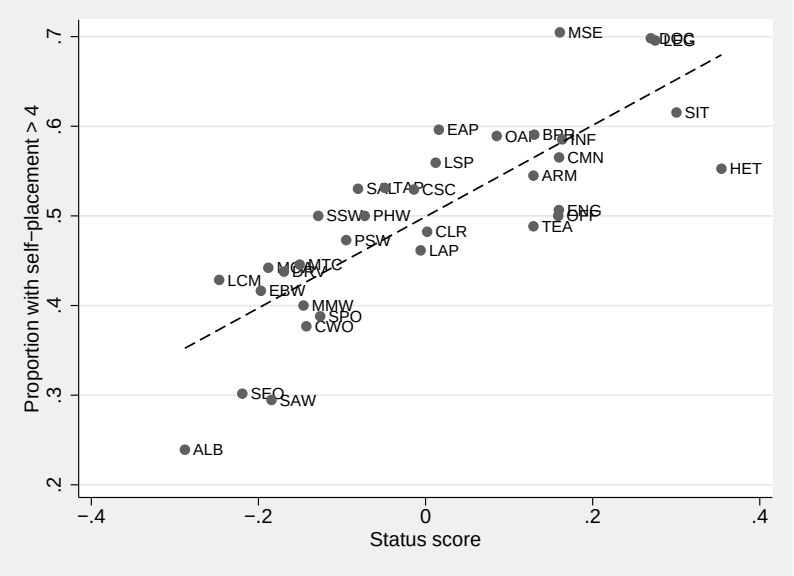

Figure 5: Occupational status vs. self-placement on the 10-point scale (r=0.81)

relatively well-paid manual occupations (for example, male craft workers or female construction workers) are low on the status scale.

In this paper I do not aim to explore in detail the relationship between occupational status and earnings beyond a simple bivariate analysis. Occupational income inequality in Russia is a complex phenomenon that is driven not only by gender occupational segregation, but to a large extent by unequal distribution of occupations across private and state sectors of economy as well as regional inequalities. However, even a simple bivariate analysis suggests that assortative mating in Russia is primarily driven by educational and cultural rather than material resources (cf. Kalmijn, 1994). In fact, correlation between occupational status and proportion of people with higher education in Russia (as well as in other countries) is so high that it would be reasonable to suggest that educational differences are the main driving force for occupational assortative mating.

A question arises as to why not replace the relational status scale with a much simpler scale constructed on the basis of occupational education (for instance, proportion of people with college degree). Indeed, such a scale would be a useful proxy for occupational status. However, for several reasons, it would not be a perfect approximation. First, there are occupational groups that are quite different in terms of education (as defined by proportion of people with university degree), but close on the status scale (for example, engineers and general managers). Second, it is hard to find a variable that summarizes occupational education well. While occupational groups at the top half of the status scale are clearly different with regard to proportion of people with university degree, low status occupational groups do not substantially differ on this variable, probably because vocational education is more relevant for them than higher education. Using mean number of years in education does not solve the problem as it is less reliable and fails to distinguish between different educational tracks.

Let us now compare social status with other two validation variables, subjective social class and self-placement on the 10-point scale of perceived social hierarchy (Figures 4 and 5). As can be seen from Figure 4, status and subjective social class are very well correlated (r=0.95). High correlations of status, education and subjective class confirm validity of the status scale.

On the other hand, correlation between status and self-placement variable is more modest (r=0.81). If we regress both subjective class and self-placement variables on status and occupational earnings, earnings will only be significant for self-placement. This suggests that earnings mainly affect how individuals place themselves on the numerical social hierarchy scale,

professionals, while for women the earnings of all those groups are closer to each other. This difference can probably be explained by the fact that most doctors work in public sector where employers have much less discretion in setting individual contracts and therefore fewer opportunities for gender-based discrimination.

but are less important for their subjective social class.[9]

4.5 Status scales in Russia and the United States

A prima facie comparison of the Russian scale and status scales previously produced for other countries (Chan, forthcoming) does not give any evidence of major differences between Russia and Western countries. A more formal comparison is impossible, as occupational classifications used for construction of national scales are different.

To overcome this problem I construct a scale for the US using exactly the same analytic procedures as for the Russian scale. The data come from the pooled General Social Survey data set for 1988-2008. The GSS is a member of the ISSP project, and data collections procedures and sample sizes are similar in the GSS and Russian part of the ISSP.[10] After pooling the data for 1988-2008 the analytic sample consists of 14037 couples. Occupational groups have been constructed in the same way as in the Russian case. The only difference is that group SSW ("semi-skilled workers not elesewhere classified") is not present in the US sample, as the ISCO88 code for it (84) is not part of standard ISCO88 and was used only in the Russian part of the ISSP. Therefore, the scale for the US includes 33 occupational groups.[11]

The resulting scale for the US is very similar to the Russian scale ($r = 0.91$).[12] Figure 6 shows the scatter plot of US vs. Russian status scores.

Differences between the scales for two countries are minor. Medical doctors, life science professionals, teaching associate professionals, salespersons rank higher in the US than in Russia. Science and IT professionals, managers of small enterprises, people in military forces and stationary plant operators rank higher in Russia. Although differences in the scores of individual occupational groups are to be interpreted with caution (see Section 4.4), it is still possible to speculate on the reasons behind some of them. For instance, the higher rank of science and IT professionals in Russia goes in line with research of occupational prestige in the USSR in the 1960s (Yanowitch and Dodge, 1969), when scientists were on the top of the occupational prestige hierarchy. Many managers of small enterprises in Russia are self-employed entrepreneurs who are economically a privileged social group in post-Soviet Russia (Gerber, 2001). However, with the present data any definite conclusions about differences in positions of the occupational groups in the US and

[9] However, if analyzed at the individual level, earnings are correlated with subjective class even when we control for occupational status.

[10] Unfortunately, it is not possible to construct a scale using the British analogue of the GSS, the British Social Attitudes Survey, as there are too many missing values for occupations of partners there.

[11] Occupation is coded in the GSS according to the US80 SOC. It was converted to ISCO88 using the tool by Ganzeboom and Treiman (2005).

[12] The scale for the US is not reported in this paper, but is available from the author on request.

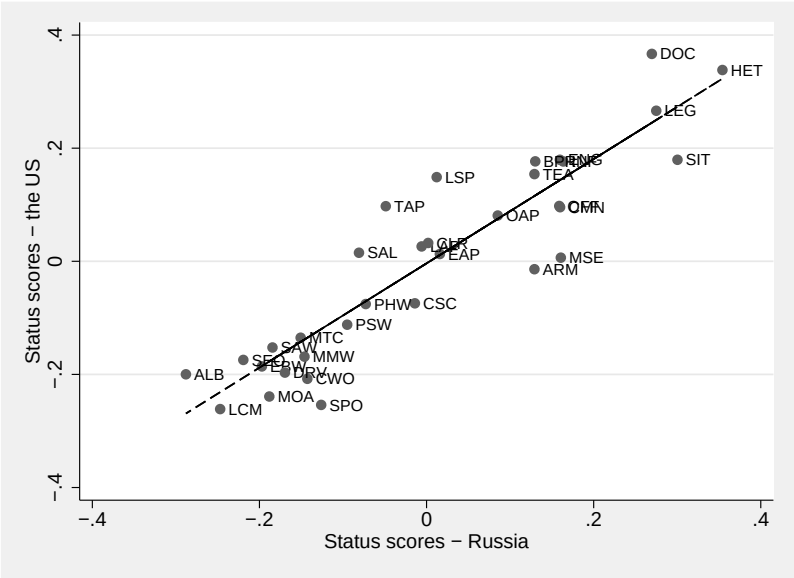

Figure 6: Status score in Russia and the US (r=0.91)

Russia would be hazardous.

4.6 The social status scale and other occupational scales

In this section I compare the status scale with three other scales well-known in stratification research and described in section 2. The SIOPS is an international scale of occupational prestige, the ISEI is an international socio-economic scale and the CAMSIS-Russia is a relational scale constructed using the data from the RLMS.

Table 6 shows correlations between four scales at the four-digit ISCO88 level. Table 7 demonstrates how the scales are related to our validation variables for ISSP data. As the status scale was constructed using the ISSP data, it is cross-checked against the data from Round 15 of the RLMS (2006) (Table 8).

For ISSP data the status scale and ISEI outperform the SIOPS and CAMSIS. The differences between the status scale ans ISEI are very small, although the status scale is better correlated with subjective social class. However, for RLMS data both SIOPS and ISEI show higher correlations with validation variables than the status scale, although the difference is again quite small.

Figures 7 and 8 examine substantive differences between the status scale and ISEI, at the four-digit ISCO88 level and at the level of 34 occupational status groups. Figure 7 shows that there is some heterogeneity within status groups with respect to SEI. Some occupations that are combined in the same status group are quite different on the ISEI scale. For in-

Table 6: Pearson's correlation for the status scale, ISEI, SIOPS and CAMSIS-Russia[a]

	status	ISEI	SIOPS	CAMSIS (male)	CAMSIS (female)
status	1				
ISEI	0.8977	1			
SIOPS	0.8276	0.8793	1		
CAMSIS (male)	0.8229	0.7851	0.7409	1	
CAMSIS (female)	0.7749	0.7349	0.6536	0.7040	1

[a] At the four-digit ISCO88 level.

Table 7: Occupational scales correlated with validation variables (ISSP data)[a]

	individual level			group level[b]		
	educ.	subj. class	self-plac.	educ.	subj. class	self-plac.
status	0.5652	0.4507	0.1881	0.9084	0.9373	0.6083
ISEI	0.5622	0.4336	0.1838	0.9184	0.8950	0.6179
SIOPS	0.5408	0.3984	0.1668	0.8633	0.8420	0.5275
CAMSIS	0.5111	0.3970	0.1625	0.8697	0.8422	0.5540

[a] All variables measured as in Table 3.

[b] At the 86 group level.

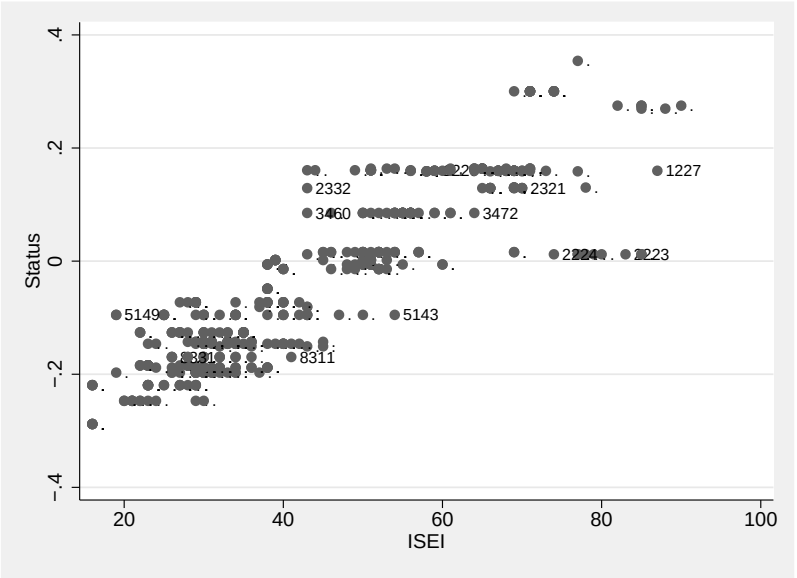

Figure 7: Status scale vs. ISEI (four-digit ISCO88 level)

Table 8: Occupational scales correlated with validation variables (RLMS Round 15)

	individual level		group level[a]		
	rights[b]	respect[c]	educ.[d]	rights[e]	respect[e]
status	0.1790	0.1272	0.8355	0.5754	0.5187
ISEI	0.1895	0.1225	0.8833	0.6540	0.5186
SIOPS	0.1782	0.1322	0.8431	0.6270	0.5591
CAMSIS	0.1691	0.1037	0.8287	0.5549	0.3155

[a] At the 86 group level.

[b] "Please imagine a nine-step ladder where on the bottom, a first step, stand people who are completely without rights, and on the highest step, the ninth, stand those who have a lot of power. On which of the nine steps are you personally standing today?"

[c] "And now another nine-step ladder where on the lowest step stand people who are absolutely not respected, and on the highest step stand those who are very respected. On which of the nine steps are you personally standing today?"

[d] Proportion with higher education.

[e] Mean values in occupational groups.

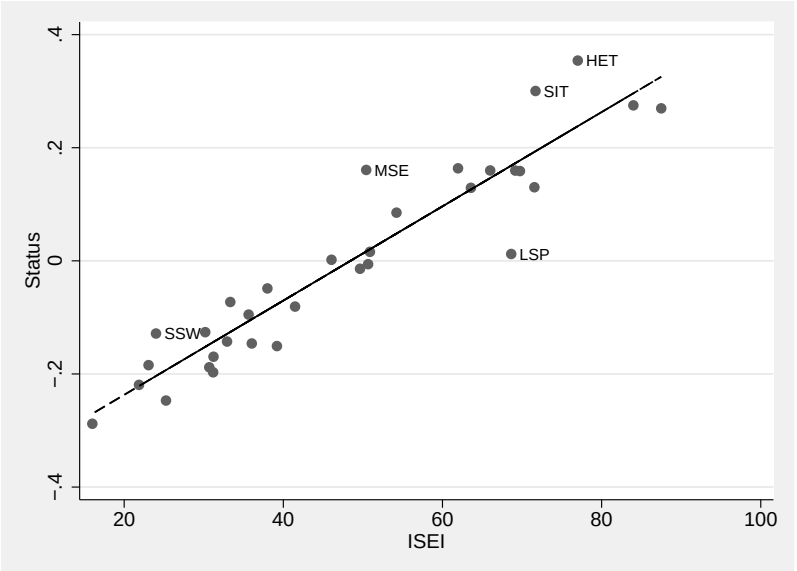

Figure 8: Status scale vs. ISEI (34 groups, r=0.9)

stance, this is the case for department managers in business services (ISCO code 1227) and department managers in transport, storage and communication (1226), secondary education teachers (2321) and pre-primary teachers (2332), locomotive-engine drivers (8311) and motorized farm-plant operators (8331). However, as it was shown in section 4.2, when we construct a more detailed occupational scale with a limited sample, the resulting scale is less reliable.

When the status scale is compared with the ISEI at the level of 34 occupational groups, the correlation between the scales is very high (r=0.9). There are only minor discrepancies. University lecturers (HET) and science and IT professionals (SIT) rank higher on the status scale than on the ISEI. Same is the case for general managers of small enterprises (MSE), a group that in post-Soviet Russia probably includes many self-employed entrepreneurs who started new businesses after the collapse of the state socialist system. On the countrary, life science and health professionals (LSP, a group consisting mainly of veterinarians and pharmacists) are lower on the status scale than expected from their ISEI. This can probably be explained by the fact that many people from this group live in the countryside.

Overall, despite very different approaches and data sets used to construct both scales, the status scale for Russia and ISEI are surprisingly close to each other. This suggests that ISEI may serve as a proxy for status scale in Russia. It is unlikely that the actual differences between these two scales will lead to different conclusions if both scales are used as measures of occupational status in empirical research.

5 Discussion

The analysis shows that the occupational status scale for Russia is similar to the scales previously constructed for Western industrial countries. If we compare the Russian scale with the scale for the US, only idiosyncratic differences can be found. This finding is trivial and surprising at the same time. After Treiman's (1977) influential book that showed similarity of occupational prestige in different parts of the world, it is hard to expect striking differences in occupational status between Russia and Western countries. However, Treiman did point out some differences in occupational prestige in capitalist and socialist countries, including the USSR. In the latter manual occupations ranked higher. Both in the USSR and post-Soviet Russia the economic position of some occupational groups (for instance, professionals) relative to other groups has been very different from Western countries. Russian professionals, especially employed in the public sector, rarely enjoy the level of earnings and economic stability of their Western counterparts. Besides, there is a perceived common feeling both in Western countries and Russia that Russia is a very specific society with a social structure different

from Western countries.

This paper shows that this is not the case, at least when it comes to occupational status. This can be explained by the fact that occupational status is very likely to be driven by occupational education rather than income. Educational requirements for different occupations are similar in different countries, hence the similarity in occupational status orders.

There are several limitations to the findings presented in this paper. Due to a relatively small sample size, I had to aggregate occupations into bigger occupational groups. Therefore, the status scale can hardly say anything about social status of several occupations that are not well represented in the sample (e.g. senior officials[13], financial and management consultants, managers of large international firms). Special surveys are necessary to estimate social status for those occupations, and qualitative research strategy would probably be more suitable in this case.

As mentioned earlier, to increase the sample size I pooled the ISSP data sets for 15 years. Due to the nature of the existing data the strategy chosen has certain flaws. The status order in Russia may have changed in the last 15 years that were marked by rapid economic and political developments. A comparison of status orders in the late USSR and post-Soviet Russia would be of clear sociological interest; however, we lack data to conduct such a test.[14] The labour force survey conducted by the Russian Federal Statistical Office[15] has a sample size that is big enough to estimate occupational status without aggregating occupations into bigger groups and allows to compare status scales for different years. Unfortunately, at the moment neither these data nor micro-data from the Russian census are available for public use.

I checked validity of the status scale by correlating it with occupational education, subjective social class and self-placement on the scale of perceived social hierarchy. The scale is well correlated with the validation variables, especially with education ($r = 0.94$) and subjective social class ($r = 0.95$). It is also well correlated with other occupational scales and in particular with the ISEI. This is surprising given conceptual differences between socio-economic and relational approaches to construction of occupational scales. Furthermore, correlation of the ISEI and status scale in Russia ($r = 0.9$) is higher than in the UK ($r = 0.81$). Similarity between the Russian status scale and ISEI can probably be explained by the role of occupational education in the construction of both scales. The ISEI is directly based on occupational earnings and education, with education having a larger weight

[13] "Senior officials" occupy the modest ninth position on the scale; however, they are more likely to be middle-level government officers, mainly in Russian regions, rather than top-level federal officials.

[14] I conducted a reliability test and compared status scores for two halves of the sample, 1992-99 and 2000-06. Two scales correlate with $r = 0.91$; no substantially interpretable differences were found.

[15] ONPZ - *Obsledovanie naseleniya po problemam zanyatosti*.

than earnings (Ganzeboom and Treiman, 1996, p.212). The status scale is highly correlated with occupational education, which plays an important role in occupational assortative mating (Kalmijn, 1994).

Overall, the occupational status scale that has been constructed for Russia displays good validity and reliability and can be used in further empirical research.

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Table 9: Occupational status scale for Russia

	Occupational group	Abbr.	Typical occupations	ISCO88	n men	n women	% of women	Status score
1	Higher education teaching professionals	HET	University lecturers	231	51	63	55	0.3541
2	Science and IT professionals	SIT	Computer programmers, physicists, chemists	211, 212, 213	54	67	55	0.3003
3	Legal professionals	LEG	Lawyers	242	35	43	55	0.2749
4	Medical doctors	DOC	Medical doctors	2221, 2222	80	132	62	0.2696
5	Professionals in information services and arts	INF	Librarians, archivists, journalists	243, 244, 245, 246 (exc.2441)	61	172	74	0.1636
6	Managers of small enterprises	MSE	General managers	13	211	104	33	0.1607
7	Corporate managers	CMN	Directors, department managers	12	283	146	34	0.1598
8	Engineers and architects	ENG	Engineers, architects	214	542	368	40	0.1596
9	Senior officials	OFF	Senior officials	11	33	20	38	0.1588
10	Business professionals	BPR	Accountants, economists	241, 2441	94	550	85	0.1301
11	Military	ARM	Armed forces	01	101	20	17	0.1291
	Teaching professionals (primary and secondary)	TEA	School teachers	23 (exc.231)	175	769	81	0.1291
13	Other associate professionals	OAP	Bookkeepers, admin. secretaries, buyers, etc.	34	350	436	55	0.0852
14	Engineering associate professionals	EAP	Quality inspectors, technicians, etc.	31	215	282	57	0.0159
15	Other life science and health professionals	LSP	Agronomists, pharmacists, veterinarians	22 (exc. 2221 and 2222)	53	129	71	0.0121
16	Office clerks	CLR	Secretaries, library clerks, typists	41 (exc.413)	55	333	86	0.0019
17	Life science and health associate professionals	LAP	Medical assistants	32	19	435	96	-0.0059

Table 9: Occupational status scale for Russia (continued)

	Occupational group	Abbr.	Typical occupations	ISCO88	n men	n women	% of women	Status score
18	Customer services clerks	CSC	Cashiers, counter clerks, receptionists	42	16	161	91	-0.0140
19	Teaching associate professionals	TAP	Pre-primary teachers	33	21	180	90	-0.0488
20	Precision and handicraft workers	PHW	Instrument and glass makers, engravers	73	41	35	46	-0.0728
21	Salespersons	SAL	Shop salespersons	52	99	635	87	-0.0809
22	Personal and protestive services workers	PSW	Cooks, child-care workers, police officers	51	377	506	57	-0.095
23	Stationary plant operators	SPO	Weaving-machine operators, petroleum-plant operators	81	151	114	43	-0.1261
24	Semi-skilled workers nec.	SSW	Semi-skilled workers not elsewhere classified	84	43	34	44	-0.1285
25	Craft and related trades workers	CWO	Wood treaters, weavers, sewers	70, 74	103	309	75	-0.1427
26	Metal and machinery workers	MMW	Flamecutters, tool-makers, motor-vehicle mechanics	72, 75	1524	302	17	-0.1461
27	Material-recording and transport clerks	MTC	Stock, production and transport clerks	413	47	192	80	-0.1507
28	Drivers and mobile plant operators	DRV	Car, bus and lorry drivers, motorised farm operators	83	1562	130	8	-0.1695
29	Skilled agricultural workers	SAW	Dairy and poultry producers, forestry workers	61	160	261	62	-0.1844
30	Machine operators and assemblers	MOA	Mechanical assemblers, sewing-machine operators	82	123	149	55	-0.1882
31	Extraction and building trades workers	EBW	Carpenters, plumbers, building electricians	71	808	162	17	-0.1971
32	Sales and services elementary occupations	SEO	Cleaners, doorkeepers, building caretakers	91	236	551	70	-0.2193
33	Labourers in construction, transport and manufacturing	LCM	Freight-handlers, hand packers	93	226	164	42	-0.2470
34	Agricultural labourers	ALB	Farm-hands and labourers	92	67	62	48	-0.2880