Appendix B

Additional Results for

"Social Class and Workers' Rent, 1983-2001"

How Strongly do EGP Classes Predict Earnings in Comparison to Standard Educational and Occupational groups?

At the end of this Appendix B, we offer the complete model specifications and coefficients for the following 12 models estimated for the pooled yearly data of all 2.5 million individuals in our sample.

We estimated 6 baseline models and obtained the following R^2 values:

Model 1. Only demographic variables and labor force experience, all interacted with a linear term for time

R^2=.2039

Model 2a. Model 1 + education + education*time (with linear and quadratic terms for education)

R^2=.3908

Model 2b. Model 1 + education + education*time (with dummy variables for educational categories)

R^2=.3891

Model 3. Model 1 + occupation + occupation*time

R^2=.3724

Model 4a. Model 2a + occupation + occupation*time

R^2=.4364

Model 4b. Model 2b + occupation + occupation*time

R^2=.4353

We then estimated 6 test models with appropriate F tests (for the EGP class dummies and their

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interactions with time):

Model 5. Model 1 + class + class*time

R^2=.3991

```
F( 12,2508464) =67898.27
     Prob > F =    0.0000
```

Model 6a. Model 2a + class + class*time

R^2=.4552

```
F( 12,2508460) =24716.64
     Prob > F =    0.0000
```

Model 6b. Model 2b + class + class*time

R^2=.4538

```
F( 12,2508456) =24764.90
     Prob > F =    0.0000
```

Model 7. Model 3 + class + class*time

R^2=.4084

```
F( 12,2508454) =12745.64
     Prob > F =    0.0000
```

Model 8a. Model 4 + class + class*time

R^2=.4640

```
F( 12,2508450) =10746.15
     Prob > F =    0.0000
```

Model 8b. Model 4 + class + class*time

R^2=.4627

```
F( 12,2508446) =10651.26
     Prob > F =    0.0000
```

There are two basic conclusions here:

   1. EGP classes are uniformly better predictors of earnings patterns over this time
   period than either education or the census occupational categories. The R^2 for Model
   5 is greater than the R^2 for models 2a, 2b, and 3.

2. For each of the six baseline models 1 through 4b, the inclusion of class and class by time interactions in corresponding models 5 through 8b increases the R^2 substantially and generates a statistically significant F test statistic for the inclusion of the additional 12 parameters. For example, the baseline model 1 has an R^2 of .2039. For model 5, EGP dummies and their interactions with time are added to model 1, and the R^2 increases .3991. The value of an F test for the 12 coefficients is a 67,898.27 with a p-value of, essentially, zero. But, most importantly, EGP classes almost double the explanatory power of the model. At the other end of the spectrum, even after trends for education and occupational categories are specified, EGP classes still have substantial and statistically significant predictive power (though the latter is unsurprising with 2.5 million cases). For model 8a, the value for R^2 is .4640 (in comparison to .4364 for model 4a). For model 8b, the value for R^2 is .4627 (in comparison to .4353 for model 4b). Again, the F test is significant in both cases, with values of 10,746.15 and 10,651.26 respectively.

Are these class trends a mere reflection of more basic processes that should be modeled directly? In a fundamental sense, the answer to this question must be 'yes'. But, given the data at our disposal, a partition based on class is a good starting point for the following reasons: Class, occupation, and education are multiple faces of the same joint population distribution. Earnings can be projected onto any of these marginal distributions, or into cells defined by any combination of them. None has an uncontestable claim to exogeneity, and the most reasonable position is to regard them as all endogenous with respect to each other, as generated by the heterogeneity that can be found within cells of each of the marginal distributions. Accordingly, it is proper for the sociological literature to "give classes a try," so as to restore some balance to the literature that has seized upon educational categories as the most important variable for explaining these trends because supply-side-focused economists were the scholars to first discover the growth of earnings inequality.

Educational Groups as a Partition of the Labor Market for Estimating the Relative Decline in the Variance of Industry Effects

In the following four figures, we estimate the standard deviation of industry effects within educational groups, after conditioning on alternative sets of attributes for individuals. These figures are directly comparable to Figures 3 and 4 in the main text.

We do not present these results in the main text (although we do refer to them in the results section) because of space considerations. However, as we also note there, they do not permit as natural of an interpretation as measures of rent. Although they are reasonable empirical models, if we were to present them as if they inform the rent destruction conjecture, then we would lose the claim to be estimating models appreciably similar to those of Katz, Krueger, and Summers, which is what establishes our claim that even neoclassical economists should regard these industry coefficients as adequate indicators of relative rent payments (and, hence, that even

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neoclassical economists should pay attention to results such as ours).
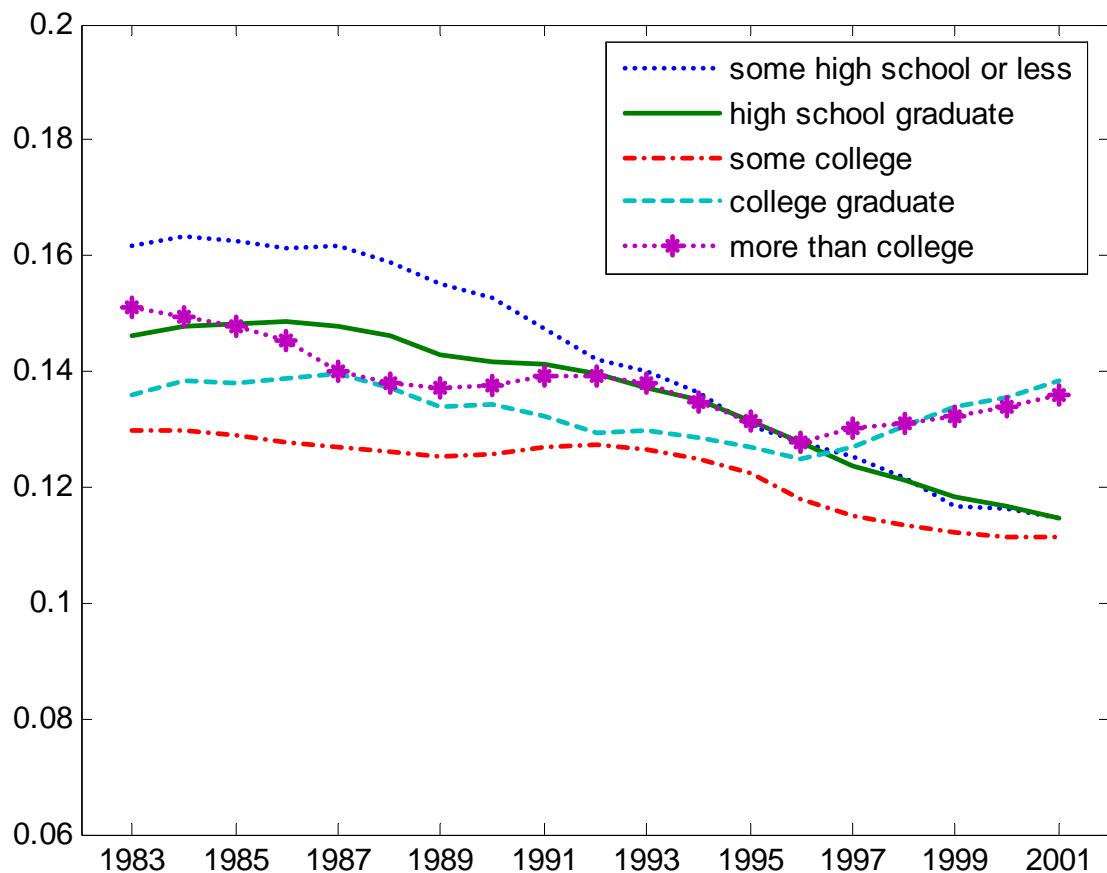
Figure B2a. Five-Year Moving Averages of the Weighted Standard Deviation of Industry Effects
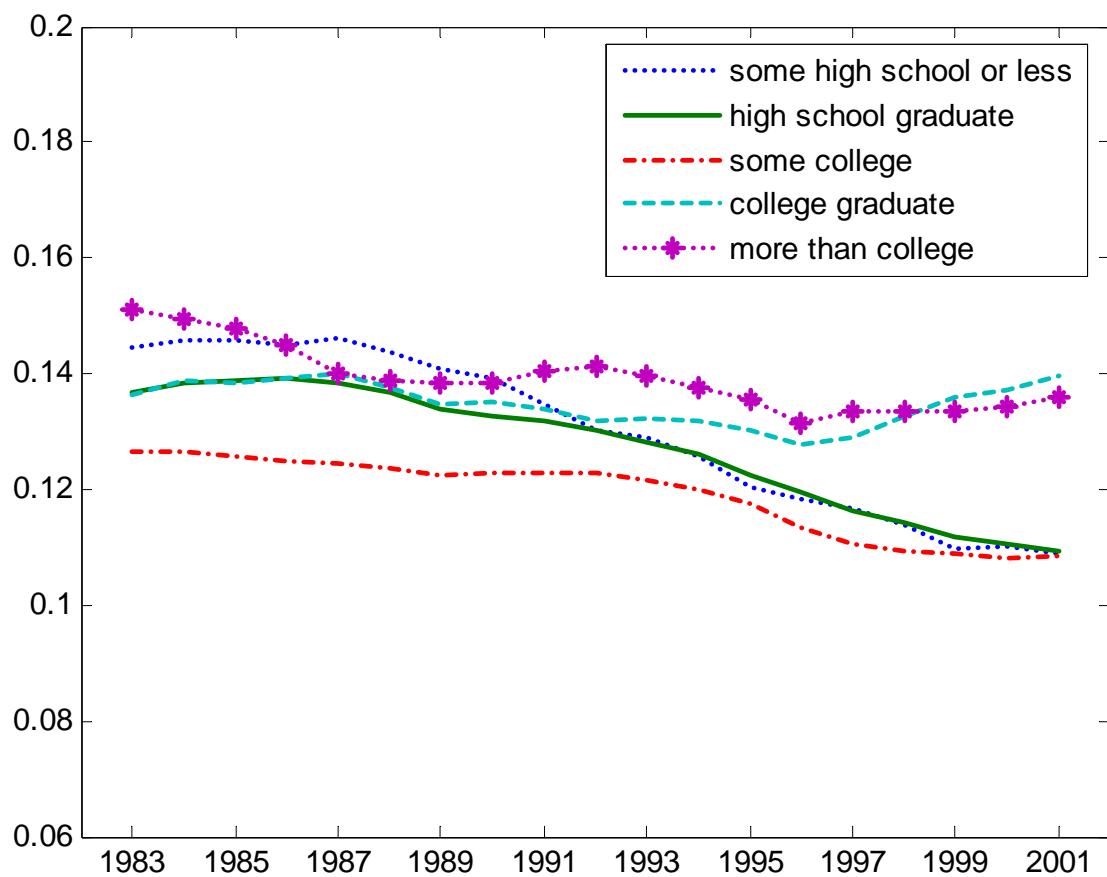
Figure B2b. Five-Year Moving Averages of the Weighted Standard Deviation of Industry Effects (with an adjustment for union status)
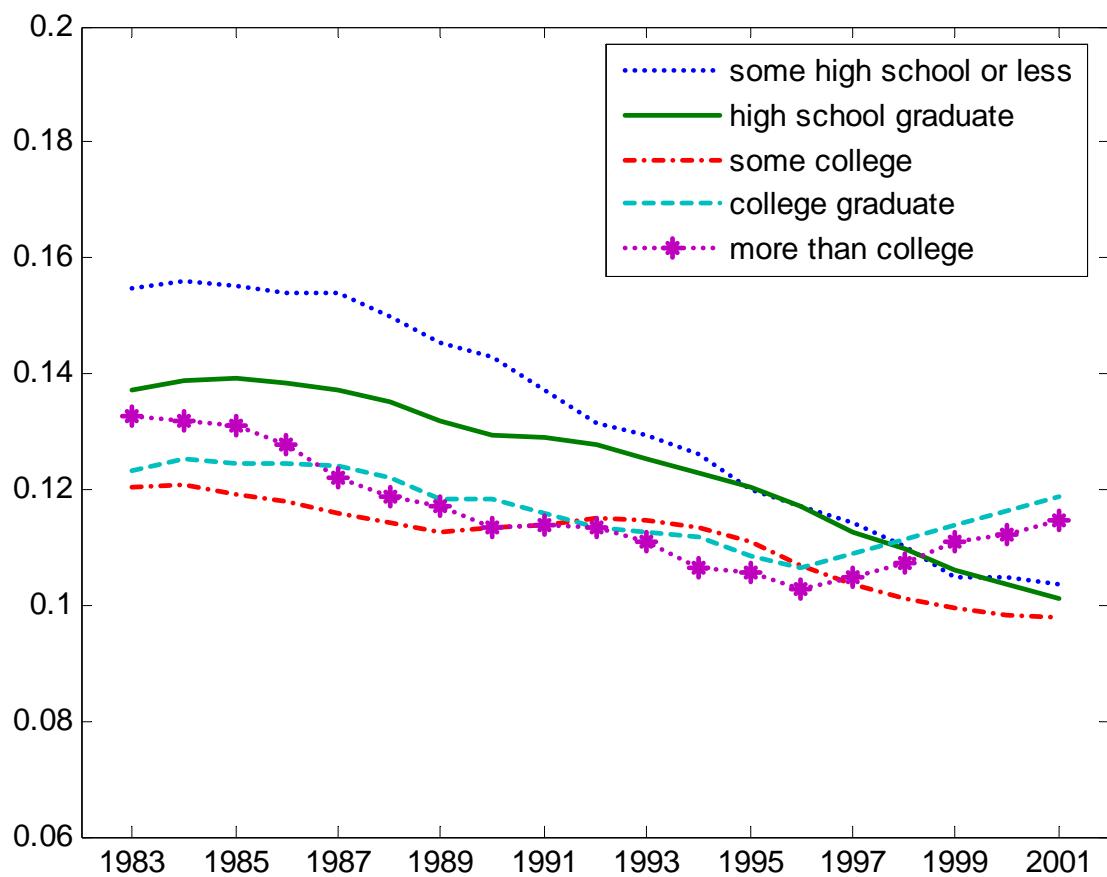
Figure B2c. Five-Year Moving Averages of the Weighted Standard Deviation of Industry Effects (with an adjustment for EGP class)
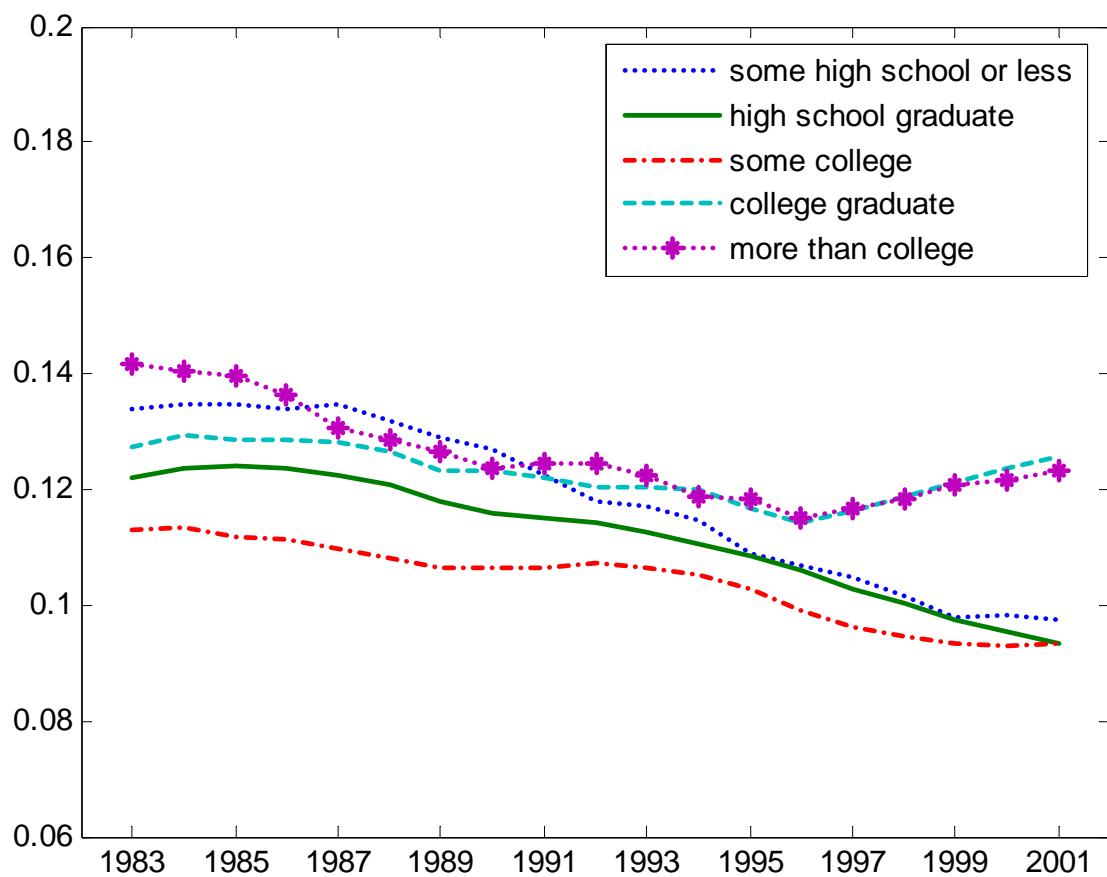
Figure B2d. Five-Year Moving Averages of the Weighted Standard Deviation of Industry
Effects (with an adjustment for union status and EGP class)

Variance Explained and the Connections to the Literature on the Increase in Within-Category Earnings Inequality

The tables below give the R-squared values for all of the regression models that generate Figures 2 and 3. (The basic pattern holds for Figure 4, and thus we do not report the values here). As is clear, the percentage of the variance in earnings explained is rather high, and consistent with what Katz, Krueger, and Summers find. Moreover, the percentage of variance explained drops steadily over the years analyzed, which is consistent with the results of the paper and the extant literature on the growth of within-category earnings inequality. If industry location was important and is increasingly less important, the amount of variance explained should fall. If it is also the case that within-category inequality is increasing (as we note in the paper, based on the standard findings in the literature), then the percentage of variance explained by the same specification should also decline.

R-Squared Values for Figure 2 (from Each Underlying Year-Specific Regression)

Year	No adjustment for Union	Adjustment for Union
1983	0.456629	0.461482
1984	0.453984	0.458552
1985	0.460444	0.464475
1986	0.463101	0.467389
1987	0.449189	0.452681
1988	0.442622	0.445712
1989	0.446837	0.451328
1990	0.445819	0.449495
1991	0.443240	0.446388
1992	0.438619	0.441832
1993	0.430615	0.434917
1994	0.431915	0.436340
1995	0.426874	0.430902
1996	0.425259	0.429018
1997	0.419823	0.423590
1998	0.414226	0.417326
1999	0.419201	0.421221
2000	0.408427	0.410254
2001	0.400592	0.401929

R-Squared Values for Figure 3, Panel (a)

Year	I	II	IIIa	IIIb	V	VI	VIIa
1983	0.359098	0.296122	0.328632	0.312541	0.355802	0.340425	0.426665
1984	0.357362	0.297146	0.326946	0.320999	0.355754	0.352149	0.423375
1985	0.356516	0.295982	0.318890	0.337880	0.364723	0.365195	0.433021
1986	0.382046	0.310427	0.314238	0.334736	0.370671	0.344926	0.429601
1987	0.371260	0.293781	0.300648	0.299504	0.358439	0.326509	0.406100
1988	0.351389	0.293960	0.308924	0.296529	0.337272	0.327450	0.404899
1989	0.372203	0.292835	0.289025	0.311141	0.325184	0.326461	0.381064
1990	0.359821	0.301245	0.287428	0.317601	0.336997	0.319619	0.374293
1991	0.358823	0.297552	0.286236	0.290689	0.328122	0.330290	0.364107
1992	0.350034	0.300140	0.291811	0.271371	0.325733	0.319294	0.360388
1993	0.337291	0.296088	0.277365	0.280924	0.323488	0.318369	0.354626
1994	0.352705	0.302836	0.296920	0.296655	0.321558	0.303626	0.341044
1995	0.344796	0.292825	0.272880	0.267784	0.320034	0.301144	0.334661
1996	0.337811	0.294982	0.262998	0.278092	0.359900	0.299871	0.331548
1997	0.325712	0.292422	0.274558	0.275762	0.306982	0.296144	0.329527
1998	0.301887	0.293506	0.266802	0.304438	0.304276	0.276538	0.306804
1999	0.321628	0.293206	0.275483	0.287446	0.303240	0.262981	0.302415
2000	0.303951	0.280792	0.261932	0.288897	0.257355	0.252917	0.290962
2001	0.291178	0.278584	0.273625	0.270515	0.255751	0.246010	0.277059

Panel (b)

Year	I	II	IIIa	IIIb	V	VI	VIIa
1983	0.359160	0.299778	0.333205	0.329703	0.357703	0.392195	0.463192
1984	0.357408	0.301918	0.331130	0.329546	0.357020	0.403021	0.458425
1985	0.356516	0.299708	0.323169	0.346355	0.366694	0.413090	0.465949
1986	0.382134	0.313721	0.319043	0.344674	0.373522	0.396119	0.464754
1987	0.371294	0.296366	0.305729	0.311267	0.360927	0.369971	0.438881
1988	0.351404	0.297930	0.311899	0.304408	0.340155	0.366621	0.434780
1989	0.372207	0.298320	0.294511	0.319776	0.327415	0.370307	0.416046
1990	0.359826	0.307553	0.293058	0.325153	0.340653	0.355850	0.404167
1991	0.358925	0.302560	0.290904	0.300007	0.331727	0.361895	0.395378
1992	0.350094	0.304761	0.297811	0.278501	0.329063	0.355762	0.392108

1993	0.337296	0.303146	0.282606	0.283310	0.330283	0.357445	0.387723
1994	0.352705	0.310470	0.302032	0.299455	0.335507	0.340463	0.367059
1995	0.344799	0.300028	0.277709	0.270390	0.328799	0.339627	0.361864
1996	0.337835	0.302523	0.269575	0.282740	0.366596	0.333912	0.355375
1997	0.325731	0.299187	0.279450	0.277944	0.319142	0.328486	0.356688
1998	0.301890	0.298678	0.270375	0.307518	0.314813	0.309602	0.330296
1999	0.321642	0.297457	0.278593	0.288907	0.311562	0.291619	0.320177
2000	0.303968	0.284765	0.264684	0.290563	0.264207	0.281993	0.308816
2001	0.291179	0.281948	0.276368	0.270661	0.261342	0.275549	0.290358

The 46-industry coding and Cell Sizes for Analysis

Is a categorization of industries into 46 categories sufficient for our analysis? Figure 2 in the main text can be estimated for the full 3-digit industry codes (for a total of 225 industries.) We have done so in the following figure (which is exactly analogous to Figure 2):
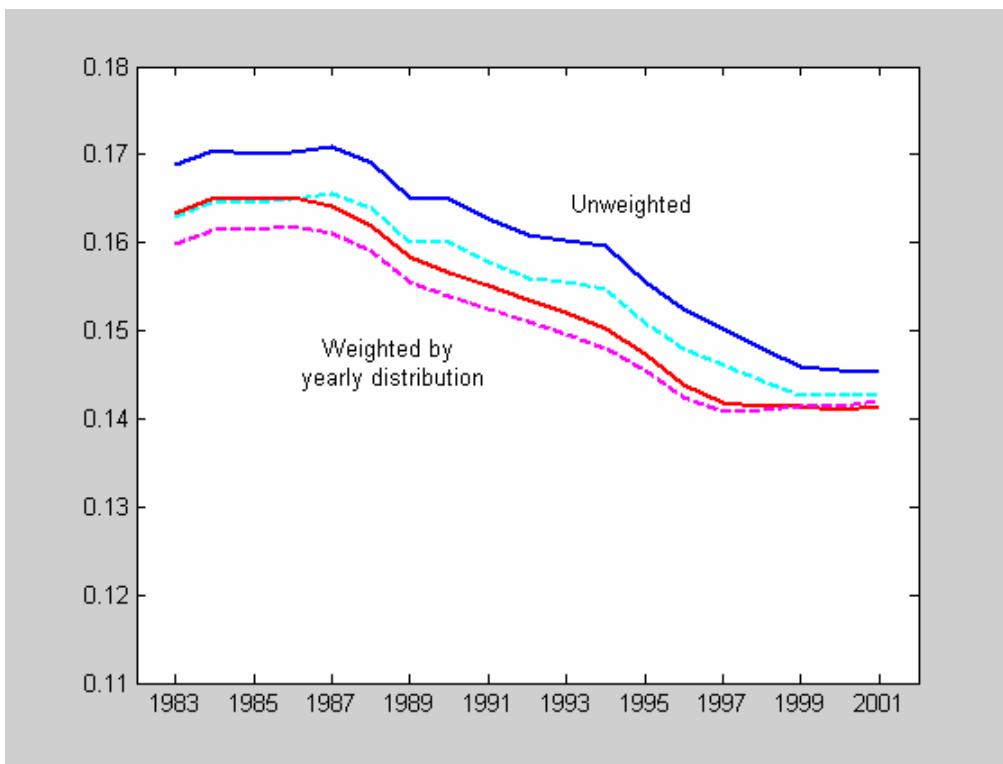
Figure B1. Five-Year Moving Averages of the Standard Deviation of
Industry Effects, Using the 225 Industries rather than 46 Industries
as in Figure 2 in the main text.

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The basic decline is still present, although a little bit less dramatic. (The difference between the weighted and unweighted standard deviations is less dramatic as well, since there are many fewer individuals per industry. And, the weighting does not reduce the size of the expected sampling error. Thus, the noise-to-signal ratio is higher for this substitute figure.)

However, as shown in the next table, none of our EGP classes is spread across all 225 industries. And, the missing industry coefficients in each year vary. Moreover, many of the 225 industries have only 1 or 2 individuals from each class in each industry, making estimation of effects impossible in the presence of some combinations of other covariates. Thus, we have few choices on how to proceed.

EGP Class	Average sample size per year	Average number of 3-digit industries with at least one individual from the relevant class
I	22894.84	220.26
II	26770.21	220.16
IIIa	22059.42	221.11
IIIb	6361.95	171.21
V	6912.68	203.42
VI	15023.32	211.26
VIIa	32004.32	221.68

It is, of course, always preferable to measure patterns as finely as possible. But, coarse codings are not necessarily wrong (and it is not necessarily the case that 46 industries is particularly coarse, especially in comparison to the new structuralist literature in which between 2 and 10 categories are usually posited for the industry structure). Finally, we regard the correspondence between Figure B1 and Figure 2 in the main text to be a good sign.

Full Results on the Statistical Tests of the Predictive Power of EGP Classes

Key

Education (educ):
   1- some high school or less
   2- high school graduates
   3- some college
   4- college graduates
   5- more than college

Occupation (occ):
   1- managerial and professional specialty
   2- technical, sales, and administrative support
   3- service
   4- farming, forestry, and fishing
   5- precision production, craft, and repair
   6- operators, fabricators, laborers

Class (egp):
   1- "Higher-grade professionals, administrators, and officials;
       managers in large industrial establishments; large
       proprietors."
   2- "Lower-grade professionals, administrators, and officials;
       higher-grade technicians; managers in small industrial
       establishments; supervisors of non-manual employees."
   3- "Routine non-manual employees, higher-grade (administration
       and commerce)."
   4- "Routine non-manual employees, lower-grade (sales and
       service)."
   5- "Lower-grade technicians; supervisors of manual workers."
   6- "Skilled manual workers."
   7- "Semi- and unskilled manual workers (not in agriculture)."

6 BASELINE MODELS

Model 1

```
------------------------------------------------------------------------------
      Source |       SS       df       MS              Number of obs = 2508508
-------------+------------------------------           F( 31,2508476) =20729.94
       Model |  174876.383       31  5641.17363        Prob > F      =  0.0000
    Residual |  682623.7342508476  .272126875          R-squared     =  0.2039
-------------+------------------------------           Adj R-squared =  0.2039
       Total |  857500.1172508507  .341836844          Root MSE      =  .52166
------------------------------------------------------------------------------

------------------------------------------------------------------------------
   logearnwk |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
         exp |   .0437039   .0006973    62.68   0.000     .0423373    .0450705
       expsq |  -.0010416   .0000342   -30.44   0.000    -.0011087   -.0009745
       expcu |   4.75e-06   4.89e-07     9.71   0.000     3.79e-06    5.71e-06
      female |  -.0901382   .0051034   -17.66   0.000    -.1001407   -.0801356
     married |   .2344034   .0027521    85.17   0.000     .2290094    .2397974
       black |  -.1875045    .002361   -79.42   0.000    -.1921319    -.182877
    hispanic |  -.3008888    .002906  -103.54   0.000    -.3065845    -.295193
       other |  -.1199045   .0043317   -27.68   0.000    -.1283946   -.1114145
     central |  -.0698533   .0021613   -32.32   0.000    -.0740895   -.0656172
       south |  -.1271039   .0020134   -63.13   0.000     -.13105   -.1231577
        west |   .0646956   .0023012    28.11   0.000     .0601852    .0692059
    fmarried |  -.2509902   .0041055   -61.13   0.000    -.2590369   -.2429435
        fexp |   .0071272   .0010467     6.81   0.000     .0050758    .0091787
      fexpsq |  -.0009714    .000053   -18.34   0.000    -.0010752   -.0008676
      fexpcu |   .0000169   7.73e-07    21.83   0.000     .0000154    .0000184
        time |   .0090913   .0003257    27.91   0.000     .0084529    .0097297
        texp |   6.79e-06   .0000599     0.11   0.910    -.0001107    .0001242
      texpsq |   2.44e-08   2.96e-06     0.01   0.993    -5.78e-06    5.83e-06
      texpcu |  -5.05e-08   4.28e-08    -1.18   0.238    -1.34e-07    3.33e-08
     tfemale |    .003112    .000442     7.04   0.000     .0022458    .0039783
    tmarried |  -.0011493   .0002265    -5.07   0.000    -.0015932   -.0007054
      tblack |  -.0026658   .0001939   -13.74   0.000    -.0030459   -.0022856
   thispanic |  -.0053934   .0002275   -23.71   0.000    -.0058393   -.0049476
      tother |   .0042525   .0003358    12.66   0.000     .0035943    .0049106
    tcentral |  -.0012874   .0001824    -7.06   0.000     -.001645   -.0009299
      tsouth |    -.000363   .0001697    -2.14   0.032    -.0006956   -.0000303
       twest |  -.0044978   .0001924   -23.38   0.000    -.0048749   -.0041207
    tfmarried |   .0030263   .0003373     8.97   0.000     .0023652    .0036874
       tfexp |  -.0003771   .0000893    -4.22   0.000    -.0005522    -.000202
      tfexpsq |   .0000379   4.53e-06     8.36   0.000      .000029    .0000468
      tfexpcu |  -6.53e-07   6.64e-08    -9.83   0.000    -7.83e-07   -5.23e-07
       _cons |   5.913386   .0037445  1579.24   0.000     5.906047    5.920725
------------------------------------------------------------------------------
```

Model 2a (Model 1 + education + education*time)

```
------------------------------------------------------------------------------
       log:  U:\User4\zt22\Edited-data\r32.smcl
  log type:  smcl
 opened on:  10 Aug 2005, 12:10:45

. #delimit ;
delimiter now ;
. reg logearnwk exp expsq expcu female married black hispanic other central south west
fmarried fexp fexpsq fexpcu time texp texpsq texpcu tfemale tmarried tblack thispanic
tother tcentral tsouth twest tfmarried tfexp tfexpsq tfexpcu educ educsq teduc teducsq
```

```
[aw=nearnwt];
(sum of wgt is   3.5919e+11)

      Source |       SS       df       MS              Number of obs = 2508508
-------------+------------------------------           F( 35,2508472) =45978.25
       Model |  335118.847       35   9574.82419        Prob > F       =  0.0000
    Residual |  522381.272508472   .208246801          R-squared      =  0.3908
-------------+------------------------------           Adj R-squared  =  0.3908
       Total |  857500.1172508507   .341836844         Root MSE       =  .45634


-------------------------------------------------------------------------------
   logearnwk |     Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+-----------------------------------------------------------------
         exp |   .0544319   .0006149    88.52   0.000     .0532267    .0556372
       expsq |  -.0015839   .0000302   -52.36   0.000    -.0016431   -.0015246
       expcu |   .0000155   4.35e-07    35.73   0.000     .0000147    .0000164
      female |  -.1108455   .0044662   -24.82   0.000    -.1195991    -.102092
     married |   .1827132   .0024143    75.68   0.000     .1779813    .1874451
       black |  -.1337639   .0020722   -64.55   0.000    -.1378254   -.1297025
    hispanic |   -.134674   .0026616   -50.60   0.000    -.1398906   -.1294575
       other |  -.1461076   .0037962   -38.49   0.000     -.153548   -.1386671
     central |  -.0462027   .0018923   -24.42   0.000    -.0499116   -.0424938
       south |  -.0938664   .0017638   -53.22   0.000    -.0973233   -.0904094
        west |   .0478687   .0020133    23.78   0.000     .0439226    .0518148
    fmarried |  -.1868564   .0035954   -51.97   0.000    -.1939033   -.1798096
        fexp |   .0016235   .0009161     1.77   0.076     -.000172    .0034191
      fexpsq |  -.0006005   .0000464   -12.95   0.000    -.0006913   -.0005096
      fexpcu |   .0000104   6.77e-07    15.31   0.000     9.03e-06    .0000117
        time |   .0042394   .0007919     5.35   0.000     .0026873    .0057916
        texp |   .0000473   .0000528     0.90   0.370    -.0000561    .0001508
      texpsq |  -6.42e-06   2.62e-06    -2.45   0.014    -.0000115   -1.29e-06
      texpcu |   8.01e-08   3.79e-08     2.11   0.035     5.82e-09    1.54e-07
     tfemale |   .0011505   .0003868     2.97   0.003     .0003924    .0019086
    tmarried |  -.0028834   .0001987   -14.51   0.000    -.0032729   -.0024939
      tblack |  -.0012955   .0001703    -7.61   0.000    -.0016292   -.0009618
   thispanic |  -.0012419   .0002096    -5.92   0.000    -.0016527    -.000831
      tother |   .0030839   .0002943    10.48   0.000      .002507    .0036607
    tcentral |  -.0003476   .0001597    -2.18   0.030    -.0006607   -.0000345
      tsouth |  -.0001354   .0001487    -0.91   0.362    -.0004268     .000156
       twest |   -.002702   .0001683   -16.05   0.000    -.0030319   -.0023721
    tfmarried |   .0027085   .0002953     9.17   0.000     .0021297    .0032874
        tfexp |  -.0003533   .0000782    -4.52   0.000    -.0005066   -.0002001
      tfexpsq |    .000035   3.96e-06     8.84   0.000     .0000273    .0000428
      tfexpcu |  -5.50e-07   5.81e-08    -9.46   0.000    -6.64e-07   -4.36e-07
         educ |   .0080293    .001287     6.24   0.000     .0055068    .0105519
       educsq |   .0029774   .0000493    60.34   0.000     .0028807    .0030741
        teduc |  -.0015031   .0001071   -14.03   0.000     -.001713   -.0012931
      teducsq |   .0001232   4.08e-06    30.15   0.000     .0001152    .0001312
       _cons |   5.206347   .0094024   553.73   0.000     5.187919    5.224775
-------------------------------------------------------------------------------
```

Model 2b (Model 1 + education + education*time)
```
-------------------------------------------------------------------------------

      Source |       SS       df       MS              Number of obs = 2508508
-------------+------------------------------           F( 39,2508468) =40969.95
       Model |  333667.573       39   8555.57881        Prob > F       =  0.0000
    Residual |  523832.543250468   .208825683          R-squared      =  0.3891
-------------+------------------------------           Adj R-squared  =  0.3891
       Total |  857500.1172508507   .341836844         Root MSE       =  .45697
```

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```
------------------------------------------------------------------------------
  logearnwk |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
------------+-----------------------------------------------------------------
        exp |   .0508677   .0006122    83.08   0.000     .0496677    .0520676
      expsq |  -.0013669   .0000301   -45.48   0.000    -.0014258    -.001308
      expcu |   .0000117   4.31e-07    27.14   0.000     .0000108    .0000125
     female |   -.121427   .0044735   -27.14   0.000    -.1301949   -.1126591
    married |   .1892597   .0024158    78.34   0.000     .1845249    .1939945
      black |  -.1317143   .0020768   -63.42   0.000    -.1357847   -.1276439
   hispanic |  -.1712783   .0026088   -65.65   0.000    -.1763915   -.1661651
      other |  -.1534976   .0037999   -40.40   0.000    -.1609452     -.14605
    central |  -.0469477   .0018951   -24.77   0.000     -.050662   -.0432333
      south |  -.0962997   .0017668   -54.50   0.000    -.0997626   -.0928368
       west |   .0474432   .0020205    23.48   0.000     .0434831    .0514032
   fmarried |   -.190467   .0036001   -52.91   0.000     -.197523    -.183411
       fexp |   .0034077   .0009171     3.72   0.000     .0016103    .0052051
     fexpsq |  -.0006882   .0000464   -14.83   0.000    -.0007791   -.0005973
     fexpcu |   .0000118   6.77e-07    17.44   0.000     .0000105    .0000131
       time |   .0119492    .000306    39.04   0.000     .0113493     .012549
       texp |    .000154   .0000526     2.93   0.003     .0000509    .0002572
     texpsq |  -.0000128   2.60e-06    -4.92   0.000    -.0000179   -7.70e-06
     texpcu |   1.90e-07   3.76e-08     5.05   0.000     1.16e-07    2.64e-07
    tfemale |   .0009953   .0003874     2.57   0.010      .000236    .0017546
   tmarried |  -.0030345   .0001989   -15.26   0.000    -.0034243   -.0026447
     tblack |   -.001388   .0001706    -8.14   0.000    -.0017224   -.0010537
  thispanic |  -.0003302   .0002056    -1.61   0.108    -.0007332    .0000727
     tother |   .0033434   .0002946    11.35   0.000      .002766    .0039208
   tcentral |  -.0004121     .00016    -2.58   0.010    -.0007256   -.0000985
     tsouth |  -.0000536   .0001489    -0.36   0.719    -.0003454    .0002383
      twest |  -.0030867   .0001689   -18.27   0.000    -.0034179   -.0027556
  tfmarried |   .0028407   .0002957     9.61   0.000     .0022611    .0034203
      tfexp |  -.0003457   .0000783    -4.42   0.000    -.0004991   -.0001922
    tfexpsq |   .0000355   3.97e-06     8.94   0.000     .0000277    .0000432
    tfexpcu |  -5.69e-07   5.82e-08    -9.77   0.000    -6.83e-07   -4.55e-07
      educ1 |  -.5925278   .0025656  -230.95   0.000    -.5975563   -.5874992
      educ2 |  -.3900334   .0019477  -200.25   0.000    -.3938508   -.3862159
      educ3 |  -.2261503   .0021486  -105.26   0.000    -.2303614   -.2219392
      educ5 |    .125495   .0026302    47.71   0.000     .1203398    .1306502
     teduc1 |   -.013517   .0002195   -61.59   0.000    -.0139471   -.0130868
     teduc2 |  -.0091672   .0001585   -57.83   0.000    -.0094778   -.0088565
     teduc3 |  -.0087715   .0001705   -51.44   0.000    -.0091057   -.0084372
     teduc5 |    .005474   .0002162    25.32   0.000     .0050504    .0058977
      _cons |   6.139902   .0035658  1721.86   0.000     6.132913    6.146891
------------------------------------------------------------------------------
```

Model 3 (Model 1 + occupation + occupation*time)

```
------------------------------------------------------------------------------
      Source |       SS       df       MS              Number of obs = 2508508
-------------+------------------------------           F( 41,2508466) =36300.58
       Model |  319315.72     41   7788.18828           Prob > F      =  0.0000
    Residual | 538184.397 2508466  .214547216           R-squared     =  0.3724
-------------+------------------------------           Adj R-squared =  0.3724
       Total | 857500.117 2508507  .341836844           Root MSE      =  .46319
```

```
------------------------------------------------------------------------------
  logearnwk |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
------------+-----------------------------------------------------------------
        exp |   .0452926   .0006193    73.14   0.000     .0440788    .0465064
      expsq |   -.001252   .0000304   -41.20   0.000    -.0013116   -.0011925
      expcu |   9.48e-06   4.35e-07    21.81   0.000     8.63e-06    .0000103
     female |  -.1447497   .0045699   -31.67   0.000    -.1537065    -.135793
```

```
     married |  .1892123    .0024492    77.25   0.000     .1844119    .1940127
       black | -.0879463    .0021206   -41.47   0.000    -.0921026   -.0837899
    hispanic |  -.195972    .0026066   -75.18   0.000    -.2010808   -.1908632
       other | -.0869248    .0038484   -22.59   0.000    -.0944674   -.0793821
     central | -.0433176    .0019216   -22.54   0.000    -.0470838   -.0395514
       south | -.1105982    .0017888   -61.83   0.000    -.1141042   -.1070922
        west |  .0591742    .0020439    28.95   0.000     .0551682    .0631802
    fmarried | -.2103995    .0036483   -57.67   0.000      -.21755    -.203249
        fexp |  .0015128    .0009296     1.63   0.104    -.0003092    .0033349
      fexpsq | -.0006164     .000047   -13.11   0.000    -.0007086   -.0005242
      fexpcu |  .0000121    6.86e-07    17.58   0.000     .0000107    .0000134
        time |  .0121133    .0003037    39.88   0.000     .0115179    .0127086
        texp |  -.000112    .0000532    -2.10   0.035    -.0002163   -7.68e-06
      texpsq |  8.12e-06    2.63e-06     3.09   0.002     2.96e-06    .0000133
      texpcu | -1.55e-07    3.80e-08    -4.09   0.000    -2.30e-07   -8.08e-08
     tfemale |   .000597    .0003953     1.51   0.131    -.0001779    .0013719
    tmarried | -.0019866    .0002016    -9.86   0.000    -.0023816   -.0015915
      tblack | -.0025867    .0001741   -14.86   0.000     -.002928   -.0022454
   thispanic |   -.00256    .0002045   -12.52   0.000    -.0029609   -.0021592
      tother |  .0032676    .0002983    10.95   0.000     .0026829    .0038523
    tcentral | -.0012267    .0001622    -7.56   0.000    -.0015446   -.0009088
      tsouth | -.0008665    .0001508    -5.75   0.000    -.0011621    -.000571
       twest | -.0046102    .0001709   -26.98   0.000    -.0049452   -.0042753
    tfmarried |  .0022989    .0002997     7.67   0.000     .0017115    .0028863
       tfexp | -.0000898    .0000794    -1.13   0.258    -.0002453    .0000657
     tfexpsq |  .0000193    4.02e-06     4.80   0.000     .0000114    .0000272
     tfexpcu | -3.68e-07    5.90e-08    -6.24   0.000    -4.84e-07   -2.53e-07
        occ2 | -.3055641    .0017339  -176.23   0.000    -.3089624   -.3021658
        occ3 | -.6873634    .0024025  -286.11   0.000    -.6920721   -.6826546
        occ4 | -.7803977    .0088501   -88.18   0.000    -.7977436   -.7630519
        occ5 | -.3550548    .0022033  -161.15   0.000    -.3593731   -.3507364
        occ6 | -.5178216    .0020182  -256.57   0.000    -.5217772   -.5138659
       tocc2 | -.0054861    .0001424   -38.53   0.000    -.0057652    -.005207
       tocc3 |  -.001592    .0001973    -8.07   0.000    -.0019787   -.0012052
       tocc4 | -.0052451    .0007156    -7.33   0.000    -.0066476   -.0038426
       tocc5 | -.0060544    .0001845   -32.82   0.000     -.006416   -.0056928
       tocc6 | -.0076766    .0001696   -45.25   0.000    -.0080091   -.0073441
       _cons |  6.257781    .0035181  1778.75   0.000     6.250886    6.264677
-------------------------------------------------------------------------------
```

Model 4a (Model 2a + occupation + occupation*time)

```
-------------------------------------------------------------------------------
      Source |       SS       df       MS              Number of obs = 2508508
-------------+------------------------------           F( 45,2508462) =43170.88
       Model |  374252.951      45  8316.73225         Prob > F      =  0.0000
    Residual | 483247.1652508462  .192646795           R-squared     =  0.4364
-------------+------------------------------           Adj R-squared =  0.4364
       Total | 857500.1172508507  .341836844           Root MSE      =  .43892

-------------------------------------------------------------------------------
   logearnwk |      Coef.   Std. Err.       t    P>|t|     [95% Conf. Interval]
-------------+-----------------------------------------------------------------
         exp |  .0524307    .0005917    88.61   0.000      .051271    .0535904
       expsq | -.0015629    .0000291   -53.70   0.000    -.0016199   -.0015058
       expcu |  .0000155    4.18e-07    37.00   0.000     .0000147    .0000163
      female | -.1191681    .0043331   -27.50   0.000    -.1276608   -.1106754
     married |  .1651486    .0023251    71.03   0.000     .1605915    .1697057
       black |  -.083037      .00201   -41.31   0.000    -.0869764   -.0790975
    hispanic | -.1136812     .002563   -44.35   0.000    -.1187046   -.1086578
       other | -.1119541    .0036549   -30.63   0.000    -.1191177   -.1047906
```

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   central |  -.0395959   .0018213    -21.74   0.000    -.0431656   -.0360262
     south |  -.0958823   .0016968    -56.51   0.000    -.0992079   -.0925567
      west |   .0498579   .0019369     25.74   0.000     .0460615    .0536542
  fmarried |  -.1776096     .00346    -51.33   0.000     -.184391   -.1708281
      fexp |  -.0004473   .0008815     -0.51   0.612    -.0021749    .0012803
    fexpsq |  -.0004905   .0000446    -11.00   0.000    -.0005779   -.0004031
    fexpcu |   9.40e-06   6.51e-07     14.45   0.000     8.13e-06    .0000107
      time |   .0072811   .0007824      9.31   0.000     .0057476    .0088146
      texp |  -.0000404   .0000508     -0.79   0.427    -.0001399    .0000592
    texpsq |   3.77e-08   2.52e-06      0.01   0.988    -4.89e-06    4.97e-06
    texpcu |  -1.42e-08   3.65e-08     -0.39   0.696    -8.57e-08    5.73e-08
   tfemale |   .0000388   .0003748      0.10   0.917    -.0006958    .0007735
  tmarried |  -.0027002   .0001914    -14.11   0.000    -.0030752   -.0023251
    tblack |  -.0018429   .0001651    -11.17   0.000    -.0021664   -.0015193
 thispanic |  -.0008583   .0002019     -4.25   0.000     -.001254   -.0004625
    tother |   .0026541   .0002834      9.37   0.000     .0020987    .0032095
  tcentral |  -.0006777   .0001537     -4.41   0.000    -.0009791   -.0003764
    tsouth |  -.0005307    .000143     -3.71   0.000     -.000811   -.0002503
     twest |   -.003351    .000162    -20.69   0.000    -.0036684   -.0030336
  tfmarried |   .0022682   .0002842      7.98   0.000     .0017112    .0028252
     tfexp |  -.0001608   .0000752     -2.14   0.033    -.0003082   -.0000133
    tfexpsq |   .0000241   3.81e-06      6.32   0.000     .0000166    .0000316
    tfexpcu |  -4.07e-07   5.59e-08     -7.28   0.000    -5.17e-07   -2.97e-07
      educ |   .0182752   .0012612     14.49   0.000     .0158033    .0207471
    educsq |   .0016256   .0000495     32.82   0.000     .0015285    .0017227
     teduc |  -.0012283   .0001049    -11.71   0.000    -.0014338   -.0010228
   teducsq |   .0000989   4.09e-06     24.16   0.000     .0000909    .0001069
      occ2 |  -.1682599   .0018172    -92.59   0.000    -.1718216   -.1646983
      occ3 |  -.4783568   .0025102   -190.56   0.000    -.4832768   -.4734368
      occ4 |  -.5186799   .0084894    -61.10   0.000    -.5353189   -.5020409
      occ5 |  -.1300854   .0023866    -54.51   0.000     -.134763   -.1254077
      occ6 |  -.2675331   .0022797   -117.36   0.000    -.2720012   -.2630651
     tocc2 |  -.0030442    .000149    -20.44   0.000    -.0033361   -.0027522
     tocc3 |   .0014781   .0002057      7.19   0.000     .0010749    .0018812
     tocc4 |  -.0002277   .0006869     -0.33   0.740    -.0015741    .0011187
     tocc5 |  -.0028594   .0001982    -14.43   0.000    -.0032479   -.0024709
     tocc6 |  -.0046088   .0001894    -24.34   0.000    -.0049799   -.0042376
     _cons |   5.517941   .0093033    593.12   0.000     5.499707    5.536175
-------------------------------------------------------------------------------
```

Model 4b (Model 2b + occupation + occupation*time)

```
-------------------------------------------------------------------------------
      Source |       SS       df       MS              Number of obs = 2508508
-------------+------------------------------           F( 49,2508458) =39464.01
       Model |  373279.293      49   7617.94476        Prob > F      =  0.0000
    Residual |  484220.823 2508458   .193035252        R-squared     =  0.4353
-------------+------------------------------           Adj R-squared =  0.4353
       Total |  857500.117 2508507   .341836844        Root MSE      =  .43936

-------------------------------------------------------------------------------
   logearnwk |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+-----------------------------------------------------------------
         exp |   .0493551   .0005888     83.82   0.000     .0482011    .0505091
       expsq |  -.0013792   .0000289    -47.72   0.000    -.0014359   -.0013226
       expcu |   .0000123   4.14e-07     29.59   0.000     .0000114    .0000131
      female |  -.1290243   .0043356    -29.76   0.000     -.137522   -.1205265
     married |   .1703206   .0023258     73.23   0.000     .1657621    .1748791
       black |  -.0809912   .0020133    -40.23   0.000    -.0849372   -.0770453
    hispanic |  -.1433654   .0025135    -57.04   0.000    -.1482918   -.1384391
       other |  -.1171615   .0036573    -32.03   0.000    -.1243298   -.1099933
     central |  -.0400349   .0018234    -21.96   0.000    -.0436088    -.036461
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      south |  -.0979023   .0016991    -57.62   0.000    -.1012325    -.0945722
       west |   .0488479   .0019429     25.14   0.000     .0450399     .052656
   fmarried |  -.1803454   .0034632    -52.07   0.000    -.1871332    -.1735576
       fexp |   .0010213    .000882      1.16   0.247    -.0007073     .0027499
     fexpsq |  -.0005632   .0000446    -12.62   0.000    -.0006507    -.0004758
     fexpcu |   .0000106   6.51e-07     16.30   0.000     9.34e-06     .0000119
       time |   .0127863   .0003018     42.37   0.000     .0121948     .0133778
       texp |   .0000555   .0000506      1.10   0.273    -.0000437     .0001546
     texpsq |  -5.73e-06   2.50e-06     -2.29   0.022    -.0000106    -8.23e-07
     texpcu |   8.55e-08   3.62e-08      2.36   0.018     1.46e-08     1.56e-07
    tfemale |   .0001795   .0003751      0.48   0.632    -.0005556     .0009146
    tmarried |  -.0028376   .0001914    -14.82   0.000    -.0032128    -.0024624
     tblack |  -.0019524   .0001653    -11.81   0.000    -.0022764    -.0016284
   thispanic |    -.00004   .0001982     -0.20   0.840    -.0004284     .0003484
      tother |   .0028121   .0002836      9.92   0.000     .0022564     .0033679
    tcentral |  -.0007454    .000154     -4.84   0.000    -.0010471    -.0004436
      tsouth |  -.0004321   .0001432     -3.02   0.003    -.0007128    -.0001514
       twest |  -.0035613   .0001625    -21.92   0.000    -.0038797    -.0032428
    tfmarried |   .0023743   .0002845      8.35   0.000     .0018167     .0029318
       tfexp |  -.0001648   .0000753     -2.19   0.029    -.0003124    -.0000173
     tfexpsq |   .0000249   3.82e-06      6.54   0.000     .0000175     .0000324
     tfexpcu |  -4.30e-07   5.60e-08     -7.68   0.000    -5.39e-07    -3.20e-07
       educ1 |  -.4156687    .002766   -150.28   0.000    -.4210899    -.4102475
       educ2 |  -.2666704   .0020921   -127.47   0.000    -.2707708    -.2625701
       educ3 |  -.1451988   .0021553    -67.37   0.000    -.1494231    -.1409745
       educ5 |   .0791723   .0025601     30.93   0.000     .0741545     .0841901
      teduc1 |  -.0118679   .0002348    -50.55   0.000    -.0123281    -.0114078
      teduc2 |  -.0072455    .000171    -42.36   0.000    -.0075807    -.0069102
      teduc3 |  -.0073748   .0001719    -42.89   0.000    -.0077118    -.0070378
      teduc5 |   .0046712   .0002104     22.20   0.000     .0042588     .0050836
        occ2 |  -.1755224   .0018286    -95.99   0.000    -.1791063    -.1719385
        occ3 |  -.4882377   .0025122   -194.35   0.000    -.4931615    -.4833138
        occ4 |  -.5428821   .0084894    -63.95   0.000    -.5595211    -.5262431
        occ5 |  -.1389686   .0023906    -58.13   0.000    -.1436542    -.1342831
        occ6 |  -.2791997   .0022815   -122.38   0.000    -.2836713    -.2747281
       tocc2 |  -.0028123   .0001498    -18.77   0.000    -.0031059    -.0025187
       tocc3 |   .0021908    .000206     10.64   0.000     .0017871     .0025945
       tocc4 |    .000656   .0006869      0.96   0.340    -.0006902     .0020023
       tocc5 |   -.001969   .0001988     -9.90   0.000    -.0023588    -.0015793
       tocc6 |  -.0035337     .00019    -18.60   0.000    -.0039061    -.0031613
       _cons |   6.261371    .003529   1774.28   0.000     6.254454     6.268288
-------------+----------------------------------------------------------------
```

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6 TEST MODELS with F tests for EGP main effects and interactions with time

Model 5 (Model 1 + class + class*time)

```
------------------------------------------------------------------------------
      Source |       SS       df       MS              Number of obs = 2508508
-------------+------------------------------           F( 43,2508464) =38747.36
       Model |  342239.288     43   7959.0532          Prob > F      =  0.0000
    Residual |  515260.8292508464  .205408899          R-squared     =  0.3991
-------------+------------------------------           Adj R-squared =  0.3991
       Total |  857500.1172508507  .341836844          Root MSE      =  .45322

------------------------------------------------------------------------------
    logearnwk |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
         exp |   .0441222   .0006061    72.79   0.000     .0429342    .0453102
       expsq |  -.0012442   .0000297   -41.83   0.000    -.0013025   -.0011859
       expcu |   9.92e-06   4.25e-07    23.31   0.000     9.09e-06    .0000108
      female |  -.1291485   .0044793   -28.83   0.000    -.1379278   -.1203693
     married |    .172635   .0023996    71.94   0.000     .1679319     .177338
       black |   -.083042   .0020752   -40.02   0.000    -.0871093   -.0789746
    hispanic |  -.1821898   .0025531   -71.36   0.000    -.1871937   -.1771858
       other |  -.0860008   .0037661   -22.84   0.000    -.0933824   -.0786193
     central |  -.0355865   .0018801   -18.93   0.000    -.0392714   -.0319017
       south |  -.1056618   .0017506   -60.36   0.000    -.1090929   -.1022307
        west |   .0596263   .0020003    29.81   0.000     .0557057    .0635469
    fmarried |  -.1910711   .0035724   -53.48   0.000    -.1980729   -.1840693
        fexp |   .0006646     .00091     0.73   0.465     -.001119    .0024481
      fexpsq |  -.0005229    .000046   -11.36   0.000    -.0006131   -.0004327
      fexpcu |   .0000102   6.72e-07    15.22   0.000     8.91e-06    .0000115
        time |   .0062484   .0002953    21.16   0.000     .0056696    .0068273
        texp |  -.0002495   .0000521    -4.79   0.000    -.0003516   -.0001474
      texpsq |   .0000161   2.58e-06     6.26   0.000     .0000111    .0000212
      texpcu |  -2.66e-07   3.72e-08    -7.16   0.000    -3.39e-07   -1.93e-07
     tfemale |   .0018587   .0003873     4.80   0.000     .0010996    .0026179
    tmarried |  -.0026111   .0001975   -13.22   0.000    -.0029982   -.0022239
      tblack |  -.0021687   .0001704   -12.73   0.000    -.0025026   -.0018347
   thispanic |  -.0021613   .0002004   -10.79   0.000    -.0025541   -.0017686
      tother |   .0030404    .000292    10.41   0.000     .0024682    .0036127
    tcentral |  -.0013748   .0001587    -8.67   0.000    -.0016858   -.0010639
      tsouth |  -.0010027   .0001476    -6.80   0.000    -.0012919   -.0007135
       twest |  -.0045769   .0001672   -27.37   0.000    -.0049047   -.0042492
    tfmarried |   .0029023   .0002935     9.89   0.000     .0023271    .0034776
        tfexp |   -.000216   .0000777    -2.78   0.005    -.0003682   -.0000638
      tfexpsq |   .0000228   3.94e-06     5.80   0.000     .0000151    .0000305
      tfexpcu |  -3.98e-07   5.77e-08    -6.89   0.000    -5.11e-07   -2.85e-07
        egp1 |   .6616425   .0020454   323.48   0.000     .6576336    .6656514
        egp2 |   .4764769   .0019688   242.02   0.000     .4726182    .4803356
        egp3 |   .2859681   .0020736   137.91   0.000      .281904    .2900322
        egp4 |  -.0098881   .0032446    -3.05   0.002    -.0162474   -.0035289
        egp5 |   .3902106   .0030073   129.76   0.000     .3843165    .3961048
        egp6 |   .2061103   .0022475    91.71   0.000     .2017054    .2105153
       tegp1 |   .0084772   .0001692    50.09   0.000     .0081455     .008809
       tegp2 |   .0031605   .0001632    19.37   0.000     .0028406    .0034803
       tegp3 |  -.0000387   .0001754    -0.22   0.826    -.0003825    .0003052
       tegp4 |   .0028569   .0002678    10.67   0.000     .0023321    .0033818
       tegp5 |  -.0010708   .0002549    -4.20   0.000    -.0015704   -.0005712
       tegp6 |   .0008064   .0001908     4.23   0.000     .0004323    .0011804
       _cons |   5.658984   .0034002  1664.33   0.000     5.652319    5.665648
------------------------------------------------------------------------------

. test egp1 egp2 egp3 egp4 egp5 egp6 tegp1 tegp2 tegp3 tegp4 tegp5 tegp6
```

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```
( 1)  egp1 = 0
( 2)  egp2 = 0
( 3)  egp3 = 0
( 4)  egp4 = 0
( 5)  egp5 = 0
( 6)  egp6 = 0
( 7)  tegp1 = 0
( 8)  tegp2 = 0
( 9)  tegp3 = 0
(10)  tegp4 = 0
(11)  tegp5 = 0
(12)  tegp6 = 0


      F( 12,2508464) =67898.27
           Prob > F =    0.0000
```

Model 6a (Model 2a + class + class*time)

```
      Source |       SS          df       MS              Number of obs = 2508508
-------------+------------------------------              F( 47,2508460) =44598.00
       Model |  390354.086       47  8305.40609           Prob > F      =  0.0000
    Residual |  467146.032508460  .186228216              R-squared     =  0.4552
-------------+------------------------------              Adj R-squared =  0.4552
       Total |  857500.1172508507  .341836844             Root MSE      =  .43154


------------------------------------------------------------------------------
    logearnwk |     Coef.    Std. Err.      t     P>|t|    [95% Conf. Interval]
-------------+----------------------------------------------------------------
         exp |  .0506925    .0005821    87.09    0.000     .0495516    .0518334
       expsq | -.0015247    .0000286   -53.27    0.000    -.0015808   -.0014686
       expcu |  .0000152    4.11e-07    36.99    0.000     .0000144     .000016
      female | -.1154817    .0042676   -27.06    0.000     -.123846   -.1071174
     married |  .1561056    .0022877    68.24    0.000     .1516219    .1605894
       black | -.0815283    .0019762   -41.26    0.000    -.0854015   -.0776551
    hispanic | -.1111449    .0025205   -44.10    0.000    -.1160849   -.1062049
       other | -.1118702     .003594   -31.13    0.000    -.1189144   -.1048261
     central | -.0322417    .0017906   -18.01    0.000    -.0357513   -.0287321
       south | -.0915502    .0016687   -54.86    0.000    -.0948208   -.0882796
        west |  .0507012    .0019048    26.62    0.000     .0469678    .0544345
     fmarried | -.1658317    .0034034   -48.73    0.000    -.1725023   -.1591611
        fexp |  -.001036     .000867    -1.19    0.232    -.0027353    .0006634
       fexpsq | -.0004203    .0000439    -9.58    0.000    -.0005062   -.0003343
       fexpcu |  8.07e-06    6.40e-07    12.61    0.000     6.82e-06    9.33e-06
        time |  .0029813    .0007518     3.97    0.000     .0015077    .0044549
        texp | -.0001249      .00005    -2.50    0.012    -.0002228   -.0000269
       texpsq |  5.71e-06    2.48e-06     2.31    0.021     8.58e-07    .0000106
       texpcu | -9.15e-08    3.59e-08    -2.55    0.011    -1.62e-07   -2.12e-08
      tfemale |  .0010864     .000369     2.94    0.003     .0003632    .0018096
     tmarried | -.0032351    .0001883   -17.18    0.000    -.0036042    -.002866
       tblack | -.0014983    .0001623    -9.23    0.000    -.0018163   -.0011802
    thispanic | -.0004412    .0001986    -2.22    0.026    -.0008304   -.0000519
       tother |  .0025351    .0002787     9.10    0.000     .0019889    .0030813
     tcentral | -.0007983    .0001511    -5.28    0.000    -.0010945    -.000502
       tsouth | -.0006479    .0001406    -4.61    0.000    -.0009235   -.0003722
        twest | -.0033724    .0001593   -21.18    0.000    -.0036846   -.0030603
     tfmarried |  .0027791    .0002796     9.94    0.000     .0022311     .003327
        tfexp | -.0002525     .000074    -3.41    0.001    -.0003975   -.0001075
       tfexpsq |  .0000263    3.75e-06     7.00    0.000     .0000189    .0000336
       tfexpcu | -4.24e-07    5.50e-08    -7.70    0.000    -5.32e-07   -3.16e-07
        educ |  .0150917    .0012345    12.22    0.000     .0126721    .0175113
```

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```
     educsq |   .0015014    .0000482     31.18   0.000      .001407     .0015958
      teduc |  -.0010198    .0001027     -9.93   0.000     -.001221    -.0008186
    teducsq |   .0000921    3.98e-06     23.12   0.000      .0000843    .0000999
       egp1 |   .4581133    .0022436    204.19   0.000      .453716     .4625106
       egp2 |   .2982713    .0020901    142.71   0.000      .2941748    .3023678
       egp3 |   .2016665     .002032     99.24   0.000      .1976838    .2056492
       egp4 |  -.0700087    .0031079    -22.53   0.000     -.0761002   -.0639172
       egp5 |   .3221951    .0028888    111.53   0.000      .3165333    .327857
       egp6 |   .1984963    .0021435     92.60   0.000      .1942951    .2026975
      tegp1 |    .004135    .0001854     22.30   0.000      .0037716    .0044984
      tegp2 |   .0011254    .0001722      6.54   0.000      .0007879    .0014628
      tegp3 |  -.0010896    .0001715     -6.35   0.000     -.0014258   -.0007535
      tegp4 |    .002875    .0002564     11.21   0.000      .0023725    .0033774
      tegp5 |  -.0012354    .0002446     -5.05   0.000     -.0017148   -.000756
      tegp6 |   .0006921     .000182      3.80   0.000      .0003354    .0010487
      _cons |   5.221808    .0089325    584.58   0.000      5.2043      5.239315
------------------------------------------------------------------------------

. test egp1 egp2 egp3 egp4 egp5 egp6 tegp1 tegp2 tegp3 tegp4 tegp5 tegp6

 ( 1)  egp1 = 0
 ( 2)  egp2 = 0
 ( 3)  egp3 = 0
 ( 4)  egp4 = 0
 ( 5)  egp5 = 0
 ( 6)  egp6 = 0
 ( 7)  tegp1 = 0
 ( 8)  tegp2 = 0
 ( 9)  tegp3 = 0
 (10)  tegp4 = 0
 (11)  tegp5 = 0
 (12)  tegp6 = 0

       F( 12,2508460) =24716.64
            Prob > F =    0.0000
```

Model 6b (Model 2b + class + class*time)

```
------------------------------------------------------------------------------
      Source |       SS       df       MS              Number of obs = 2508508
-------------+------------------------------           F( 51,2508456) =40868.52
       Model |  389153.026     51   7630.45149         Prob > F      =  0.0000
    Residual |  468347.091 2508456  .186707318         R-squared     =  0.4538
-------------+------------------------------           Adj R-squared =  0.4538
       Total |  857500.117 2508507  .341836844         Root MSE      =  .4321

------------------------------------------------------------------------------
   logearnwk |     Coef.   Std. Err.      t     P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
         exp |   .0477354    .0005794     82.39   0.000      .0465999    .048871
       expsq |  -.0013524    .0000284    -47.56   0.000     -.0014081   -.0012967
       expcu |   .0000122    4.07e-07     29.97   0.000      .0000114    .000013
      female |   -.123494    .0042714    -28.91   0.000     -.1318659   -.1151222
     married |   .1605861    .0022891     70.15   0.000      .1560995    .1650727
       black |  -.0792228    .0019801    -40.01   0.000     -.0831036   -.0753419
    hispanic |  -.1386706    .0024726    -56.08   0.000     -.1435168   -.1338244
       other |  -.1166227    .0035976    -32.42   0.000     -.1236738   -.1095716
     central |  -.0324827    .0017932    -18.11   0.000     -.0359974   -.028968
       south |  -.0934412    .0016714    -55.91   0.000     -.0967171   -.0901653
        west |   .0506308    .0019114     26.49   0.000      .0468846    .054377
     fmarried |  -.1681077    .0034076    -49.33   0.000     -.1747864   -.161429
```

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```
       fexp |   .0002136    .0008678     0.25   0.806   -.0014871    .0019144
      fexpsq |  -.0004836    .0000439   -11.02   0.000   -.0005697   -.0003976
      fexpcu |   9.14e-06    6.41e-07    14.27   0.000    7.89e-06    .0000104
        time |   .0111469    .0003122    35.70   0.000     .010535    .0117588
        texp |  -.0000393    .0000498    -0.79   0.430   -.0001369    .0000583
      texpsq |   7.30e-07    2.46e-06     0.30   0.767   -4.10e-06    5.56e-06
      texpcu |  -5.91e-09    3.56e-08    -0.17   0.868   -7.57e-08    6.39e-08
     tfemale |   .0011492    .0003693     3.11   0.002    .0004253    .0018731
    tmarried |   -.003317    .0001885   -17.60   0.000   -.0036864   -.0029477
      tblack |  -.0016049    .0001626    -9.87   0.000   -.0019235   -.0012863
   thispanic |   .0002308    .000195      1.18   0.236   -.0001513    .0006129
      tother |   .0026358    .0002789     9.45   0.000    .0020891    .0031825
    tcentral |  -.0008346    .0001514    -5.51   0.000   -.0011312   -.0005379
      tsouth |  -.0005346    .0001409    -3.80   0.000   -.0008107   -.0002585
       twest |  -.0035521    .0001598   -22.23   0.000   -.0038654   -.0032389
   tfmarried |   .0028443    .0002799    10.16   0.000    .0022957     .003393
       tfexp |  -.0002433    .0000741    -3.29   0.001   -.0003885   -.0000982
     tfexpsq |   .0000265    3.75e-06     7.05   0.000    .0000191    .0000338
     tfexpcu |  -4.38e-07    5.51e-08    -7.95   0.000   -5.45e-07   -3.30e-07
       educ1 |  -.3606132    .0027215  -132.50   0.000   -.3659473   -.3552791
       educ2 |  -.2334359    .002046   -114.09   0.000    -.237446   -.2294259
       educ3 |  -.1357232    .0021047   -64.49   0.000   -.1398484    -.131598
       educ5 |   .0857196    .0025038    34.24   0.000    .0808123    .0906269
      teduc1 |   -.012297    .0002312   -53.19   0.000   -.0127501   -.0118439
      teduc2 |  -.0072172    .0001673   -43.14   0.000   -.0075451   -.0068893
      teduc3 |  -.0072334    .0001678   -43.11   0.000   -.0075623   -.0069046
      teduc5 |   .0039639    .000206     19.24   0.000    .0035602    .0043676
        egp1 |   .4695864    .0022454   209.13   0.000    .4651855    .4739874
        egp2 |   .3067248    .0021041   145.78   0.000     .302601    .3108487
        egp3 |   .2079496    .002055    101.19   0.000    .2039219    .2119773
        egp4 |  -.0629062    .0031151   -20.19   0.000   -.0690118   -.0568006
        egp5 |   .3290957    .0028979   113.56   0.000    .3234159    .3347755
        egp6 |   .2008771    .0021465    93.58   0.000     .19667     .2050842
       tegp1 |   .0032845    .000186     17.66   0.000     .00292      .003649
       tegp2 |   .0004079    .0001737     2.35   0.019    .0000675    .0007483
       tegp3 |   -.001817    .0001736   -10.47   0.000   -.0021572   -.0014768
       tegp4 |    .002349    .000257      9.14   0.000    .0018453    .0028527
       tegp5 |  -.0016717    .0002455    -6.81   0.000   -.0021529   -.0011905
       tegp6 |   .0007309    .0001823     4.01   0.000    .0003737    .0010881
       _cons |   5.864603    .00365    1606.74   0.000    5.857449    5.871757
------------------------------------------------------------------------------

. test egp1 egp2 egp3 egp4 egp5 egp6 tegp1 tegp2 tegp3 tegp4 tegp5 tegp6

 ( 1)   egp1 = 0
 ( 2)   egp2 = 0
 ( 3)   egp3 = 0
 ( 4)   egp4 = 0
 ( 5)   egp5 = 0
 ( 6)   egp6 = 0
 ( 7)  tegp1 = 0
 ( 8)  tegp2 = 0
 ( 9)  tegp3 = 0
 (10)  tegp4 = 0
 (11)  tegp5 = 0
 (12)  tegp6 = 0

       F( 12,2508456) =24764.90
            Prob > F =    0.0000
```

Model 7 (Model 3 + class + class*time)

```
      Source |       SS       df       MS              Number of obs = 2508508
-------------+------------------------------           F( 53,2508454) =32679.46
       Model |  350244.564      53   6608.388           Prob > F      =  0.0000
    Residual |  507255.5522508454  .202218399           R-squared     =  0.4084
-------------+------------------------------           Adj R-squared =  0.4084
       Total |  857500.1172508507  .341836844           Root MSE      =  .44969


------------------------------------------------------------------------------
    logearnwk |     Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
         exp |   .0438528   .0006015    72.91   0.000     .0426738    .0450317
       expsq |  -.0012388   .0000295   -41.97   0.000    -.0012966    -.001181
       expcu |   9.95e-06   4.22e-07    23.57   0.000     9.12e-06    .0000108
      female |  -.1116343   .0044556   -25.05   0.000    -.1203671   -.1029015
     married |   .1662603   .0023829    69.77   0.000     .1615899    .1709307
       black |  -.0712329    .002063   -34.53   0.000    -.0752763   -.0671896
    hispanic |  -.1767939   .0025346   -69.75   0.000    -.1817615   -.1718262
       other |  -.0786554   .0037377   -21.04   0.000    -.0859812   -.0713295
     central |  -.0379627   .0018659   -20.35   0.000    -.0416197   -.0343056
       south |  -.1074726   .0017374   -61.86   0.000    -.1108779   -.1040673
        west |   .0619887   .0019851    31.23   0.000     .0580981    .0658794
    fmarried |  -.1882041   .0035457   -53.08   0.000    -.1951535   -.1812547
        fexp |  -.0007304    .000903    -0.81   0.419    -.0025002    .0010394
      fexpsq |  -.0004674   .0000457   -10.23   0.000    -.0005569   -.0003779
      fexpcu |   9.70e-06   6.67e-07    14.55   0.000     8.39e-06     .000011
        time |   .0083207    .000472    17.63   0.000     .0073956    .0092459
        texp |  -.0002195   .0000517    -4.25   0.000    -.0003209   -.0001182
      texpsq |   .0000146   2.56e-06     5.70   0.000     9.56e-06    .0000196
      texpcu |  -2.48e-07   3.69e-08    -6.72   0.000    -3.20e-07   -1.76e-07
     tfemale |   .0011125   .0003852     2.89   0.004     .0003575    .0018674
    tmarried |  -.0022959   .0001961   -11.71   0.000    -.0026803   -.0019115
      tblack |  -.0025023   .0001694   -14.77   0.000    -.0028342   -.0021703
    thispanic |  -.0021685    .000199   -10.90   0.000    -.0025585   -.0017785
      tother |   .0028368   .0002898     9.79   0.000     .0022689    .0034048
    tcentral |  -.0014696   .0001575    -9.33   0.000    -.0017783   -.0011609
      tsouth |  -.0010451   .0001465    -7.14   0.000    -.0013322   -.0007581
       twest |  -.0047498    .000166   -28.62   0.000    -.0050751   -.0044246
    tfmarried |    .002549   .0002913     8.75   0.000      .001978    .0031199
       tfexp |  -.0001266   .0000771    -1.64   0.100    -.0002776    .0000245
     tfexpsq |   .0000188   3.91e-06     4.82   0.000     .0000112    .0000265
     tfexpcu |  -3.46e-07   5.73e-08    -6.05   0.000    -4.59e-07   -2.34e-07
        occ2 |  -.0611048   .0028514   -21.43   0.000    -.0666933   -.0555162
        occ3 |  -.2500944   .0044828   -55.79   0.000    -.2588805   -.2413083
        occ4 |  -.2581387   .0096868   -26.65   0.000     -.2771245   -.2391528
        occ5 |  -.0166479   .0052242    -3.19   0.001    -.0268871   -.0064087
        occ6 |  -.0123211   .0048372    -2.55   0.011    -.0218017   -.0028404
       tocc2 |  -.0026898   .0002323   -11.58   0.000    -.0031451   -.0022346
       tocc3 |   .0021536   .0003701     5.82   0.000     .0014283    .0028789
       tocc4 |   -.001137    .000788    -1.44   0.149    -.0026813    .0004074
       tocc5 |  -.0005198   .0004387    -1.18   0.236    -.0013797      .00034
       tocc6 |  -.0032301   .0004035    -8.01   0.000    -.0040209   -.0024393
        egp1 |   .5787273   .0049182   117.67   0.000     .5690878    .5883667
        egp2 |   .4305277   .0042726   100.76   0.000     .4221536    .4389019
        egp3 |   .2563913    .004369    58.68   0.000     .2478282    .2649544
        egp4 |  -.0175275   .0046828    -3.74   0.000    -.0267056   -.0083494
        egp5 |   .3705987   .0037851    97.91   0.000     .3631801    .3780173
        egp6 |   .1480221   .0035464    41.74   0.000     .1410712     .154973
       tegp1 |   .0063206   .0004079    15.50   0.000     .0055212      .00712
       tegp2 |   .0016851   .0003573     4.72   0.000     .0009848    .0023854
       tegp3 |   .0007731   .0003671     2.11   0.035     .0000536    .0014926
       tegp4 |   .0032794   .0003878     8.46   0.000     .0025193    .0040396
       tegp5 |  -.0021923   .0003191    -6.87   0.000    -.0028176   -.0015669
       tegp6 |   -.000668   .0003039    -2.20   0.028    -.0012636   -.0000725
        _cons |   5.745036   .0055957  1026.68   0.000     5.734069    5.756004
```

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```
--------------------------------------------------------------------------------

. test egp1 egp2 egp3 egp4 egp5 egp6 tegp1 tegp2 tegp3 tegp4 tegp5 tegp6

 ( 1)  egp1 = 0
 ( 2)  egp2 = 0
 ( 3)  egp3 = 0
 ( 4)  egp4 = 0
 ( 5)  egp5 = 0
 ( 6)  egp6 = 0
 ( 7)  tegp1 = 0
 ( 8)  tegp2 = 0
 ( 9)  tegp3 = 0
 (10)  tegp4 = 0
 (11)  tegp5 = 0
 (12)  tegp6 = 0

       F( 12,2508454) =12745.64
             Prob > F =     0.0000
```

Model 8a (Model 4a + class + class*time)

```
     Source |       SS       df       MS              Number of obs = 2508508
------------+------------------------------           F( 57,2508450) =38096.55
      Model |  397880.951      57   6980.36757        Prob > F      =  0.0000
   Residual |  459619.1652508450  .183228354          R-squared     =  0.4640
------------+------------------------------           Adj R-squared =  0.4640
      Total |  857500.1172508507  .341836844          Root MSE      =  .42805
```

```
--------------------------------------------------------------------------------
  logearnwk |     Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
------------+-------------------------------------------------------------------
        exp |    .050634   .0005775    87.68   0.000     .0495022    .0517658
      expsq |  -.0015242   .0000284   -53.68   0.000    -.0015799   -.0014686
      expcu |   .0000154   4.08e-07    37.62   0.000     .0000146    .0000162
     female |  -.0883251   .0042441   -20.81   0.000    -.0966433   -.0800069
    married |   .1461468   .0022716    64.34   0.000     .1416944    .1505991
      black |  -.0682979    .001964   -34.77   0.000    -.0721473   -.0644485
   hispanic |   -.103962    .002501   -41.57   0.000    -.1088638   -.0990602
      other |  -.1053431   .0035663   -29.54   0.000     -.112333   -.0983533
    central |  -.0348812   .0017766   -19.63   0.000    -.0383632   -.0313992
      south |  -.0940899   .0016555   -56.83   0.000    -.0973346   -.0908451
       west |   .0523945   .0018897    27.73   0.000     .0486907    .0560983
    fmarried |  -.1591526   .0033776   -47.12   0.000    -.1657725   -.1525326
       fexp |  -.0022485   .0008601    -2.61   0.009    -.0039342   -.0005628
     fexpsq |    -.00037   .0000435    -8.50   0.000    -.0004553   -.0002847
     fexpcu |   7.51e-06   6.35e-07    11.82   0.000     6.26e-06    8.75e-06
       time |   .0061394   .0008257     7.44   0.000     .0045211    .0077577
       texp |  -.0001356   .0000496    -2.73   0.006    -.0002328   -.0000384
     texpsq |   5.94e-06   2.46e-06     2.42   0.016     1.13e-06    .0000108
     texpcu |  -9.95e-08   3.56e-08    -2.80   0.005    -1.69e-07   -2.98e-08
    tfemale |   .0003983   .0003669     1.09   0.278    -.0003208    .0011173
   tmarried |  -.0028699    .000187   -15.35   0.000    -.0032364   -.0025034
     tblack |  -.0018423   .0001613   -11.42   0.000    -.0021584   -.0015262
  thispanic |  -.0006268   .0001971    -3.18   0.001    -.0010131   -.0002406
     tother |   .0023165   .0002765     8.38   0.000     .0017745    .0028585
   tcentral |  -.0009395     .00015    -6.26   0.000    -.0012334   -.0006456
     tsouth |  -.0006965   .0001395    -4.99   0.000     -.00097    -.000423
      twest |  -.0035181    .000158   -22.27   0.000    -.0038278   -.0032085
   tfmarried |   .0024505   .0002775     8.83   0.000     .0019067    .0029943
      tfexp |  -.0001927   .0000734    -2.63   0.009    -.0003366   -.0000488
    tfexpsq |   .0000237   3.72e-06     6.36   0.000     .0000164     .000031
```

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```
 tfexpcu |   -3.89e-07    5.46e-08    -7.13   0.000    -4.96e-07   -2.82e-07
    educ |    .0128827    .0012319    10.46   0.000     .0104681    .0152972
  educsq |    .0016872    .0000484    34.87   0.000     .0015924    .0017821
   teduc |   -.0010535    .0001024   -10.29   0.000    -.0012543   -.0008528
 teducsq |    .0000893    4.00e-06    22.33   0.000     .0000815    .0000971
    occ2 |    .0637517    .0028013    22.76   0.000     .0582613    .0692421
    occ3 |   -.0945858    .0043414   -21.79   0.000    -.1030949   -.0860768
    occ4 |     -.06654    .0092701    -7.18   0.000    -.0847091   -.0483708
    occ5 |    .1588257    .0050527    31.43   0.000     .1489226    .1687288
    occ6 |    .1696182     .004694    36.13   0.000      .160418    .1788184
   tocc2 |   -.0020513    .0002277    -9.01   0.000    -.0024975   -.0016051
   tocc3 |    .0022842    .0003576     6.39   0.000     .0015833    .0029852
   tocc4 |    .0005228     .000754     0.69   0.488     -.000955    .0020005
   tocc5 |   -.0006404    .0004232    -1.51   0.130    -.0014699    .0001891
   tocc6 |   -.0033998    .0003905    -8.71   0.000    -.0041652   -.0026345
    egp1 |    .5377511    .0046934   114.58   0.000     .5285523    .5469499
    egp2 |    .3525255    .0040898    86.20   0.000     .3445097    .3605414
    egp3 |    .2120048    .0041697    50.84   0.000     .2038323    .2201773
    egp4 |   -.0369295    .0044611    -8.28   0.000     -.045673   -.0281859
    egp5 |    .3155942    .0036167    87.26   0.000     .3085056    .3226829
    egp6 |    .1406701    .0033773    41.65   0.000     .1340506    .1472895
   tegp1 |    .0022806    .0003895     5.85   0.000     .0015172     .003044
   tegp2 |    .0001722     .000342     0.50   0.615    -.0004982    .0008425
   tegp3 |   -.0007688    .0003504    -2.19   0.028    -.0014556    -.000082
   tegp4 |    .0027328    .0003695     7.40   0.000     .0020086    .0034571
   tegp5 |   -.0023433    .0003048    -7.69   0.000    -.0029407   -.0017458
   tegp6 |   -.0006892    .0002894    -2.38   0.017    -.0012563    -.000122
   _cons |    5.130113    .0098411   521.29   0.000     5.110825    5.149401
----------------------------------------------------------------------------

. test egp1 egp2 egp3 egp4 egp5 egp6 tegp1 tegp2 tegp3 tegp4 tegp5 tegp6

 ( 1)  egp1 = 0
 ( 2)  egp2 = 0
 ( 3)  egp3 = 0
 ( 4)  egp4 = 0
 ( 5)  egp5 = 0
 ( 6)  egp6 = 0
 ( 7)  tegp1 = 0
 ( 8)  tegp2 = 0
 ( 9)  tegp3 = 0
 (10)  tegp4 = 0
 (11)  tegp5 = 0
 (12)  tegp6 = 0

       F( 12,2508450) =10746.15
            Prob > F =    0.0000
```

Model 8b (Model 4b + class + class*time)

```
----------------------------------------------------------------------------
    Source |       SS        df       MS              Number of obs = 2508508
-------------+------------------------------           F( 61,2508446) =35411.04
     Model |  396756.003     61   6504.19677           Prob > F      =  0.0000
  Residual |  460744.1132508446  .183677111           R-squared     =  0.4627
-------------+------------------------------           Adj R-squared =  0.4627
     Total |  857500.1172508507  .341836844           Root MSE      =  .42858


----------------------------------------------------------------------------
 logearnwk |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+--------------------------------------------------------------
```

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```
         exp |   .0476912   .0005747    82.98   0.000     .0465648    .0488177
       expsq | -.0013525    .0000282   -47.96   0.000    -.0014078   -.0012973
       expcu |   .0000124   4.04e-07    30.57   0.000     .0000116    .0000131
      female | -.0969909    .0042475   -22.83   0.000    -.1053158   -.0886659
     married |   .1507301    .002273    66.31   0.000     .1462751    .1551851
       black | -.0661589    .0019677   -33.62   0.000    -.0700156   -.0623023
    hispanic | -.1315469    .0024537   -53.61   0.000    -.1363561   -.1267378
       other | -.1099204    .0035696   -30.79   0.000    -.1169166   -.1029242
     central | -.0351906    .0017791   -19.78   0.000    -.0386776   -.0317037
       south | -.0960392    .0016581   -57.92   0.000     -.099289   -.0927894
        west |   .0520142    .001896    27.43   0.000      .048298    .0557303
    fmarried | -.1615632    .0033815   -47.78   0.000    -.1681908   -.1549356
        fexp | -.0009886    .0008608    -1.15   0.251    -.0026757    .0006984
      fexpsq | -.0004333    .0000435    -9.95   0.000    -.0005187    -.000348
      fexpcu |   8.57e-06   6.35e-07    13.49   0.000     7.33e-06    9.82e-06
        time |   .0127658   .0004608    27.70   0.000     .0118626     .013669
        texp | -.0000447    .0000494    -0.91   0.365    -.0001416    .0000521
      texpsq |   6.88e-07   2.44e-06     0.28   0.778    -4.10e-06    5.48e-06
      texpcu |  -9.34e-09   3.53e-08    -0.26   0.792    -7.86e-08    5.99e-08
     tfemale |   .0004982   .0003672     1.36   0.175    -.0002214    .0012179
    tmarried | -.0029681    .0001871   -15.86   0.000    -.0033349   -.0026014
      tblack | -.0019453    .0001615   -12.04   0.000    -.0022619   -.0016286
   thispanic |   .0000914   .0001935     0.47   0.637    -.0002878    .0004707
      tother |   .0024197   .0002768     8.74   0.000     .0018772    .0029622
    tcentral | -.0009853    .0001502    -6.56   0.000    -.0012796   -.0006909
      tsouth | -.0005898    .0001398    -4.22   0.000    -.0008637   -.0003159
       twest | -.0036978    .0001585   -23.33   0.000    -.0040085   -.0033871
    tfmarried |   .0025307   .0002778     9.11   0.000     .0019863    .0030752
       tfexp | -.0001858    .0000735    -2.53   0.011    -.0003298   -.0000419
      tfexpsq |    .000024   3.72e-06     6.43   0.000     .0000167    .0000313
      tfexpcu |  -4.04e-07   5.46e-08    -7.40   0.000    -5.11e-07   -2.97e-07
       educ1 | -.3765473    .0027258  -138.14   0.000    -.3818898   -.3712048
       educ2 | -.2449757    .0020599  -118.92   0.000    -.2490131   -.2409383
       educ3 | -.1385465    .0021074   -65.74   0.000    -.1426769   -.1344162
       educ5 |   .0914915   .0024981    36.62   0.000     .0865952    .0963877
      teduc1 | -.0116403    .0002312   -50.34   0.000    -.0120935   -.0111871
      teduc2 | -.0069442    .0001683   -41.25   0.000    -.0072741   -.0066143
      teduc3 | -.0071862    .0001681   -42.75   0.000    -.0075157   -.0068568
      teduc5 |   .0037114   .0002054    18.07   0.000     .0033089    .0041139
        occ2 |   .0591847   .0028126    21.04   0.000      .053672    .0646974
        occ3 | -.1010658    .0043509   -23.23   0.000    -.1095934   -.0925381
        occ4 | -.0855872    .0092788    -9.22   0.000    -.1037734   -.0674011
        occ5 |    .151994   .0050609    30.03   0.000     .1420749    .1619131
        occ6 |   .1613822   .0047005    34.33   0.000     .1521694    .1705951
       tocc2 | -.0019283    .0002285    -8.44   0.000     -.002376   -.0014805
       tocc3 |   .0025167   .0003583     7.02   0.000     .0018143     .003219
       tocc4 |   .0008019   .0007545     1.06   0.288    -.0006769    .0022808
       tocc5 | -.0002863    .0004239    -0.68   0.499    -.0011171    .0005444
       tocc6 | -.0029224    .000391     -7.47   0.000    -.0036888    -.002156
        egp1 |    .542102    .004705   115.22   0.000     .5328804    .5513235
        egp2 |   .3557576   .0041025    86.72   0.000      .347717    .3637983
        egp3 |   .2149461   .0041807    51.41   0.000     .2067521    .2231402
        egp4 | -.0328962    .0044675    -7.36   0.000    -.0416523     -.02414
        egp5 |   .3206341   .0036249    88.45   0.000     .3135294    .3277388
        egp6 |   .1420546   .0033818    42.01   0.000     .1354264    .1486829
       tegp1 |   .0017417   .0003905     4.46   0.000     .0009763     .002507
       tegp2 | -.0002995    .0003431    -0.87   0.383     -.000972    .0003731
       tegp3 | -.0012799    .0003514    -3.64   0.000    -.0019686   -.0005912
       tegp4 |   .0024225     .00037     6.55   0.000     .0016972    .0031477
       tegp5 | -.0027045    .0003056    -8.85   0.000    -.0033034   -.0021055
       tegp6 | -.0006359    .0002898    -2.19   0.028    -.0012039    -.000068
       _cons |   5.792144   .0054804  1056.88   0.000     5.781403    5.802886
-----------------------------------------------------------------------------

. test egp1 egp2 egp3 egp4 egp5 egp6 tegp1 tegp2 tegp3 tegp4 tegp5 tegp6
```

```
( 1)   egp1 = 0
( 2)   egp2 = 0
( 3)   egp3 = 0
( 4)   egp4 = 0
( 5)   egp5 = 0
( 6)   egp6 = 0
( 7)   tegp1 = 0
( 8)   tegp2 = 0
( 9)   tegp3 = 0
(10)   tegp4 = 0
(11)   tegp5 = 0
(12)   tegp6 = 0

       F( 12,2508446) =10651.26
            Prob > F =    0.0000
```