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DP17346

The Mismeasure of Man: Why Intergenerational Occupational Mobility is Much Lower than Conventionally Measured, England, 1800-2021

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May 29, 2022

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Using a new database of 1.7 m marriages in England 1837-1939, and a genealogy of 414,000 people in England 1700-2021, we estimate two independent new occupational status indices for England 1800-1939. These new indices show that there was much less social mobility 1800-1939 than previous indices, such as HISCAM, imply. The performance of these two new indices, however, illustrates a general problem with comparing social mobility across time and place using status indices. All such indices embody unknown and varying degrees of error. The more error, the more apparent mobility. So in the paper we develop a way of measuring intergenerational occupational status mobility which eliminates all measurement error. This suggests that occupational status persistence in England 1800-2021 was always much greater than conventionally measured, and was largely unchanged over time.

1 Introduction

There has long been interest in sociology and economics in measuring intergenerational social mobility rates, and in comparing these rates across time, and across societies. This has led to the construction of such social status indices as CAMSIS and HISCAM.[1] Using such indices, researchers have compared social mobility rates across countries (Lambert et al. (2013); Long and Ferrie (2018)), and across time within a country (Prandy and Bottero (2000); Song et al. (2020)). These studies suggest two things. The first is that there is typically substantial intergenerational occupational status mobility. The typical correlation of occupational status between father and son is less than 0.5. The second is that there are significant variations in occupational status mobility across time and place.

A recent study, for example, of intergenerational occupational status correlations for the USA for men born 1830-1980 found the results shown in figure 1.1 (Song et al. (2020)). This suggests rapid social mobility all the way from those born 1830 to 1980, with intergenerational correlations almost always less than 0.35. But also we see a clear decline in social mobility between the nineteenth century and the modern period. Similarly Ferrie and Long directly estimate occupational mobility for England 1851-1911, using census data, and imputing average earnings for each occupation as a measure of status. They find for 1851-1911 that the intergenerational correlation of status in England was then 0.27, compared to 0.23 in the USA (Long and Ferrie (2018), table 5).

Lambert et al. (2013) give measures of the father-son correlation using the HISCAM-U2 index for all 8 countries that the U2 index is estimated from, for marriages 1800-1938. This is shown in table 1.1. These correlations, which are typical of the social mobility literature, are in the range of 0.4-0.5 for the whole population, though higher if we restrict to non-farm occupations. But here we see substantial variations in social mobility rates across countries, with Sweden, for example, showing much more mobility than Germany.

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[1]https://www.camsis.stir.ac.uk/Data/Britain91.html, https://www.camsis.stir.ac.uk/hiscam/. See Prandy and Lambert (2003); Lambert et al. (2013).
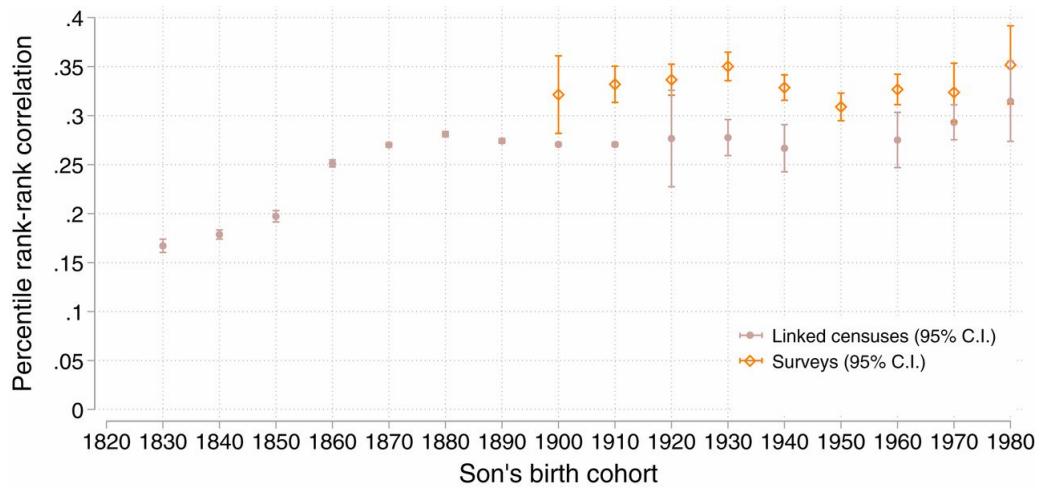
Figure 1.1: Intergenerational Occupational Status Correlations USA, 1830s-1980s
Source: Xi et al., 2020, figure 2.

Countries	All Men	Non-farm
All	.43	.55
Netherlands	.45	.56
Germany	.54	.63
France	.44	.54
Sweden	.30	.43
Britain	.46	.50
Canada	.41	.53
Belgium	.43	.48

Table 1.1: Intergenerational Correlations with HISCAM-U2, 1800-1938
Source: Lambert et al. (2013), table 2.

However, a problem with all these measures is that the occupational status indices used embody substantial errors. As occupations change over time, the importance of these errors can also change, giving spurious impressions of changes in social mobility rates. Similarly countries that at the same time show large differences in occupational structure can record different degrees of social mobility. In this paper we show that if social status indices are constructed using much larger amounts of data they will indeed show much less social mobility. Also just changing the list of occupation categories used will also change the measured rates of social mobility. All comparisons of social mobility rates across time and place using such indices are thus suspect.

Recognizing these measurement issues, some researchers on social mobility have favored more abstract measures of movement between social status categories, where social status by category is not parameterized, such as the Altham Index (Altham (1970); Altham and Ferrie (2007); Long and Ferrie (2013); Perez (2019)). But, as has been noted, "one possible reason for the lack of success of the Altham index may be difficulty in interpreting it" (Bouchet-Valat (2022, p.205)). Further, any exercise in measuring social mobility that has to assign different occupations or educations to a limited set of social categories, as with the Altham Index, still faces exactly the same problem of different measurement errors across time and space.

In the final section of the paper we suggest a way of measuring intergenerational occupational status mobility rates which is independent of measurement errors. This measure looks at the ratio of the correlation of status between fathers and fathers-in-law relative to that between son and father-in-law. Whatever the errors in status attribution to occupations, this ratio should measure the underlying intergenerational correlation in occupational status. This new measure suggests occupational status mobility rates are substantially lower than conventionally measured. These measurees suggest also that intergenerational occupational status correlations were constant across the interval 1837-2021.

We do however validate in the paper that the HISCAM association methodology does successfully capture the socio-economic status of occupations. These indices do a good job in measuring social status, we shall see, in part because assortment in marriage by occupational status is so strong, so that status can be well captured by such relationship pairs as husband-wife, son-father, and son father-in-law.

2   CAMSIS and HISCAM

The CAMSIS occupational scales for men and women in Britain 1971, 1991, and 2010-12 were derived using data on pairs of occupations for husbands and wives, where both had an occupation. An algorithm was employed to give status scores to each occupation in a way that maximized the resultant marital correlation of occupational status.

HISCAM measures for Britain 1800-1938 were derived in a similar way, but using mainly father-son occupational pairings as the basic data.[2] Again the algorithm assigns status scores in such a way as to maximize father-son correlations. The number of occupational pairs that each index was based on is given in Table 2.1. As can be seen, for Britain, relative to the number of occupational categories used, the data is modest, so that for many of the less frequent occupational categories the assigned status will be measured with significant error.

Occupations for the HISCAM status scores were coded to a standard set using an international

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[2]http://www.camsis.stir.ac.uk/hiscam/. HISCAM is "an empirical estimate of the average relative position within the structure of social stratification occupied by the incumbents of occupational unit groups" based on "patterns of intergenerational occupational connections."

Index	Occupational Coding	Years	Occupational Categories	Occupational Pairings
HISCAM-GB	HISCO	1800-1938	1,300	51,419
CAMSIS	SOC70	1971	223	94,615
CAMSIS	SOC90	1991	371	92,021
CAMSIS	SOC2010	2010-12	371	67,315

Table 2.1: Existing Occupational Indices, Britain

occupation classification system HISCO, which set out to have an internationally comparable set of occupation codes based on the 1,300 most common male and female occupations 1800-1938 in Belgium, England, France, Germany, Netherlands, Norway, Quebec, and Sweden.[3] The USA is not included among the HISCAM indices because the creators "have not yet been able to achieve satisfactory results" using US data.[4] Because of the desire for a comparable international coding of occupations the occupational classifications are detailed. A weaver, for example, can be coded as Cloth Weaver (hand), Cloth Weaver (Machine, except Jacquard Loom), Cloth Weaver (Hand or Machine), Weaver, Specialisation Unknown or Other Weavers and Related Workers.

To rank occupations on a single status scale CAMSIS and HISCAM use Goodman's RCII association model (Goodman (1979)).[5] As noted above, this is fitted by iterating to a set of occupational rankings that maximize either the correlation of occupational status in marriage, or in father-son pairings. HISCAM-GB is estimated using this RCII model (Lambert et al. (2013)). The resulting estimates are normalized to have mean 50 and standard deviation 15, then truncated to have a minimum value of 1 and a maximum of 99.

However, the HISCAM and CAMSIS indices have two modifications to address several common practical problems in estimating association models. The first is that of sparse categories. The fine grid of occupations, together with the modest numbers of occupational pairings, shown in table 2, means that many occupations appear infrequently. Where an occupational category has few individuals, the RCII estimator often will not converge to a stable set of occupational status rankings. HISCAM and CAMSIS address this by combining any occupation with fewer than 30 observations with other "similar" occupations.[6] But this, of course, necessitates some a priori judgement of what occupational statuses are, and introduces further error into the indices.

The second problem are so-called "diagonals" and "pseudo-diagonals". Diagonals are cases where each person in the pair has the same occupation. Pseudo-diagonals are cases where even though the occupation have different statuses, they are frequently found together in pairings. These would include particularly "farmer" and "farm-worker" which are found commonly both in husband-wife pairings, and also father-son pairings. To avoid the distortions in status rankings CAMSIS and HISCAM typically drop pairs of diagonals and pseudo-diagonals. The HISCAM project, however, concluded that dropping diagonals was insufficient, and dropped the agricultural sector from their analysis entirely. Farm jobs were assigned scores equal to the average of all occupations paired with farming occupations. With the huge amount of new data assembled below we find that these two problems do not arise, and we can estimate RCII models without any restrictions or ad hoc adjustments.

3 New Occupational Status Indices, England, 1800-1939

Using two large new databases, in this paper we construct two new occupational status indices for men in England 1800-1939. The first of these new indices, FOE-RCII, is an association index, as with CAMSIS and HISCAM. However, in this case it is based on occupational data for 2.36m. father-son and father-son in law pairs, from 1.6 million marriages 1837-1939. We also employ a simplified occupational scheme with 442 occupational categories (as opposed to the 1,300 in HISCAM).

This new index is thus based on nearly 50 times as much data as the HISCAM-GB index. This also uses more father-son pairs than in the entire eight country HISCAM occupational database.[7] Because of this much greater set of data we are able to avoid most of the ad hoc procedures forced on the HISCAM creators by data limitations, such as amalgamating occupations in the estimation. Because of the much greater occupational status information in occupational titles within English agriculture, we can also estimate the model without having to drop occupations in the agricultural sector. Lastly we are able to implement the RCII model without dropping diagonal, or quasi-diagonal, observations.

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[3] HISCO, or Historical ISCO, is a modification of the 1968 version of the International Standard Classification of Occupations (ISCO-68). (Leeuwen et al. (2004)). `http://historyofwork.iisg.nl/index.php`.

[4] `https://www.camsis.stir.ac.uk/hiscam/`

[5] Xie (2003, 1992); Hendrickx (2004) provide less theoretical introductions to the RCII model.

[6] In the HISCAM indices estimated using only data from one country, when a category was small and its score varied substantially from the category's score in the "universal" scale, its score was replaced by the average of the original score and the score in the "universal" scale.

[7] The HISCAM database has 1.2 m father-son occupational pairs, but 0.5 m of these come from Quebec, where the occupations are mostly in agriculture.

We carry out the index estimation separately using the father-son occupation associations, and the father-in-law son associations, and then take the average of these occupational rankings in forming the overall index. The correlation between the RCII index created using fathers and sons versus the RCII index using fathers-in-law and sons is 0.95.

The second new index, FOE-PCA, is constructed in part using a large genealogical database for England that has information on such outcomes as occupation, wealth at death, and educational status. It is a much more direct estimate of average socio-economic status by occupation. Nicely, it is constructed completely independently of the information underlying the FOE-RCII index.

People want occupational status indices in part to measure the degree of occupational status inheritance, and also to measure the degree of occupational status assortment in marriage. It is thus potentially problematic to compare status inheritance and marital assortment over time when the indices to measure this are estimated by maximizing both of these correlations. This occupational status index has one virtue in being completely independent from parent-child occupation correlations and also from marital occupation correlations. This index has 5 components.

1. Literacy rates by occupation, 1837-1879

2. Probate Rate by occupation, 1858-1939

3. Average log wealth at death by occupation, 1858-1939

4. Average attainment of higher education by occupation, 1800-1939

5. Proportion in schooling ages 12-18 by occupation, 1851-1939

Occupational literacy is estimated from 0.4 m observations of the signature literacy of grooms 1837-1879 and their occupations. The period 1837-1879 was used even though there is literacy data all the way to 1939 because after 1880 signature literacy rates for grooms are near 100% so that this measure contributes little information for 1880 and later. For marriages 1837-1879 only 64% of grooms could sign the register, so that this measure contributes significant information on educational status by occupation. This measure will discriminate more on the status of lower status occupation, since almost all men in higher status occupations will be literate.

The second measure, the probate rate, shows the fraction of men by occupation that had some wealth at death, for deaths 1858 and later. The third measure is the average ln wealth at death, measured relative to average estimate ln wealth at death for each decade in England. For those not probated wealth at death is taken as half the level of wealth at which probate was legally required in the year of death. These two wealth measures correlate highly. But the first better measures differences in wealth for occupations lower in the wealth distribution, while the second better measures wealth differences for higher status occupations.

The fourth measure is an indicator of what fraction of men by occupation attended university, or achieved an equivalent higher education such as medical training in a teaching hospital, or membership of an engineering society, or qualification as a chartered accountant. This again is a measure which discriminates more for higher status occupations. The final measure is whether the person was observed in schooling when recorded in a census or population register ages 12-18.[8]

We construct a composite index of our five occupational status variables using Principal Components Analysis (PCA).[9] PCA, originally created by Pearson (1901), is a widely used technique to simplify multidimensional data, later developed by Hotelling (1933). PCA generates a linear transformations of the five status measures into a set of new variables: uncorrelated principal components. By construction, the first principle component captures the greatest variation possible by any single linear transformation. We use this first principal component as our unidimensional index of occupational status.

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[8]The censuses of 1851-1911 give such information, as does the population register of 1939.

[9]Simple averaging would be inefficient as information would be lost by combining high variability measures, such as average wealth, with those with low variability such as education or literacy. PCA allows the data to tell us the weights that maximize variability, without reference to any target, or output, measure. In this way, PCA is a type of 'unsupervised learning'.

Marriage Period	All	Groom Literacy	Groom Occupation	Father Occupation	Father-in-law Occupation
1837-59	540,650	289,772	450,905	413,638	411,789
1860-79	365,465	195,597	310,321	294,935	295,259
1880-99	336,124	-	285,405	253,004	273,058
1900-39	343,344	-	283,040	242,408	273,831
1940-79	66,636	-	61,454	52,986	54,405
1980-2021	15,535	-	15,449	13,786	14,010
All	1,667,754	485,369	1,406,574	1,270,757	1,322,352

Table 4.1: Parish Register Marriage Data, 1837-2021

4 Data

We use two sources of data to construct these new indices. The first is a set of 1.6 million marriage records in England 1837-1939 which were transcribed by volunteers to the Freereg organization, and posted on their web page.[10] The Freereg marriage records, where the information comes from marriage record copies deposited in local record offices, all come from church weddings, and exclude civil marriages. But though Civil marriage was introduced in England in 1837, such marriages remained a small minority of all weddings before 1914. In 1841 Civil marriages were 1.7% of all marriages, in 1914, still only 24%, and in 1952 31% (Haskey, 2015).

These marriage registers typically record whether the bride and groom were literate (through their ability to sign the marriage register). They also give occupations for the groom, his father, and his father in law.[11] The data we have available by period is shown in table 4.1. Because transcribing these marriage records is a volunteer effort based on local interests, the numbers of marriages recorded by county for the years 1837-1939 varies considerably by county. Four counties contain about 50% of the marriages transcribed for England: Kent, Lancashire, Lincolnshire, and Staffordshire. But these counties were very different in terms of occupations and urbanization, so that the overall sample generated seems representative of England as a whole.

From these records we construct our FOE-RCII index of male occupational status 1837-1939. We also construct from the literacy data for grooms 1837-1879 a measure of literacy by occupation. The marriage records in table 3 for the years 1980-2021 came largely from deposited church marriage registers in Essex Record Office that we collected ourselves. In these years only a minority of all weddings were performed in churches. 49% of weddings by 1982 and 68% by 2012 were civil (Haskey, 2015). But there is no reason to expect that the father-son or father-in-law son correlations for church weddings would be any different than for the population as a whole.

In constructing the FOE-RCII index, and in estimating literacy by occupation we convert the more than 100,000 individual occupation description strings in these 1.6 million marriage records into 442 simplified occupations. The more than 2,000 different types of clerks listed, for example, were translated into Bank Clark, Civil Servant-Clerk, Clergy-Church of England, Commercial Clerk, Legal Clerk, and Parish Clerk. We also coded these occupations by their HISCO equivalent, and constructed a separate HISCO-RCII index. Where multiple occupations were given we used the first listed, except in the case that the first was a military occupation. In that case, we coded the person to their civilian occupation.

The second source of data we have is a genealogical database 1700-2022 of 414,000 linked persons in rare surname lineages (Families of England (FOE)) where we can obtain for a subsample of men their wealth at death, their probate status, their educational status ages 12-18, and their attainment of higher educational qualifications. Table 4.2 shows the amount of data available for men by occupation from this source. The quantity of data here is much smaller than for the marriage database, but we shall see that it produces an index which is nearly as good in terms of intergenerational correlations as is the family association index. These five measures of educational and wealth status correlate reasonably well, as

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[10]We added to these records 21,339 marriages in Essex parishes 1837-1939 that we ourselves collected.
[11]Much less often in earlier years they give an occupation also for the bride.

Birth Period	Occupation	Probate	LnWealth	Higher Education	Schooling 12-18
1780-1839	12,367	7,084	6,807	11,774	1,440
1840-1879	16,045	10,234	10,170	15,507	5,959
1880-1919	14,264	10,574	10,269	13,585	3,390
All	42,676	27,892	28,148	40,866	10,789

Table 4.2: FOE Social Status Data, Males
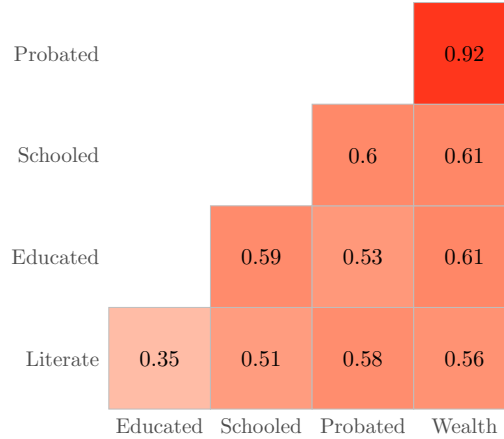
Figure 4.1: Correlation between Status Measures for occupations, 1800-1939

figure 4.1 shows.

The schooling 12-18 variable is estimated from a set of census reports on whether a person in this age range was at work, in schooling or an apprenticeship, or nothing was recorded. To allow for the cases with nothing recorded we take the raw measure of schooling as the average of an indicator variable for "in schooling" and one minus an indicator variable for "at work." However, we correct this variable for the average age people were observed at in each occupation by regressing the fraction in schooling against average age, and adjusting all the raw measures to a standard age of 15. This results in some cases in a negative estimate of the proportion in schooling on this adjusted measure.

The two wealth measures are the fraction of men who are probated at death by occupation, and the average log wealth of those probated normalized by average wealth at death for all men by decade 1850-1939.

The principal component analysis decomposition works well with the five status indices we employ here. The first principle component accounts for 68% of the variance in the five status measures. We normalize the resulting PCA index to a scale of 0-100. Figure 4.2 shows the distribution of the status values of the PCA index on this 0-100 scale, across the whole population of grooms. The distribution is asymmetrical, with the mass of men having occupations in the 20-50 occupational status range. But there is a long tail of upper status occupations in the 50-100 range. Table 4.3 shows the characteristics of the top 10 and bottom 10 occupations in the FOE-PCA ranking. The top and bottom occupations seem very plausible for those positions. Table 4.3 shows the ranking of the top 10 occupations in the FOE-RCII index, and their comparable ranking in the FOE-PCA index.

Though the FOE-RCII index and FOE-PCA index were produced using entirely different methods, and completely different data, they show a 0.86 correlation in the status assigned to occupations. Figure 4.4, for example, shows the estimated status of the 442 FOE simplified occupations on the FOE-PCA

Table 4.3: Top and Bottom Ten Occupations, by Status

Rank	Occupation	Probated	Wealth	Educated	Schooled	Literate	PCA
1	Deacon-Church Of England	1.000	1.00	2.497	1.000	1.122	100.0
2	Member Of Parliament	0.748	0.95	4.405	1.000	1.040	98.4
3	Barrister	1.000	0.95	3.010	1.000	0.920	98.4
4	Bishop-Church Of England	1.000	0.87	2.438	1.000	0.958	97.5
5	Titled	0.500	1.00	4.930	0.962	1.131	96.1
6	Judge	0.909	0.92	2.884	1.000	1.000	95.2
7	Brigadier Army	0.846	1.00	1.838		0.912	95.1
8	Clergy-Church Of England	0.990	0.90	1.517	0.994	0.950	92.2
9	Magistrate	0.579	0.94	3.255		1.029	90.2
10	Solicitor	0.970	0.86	1.576	0.973	0.847	89.4
433	Stillman	0.000	0.00	−3.730		−0.039	16.2
434	Scissor Smith	0.000	0.00	−4.621	0.500	0.147	15.8
435	Stick Maker	0.000	0.00	−4.085	0.417	0.143	15.7
436	Nailer	0.000	0.07	−4.064	0.241	0.251	15.0
437	Paver	0.000	0.00	−3.902	0.321	0.111	14.4
438	Ore Dresser	0.000	0.00	−4.605	0.389	−0.091	13.7
439	Locksmith	0.000	0.00	−4.605	0.379	0.568	13.5
440	Handloom Weaver	0.000	0.00	−4.621	0.333	0.226	12.6
441	Nail Forger	0.000	0.00	−4.605	0.206	0.231	10.3
442	Pauper	0.000	0.06	−8.548	0.000	0.355	0.0

status index versus the FOE-RCII index. The figure also shows the most significant outliers. There is no obvious pattern to these. This, we believe, is a first demonstration that "family association" style status indices produce occupational status rankings that are very close to those implied using direct socio-economic measures such as education, earnings and wealth. This is confirmation of the validity of the HISCAM approach. This second index also produces much higher intergenerational correlations in occupational status than the existing indices. Where we estimate, however, familial correlations using the marriages database we potentially run into the problem that the FOE-RCII index was constructed using the same data and with an algorithm based on maximizing the father-son correlations in occupational status. However, we can test whether this will be a significant source of bias by taking the marriage data, divide it randomly into two halves, then estimating the FOE-RCII index on the first part. We can take this 50% index and estimate the father-son and father-in-law-son correlations using both the training 50% of the data, and the testing 50%. If these estimates do not differ significantly across the two sub-samples of the marriage data, then we will be getting an unbiased estimate of intergenerational mobility even using the marriage sample and the RCII status index from that sample.

Table 4.5 shows the results of this test. The evidence from the table is that there is no significant upwards bias in intergeneration correlation estimates when we use an RCII status index derived from the same data we are estimating the intergeneration correlation with. Thus on either database we can do a test of the quality of the different occupational indices.

Finally, using the HISCO occupational labels and the marriage registers database, we constructed a new HISCAM index for England 1837-1939, which we label HISCO-RCII. In constructing this index, because of the very large amounts of data, we do not drop diagonals and pseudo-diagonals. We do drop HISCO occupations with less than 20 men holding that occupation. Thus out of 1,300 HISCO occupations we end up assigning a status to only 363 in the HISCO-RCII index.

In appendix 2 we give the status scores of each of the 442 FOE occupations on both the FOE-RCII and FOE-PCA indices. In appendix 3 we give the HISCO-RCII scores, as well as the HISCAM-U2 and HISCAM-GB status scores, for the 363 occupations we are able to rank.
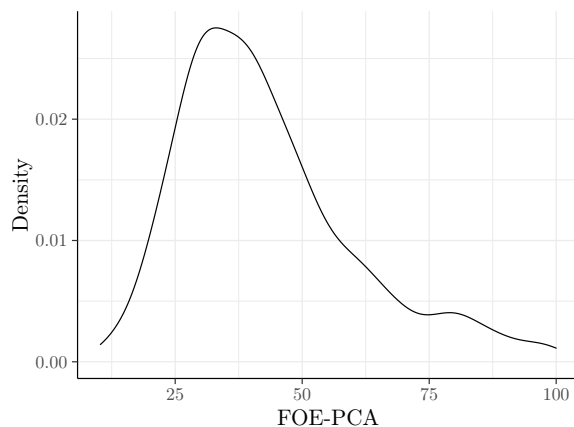
Figure 4.2: The Distribution of Occupational Status, FOE-PCA index

Notes: This is by occupational title, unweighted by the number of people in each occupation.

Rank	FOE-Occupation	RCII	PCA
1	Titled	100.00	96.08
2	Esquire	97.67	69.71
3	Member Of Parliament	96.79	98.42
4	Bishop-Church Of England	93.47	97.46
5	General Army	90.58	82.18
6	Colonel Army	90.39	79.81
7	Deacon-Church Of England	89.37	100.00
8	Admiral Rn	89.29	78.43
9	Judge	88.25	95.17
10	Lieutenant-Colonel Army	87.55	79.13
432	Nail Forger	15.88	10.27
433	Mine Laborer	15.02	31.03
434	Spade Maker	14.37	35.96
435	Puddler	11.27	19.98
437	Framework Knitter	9.03	21.13
438	Chainmaker	1.50	24.55
439	Coal Miner	0.43	22.39
440	Ore Dresser	0.34	13.72
441	Nailer	0.00	15.00

Table 4.3: Top and Bottom Ten Ranked Occupations under FOE-RCII index
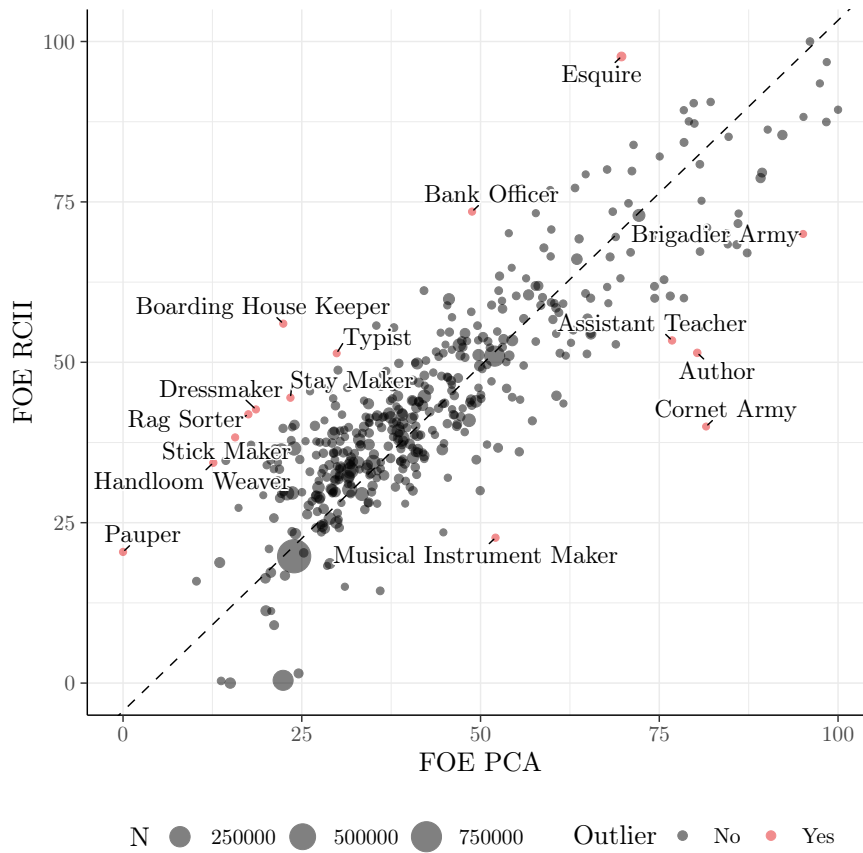
Figure 4.4: The Distribution of Occupational Status, FOE-PCA index

Pair	Data	RCII Index (full sample)	RCII Index (50% sample)
Father-son	Marriages, full	0.673	0.673
Father-son	Marriages, test 50%	0.672	0.672
Father-son	Marriages, training 50%	0.674	0.674
Finl-groom	Marriages, full	0.557	0.557
Finl-groom	Marriages, test 50%	0.557	0.556
Finl-groom	Marriages, training 50%	0.557	0.557

Table 4.5: Estimating Potential Biases in FOE-RCII index, marriage sample, 1837–1939

Notes: "Finl" indicates father-in-law.

5 Comparing the New Indices with HISCAM

Table 5.1 shows the correlation in occupational status as measured with the three new indices – FOE-RCII, FOE-PCA and HISCO-RCII – compared to HISCAM-GB and HISCAM-U2. As can be seen all these indices correlate strongly. Note in particularly that the FOE-PCA index, which is constructed both in a different way, and using separate data, correlates well with all the association type indices.

However, the measure of which is the best index of occupational status will be which index produces the highest correlations of son to father and groom to father-in-law. Table 5.2 shows these correlations for all five indices 1837-1939. Though the FOE-RCII index correlates well with the two HISCAM indices, the FOE-RCII index produces substantially greater father-son and father-in-law-son correlations than does either HISCAM-GB or HISCAM-U2. Thus on this criterion of fit, it is a better index of social status for England 1837-1939. The true correlation in status averages at least 0.67 for this period, well above the 0.53 found with HISCAM-GB.

The FOE-PCA index performs somewhat less well than the FOE-RCII index. But it must be remembered that 4 of the 5 sub-indices that compose this index were created using samples in the order of 10,000-50,000 as opposed to 2.4 million observations. If sample size for the FOE-PCA index was substantially increased it might well correlate better across generations than the FOE-RCII index.

Table 5.2 shows that on all these indices there appears to be an increase in social mobility rates 1837 to 1939. For the FOE-RCII index, for example, the measured father-son intergenerational correlation falls from 0.71 in 1837-1859 to 0.60 for 1900-39. On HISCAM-GB the fall is from 0.59 to 0.44.

However, the 0.67 intergenerational correlation recorded using the FOE-RCII index can be shown to be still well below the true correlation for 1837-1939. This is because of two forms of remaining error in the index. The first is the mismeasurement of the exact average status of each of the FOE 442 occupation categories. The second is that people whose occupation is assigned to the same of the 442 categories will often actually differ in occupational status. The category "clerk," for example, covers occupations that differ widely in earnings, and in other measures of occupational status.

Suppose a persons true occupational status is z. Suppose also their assigned status on an occupational index is Z. Then there will be two independent errors linking their assigned status to their true status. $Z = z + u + e$, where e is the error in measuring the true average occupational status of the assigned occupation Z. u is the error caused by the range of occupations that fall under the label Z, each with a different underlying status.

When we measure intergenerational mobility with such a social status index the estimate is biased downwards by a factor

$$\frac{\sigma_z^2}{\sigma_z^2 + \sigma_u^2 + \sigma_e^2} \tag{1}$$

For the FOE-RCII and FOE-PCA indices, because of their entirely independent construction, the error component e attached to errors in the average occupational status by category will be independent, but not the within-category component u. Assuming the error term e variance is the same for each index, the correlation between these indices 0.86 will be

$$\rho = \frac{\sigma_z^2 + \sigma_u^2}{\sigma_z^2 + \sigma_u^2 + \sigma_e^2} = 0.86 \tag{2}$$

This implies that the error component in these indices we have derived has to be at least 14% of the variance in measured status. It also implies that if we multiply our father-son correlations by 1.16 we will get an estimate closer, but still not as large as, the true underlying persistence of occupational status across generations. Since that correlation for the RCII index is 0.67, the true intergenerational correlation in occupational status has to be at least 0.78. When we add the attenuation caused by the variance within occupational categories, the true underlying correlation of occupational status in England 1837-1939 must be above 0.8. This is well above the 0.49-0.53 correlation reported for this period using the HISCAM-U2 and HISCAM-GB occupational status indices.

Measure	HISCAM U2	HISCAM GB	FOE PCA	FOE RCII	HISCO RCII
HISCAM U2	1	0.872	0.807	0.809	0.835
HISCAM GB		1	0.738	0.750	0.786
FOE-PCA			1	0.859	0.821
FOE-RCII				1	0.933
HISCO-RCII					1

Table 5.1: Correlation between Occupational Status Indices, 1800–1939

Group	Period	HISCAM U2	HISCAM GB	FOE-PCA	FOE-RCII	HISCO-RCII
Father-son	All	0.480	0.532	0.613	0.673	0.633
Father-son	1837–1859	0.552	0.586	0.638	0.706	0.668
Father-son	1860–1899	0.486	0.537	0.622	0.677	0.632
Father-son	1900–1939	0.390	0.439	0.544	0.602	0.569
Father-Finl	All	0.302	0.345	0.460	0.504	0.430
Father-Finl	1837–1859	0.329	0.379	0.478	0.532	0.458
Father-Finl	1860–1899	0.303	0.346	0.468	0.509	0.428
Father-Finl	1900–1939	0.251	0.285	0.404	0.442	0.386

Table 5.2: Intergenerational Correlations in Marriage Database, 1837-1939, males

Notes: "Finl" indicates father-in-law.

6   Measuring Social Mobility with Imperfect Status Indices

Above we developed two new social status indices for England and Wales 1800-1939. We see with those indices that intergenerational social mobility rates are much lower than conventionally estimated. There is more occupational status persistence than previous status indices show. But we also see on all the indices that there are signs of increases in social mobility over time as England industrialized. However, there remains the issue that all indices are imperfect measures of the true social status of individuals, and the degree of imperfection can change over time with changes in the structure of the economy, and changes in how occupations are described.

Here we show how we can use the marriage records in England to estimate measures of marital occupational status assortment and intergenerational occupational correlations that should be independent of these measurement errors.[12] Consider figure 6.1, which shows the pattern of correlations in occupational status between a groom, his father and his father-in-law, assuming that the matching in marriage is between groom and bride.[13] The true correlations in occupational status between father and son, bride and groom, and bride and her father, are assumed to be b, r, and f. [14]

But the correlations, where observed, will be attenuated by measurement errors, measurement errors that vary with time and place. The attenuation will potentially be different where the pair observed is male, θ, as opposed to male and female, ϕ. Figure 6.1 shows the observed correlations between father and son, father and father-in-law and son and father-in-law. The observed correlation in occupational status between groom and father, and groom and father-in-law will be θb and $\theta r f$. The observed correlation in occupational status between father and father-in-law will be $\theta r b f$. But this in turn implies that

$$b = \frac{correlation\ father-in-law\ to\ father}{correlation\ father-in-law\ to\ groom} = \frac{\theta r b f}{\theta r f} \tag{3}$$

Thus by taking the ratio of the father-in-law to father and father-in-law to groom correlations we can get an estimate of the underlying intergenerational father-son correlation independent of measurement errors, even when these errors are changing over time periods.

Table 6.2 shows these intergenerational correlation estimates for father-in-law to groom and father-in-law to father using the FOE-RCII status index for 1837-1939, and the CAMSIS index for 1940-2021.[15] The measured father-in-law to groom correlation drops substantially in this period from 0.591 in 1837-79 to 0.285 by 1980-2021. This would in the literature cited above be taken as a sign of increasing social mobility rates. But the implied intergenerational father-son correlation shown in the table is close to 0.9 all they way from 1837 to 1979. Thereafter the point estimate drops to 0.780, though with a standard error now becuase of fewer observations of 0.029, so that the actual value could be in the range 0.72 to 0.84. Importantly the substantial decline in the father to son correlation shown in table 6.3, where the decline 1837-2021 is from 0.70 to 0.36 is not echoed in the estimate of the underlying father-son correlation which goes just from 0.90 down to 0.78.

Note that the underlying marital correlation in underlying social status will be given by

$$r = \frac{correlation\ father-in-law\ to\ groom}{correlation\ to\ groom} * \frac{b}{f} = \frac{\theta r f}{\theta b} * \frac{b}{f} \tag{4}$$

If daughters inherit underlying status as strongly as sons, so that $b = f$, then that underlying marital status correlation r will be just

$$r = \frac{correlation\ father-in-law\ to\ groom}{correlation\ to\ groom} \tag{5}$$

Table 6.3 shows what the underlying implied marital correlations were based on (5). As can be seen, despite again the declining measured father-son correlations, these implied marital correlations are high,

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[12]Here we use a method first employed by Curtis (2020)

[13]Clark and Cummins (2022) show that for England 1837-2021 there is clear evidence that matching in marriage was between bride and groom.

[14]Brides often did not have any listed occupation in the English marriage records, but we can think of her having a latent occupational status, that the groom is matching with. There is other evidence suggesting that $b = f$, so that there is gender symmetry in the inheritance of (underlying) occupational status, but for the estimation of b we do not need to assume this. See again Clark and Cummins (2022).

[15]The Camsis index used here is described in table 2.1, and is for 1991.
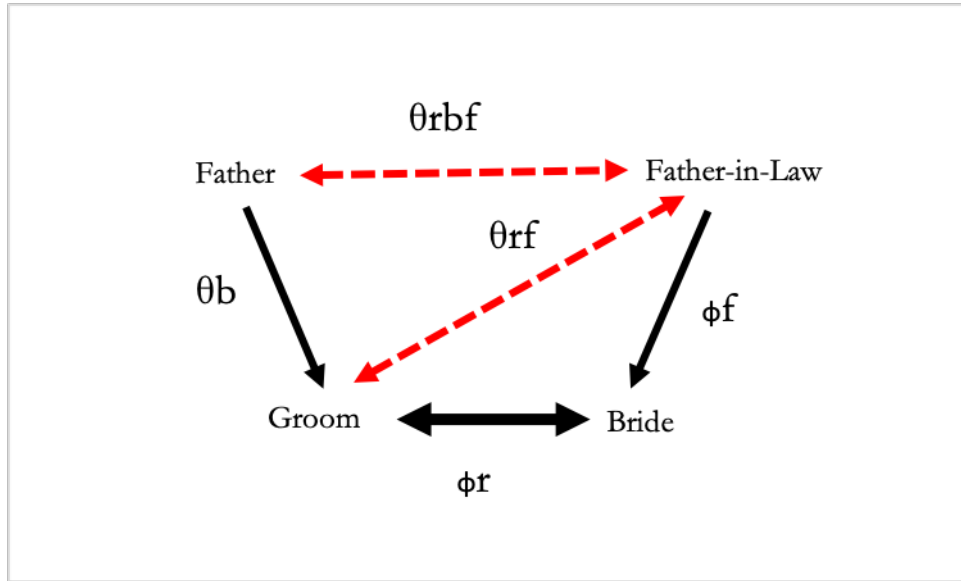
Figure 6.1: Correlations in Status in Marriage

and in this case stable throughout the years 1837-2021, lying always in the range 0.80 to 0.83. This very high implied assortment in marriage throughout these years is consistent with the high intergenerational correlation estimated across these same years.[16]

Thus despite the observed substantial decline over time in father-son, father to father-in-law, and father-in-law to son correlations, the correlation patterns observed are largely consistent with a both very high levels of assortment by status in marriage, and a subsequent very strong intergenerational correlation in status. The observed correlations also suggest no change over time in the strength of marital assortment, despite the rise in female education and employment across these years. Intergenerational mobility in status is very limited throughout, with just a modest increase observed in the very last period.

The methods used here to correct for measurement errors can be widely adopted where marital records record status information for grooms, and both fathers. In England, for example, the Registrar General holds over 100 million such marriage records 1837-2022.

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[16]See Clark and Cummins (2022).

Period	Index	N	Father-in-law to groom	Father-in-law to father	$\hat{b}$	s.e.
1837–1859	FOE-RCII	391,244	0.591	0.533	0.903	0.002
1860–1899	FOE-RCII	790,320	0.555	0.504	0.908	0.002
1900–1939	FOE-RCII	501,654	0.491	0.444	0.905	0.002
1940–1979	CAMSIS90	44,430	0.343	0.324	0.942	0.014
1980–2021	CAMSIS90	15,254	0.285	0.222	0.780	0.029

Table 6.2: Underlying Correlations in Intergenerational Occupational Status, marriages 1837–2021

Notes: Standard errors from 10,000 bootstrap replications.

Period	Index	N	Father to Son	Father-in-Law to Groom	$\hat{r}$	s.e.
1837–1859	FOE-RCII	388,942	0.700	0.581	0.830	0.002
1860–1899	FOE-RCII	785,507	0.664	0.544	0.819	0.002
1900–1939	FOE-RCII	498,394	0.597	0.483	0.808	0.002
1940–1979	CAMSIS90	44,430	0.421	0.343	0.817	0.012
1980–2021	CAMSIS90	15,254	0.356	0.285	0.799	0.025

Table 6.3: Underlying Marital Correlations in Occupational Status, marriages 1837-2021

Notes: Standard errors from 10,000 bootstrap replications.

7 Conclusion

This paper reports multiple outcomes. First, using large quantities of new data, we construct three new independent occupational status indices for England in the years 1800-1939, the FOE-RCII, FOE-PCA, and HISCO-RCII indices. These new indices all provide more accurate measures of the social status of occupations in these years than the existing HISCAM indices. The appendices give the estimated status value for all occupations on these new indices.

Second we validate that association indices of occupational status do successfully capture the socio-economic rank of different occupations as measured by the educational and wealth status of the holders. Third we show how dependent measures of intergenerational occupational status mobility are to the quality of occupational indices. The more accurate the index the lower will be measured rates of intergenerational mobility. This makes all comparisons of intergenerational occupational mobility over time and place suspect. The measurement errors embedded in occupational status indices depend on the quantity of data available to construct the index, the employment structure in the society in question, and the way occupations are described in different societies. Traditional comparisons of social mobility across time and place using such indices is unreliable.

Lastly we show how to derive measures of the true underlying father-son occupational status correlation, independent of measurement errors, using the occupational status of fathers, sons and fathers-in-law. This underlying father-son correlation is remarkably high, in the region of 0.9 for all periods but the most recent, marriages 1980-2021, where it is around 0.78. But we see from the FOE-RCII index that for the period 1837-1879 the implied correlation in underlying occupational status father-son has to be greater than 0.8. So at least in this first period we can validate these new estimates.

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A Appendix

A.1 Principal Component Index

We construct a composite index of our five occupational status variables using Principal Components Analysis (PCA).[17] PCA is a widely used technique to simplify multidimensional data, originally developed by Pearson (1901), and Hotelling (1933). We employ PCA to generate linear transformations of the five status measures into a set of new variables; uncorrelated principal components. By construction, the first principle component captures the greatest variation possible by any single linear1997 transformation, and thus we use this as the basis for our unidimensional index of occupational status.

Formally we take a vector of scaled status variables $\mathbf{x}$ with covariance matrix $\mathbf{\Sigma}$ where the first principle component is $\alpha_1' x$ where α_1 is the eigenvector of $\mathbf{\Sigma}$ corresponding to the largest eigenvalue, λ_1.[18]

Table A.1 reports the relative importance of each of the principal components calculated on the set of five occupational status measures. The first Principal Component accounts for 68.1% of the variance in the five status measures. This supports the validity of using this first principal component as the basis of our unidimensional status index. The variable loadings (Eigenvectors) are reported in table A.2.

Table A.1: Importance of Principal Components

	Principal Component				
	1	2	3	4	5
Standard deviation	1.832	0.813	0.734	0.606	0.279
Proportion of Variance	0.671	0.132	0.108	0.073	0.016
Cumulative Proportion	0.671	0.803	0.911	0.984	1.000

Table A.2: First Principal Component Eigenvectors

Measure	Loading
Probated	-0.490
Wealth	-0.501
Educated	-0.405
Schooled	-0.424
Literate	-0.407

Figure A.1 reports a biplot which illustrates how each of the five variables relate to each other in the PCA. All five component measures contribute to the first Principal Component, and are relatively close to one another. (In particular, the probated measure, and that for average, wealth). There is a surprising distance between the average literacy rate of an occupation, and the schooling and higher education variables. This relates to their respective correlations, as reported in figure 4.1.

Finally we re-scale the First Principal component score into a standardized status score, from 0-100. Note we do not calculate percentiles here but rather rescale the first principal component so that the minimum is 0, and the maximum is 100. The top 10, and the bottom 10, by this score (calculated to one decimal place) is reported in table 4.3. The distribution of this score is reported in figure 4.2.

A.2 Tabular Summary of the FOE-PCA and FOE-RCII Indices

Appendix table A.3 shows the five components of the PCA index for 442 FOE occupational categories, as well as the final PCA index and the RCII index. The occupations are listed in alphabetical order. For 40 of the 442 occupations one or more of the components of the PCA index is missing. In these cases

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[17]Simple averaging would be inefficient as information would be lost by combining high variability measures, such as average wealth, with those with low variability such as education or literacy. PCA allows the data to tell us the weights that maximize variability, without reference to any target, or output, measure. In this way, PCA is a type of 'unsupervised learning'.

[18]For more details on the derivation of Principal Components, see Jolliffe (2002) p.4-6.
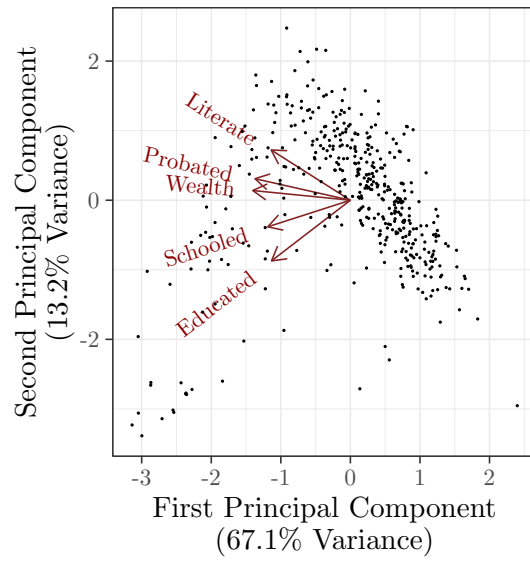
Figure A.1: PCA Biplot of the Five Status Measures and the First and Second Principal Component
Source: PCA analysis.

the PCA index values were interpolated based on the other components. For one occupation, "scissor smith", there was not sufficient data to estimate the RCII index value.

Table A.3: FOE Occupational Categories Indices

FOE Standard Occupation	Fraction Higher Educated	Fraction Probated	Average ln Wealth	Fraction Literate 1837–79	Fraction in Schooling 12–18	PCA	RCII
Accountant	0.04	0.72	-0.63	0.98	0.53	57.7	61.9
Actor	0.09	0.38	-2.21	0.87	0.72	48.7	57.9
Admiral RN	0.17	1.00	2.78		0.69	78.4	89.3
Agent	0.04	0.56	-1.55	0.92	0.51	50.4	53.9
Architect	0.90	0.81	0.88	1.00	0.84	85.9	68.3
Army	0.29	0.65	-0.59	0.77	0.54	57.2	40.9
Art Dealer	0.00	0.64	-1.00		0.29	45.4	58.9
Artist	0.11	0.70	-0.57	0.46	0.61	49.4	34.8
Assistant Draper	0.00	0.46	-2.37	0.91	0.45	44.1	50.9
Assistant Manager	0.03	0.59	-0.84	1.00	0.43	53.6	45.9
Assistant Teacher	0.51	0.89	0.60	1.00	0.79	76.8	53.4
Athlete	0.10	0.50	-0.77	0.71	0.50	49.9	30.0
Attendant	0.01	0.28	-2.60	0.86	0.43	40.7	38.7
Auctioneer	0.00	0.47	-1.37	0.96	0.69	52.7	63.4
Author	0.54	0.94	1.42	0.97	0.78	80.3	51.5
Bailiff	0.00	0.62	-1.43	0.77	0.55	52.5	36.7
Baker	0.00	0.33	-2.75	0.84	0.32	37.4	41.4
Bank Accountant	0.00	1.00	-0.01		0.22	57.7	73.2
Bank Cashier	0.00	0.78	0.05	1.00	0.55	59.9	70.7
Bank Clerk	0.01	0.85	0.14	0.89	0.50	58.9	67.8
Bank Manager	0.03	0.88	1.25	1.00	0.63	68.5	73.5
Bank Messenger	0.00	0.50	-1.70		0.30	36.3	48.1
Bank Officer	0.10	0.44	-1.38		0.65	48.8	73.5
Banker	0.35	0.92	3.48	0.93	0.78	80.7	80.9
Barman	0.00	0.24	-3.01	0.76	0.28	33.5	39.0
Barrister	1.00	0.95	3.01	1.00	0.92	98.4	87.5
Basket Maker	0.00	0.22	-3.52	0.62	0.15	28.0	33.4
Bicycle Maker	0.00	0.67	-0.18		0.29	44.9	37.4
Bill Poster	0.00	0.25	-2.31	1.00	0.06	36.0	33.4
Bishop-Church Of England	1.00	0.87	2.44	1.00	0.96	97.5	93.5
Blade Forger	0.00	0.32	-2.98	0.67	0.12	30.1	25.5
Bleacher	0.00	0.14	-3.44	0.39	0.24	22.4	39.7
Boarding House Keeper	0.00				-0.03	22.4	56.0
Boilermaker	0.00	0.27	-2.99	0.50	0.37	29.7	29.8
Bookbinder	0.00	0.27	-3.02	0.88	0.35	37.7	44.3
Bookkeeper	0.01	0.48	-2.48	0.86	0.39	42.1	47.9
Bookmaker	0.00	0.33	-3.81	0.67	0.58	35.8	40.5
Bookseller	0.00	0.40	-2.57	0.95	0.46	42.1	61.2
Bottler	0.00	0.00	-3.71	0.62	0.15	20.6	34.7
Box Maker	0.00	0.50	-2.11	0.42	0.13	30.2	32.4
Brass Finisher	0.00	0.23	-3.19	0.71	0.38	31.9	35.2
Brass Founder	0.00	0.27	-2.93	0.57	0.18	29.5	35.9
Brass Moulder	0.00	0.20	-2.89	0.42	0.50	29.6	34.8
Brewer	0.14	0.79	1.84	0.67	0.53	60.6	44.8
Bricklayer	0.00	0.32	-2.77	0.60	0.36	33.4	29.5
Brickmaker	0.00	0.26	-3.35	0.43	0.11	24.1	23.3
Brigadier Army	0.85	1.00	1.84		0.91	95.1	70.0
Broker	0.00	0.76	0.56	0.78	0.71	60.1	56.7
Brushmaker	0.00	0.20	-3.38	0.72	0.46	32.6	39.0
Builder	0.00	0.71	-0.62	0.95	0.52	54.4	53.4
Bus Conductor	0.00	0.26	-2.52	0.83	0.40	38.9	36.5
Bus Driver	0.00	0.42	-1.89	0.90	0.28	42.1	35.0
Butcher	0.00	0.43	-2.05	0.84	0.38	42.2	44.7
Butler	0.00	0.50	-1.85	0.82	0.30	44.1	42.8

Continued on next page

Table A.3: FOE Occupational Categories Indices

FOE Standard Occupation	Fraction Higher Educated	Fraction Probated	Average ln Wealth	Fraction Literate 1837–79	Fraction in Schooling 12–18	PCA	RCII
Buyer	0.00	0.61	-1.32	1.00	0.30	49.6	55.7
Cab Proprietor	0.00	0.33	-3.25	0.81	0.62	31.4	46.1
Cabinet Maker	0.00	0.32	-3.06	0.85	0.47	38.4	44.7
Cable Hand	0.00	0.62	-1.32		0.36	47.8	39.1
Candle Maker	0.00	0.00	-4.62	0.81		25.5	37.7
Capstan Operator	0.00	0.00	-2.60		0.16	21.7	30.8
Captain Army	0.36	0.91	1.37	1.00	0.87	78.5	84.3
Captain RN	0.04	0.94	1.68	1.00	0.65	67.7	80.0
Caretaker	0.01	0.49	-2.16	0.68	0.37	40.9	40.1
Carpenter	0.00	0.32	-2.83	0.80	0.48	38.9	38.1
Carrier	0.00	0.27	-3.03	0.66	0.19	30.5	33.7
Carter	0.00	0.18	-3.36	0.42	0.23	23.7	29.6
Carver And Gilder	0.00	0.29	-3.12	0.83	0.46	37.3	46.6
Cashier	0.00	0.81	-0.22	0.95	0.52	58.4	58.9
Cellarman	0.00	0.20	-3.61	0.73	0.18	27.5	37.5
Chainmaker	0.00	0.28	-2.86	0.27	0.26	24.5	1.5
Chair Maker	0.00	0.03	-4.01	0.51	0.28	21.2	36.6
Chartered Accountant	0.93	0.82	0.71	1.00	0.70	84.4	70.1
Chauffeur	0.00	0.47	-2.05		0.39	41.6	38.7
Cheesemonger	0.00	0.33	-2.43	0.95	1.00	53.6	50.0
Chef	0.00	0.57	-0.88		0.28	46.0	46.5
Chemist	0.09	0.63	-0.84	0.94	0.72	58.1	61.9
Chimney Sweep	0.00	0.25	-3.05	0.27	0.39	23.6	23.6
Cigar Maker	0.00	0.10	-4.22	0.67	0.31	26.2	45.5
Civil Engineer	0.92	0.82	1.08	0.99	0.84	86.0	71.6
Civil Servant	0.16	0.82	0.30	0.96	0.62	65.0	56.8
Civil Servant-Clerk	0.05	0.71	-0.42	0.99	0.44	56.0	56.8
Civil Servant-High	0.33	0.89	1.08	1.00	0.72	75.7	62.9
Cleaner	0.00	0.28	-2.47	0.58	0.31	31.9	29.5
Clergy-Church Of England	0.99	0.90	1.52	0.99	0.95	92.2	85.4
Clergy-Other	0.52	0.60	-1.12	0.98	0.61	65.4	60.0
Cloth Finisher	0.00	0.24	-3.53	0.47	0.17	24.0	40.2
Coach Builder	0.00	0.31	-2.45	0.76	0.58	41.0	42.9
Coachman	0.01	0.30	-3.02	0.81	0.26	34.4	37.2
Coal Merchant	0.00	0.62	-1.27	0.80	0.40	45.9	47.1
Coal Miner	0.00	0.22	-2.97	0.26	0.22	22.4	0.4
Coal Porter	0.00	0.13	-3.28	0.43	0.21	22.5	29.8
Coffee House Keeper	0.00	0.35	-2.67	0.92	0.33	36.8	48.6
Collector	0.00	0.53	-1.95	0.89	0.36	44.5	47.9
Colliery Owner	0.00	0.86	2.38	1.00	-0.02	59.9	59.3
Colonel Army	0.49	0.93	1.81	1.00	0.73	79.8	90.4
Commander RN	0.10	0.91	1.30	1.00	0.68	71.4	83.9
Commercial Artist	0.00	0.44	-1.77	1.00	0.53	46.0	52.0
Commercial Clerk	0.00	0.58	-1.47	0.92	0.35	47.0	52.7
Commercial Painter	0.00	0.36	-2.51	0.84	0.33	38.3	40.7
Commercial Traveller	0.00	0.61	-1.44	0.82	0.45	47.8	54.5
Commission Agent	0.00	0.36	-2.68	0.92	0.30	37.9	55.4
Company Director	0.15	0.84	1.46		0.64	68.9	69.5
Company Secretary	0.27	0.83	0.94	1.00	0.59	69.6	63.1
Compositor	0.00	0.45	-2.34	0.92	0.57	46.3	44.8
Confectioner	0.00	0.54	-1.67	0.82	0.52	46.9	47.5
Contractor	0.00	0.60	-0.70	0.81	0.38	48.7	44.2
Convict	0.04	0.00	-4.77		0.15	19.6	29.3
Cook	0.00	0.18	-3.36	0.87	0.38	36.3	41.4
Cooper	0.00	0.41	-2.93	0.72	0.62	40.1	37.3

Continued on next page

Table A.3: FOE Occupational Categories Indices

FOE Standard Occupation	Fraction Higher Educated	Fraction Probated	Average ln Wealth	Fraction Literate 1837–79	Fraction in Schooling 12–18	PCA	RCII
Coppersmith	0.00	0.36	-2.31	0.71	0.40	36.5	41.6
Cork Cutter	0.00	0.00	-3.91	0.81	0.00	23.7	39.9
Cornet Army	0.43	1.00	3.08	1.00	0.73	81.5	40.0
Corporal Army	0.01	0.27	-3.01	0.86	0.39	37.6	39.5
Crane Driver	0.00	0.44	-2.14	0.50	0.34	35.6	33.0
Currier	0.00	0.00	-4.13	0.80	0.40	29.7	43.2
Cutler	0.00	0.09	-4.06	0.62	0.17	23.5	37.8
Dairyman	0.00	0.49	-1.90	0.86	0.27	42.9	42.3
Deacon-Church Of England	1.00	1.00	2.50	1.00	1.12	100.0	89.4
Dealer	0.00	0.46	-2.07	0.72	0.32	39.0	41.8
Dentist	0.67	0.65	-0.32	0.93	0.74	71.0	67.1
Designer	0.00	0.75	-0.47	0.89	0.57	57.7	53.2
Diplomat	0.53	0.86	1.39		0.84	75.1	82.1
Dock Laborer	0.00	0.12	-3.09	0.50	0.40	27.5	28.6
Domestic Gardener	0.00	0.35	-2.83	0.81	0.25	35.5	32.0
Draper	0.01	0.54	-1.43	0.61	0.56	45.6	59.8
Draughtsman	0.05	0.62	-0.91	0.93	0.50	53.1	52.3
Dressmaker	0.00	0.00	-3.64		0.32	18.6	42.7
Driller	0.00	0.35	-2.31	0.48	0.15	30.3	32.2
Drover	0.00	0.00	-4.61	0.56	0.87	34.3	28.1
Dyer	0.02	0.30	-2.66	0.40	0.32	26.8	40.1
Electrical Engineer	0.44	0.77	-0.12		0.62	65.4	54.5
Electrician	0.02	0.53	-1.36		0.53	47.2	41.5
Enameller	0.00	0.00	-3.41	0.50		21.9	31.4
Engineer	0.12	0.57	-1.17	0.57	0.61	48.4	41.0
Engraver	0.00	0.48	-1.81	0.78	0.62	45.3	47.7
Erector	0.00	0.20	-2.41	0.60	0.27	32.4	35.8
Errand Boy	0.00	0.08	-3.59		0.00	20.7	11.2
Esquire	0.43	0.71	0.09	1.00	1.00	69.7	97.7
Estate Agent	0.12	0.82	1.09	1.00	0.70	68.1	66.4
Factory Hand	0.01	0.33	-2.30	0.46	0.22	29.7	32.7
Farm Bailiff	0.00	0.49	-2.05	0.75	0.38	40.9	36.0
Farm Carter	0.00	0.17	-2.95	0.70	0.21	30.5	28.1
Farm Laborer	0.00	0.16	-3.65	0.48	0.18	22.9	29.6
Farm-Cowman	0.00	0.28	-2.34	0.68	0.28	34.8	29.8
Farm-Horseman	0.00	0.37	-2.28	0.40	0.26	30.0	26.5
Farm-Shepherd	0.00	0.31	-2.78	0.48	0.21	27.9	24.4
Farmer	0.02	0.70	-0.59	0.83	0.45	52.0	51.0
Farmer-Large	0.04	0.74	0.32	1.00	0.52	59.7	76.8
Farmer-Small	0.00	0.55	-2.08	0.71	0.33	41.1	49.8
Farmers Son	0.00	0.29	-3.11	0.83	0.35	35.4	55.7
Farrier	0.00	0.25	-3.11	0.82	0.45	36.2	39.8
Feltmaker	0.00	0.00	-2.04	0.75		31.9	30.9
Fettler	0.00	0.17	-2.83	0.67	0.37	35.5	28.0
File Cutter	0.00	0.22	-3.53	0.53	0.20	26.4	28.3
File Forger	0.00	0.60	-2.30	1.00	0.12	44.8	23.5
File Smith	0.00	0.25	-4.28	0.53	0.03	21.7	34.4
Filer	0.00	0.10	-3.03	0.49	0.20	25.3	20.3
Fireman	0.00	0.36	-2.48	0.60	0.36	34.9	30.7
Fish Curer	0.00	0.20	-3.21	0.33	0.20	20.1	34.0
Fisherman	0.00	0.20	-3.62	0.52	0.40	27.3	30.5
Fishmonger	0.00	0.20	-3.19	0.62	0.20	29.2	37.4
Fitter	0.00	0.45	-2.02	0.65	0.47	40.5	35.1
Florist	0.00	0.43	-2.76	1.00	0.27	43.8	51.7
Flying Officer Raf	0.30	0.68	-0.99		0.75	64.9	51.3

Continued on next page

Table A.3: FOE Occupational Categories Indices

FOE Standard Occupation	Fraction Higher Educated	Fraction Probated	Average ln Wealth	Fraction Literate 1837–79	Fraction in Schooling 12–18	PCA	RCII
Footman	0.00	0.40	-2.61	0.90	0.28	36.0	34.4
Foreman	0.00	0.53	-1.64	0.72	0.29	41.2	38.6
Forester/Woodman	0.00	0.20	-3.16	1.00	0.51	40.5	30.0
Forgeman	0.00	0.17	-3.38	0.40	0.19	22.6	16.8
Framework Knitter	0.00	0.14	-3.58	0.50	0.11	21.1	9.0
French Polisher	0.00	0.27	-2.78	0.62	0.35	31.6	39.9
Fruiterer	0.00	0.46	-2.53	0.63	0.17	34.4	39.0
Furnaceman	0.00	0.18	-3.26	0.31	0.17	19.9	16.3
Gamekeeper	0.00	0.38	-2.59	0.76	0.31	36.5	32.4
Garage Proprietor	0.00	0.75	1.41		0.65	62.7	53.0
Gardener	0.00	0.34	-2.73	0.77	0.25	35.0	34.4
Gas Fitter	0.00	0.34	-2.77	0.67	0.54	37.1	36.9
Gas Worker	0.00	0.00	-3.43		0.57	30.2	31.7
Gatekeeper	0.00	0.22	-3.56	0.67	0.37	30.3	33.4
General Army	0.55	1.00	2.45	1.00	0.86	82.2	90.6
Gentleman	0.21	0.89	1.63	0.96	0.92	72.2	72.9
Glass Cutter	0.00	0.00	-3.75	0.65	0.05	21.1	30.9
Glassblower	0.00	0.11	-3.31	0.50	0.30	27.2	26.7
Glassmaker	0.00	0.33	-2.72	0.56	0.38	33.8	27.1
Glazier	0.00	0.12	-2.99	0.73	0.22	30.4	37.7
Glover	0.00			0.70	0.07	29.5	39.3
Goldsmith	0.00	0.09	-3.77	0.79	0.30	30.1	48.8
Grazier	0.00	1.00	0.73	0.95	0.99	74.3	61.8
Greengrocer	0.00	0.24	-2.99	0.49	0.32	28.8	34.0
Grinder	0.00	0.14	-3.37	0.34	0.23	21.9	28.8
Grocer	0.00	0.58	-1.46	0.94	0.48	49.7	51.1
Groom	0.00	0.20	-3.42	0.70	0.22	29.1	30.3
Groundsman	0.00	0.38	-2.52	0.67	0.73	40.1	30.6
Gunmaker	0.00	0.17	-3.89	0.70	0.34	28.0	35.8
Hairdresser	0.00	0.35	-2.46	0.83	0.32	39.1	42.1
Hammerman	0.00	0.20	-3.83	0.51	0.39	26.1	32.9
Handloom Weaver	0.00	0.00	-4.62	0.33	0.23	12.6	34.3
Harness Maker	0.00	0.36	-3.20	0.82	0.28	32.2	34.5
Hatter	0.00	0.33	-2.41	0.56	0.31	33.7	40.0
Hawker	0.01	0.17	-3.39	0.40	0.36	25.8	26.3
Head Teacher	0.67	0.88	0.82	1.00	0.73	81.7	71.0
Horse Keeper	0.00	0.04	-3.91	0.54	0.30	21.7	31.5
Horticulturalist	0.00	1.00	1.35	1.00	1.00	67.9	59.2
Hosiery Hand	0.00	0.00	-3.41	1.00	0.18	28.5	18.3
Hotel Manager	0.00	0.38	-1.15		0.62	46.0	57.0
Hotel Porter	0.00	0.11	-3.26	0.88	0.55	38.5	38.0
House Decorator	0.00	0.39	-2.14	0.91	0.33	41.4	46.8
House Furnisher	0.00	0.62	-1.02		0.27	52.3	54.8
House Painter	0.00	0.21	-3.06	0.76	0.36	33.0	38.0
Housekeeper	0.00	0.00	-4.61	0.50	0.90	33.2	37.2
Innkeeper	0.00	0.61	-1.45	0.90	0.42	49.9	49.4
Inspector	0.00	0.44	-2.14	0.51	0.34	35.6	41.7
Instrument Maker	0.00	0.41	-1.76	0.88	0.40	43.3	39.4
Insurance Agent	0.01	0.56	-1.36	0.89	0.42	48.8	43.3
Insurance Broker	0.00	0.57	-0.43	1.00	0.55	54.0	70.1
Insurance Inspector	0.00	0.83	-0.91		1.11	67.7	61.7
Iron Dresser	0.00	0.25	-2.89	0.35	0.23	22.1	29.5
Iron Moulder	0.00	0.24	-3.00	0.48	0.32	28.9	25.6
Iron Turner	0.00	0.29	-3.31	0.64	0.28	30.8	35.9
Ironfounder	0.00	0.62	-0.79	0.67	0.53	45.4	40.4

Continued on next page

Table A.3: FOE Occupational Categories Indices

FOE Standard Occupation	Fraction Higher Educated	Fraction Probated	Average ln Wealth	Fraction Literate 1837–79	Fraction in Schooling 12–18	PCA	RCII
Ironmaster	0.12	0.88	3.05	0.94	0.89	80.7	67.3
Ironmonger	0.00	0.65	-1.08	0.98	0.54	53.1	58.3
Jeweller	0.00	0.49	-1.64	0.84	0.66	47.4	53.3
Journalist	0.05	0.62	-1.16	1.00	0.62	55.0	60.4
Judge	0.91	0.92	2.88	1.00	1.00	95.2	88.2
Justice Of The Peace	0.57	0.91	2.57	1.00	0.87	84.7	85.1
Laborer	0.00	0.18	-3.19	0.38	0.27	23.9	19.8
Lace Hand	0.00	0.50	-1.19	0.83	0.04	40.5	36.7
Lace Maker	0.00	0.17	-4.04	0.66	0.30	27.8	32.7
Lamplighter	0.00	0.25	-3.11	0.53	0.17	29.4	29.7
Landed Proprietor	0.45	0.92	2.74	1.00	0.85	84.6	68.4
Laundry Worker	0.00	0.00	-3.85	0.50	0.34	17.9	37.1
Leather Worker	0.00	0.43	-2.42	0.76	0.38	39.7	39.8
Legal Clerk	0.01	0.54	-1.79	0.96	0.30	45.6	54.7
Librarian	0.00	0.71	-0.52	1.00	0.46	53.0	59.6
Licensed Victualler	0.00	0.62	-1.21	0.83	0.46	49.4	43.9
Lieutenant Army	0.40	0.77	0.18	0.98	0.76	71.2	79.8
Lieutenant Commander RN	0.30	0.88	1.34		1.00	80.9	75.2
Lieutenant RN	0.05	0.87	0.55	0.98	0.60	63.2	77.2
Lieutenant-Colonel Army	0.41	0.90	1.32	1.00	0.87	79.1	87.6
Lineman	0.00	0.40	-2.54	0.75	0.27	39.2	35.0
Locksmith	0.00	0.00	-4.61	0.38	0.57	13.5	18.8
Loco Driver	0.00	0.49	-2.02	0.64	0.30	38.1	30.6
Machine Ruler	0.00	0.20	-2.91	1.00	0.42	42.2	46.4
Machinist	0.00	0.32	-2.36	0.61	0.32	33.2	37.0
Magistrate	0.58	0.94	3.25		1.03	90.2	86.3
Major Army	0.45	0.91	1.49	0.95	0.87	79.9	87.2
Malster	0.00	0.43	-1.87	0.70	0.39	41.2	36.5
Manager	0.03	0.67	-0.66	0.81	0.58	54.0	51.0
Manufacturer	0.02	0.69	0.17	0.79	0.55	56.7	60.5
Mariner	0.00	0.17	-3.58	0.67	0.41	29.5	38.9
Mariner Mate	0.00	0.61	-1.64	0.85	0.64	51.3	52.3
Market Gardener	0.00	0.61	-1.25	0.85	0.30	46.7	40.0
Mason	0.00	0.27	-3.39	0.61	0.36	31.5	32.2
Master Baker	0.00	0.59	-1.39	1.00	0.20	48.1	53.3
Master Mariner	0.00	0.62	-1.27	0.91	0.67	53.2	53.6
Mattress Maker	0.00	0.33	-2.21	0.75	-0.15	33.1	33.3
Mechanic	0.00	0.44	-1.98	0.60	0.45	39.1	40.5
Mechanical Engineer	0.19	0.73	-0.49	0.92	0.63	61.1	51.4
Medical Doctor	0.97	0.87	1.02	0.99	0.87	89.2	78.7
Member Of Parliament	0.75	0.95	4.41	1.00	1.04	98.4	96.8
Merchant	0.06	0.78	0.94	0.93	0.59	63.5	66.1
Merchant Seaman	0.00	0.24	-2.94	0.62	0.50	34.1	33.5
Messenger	0.00	0.27	-2.85	0.90	0.12	34.0	41.5
Midshipman RN	0.00	0.80	-0.13	1.00	0.37	54.4	64.7
Milkman	0.00	0.26	-2.51	0.77	0.21	31.9	34.0
Mill Hand	0.00	0.24	-3.11	0.38	0.17	23.9	36.6
Miller	0.00	0.35	-2.85	0.81	0.29	37.2	42.0
Milliner	0.00	1.00	0.42	0.50	0.34	34.4	40.6
Millwright	0.00	0.46	-2.25	0.75	0.71	46.8	40.4
Mine Agent	0.00	0.67	-1.97	0.89	0.67	55.4	36.0
Mine Laborer	0.00	0.27	-2.98	0.67	0.31	31.0	15.0
Miner	0.00	0.24	-3.31	0.26	0.15	20.7	17.2
Mining Engineer	0.29	0.69	-0.04	0.87	0.59	60.3	59.2
Model Maker	0.00	0.67	-0.95	0.98	0.52	55.5	44.2

Continued on next page

Table A.3: FOE Occupational Categories Indices

FOE Standard Occupation	Fraction Higher Educated	Fraction Probated	Average ln Wealth	Fraction Literate 1837–79	Fraction in Schooling 12–18	PCA	RCII
Motor Driver	0.00	0.25	-2.42	0.62	0.33	31.8	34.6
Musical Instrument Maker	0.00	1.00	-0.91	0.94	-0.09	52.1	22.7
Musician	0.04	0.50	-2.46	0.70	0.43	40.5	47.2
Nail Forger	0.00	0.00	-4.61	0.21	0.23	10.3	15.9
Nailer	0.00	0.07	-4.06	0.24	0.25	15.0	0.0
Newsagent	0.00	0.71	-0.92	0.67	0.37	46.4	41.8
Nurse	0.00	0.40	-2.64	0.50	0.37	35.3	41.5
Nurseryman	0.00	0.56	-1.05	0.93	0.32	47.8	50.8
Officer Army	0.43	0.87	0.62	1.00	0.74	74.0	69.5
Officer RN	0.12	0.61	-0.81	1.00	0.73	61.6	59.1
Oiler	0.11	0.40	-2.50	0.50	0.34	34.5	32.4
Optician	0.67	0.67	-0.37	0.77	0.36	60.6	54.5
Ore Dresser	0.00	0.00	-4.61	0.39	-0.09	13.7	0.3
Outfitter	0.00	0.88	0.24	1.00	0.59	64.7	60.7
Own Means	0.27	0.85	1.41	0.98	0.87	74.4	60.0
Packer	0.00	0.26	-2.72	0.63	0.22	29.9	36.1
Packing Case Maker	0.00	0.50	-1.79	0.62	0.41	37.8	38.4
Paper Hanger	0.00	0.29	-3.17	0.79	0.31	30.4	39.3
Paper Maker	0.00	0.38	-2.08	0.57	0.35	37.4	35.0
Paper Stainer	0.00	0.50	-2.43	0.55		36.1	46.2
Parish Clerk	0.00	0.29	-2.89	0.85	0.48	40.9	33.6
Pattern Maker	0.00	0.41	-2.05	0.84	0.53	46.2	41.8
Pauper	0.00	0.06	-8.55	0.00	0.36	0.0	20.4
Paver	0.00	0.00	-3.90	0.32	0.11	14.4	34.7
Pawnbroker	0.00	0.60	0.75	0.93	0.66	61.0	57.7
Petty Officer Army	0.00	0.64	-1.97	0.95	0.48	50.9	49.6
Petty Officer RN	0.03	0.43	-2.73	0.93	0.51	46.0	45.6
Photographer	0.00	0.50	-2.33	0.80	0.60	44.8	51.4
Piano Maker	0.00	0.61	-1.78	0.58	0.26	37.4	44.0
Piano Tuner	0.00	0.50	-1.46	0.88	0.52	43.4	48.4
Picture Framer	0.00	0.44	-2.65	1.00	0.54	46.0	42.7
Pipe Fitter	0.00	0.43	-1.71	0.50	-0.02	31.5	31.0
Pipe Maker	0.00	0.14	-3.44	0.51	0.39	27.7	24.7
Plasterer	0.00	0.24	-2.89	0.66	0.31	31.6	34.2
Platelayer	0.00	0.28	-3.16	0.56	0.20	28.1	27.2
Plater	0.00	0.25	-3.26	0.64	0.68	39.1	33.4
Plumber	0.00	0.44	-2.21	0.85	0.40	41.9	43.3
Police Constable	0.01	0.43	-2.42	0.89	0.34	42.1	35.5
Police Officer	0.00	0.50	-1.93	0.91	0.62	48.5	43.8
Police Sergeant	0.00	0.83	-0.90	0.96	0.36	54.4	44.6
Polisher	0.00	0.29	-2.74	0.48	0.24	27.0	29.3
Porter	0.00	0.22	-2.98	0.72	0.30	31.8	33.0
Postman	0.00	0.49	-1.84	0.74	0.34	41.3	36.0
Postmaster	0.07	1.00	0.24	0.88	0.53	63.0	55.0
Potter	0.00	0.30	-2.98	0.47	0.26	28.2	24.1
Pottery Decorator	0.00	0.67	-0.59	0.81	0.23	47.5	42.8
Poulterer	0.00	0.75	-1.26	0.81	0.40	50.1	44.3
Presser	0.00	0.25	-2.73	0.48	0.30	25.0	29.7
Printer	0.00	0.40	-2.33	0.66	0.57	40.4	44.0
Printer Compositor	0.01	0.41	-2.17	0.91	0.53	45.1	52.8
Printers Assistant	0.03	0.45	-1.99	1.00	0.24	43.6	38.7
Printers Cutter	0.00	0.00	-3.33	1.00	0.01	28.8	45.7
Printers Reader	0.00	0.33	-1.92	1.00	0.40	44.4	54.6
Professor	0.90	0.93	1.18	0.96	0.76	87.3	67.0
Publisher	0.00	0.75	1.44	0.93	0.52	59.8	66.5

Continued on next page

Table A.3: FOE Occupational Categories Indices

FOE Standard Occupation	Fraction Higher Educated	Fraction Probated	Average ln Wealth	Fraction Literate 1837–79	Fraction in Schooling 12–18	PCA	RCII
Puddler	0.00	0.08	-4.02	0.29	0.37	20.0	11.3
Quarryman	0.00	0.30	-2.92	0.35	0.28	26.0	27.6
Rag Sorter	0.00	0.00	-4.14	0.39	0.10	17.5	41.9
Railway Guard	0.00	0.45	-2.27	0.85	0.26	39.0	37.2
Railway Signalman	0.00	0.37	-2.49	0.86	0.32	39.4	34.2
Railway Stoker	0.00	0.50	-1.79	1.00	0.45	45.4	32.0
Railway Worker	0.00	0.45	-2.20	0.81	0.38	38.9	34.6
Refuse Collector	0.00	0.15	-2.94	0.25	0.22	18.5	30.6
Restaurant Keeper	0.00	0.86	-0.48	0.91	0.35	56.0	49.5
Riveter	0.00	0.22	-2.92	0.46	0.42	30.2	24.2
Ropemaker	0.00	0.33	-3.35	0.56	0.29	31.4	36.2
Royal Air Force	0.00	0.60	-1.86		0.11	38.2	43.1
Royal Navy	0.00			0.77		40.5	44.0
Saddler	0.00	0.29	-3.10	0.88	0.62	42.8	45.8
Sailmaker	0.00	0.33	-3.18	0.84	0.57	38.6	42.7
Salesman	0.01	0.54	-1.28	0.88	0.40	47.2	51.1
Sawyer	0.00	0.18	-3.44	0.55	0.32	27.1	29.1
Scaffolder	0.00	0.00	-2.81		0.16	21.1	33.4
Scientist	0.63	0.83	0.48	1.00	0.75	78.4	60.0
Scissor Smith	0.00	0.00	-4.62	0.50	0.15	15.8	
Seaman RN	0.00	0.23	-3.00	0.76	0.40	35.1	35.7
Secretary	0.07	0.57	-1.47	0.94	0.63	52.5	61.2
Sergeant Army	0.00	0.31	-2.87	0.90	0.45	41.4	43.9
Servant	0.01	0.28	-3.26	0.67	0.18	29.3	30.1
Sheet Metal Worker	0.00	0.53	-1.78	0.60	0.47	41.1	32.5
Shipwright	0.00	0.33	-2.94	0.80	0.57	40.4	41.3
Shoemaker	0.00	0.26	-3.27	0.66	0.32	31.8	33.2
Shop Assistant	0.00	0.37	-2.33	0.83	0.29	37.8	40.5
Shop Manager	0.01	0.62	-1.32		0.34	45.5	47.6
Shopkeeper	0.00	0.63	-1.38	0.83	0.29	45.0	43.6
Sign Writer	0.00	0.67	-0.97	1.00	0.49	51.5	47.0
Slater	0.00	0.08	-3.64	0.49	0.33	21.9	33.3
Slaughterman	0.00	0.33	-1.66	0.50	0.06	29.9	33.8
Smith	0.00	0.27	-3.05	0.63	0.34	31.7	30.2
Soap Maker	0.00	0.50	-2.64	0.69		38.6	39.0
Soldier Army	0.01	0.25	-3.01	0.64	0.38	32.9	34.4
Solicitor	0.97	0.86	1.58	0.97	0.85	89.4	79.6
Sorter Post Office	0.00	0.80	-0.91	1.00	0.10	49.7	46.0
Spade Maker	0.00	0.60	-0.83	0.45	0.12	36.0	14.4
Spring Maker	0.00	0.38	-3.31	0.54	0.22	29.3	29.6
Stamper	0.00	0.22	-2.92	0.47	0.36	27.7	23.5
Station Master	0.00	0.50	-2.09	0.97	0.48	47.5	52.4
Stationary Engineman	0.00	0.28	-2.99	0.46	0.23	27.5	29.0
Stationer	0.03	0.73	-0.38	0.97	0.62	58.7	60.1
Stay Maker	0.00	0.00	-4.20	0.67		23.4	44.5
Steelworker	0.00	0.33	-2.67	0.47	0.26	28.9	18.6
Stenographer	0.00	1.00	1.00		0.18	56.4	63.1
Steward	0.00	0.36	-2.29	0.84	0.47	41.4	43.8
Stick Maker	0.00	0.00	-4.09	0.42	0.14	15.7	38.3
Stillman	0.00	0.00	-3.73		-0.04	16.2	27.3
Stockbroker	0.10	0.86	1.82	1.00	0.68	70.7	74.8
Stoker	0.00	0.31	-2.64	0.55	0.36	34.3	28.2
Storekeeper	0.00	0.56	-1.67	0.64	0.25	39.2	37.8
Striker	0.00	0.22	-3.18	0.41	0.32	27.0	24.2
Student	0.82	0.81	0.26	1.00	1.06	86.1	73.2

Continued on next page

Table A.3: FOE Occupational Categories Indices

FOE Standard Occupation	Fraction Higher Educated	Fraction Probated	Average ln Wealth	Fraction Literate 1837–79	Fraction in Schooling 12–18	PCA	RCII
Supervisor	0.03	0.62	-1.23		0.48	49.7	53.4
Surveyor	0.10	0.69	-0.81	0.97	0.65	60.6	58.5
Tailor	0.00	0.27	-3.05	0.78	0.57	38.5	39.3
Tailors Cutter	0.00	0.38	-2.17	0.70	0.40	37.8	46.1
Tallow Chandler	0.00	0.43	-2.24	0.82	0.57	44.7	43.5
Tanner	0.03	0.06	-3.75	0.61	0.26	28.4	37.5
Taxi Driver	0.00	0.50	-1.08	0.50	0.44	34.5	40.6
Taxidermist	0.00	0.50	-0.98	1.00	1.11	61.6	43.6
Tea Planter	0.11	0.82	0.42		0.84	64.7	79.3
Teacher	0.32	0.73	-0.65	0.95	0.70	65.4	54.4
Teacher Elementary	0.00	0.85	0.06	1.00	0.59	61.9	51.0
Technician	0.02	0.49	-1.39	1.00	0.46	50.1	44.9
Telegraphist	0.00	0.62	-1.31	1.00	0.42	50.2	49.0
Telephonist	0.00	0.57	-1.47		-0.02	38.7	34.6
Textile Twister	0.00	0.50	-1.44	0.35	-0.02	30.6	33.6
Thatcher	0.00	0.00	-4.61	0.62		21.1	25.7
Theatre And Film	0.13	0.64	-0.35	0.00	0.43	40.9	49.9
Ticket Collector	0.00	0.25	-2.90	0.80	0.01	30.6	41.8
Tiler	0.00	0.25	-2.89	0.62	0.06	27.4	31.5
Timber Merchant	0.00	0.70	-0.46	0.90	0.40	51.6	58.9
Time Keeper	0.00	0.43	-1.50	0.76	0.19	38.7	40.0
Tin Plate Worker	0.02	0.27	-3.01	0.64	0.18	29.7	31.6
Tinsmith	0.00	0.20	-2.26	0.46	0.17	27.0	35.5
Titled	0.50	1.00	4.93	0.96	1.13	96.1	100.0
Tobacco Worker	0.00	0.00	-3.95	1.00	0.13	27.0	37.7
Tobacconist	0.00	0.64	-1.10	0.85	0.68	51.0	53.3
Toolmaker	0.00	0.52	-1.70	0.53	0.43	38.6	31.9
Tradesman	0.00	0.25	-3.03	0.54	0.44	31.6	32.1
Trainer	0.00	0.36	-1.57	0.64	0.70	40.7	41.6
Tram Driver	0.00	0.42	-1.83	0.50	0.18	30.9	39.5
Trimmer	0.00	0.33	-2.62	0.62	0.09	29.6	31.7
Tripe Dresser	0.00	1.00	3.15	0.28	0.12	50.9	37.2
Truck Driver	0.00	0.33	-1.94	0.75	0.40	39.5	31.5
Turncock	0.00	0.20	-3.00	1.00	0.34	41.9	35.9
Turner	0.00	0.35	-2.42	0.58	0.33	34.2	34.0
Typist	0.00	0.33	-2.53		0.07	29.9	51.4
Umbrella Maker	0.00	0.50	-1.14	0.33	0.15	31.0	38.4
Undertaker	0.00	0.00	-3.34	0.80	0.80	42.4	50.3
Unemployed	0.11	0.00	-3.92	1.00	0.37	33.7	44.0
Upholsterer	0.00	0.34	-2.50	0.88	0.32	38.6	49.8
Valet	0.00	0.00	-2.79	0.95	0.23	29.4	44.4
Varnish Maker	0.00	0.00	-2.41	0.83	-0.10	28.2	40.9
Veterinarian	0.86	0.75	-0.65	0.97	0.78	76.5	60.3
Viewer	0.00	0.33	-1.61	1.00	0.09	39.5	28.0
Waiter	0.00	0.16	-2.81	0.82	0.26	34.5	41.3
Warehouseman	0.00	0.29	-2.66	0.76	0.26	34.3	43.5
Watchmaker	0.00	0.41	-2.34	0.73	0.39	38.1	46.3
Watchman	0.00	0.40	-2.53	0.35	0.28	28.5	32.1
Waterman	0.00	0.28	-3.06	0.40	0.38	29.8	25.0
Weaver	0.00	0.21	-3.64	0.39	0.19	22.1	36.3
Weighman	0.00	0.00	-3.13	0.53	0.35	20.4	20.9
Welder	0.00	0.33	-1.55	0.38	0.08	28.0	24.9
Wharfinger	0.17	1.00	1.33	0.86	0.38	68.9	52.8
Wheelwright	0.00	0.47	-2.29	0.77	0.57	44.7	36.4
White Smith	0.00	0.38	-3.20	0.63	0.44	34.7	32.7

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Table A.3: FOE Occupational Categories Indices

FOE Standard Occupation	Fraction Higher Educated	Fraction Probated	Average ln Wealth	Fraction Literate 1837–79	Fraction in Schooling 12–18	PCA	RCII
Window Cleaner	0.00	0.13	-2.77		0.27	29.5	35.8
Wine Merchant	0.00	0.84	1.35	0.99	0.57	63.8	69.2
Wire Drawer	0.00	0.20	-3.55	0.53	0.25	24.7	34.9

A.3 Tabular Summary of the HISCO-RCII Index

Appendix table A.4 shows the RCII index for HISCO categories, as well as the HISCAM U2 index and the HISCAM GB index. The occupations are listed in order of the HISCO codes.

Table A.4: HISCO Indices

Occupation	RCII	HISCAM U2	HISCAM GB
1110 Chemist, General	63.7	82.8	84.1
1190 Other Chemist	58.7	82.8	84.1
1210 Physicist, General	71.4	79.7	80.4
1390 Other Physical Scientists	63.3		
1400 Physical Science Technicians, Specialisatin Unknown	48.2	62.4	66.6
1420 Chemistry Technician	38.3	79.7	80.4
2000 Engineer, Specialisation Unknown	46.4	99.0	66.8
2120 Building Architect	70.7	85.4	66.0
2200 Civil Engineers	74.2	81.8	77.4
2210 Civil Engineer, General	65.3	84.5	65.0
2305 Electrical Engineer, General	54.7	85.8	63.7
2400 Mechanical Engineers	59.8	81.8	82.8
2410 Mechanical Engineer, General	54.6	81.8	82.8
2620 Extractive Metallurgist	62.6	67.1	66.0
2700 Mining Engineers	62.4	81.8	82.8
2710 Mining Engineer, General	63.2	81.8	82.8
3110 Draughtsman, General	56.3	67.1	66.0
4200 Ships' Deck Officers and Pilots	50.7	53.5	54.2
4215 Ship's Master (Sea)	54.9	75.2	61.9
5110 Biologist, General	48.4	89.3	91.5
5120 Botanist	58.8	89.3	91.5
6100 Medical Doctor, Specialisation Unknown	82.1	99.0	74.1
6210 Medical Assistant	41.7	57.7	55.2
6310 Dentist, General	71.1	98.8	74.1
6510 Veterinarian, General	62.7	73.4	74.1
6710 Pharmacist	61.4	94.9	66.4
7110 Nurse, General	42.7	57.7	55.2
7530 Dispensing Optician	57.5	99.0	74.1
7620 Physiotherapist	51.0	57.7	55.2
11010 Accountant, General	74.8	71.8	65.0
12110 Lawyer	87.4	99.0	75.5
12210 Judge	87.7	99.0	99.0
12410 Solicitor	65.1	99.0	75.5
13020 Teacher, Level and Subject Unknown, Not University and H...	56.5	67.5	58.1
13100 University and Higher Education Teachers	70.3	99.0	71.4
13940 Head Teacher	76.7	81.7	77.8
14120 Minister of Religion	83.5	99.0	74.2
15120 Author	53.6	76.2	71.9
15915 Journalist	63.6	91.2	71.9
16200 Commercial Artists and Designers	57.4	66.1	59.8
16220 Commercial Artist	52.6	68.0	67.0
16250 Display Artist	50.6	66.1	59.8
16310 Photographer, General	54.9	66.1	59.8
17000 Composers and Performing Artists, Specialisation Unknown	34.2	59.3	57.6
17140 Instrumentalist	49.4	59.0	57.6
17145 Singer	53.1	59.0	57.3
17320 Actor	62.4	59.3	57.6
17390 Other Actors and Stage Directors	57.9		
17420 Theatrical Producer	44.7	59.3	57.0
18020 Professional Sportsman	35.8	59.3	57.6
19120 Librarian	62.6	89.3	91.5
20110 Legislative Official	100.0	99.0	67.7
20210 Government Administrator	65.2	92.8	70.4
21000 Managers, Specialisation Unknown	54.8	71.6	67.0
21110 General Manager	66.5	88.2	54.4
21220 Production Manager (except Farm)	65.2	67.4	58.7

Continued on next page

Occupation	RCII	HISCAM U2	HISCAM GB
21240 Contractor	46.6	68.8	67.9
21340 Sales Manager (Retail Trade)	50.8	64.9	58.6
21420 Hotel and Restaurant Manager	56.0	89.3	58.6
22000 Supervisors, Foremen and Inspectors, Specialisation Unk...	45.9	65.5	60.8
22210 Railway Station Master	54.9	81.9	83.0
22220 Postmaster	57.8	89.2	60.8
22290 Other Transport and Communications Supervisors	54.4	69.6	60.8
22425 Housekeeper (Private Service, in Hotels, or in Other Ins...	38.7	65.5	64.2
22440 House Steward	54.7	64.9	63.4
22490 Other Housekeeping and Related Service Supervisors	38.2	67.0	60.1
22520 Farm Supervisor	36.8	59.1	48.3
22610 Production Supervisor or Foreman, General	41.1	55.3	43.7
22620 Supervisor and General Foreman (Mining, Quarrying and We...	33.0	61.4	59.4
30000 Clerical and Related Workers, Specialisation Unknown	54.2	67.9	58.7
31000 Government Executive Officials	55.3	83.9	69.0
31040 Customs officer	52.1	63.7	61.5
32110 Stenographer-Typist, General	61.8	63.1	61.4
32120 Stenographic Secretary	64.1	99.0	60.4
33110 Bookkeeper, General	57.5	71.7	62.9
33135 Cashier, Office or Cash Desk	61.7	78.2	78.8
33140 Bank Teller	73.9	78.2	72.0
33160 Cash Desk Cashier	44.7	78.2	78.8
33170 Post Office Counter Clerk	48.6	78.2	74.2
33940 Finance Clerk	70.2	67.9	66.8
33990 Other Bookkeepers, Cashiers and Related Workers	46.6	74.8	74.9
36000 Transport Conductors	43.8	59.3	54.7
36040 Bus Conductor	39.5	52.5	54.7
37030 Postman	38.2	53.3	45.5
37040 Messenger	44.4	52.6	54.7
38000 Telephone and Telegraph Operators	37.7	63.1	54.7
38040 Telegrapher	51.2	61.3	54.7
39130 Stock Records Clerk	44.5	61.6	57.5
39140 Storeroom Clerk	41.0	61.6	57.5
39150 Weighing Clerk	22.8	61.6	57.5
39340 Legal Clerk	56.6	77.7	78.2
39350 Insurance Clerk	66.4	68.2	67.2
39940 Proof Reader	59.2	68.2	60.4
39960 Railway Clerk	37.0	55.5	58.7
39990 Other Clerks	37.1	64.6	58.7
41020 Working Proprietor (Wholesale Trade)	62.9	81.5	72.6
41025 Working Proprietor (Wholesale or Retail Trade)	53.1	64.3	60.3
41030 Working Proprietor (Retail Trade)	55.3	59.2	50.0
41040 Working Proprietor (Hiring Out)	43.8	59.2	60.3
42220 Buyer	58.9	68.9	59.9
43200 Commercial Travellers and Manufacturers Agents	49.2	68.3	59.9
43220 Commercial Traveller	57.5	68.3	59.9
43230 Manufacturer's Agent	58.7	68.9	59.9
44120 Insurance Salesman	49.3	71.8	63.2
44130 Estate Agent	69.6	99.0	79.5
44140 Stock Broker	66.3	82.8	84.1
44320 Auctioneer	66.9	73.0	65.7
44330 Appraiser	60.5	70.8	62.7
45125 Salesperson, Wholesale or Retail Trade	54.2	60.3	51.8
45130 Retail Trade Salesperson	43.9	52.1	53.3
45220 Street Vendor	31.4	48.6	46.1
49000 Sales Workers Not Elsewhere Classified	36.0		
49020 Pawnbroker	62.1	52.6	53.3

Continued on next page

Table A.4: HISCO Indices

Occupation	RCII	HISCAM U2	HISCAM GB
49030 Waste Collector	42.3	52.6	49.3
51020 Working Proprietor (Hotel and Restaurant)	49.9	56.2	53.5
51030 Working Proprietor (Restaurant)	53.0	54.8	57.5
51040 Working Proprietor (Guest House)	60.7	68.5	60.6
51050 Working Proprietor (Cafe, Bar and Snack Bar)	45.6	54.8	41.2
53100 Cooks	44.6	58.6	55.2
53120 Head Cook	45.1	58.6	56.2
53210 Waiter, General	43.9	53.6	49.8
53250 Bartender	41.7	53.6	49.8
54010 Domestic Servant, General	41.7	39.9	48.4
54020 House Servant	49.3	39.9	34.7
54030 Personal Maid, Valet	46.4	39.9	34.7
54055 Hotel Concierge	40.4	43.4	38.7
54060 Ship's Steward	46.6	43.4	38.7
54090 Other Maids and Related Housekeeping Service Workers	35.1	53.0	48.4
55100 Building Caretakers	44.8	58.0	58.6
55130 Janitor	42.3	66.0	64.8
55220 Charworker	32.2	43.4	38.7
55230 Window Cleaner	39.2	43.4	38.7
55240 Chimney Sweep	26.0	47.4	48.4
56010 Launderer, General	40.4	51.1	48.4
57025 Women's or Men's Hairdresser	45.0	53.7	54.1
57070	42.5	53.7	50.5
58220 Policeman and other Maintainers of Law and Order (except...	39.2	52.4	44.7
58300 Military	39.9	55.0	57.7
58320 Officer	79.2	99.0	79.4
58330 Non-Commissioned Officer	44.1	56.3	49.2
58340 Other Military Ranks	36.4	47.1	38.7
58940 Watchman	35.9	48.5	48.1
59220 Undertaker	54.7	55.7	55.2
59920 Bookmaker (Sport)	42.3	55.8	55.2
59940 Nursing Aid	39.3	48.3	44.4
59990 Other Service Workers Not Elsewhere Classified	39.6	56.2	55.2
61110 General Farmer	52.3	51.1	51.6
61115 Small Subsistence Farmer (Husbandman)	49.8	49.4	42.5
61230 Orchard and Related Tree and Shrub Crop Farmer	82.6	53.0	49.8
61240 Livestock Farmer	65.6	53.2	58.0
61270 Horticultural Farmer	59.3	60.8	55.8
62120 Farm-Servant	31.2	45.8	41.5
62430 Sheep Farm Worker	25.4	47.8	39.6
62460 Horse Worker	31.8	51.8	49.5
62490 Other Livestock Workers	32.2	52.5	47.8
62510 Dairy Farm Worker, General	39.4	51.0	43.4
62700 Nursery Workers and Gardeners	35.9	51.5	42.9
62720 Market Garden Worker	42.1	52.6	49.3
62730 Nursery Worker	53.3	52.6	49.1
62740 Gardener	33.4	53.0	53.5
63220 Forest Supervisor	31.0	53.5	43.4
64100 Fishermen	31.7	51.6	52.7
64990 Other Fishermen, Hunters and Related Workers	33.5	52.0	41.1
71105 Miner, General	2.5	45.6	33.2
71110 Quarryman, General	30.0	49.0	47.2
71290 Other Mineral and Stone Treaters	0.0	46.8	42.6
71300 Well-Drillers, Borers and Related Workers	36.6	45.6	41.2
72000 Metal Processors, Specialisation Unknown	45.0	49.9	38.0
72100 Metal Smelting, Converting and Refining Furnacemen	22.9	46.0	42.2
72190 Other Metal Smelting, Converting and Refining Furnaceman	15.6	45.9	32.6

Continued on next page

Table A.4: HISCO Indices

Occupation	RCII	HISCAM U2	HISCAM GB
72220 Hot-Roller (Steel)	40.4	49.6	45.8
72500 Metal Moulders and Coremakers	39.8	50.6	46.7
72520 Bench Moulder (Metal)	37.9	49.6	45.8
72530 Floor and Pit Moulder	23.9	49.6	43.3
72620	32.1	49.6	45.8
72725 Wire Drawer (Hand or Machine)	38.4	50.6	46.7
72890 Other Metal Platers and Coaters	39.1	48.1	46.7
72930 Casting Finisher	35.2	49.6	43.3
73210 Sawyer, General	31.2	49.6	48.0
73400 Paper Maker, Specialisation Unknown	37.4	47.5	49.5
73490 Other Paper Makers	48.6	47.5	49.5
74100 Crushers, Grinders and Mixers	41.1	51.2	48.0
74130 Miller-Grinder (Chemical and Related Processes)	38.2		
74220 Cooker (Chemical and Related Processes)	40.6	50.5	48.0
74490 Other Still and Reactor Operators	27.6	53.7	50.5
74925 Coal Gas Maker	35.0	51.1	48.0
75000 Spinners, Weavers, Knitters, Dyers and Related Workers, ...	42.0	50.1	45.7
75100 Fibre Preparers	39.9	52.6	54.6
75135 Fibre Carder	42.1	52.6	54.6
75145 Fibre Comber	42.7	52.6	54.6
75150 Fibre Drawer	43.1	52.6	49.3
75220 Spinner, Thread and Yarn	41.7	50.0	51.6
75230 Doubler	44.7	50.0	46.2
75240 Twister	42.5	50.0	51.6
75250 Winder	42.1	50.0	51.6
75320 Loom Fixer	40.6	47.7	43.7
75400 Weavers and Related Workers	41.5	45.2	45.7
75415 Beam Warper	45.3	47.7	48.5
75422 Loom Threader (Hand or Machine)	43.3	47.7	43.7
75430 Cloth Weaver (Hand)	37.5	47.7	43.7
75450 Lace Weaver (Machine)	35.3	47.7	48.5
75452	34.2	47.7	43.7
75490 Other Weavers and Related Workers	48.2	50.3	30.3
75535 Hosiery Knitter (Hand)	19.8	47.7	48.5
75540 Knitter (Hand-Operated Machine)	9.3	47.7	48.5
75600 Bleachers, Dyers and Textile Product Finishers	44.2	53.8	51.0
75615 Textile Bleacher	43.2	53.8	51.0
75622 Yarn, Fabric or Garment Dyer	44.0	53.8	51.0
75655 Textile Fuller	42.5	53.8	50.7
75710 Rope Maker, General	37.8	50.6	50.2
75720 Wheel Turner, Rope Making	36.7	47.7	43.7
75990 Other Spinners, Weavers, Knitters, Dyers and Related Wor...	30.8	60.3	56.0
76145 Tanner	38.2	57.3	54.7
76150 Leather Currier	45.5	57.3	54.7
77120 Grain Miller	35.5	55.2	36.6
77250 Crystalliser Operator (Sugar Refining)	34.2	56.2	51.0
77310 Butcher, General	41.1	59.4	50.8
77320 Slaughterer	33.9	52.6	50.8
77390 Other Butchers and Meat Preparers	42.3	57.5	50.8
77450 Pickler, Food	33.0	56.2	51.0
77610 Baker, General	43.1	57.3	39.6
77660 Confectionary Maker	50.5	58.9	50.8
77810 Brewer, General	41.2	60.6	50.8
78100 Tobacco Preparers	41.0	49.1	50.8
78200 Cigar Makers	48.5	47.8	50.8
79100 Tailors and Dressmakers	41.3	50.8	51.6
79140 Dressmaker	47.0	50.0	47.4

Continued on next page

Table A.4: HISCO Indices

Occupation	RCII	HISCAM U2	HISCAM GB
79190 Other Tailors and Dressmakers	47.6	51.1	50.3
79200 Fur Tailors and Related Workers	52.4	51.1	47.6
79220 Fur Tailor	50.7	50.0	46.3
79310 Hat Maker, General	43.6	56.4	47.4
79320 Milliner, General	41.1	50.0	50.3
79450 Garment Cutter, except Leather	49.7	55.9	47.5
79475 Glove Cutter, Leather or Other Material	41.3	55.9	47.5
79620 Furniture Upholsterer	52.2	60.4	56.5
79640 Mattress Maker	37.3	50.0	47.4
79920 Sail, Tent and Awning Maker	44.0	56.7	47.4
79930 Umbrella Maker	42.5	51.1	50.3
79990 Other Tailors, Dressmakers, Sewers, Upholsterers and Rel...	34.3	54.9	47.4
80110 Shoemaker, General	35.1	50.0	47.4
80310 Leather Goods Maker, General	43.0	51.1	47.6
80320 Saddler and Harness Maker	44.5	51.1	50.3
81120 Cabinetmaker	46.7	52.2	42.3
81190 Other Cabinetmakers	28.9	62.8	59.3
81230 Wood Turner	40.7	51.7	47.6
81920 Coach-Body Builder	45.3	61.0	53.2
81925 Cartwright	38.0	53.1	46.1
81930 Cooper	39.3	51.5	49.2
81935 Wooden Pattern Maker	45.8	52.2	48.0
81940 Wooden Model Maker	46.8	52.2	48.9
81945 Wood Carver	49.8	60.8	50.4
81955 Wooden Furniture Finisher	43.7	47.2	49.6
81990 Other Cabinetmakers and Related Woodworkers	43.4	47.2	49.6
83110 Blacksmith, General	30.3	51.6	46.1
83140 Forging-Press Operator	29.9	51.6	46.1
83190 Other Blacksmiths, Hammersmiths and Forging-Press Operators	30.6	51.6	46.1
83220 Tool and Die Maker	37.1	49.8	37.4
83320 Lathe Setter-Operator	38.1	51.5	51.5
83410 Machine-Tool Operator	39.8	61.8	59.9
83420 Lathe Operator	40.8	50.0	46.1
83520 Buffing- and Polishing-Machine Operator	39.0	50.5	40.0
83530 Tool Grinder, Machine Tools	32.6	49.9	46.1
83560 Textile Card Grinder	36.6	51.8	48.3
83590 Other Metal Grinders, Polishers and Tool Sharpeners	33.0	48.2	39.5
83915 Cutler	38.1	50.0	36.3
83920 Gunsmith	41.3	54.9	45.0
83930 Locksmith	27.9	53.6	48.3
83960 Metal-Press Operator	29.4	51.8	45.3
83990 Other Blacksmiths, Toolmakers and Machine-Tool Operators...	9.5	47.1	35.6
84100 Machinery Fitters and Machine Assemblers	40.5	56.9	49.5
84175 Machinery Erector and Installer	41.7	56.9	54.3
84190 Other Machinery Fitters and Machine Assemblers	40.0	52.9	49.5
84220 Watch and Clock Assembler	51.0	63.9	55.1
84240 Precision Instrument Assembler	43.8	58.7	51.0
84900 Machinery Fitters, Machine Assemblers and Precision Inst...	44.7	61.3	55.0
84910 Machine Mechanic, General	44.9	58.7	56.3
84980 Oiler and Greaser (except Ships' Engines)	34.8	50.2	49.5
85510 Electrician, General	43.8	55.6	57.5
85700 Electric Linemen and Cable Jointers	37.2	51.7	48.3
87105 Plumber, General	45.9	55.8	50.4
87110 Pipe Fitter, General	42.3	60.5	58.4
87120 Gas Pipe Fitter	40.1	51.8	52.8
87190 Other Plumbers and Pipe Fitters	40.7	54.3	51.2
87210 Welder, General	30.3	52.2	52.7

Continued on next page

Table A.4: HISCO Indices

Occupation	RCII	HISCAM U2	HISCAM GB
87310 Sheet-Metal Worker, General	37.3	54.6	55.0
87330 Coppersmith	44.7	55.9	52.9
87340 Tinsmith	35.6	50.1	52.7
87350 Boilersmith	33.1	50.2	40.2
87400 Structural Metal Preparers and Erectors	38.4	60.1	55.6
87462 Riveter (Hand or Machine)	28.3	48.5	50.4
88010 Jeweller, General	57.3	76.8	77.1
88050 Goldsmith and Silversmith	52.3	65.3	55.7
89120 Glass Blower	30.5	42.4	33.0
89148 Plate-Glass Polisher	37.8	45.9	37.4
89156 Glass Cutter	34.1	45.3	33.0
89164 Glass Edge Grinder	37.0	45.7	33.0
89210 Potter, General	24.6	46.9	33.0
89240 Brick and Tile Moulder (Hand)	35.8	45.9	37.4
89242 Brick and Tile Moulder (Hand or Machine)	24.6	44.9	28.3
89247 Pottery and Porcelain (Die- or Hand)	32.9	45.9	37.4
89290 Other Potters and Related Clay and Abrasive Formers	27.2	49.1	45.2
89320 Glass-Making Furnacemen	22.5	45.9	37.4
89540 Ceramics Decorator	45.4	45.9	37.4
91025 Paper Box Maker (Hand or Machine)	35.4	59.5	57.2
92120 Hand Compositor	48.8	54.2	58.1
92400 Printing Engravers (except Photo-Engravers)	51.3	63.4	55.3
92625 Bookbinder (Hand or Machine)	48.0	55.9	54.0
92950 Textile Printer	47.1	57.4	55.8
92990 Other Printers and Related Workers	42.4	57.4	55.8
93120 Building Painter	42.1	53.4	38.3
93950 Sign Painter	50.5	54.0	51.6
93990 Other Painters	43.7	62.9	56.6
94100 Musical Instrument Makers and Tuners	21.3	63.9	56.7
94170	48.4	52.0	51.2
94180 Musical Instrument Tuner	51.8	48.5	51.2
94190 Other Musical Instrument Makers	40.2	60.2	49.7
94220 Basket Maker	35.4	48.5	49.7
94230 Brush Maker (Hand)	42.3	52.0	49.7
94920	46.2	48.5	44.5
94960 Candle Maker	40.4	52.0	51.2
95120 Bricklayer (Construction)	31.7	47.3	44.2
95145 Marble Setter	33.9	50.1	49.9
95150 Tile Setter	34.2	50.1	46.5
95160 Paviour	38.7	46.4	33.6
95320 Slate and Tile Roofer	35.3	43.9	42.8
95360 Roof Thatcher	26.5	41.7	41.2
95410 Carpenter, General	39.8	51.7	50.0
95440 Wood Shipwright	43.1	53.9	58.0
95490 Other Carpenters, Joiners and Parquetry Workers	22.7	51.7	50.0
95510 Plasterer, General	36.8	48.3	50.0
95590 Other Plasterers	40.2	54.3	56.4
95720 Building Glazier	40.2	56.5	50.0
95910 Housebuilder, General	56.6	63.5	59.4
95920 Building Maintenance Man	40.1	50.1	49.9
95925 Paperhanger	41.9	57.6	50.0
95930 Carpet Planner	50.9	50.1	49.9
95990 Other Construction Workers	44.5	56.7	51.8
96910 Stationary Engine Operator, General	30.4	50.5	38.7
96950 Water Treatment Plant Operator (Waterworks)	39.3	48.1	43.8
97120 Docker	30.8	50.5	50.8
97125 Loader of Ship, Truck, Wagon or Airplane	35.1	47.5	41.0

Continued on next page

Table A.4: HISCO Indices

Occupation	RCII	HISCAM U2	HISCAM GB
97145 Warehouse Porter	47.0	49.5	47.2
97152 Packer, Hand or Machine	39.9	50.7	45.8
97190 Other Dockers and Freight Handlers	56.0	50.8	47.2
97210 Rope and Cable Splicer, General	42.9	47.8	45.8
97315 Crane Driver (Bridge- or Gantry Crane, Jib-Crane, Tower-...	36.4	51.5	47.2
98130 Able Seaman	38.1	50.7	51.0
98135 Seaman, Able or Ordinary	37.7	50.7	51.0
98190 Other Ships' Deck Ratings, Barge Crews and Boatmen	27.3	47.2	29.9
98320 Railway Engine Driver	33.6	53.4	42.5
98330 Railway Steam-Engine Fireman	32.3	48.2	56.5
98420 Railway Brakeman (Freight Train)	39.6	48.5	44.6
98430 Railway Signaller	35.8	52.8	47.8
98500 Motor-Vehicle Drivers	42.6	52.4	49.0
98520 Tram Driver	43.1	50.3	46.7
98530 Taxi Driver	40.1	61.1	58.3
98540 Motor Bus Driver	37.8	49.6	43.8
98555 Lorry and Van Driver (Local or Long-Distance Transport)	33.4	51.6	57.3
98590 Other Motor-Vehicle Drivers	37.7	49.8	42.4
98620 Animal-Drawn Vehicle Driver (Road)	34.7	48.1	35.2
98990 Other Transport Equipment Operators	35.0	51.0	58.6
99910 Labourer	22.4	46.8	34.5
99930 Factory Worker	37.9	49.0	41.7