Econometrica Supplementary Material

SUPPLEMENT TO "TRADE LIBERALIZATION AND LABOR MARKET DYNAMICS"

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APPENDIX B: SECTORAL DEFINITIONS

TABLE B.I SHOWS THE CORRESPONDENCE BETWEEN 2-DIGIT CNAE SECTORS and the seven sectors used in the model developed in this paper. The division of manufacturing into Low-Tech and High-Tech Manufacturing was based on the OECD Science Technology and Industry Scoreboard (2001) report "Towards

TABLE B.I

CORRESPONDENCE BETWEEN 2-DIGIT CNAE INDUSTRIES AND THE SEVEN AGGREGATE SECTORS

Agriculture/Mining	Agriculture (01); Forestry (02); Fishing (05); Mineral Coal Extraction (10); Oil Extraction (11); Metallic Minerals Extraction (13); Non-Metallic Minerals Extraction (14)
Low-Tech Manufacturing	Food and Beverage (15); Tobacco Products (16); Textiles (17); Apparel (18); Leather Products and Footwear (19); Wood Products (20); Paper, Cellulose and Paper Products (21); Editing and Printing (22); Rubber and Plastic Products (25); Non-Metallic Mineral Products (26); Basic Metals (27); Fabricated Metal Products (except machinery and equipment) (28); Furniture (36); Recycling (37)
High-Tech Manufacturing	Ethanol, Nuclear Fuels, Oil Refining and Coke (23); Chemical Products (24); Machinery and Equipment (29); Office, Accounting and Computing Machinery (30); Electrical Machinery and Apparatus (31); Radio, Television and Communications Equipment (32); Medical, Precision and Optical Instruments; Motor Vehicles, Trailers and Semi-Trailers (33); Other Transportation Equipment (35)
Construction	Construction (45)
Trade	Commerce and Repair of Auto Vehicles and Motorbikes (50); Wholesale Trade (51); Retail Trade (52)
Transportation/Utilities/ Communications	Electricity, Gas and Hot Water (40); Water Treatment and Distribution (41); Ground Transportation (60); Water Transportation (61); Air Transportation (62); Auxiliary Transportation Activities (63); Post and Telecommunications (64)
Services	All other industries, including Lodging and Food Service (55); Financial Intermediation, Insurance, Private Pension and Related Services (65, 66, and 67); Real Estate, Renting and Business Services (70, 71, 72, 73, and 74); Public Administration, Defense and Social Security (75); Education (80); Health and Social Services (85); Other Services (90, 91, 92, and 93); Domestic Service (95); International Organizations (99)

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a Knowledge-Based Economy." In this report, the OECD classifies industries according to their technology intensity.

APPENDIX C: INTERSECTORAL REALLOCATION AS A RESPONSE TO TRADE LIBERALIZATION (1989–1995)

This section replicates Table 4 of Pavcnik, Blom, Goldberg, and Schady (2002) and Figure 6 of Coşar (2013), with the caveat that RAIS partitions manufacturing into 12 sectors. As in these two papers, no clear reallocation pattern arises in response to trade reform.

First, Figure C.1 plots changes in manufacturing industry employment shares between 1989 and 1995 versus changes in industry tariffs between 1990 and 1995 (the period during which the bulk of tariff liberalization occurred). The figure also looks at longer horizons and shows changes in employment shares between 1989 and 2000 as a function of changes in tariffs between 1990 and 1995. No clear pattern emerges from these two plots, even though there seems to be a stronger relationship between employment shares and tariffs at a longer horizon (compare columns (1) and (2) of Table C.I). Figure C.1 also plots

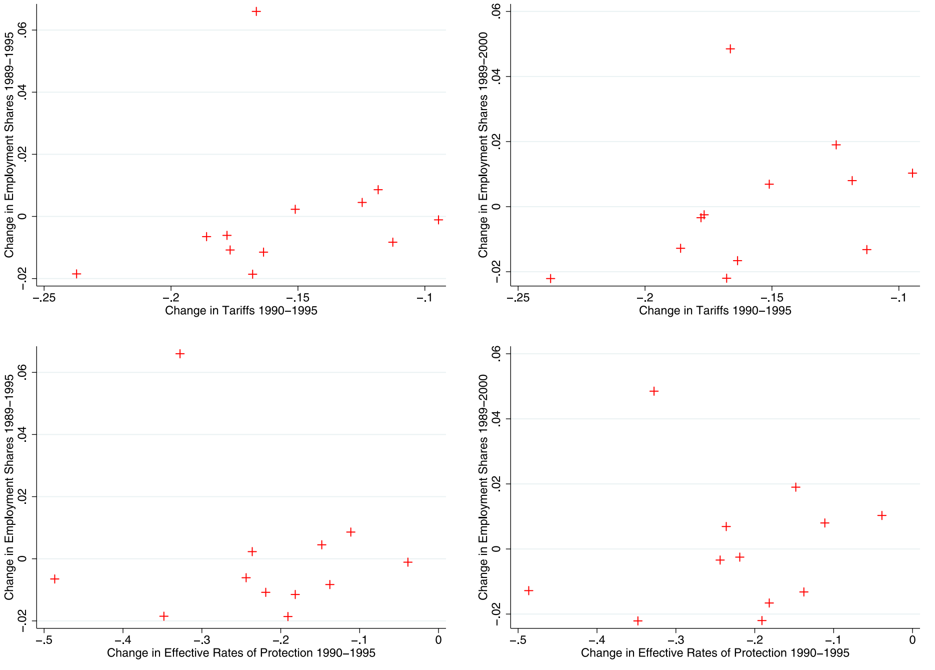

FIGURE C.1.—Changes in manufacturing industry employment shares plotted against changes in industry tariffs between 1990 and 1995. Industries are classified according to the IBGE Subsector classification.

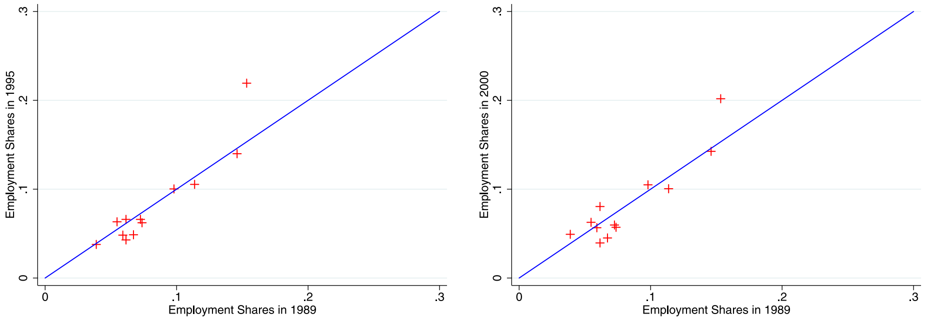

FIGURE C.2.—Manufacturing industry employment shares in 1995 (left hand side panel) and in 2000 (right hand side panel) plotted against employment shares in 1989. Industries are classified according to the IBGE subsector classification.

changes in employment shares as a function of changes in effective rates of protection. In that case, there is an even weaker relationship between changes in employment shares and sector-specific measures of trade liberalization (see columns (3) and (4) of Table C.I).

As in Coşar (2013), Figure C.2 plots manufacturing industry employment shares in 1995 and 2000 versus employment shares in 1989. Excluding the Food and Beverages sector, all the remaining sectors lie very close to the 45 degree line, suggesting little intersectoral reallocation following trade liberalization. Table C.II fits linear regressions of employment shares in 1995 and 2000 on employment shares in 1989 and yields an insignificant constant and a slope not statistically different from 1, reinforcing the conclusion that trade liberalization did not trigger substantial intersectoral reallocation. These results are consistent with Table 4 in Pavcnik, Blom, Goldberg, and Schady (2002) and Figure 6 of Coşar (2013), who established these facts for Brazil, and with the papers

TABLE C.I

CHANGES IN EMPLOYMENT SHARES VERSUS CHANGES IN TARIFFS[a]

	$\Delta\text{EmpShare}_{1989-1995}$	$\Delta\text{EmpShare}_{1989-2000}$	$\Delta\text{EmpShare}_{1989-1995}$	$\Delta\text{EmpShare}_{1989-2000}$
$\Delta\ln(1+\text{tariff})$	0.1028	0.1894		
	(0.179)	(0.153)		
$\Delta\ln(1+\text{ERP})$			−0.0221	0.0172
			(0.059)	(0.053)
Constant	0.0161	0.0296	−0.0049	0.0038
	(0.029)	(0.025)	(0.015)	(0.013)
Observations	12	12	12	12
R-squared	0.032	0.133	0.014	0.010

[a] Changes in Tariffs and Effective Rates of Protection (ERP) between 1990 and 1995.

TABLE C.II

CHANGES IN EMPLOYMENT SHARES VERSUS CHANGES IN TARIFFS[a]

	EmpShare_{1995}	EmpShare_{2000}
EmpShare_{1989}	0.98219***	0.92302***
	(0.096)	(0.150)
Constant	−0.00463	0.00153
	(0.008)	(0.012)
Observations	11	11
R-squared	0.920	0.808

[a]Excluding the Food and Beverages industry.

surveyed in Goldberg and Pavcnik (2007), which focused on the experience of other developing countries following trade liberalization.

APPENDIX D: INTRASECTORAL VERSUS INTERSECTORAL MOBILITY

This section compares intrasectoral versus intersectoral mobility in RAIS between 1995 and 2005. Table D.I shows that, conditional on formal sector employment in two consecutive years, 14.4% of workers switch firms every year: 8.8% switch firms within sector and 5.6% switch firms across sectors; a finer partition of sectors would make the latter even larger. The main conclusion that arises from this table is that intrasectoral flows are larger than intersectoral flows, but that they have the same orders of magnitude.

Table D.II looks at intersectoral transition rates conditional on workers who (1) hold formal employment in two consecutive periods, and (2) switch firms between these two periods. This table shows that, even after switching firms, the majority of workers remain in the same sector—the only exception being for workers initially employed in High-Tech Manufacturing. However, a substantial fraction of workers switch sectors conditional on switching firms.

TABLE D.I

PERCENTAGE OF WORKERS WHO SWITCH FIRMS WITHIN A YEAR[a]

	Percentage of Workers
Switch Firms	14.4
Switch Firms Within Sector	8.8
Switch Firms Across Sectors	5.6

[a]Average figures (1995 to 2005), conditional on formal employment at time t and $t+1$.

TABLE D.II

TRANSITION RATES (%) CONDITIONAL ON SWITCHING FIRMS WITHIN A YEAR[a]

Initial Sector ↓	Agr/Min	LT	HT	Const	Trade	T/U/C	Services
Agr/Mining	57.3	14.8	3.4	4.9	5.9	4.0	9.8
Low-Tech	5.8	51.1	5.4	4.8	12.1	3.7	17.2
High-Tech	4.7	17.2	35.7	5.2	10.8	4.1	22.4
Construction	2.9	6.4	2.3	55.9	6.9	4.3	21.4
Trade	2.0	9.8	2.6	4.0	53.3	5.8	22.4
T/U/C	3.1	6.1	1.9	5.7	10.9	51.7	20.7
Services	1.4	5.8	2.5	4.7	8.3	3.9	73.4

[a]Average employment rates (1995–2005) at $t+1$, conditional on formal employment at time t and $t+1$ and switching firms between t and $t+1$.

APPENDIX E: SUMMARY OF MODEL PARAMETERS

Table E.I summarizes all the parameters of the model.

TABLE E.I

SUMMARY OF MODEL PARAMETERS

$\boldsymbol{\beta}_1, \dots, \boldsymbol{\beta}_7$	Twelve-dimensional parameter vectors that enter the human capital production function in each sector
$\sigma_0, \dots, \sigma_7$	Standard deviation of the value of the Residual Sector and standard deviations of sector-specific idiosyncratic shocks
$\boldsymbol{\theta}_2, \boldsymbol{\theta}_3$	Type-specific permanent unobserved heterogeneity 8-dimensional vectors (type 1 is the reference type and hence has $\boldsymbol{\theta}_1 = 0$)
λ_2, λ_3	Type-specific permanent unobserved heterogeneity parameters in the costs of mobility
$\boldsymbol{\gamma}$	Seven-dimensional parameter vector that enters the value of the Residual Sector
$\boldsymbol{\varphi}^{\mathbf{0}}, \boldsymbol{\varphi}_{\mathbf{In}}, \boldsymbol{\varphi}_{\mathbf{Out}}$	Respectively seven-, seven-, and six-dimensional parameter vectors that enter the cost of mobility function
$\boldsymbol{\kappa}$	Six-dimensional parameter vector that enters the cost of mobility function
$\boldsymbol{\tau}$	Six-dimensional vector with non-pecuniary preference parameters (the Residual Sector is excluded, given that its value is estimated and the Agriculture/Mining Sector is the excluded sector to which relative utility is measured)
ν	Scale parameter for the preference shocks
$\boldsymbol{\pi}_2, \boldsymbol{\pi}_3$	Twelve-dimensional vectors that enter the function that relates initial conditions to type probabilities
$\boldsymbol{\epsilon}$	Seven-dimensional parameter vector driving the sector-specific elasticities of substitution in the CES production functions
$\mathbf{a}^{\mathbf{0}}, \mathbf{a}^{\mathbf{1}}, \mathbf{b}^{\mathbf{0}}, \mathbf{b}^{\mathbf{1}}$	seven-dimensional parameter vectors entering the model for the CES production function shares (intercepts and slopes, for unskilled and skilled workers)
ρ	Discount factor imposed to be equal to 0.95

APPENDIX F: ESTIMATION PROCEDURE

This section details the steps followed in the estimation procedure.

1. Obtain value added series Y_t^k for each sector $k = 1, \dots, 7$ and year $t = 1995, \dots, 2005$; wage bill shares of total value added $\widehat{s}_t^{e,k}$ for each sector $k = 1, \dots, 7$, skill level $e = 0, 1$, and year $t = 1995, \dots, 2005$; physical capital income shares of total value added $\widehat{s}_{K,t}^k$ for each sector $k = 1, \dots, 7$ and year $t = 1995, \dots, 2005$; and capital rental prices $r_t^K = \frac{\text{Capital Share} \times \text{Value Added}_t}{\text{Capital Stock}_t}$ for $t = 1995, \dots, 2005$. The wage bill and physical capital income shares come from National Accounts and RAIS; RAIS is only used to compute the ratio of wages paid to skilled versus unskilled workers. Total capital stock is constructed in Morandi (2004).

2. Estimate the auxiliary models with data from the panel of workers. Let $\widehat{\delta}$ denote the estimates of these models and factor shares all stacked up in a single vector. This vector will be fixed throughout the estimation procedure.

3. Extract initial conditions from the panel of workers. The initial conditions consist of the empirical joint distribution of age, gender, education level, and sector-specific experiences as found in the data. In 1995, I will have initial conditions for individuals aged 25 to 60 years old, and after that, from 1996 to 2005, I will only have initial conditions for entering generations at the age of 25 (the age of entry into the model). One thousand individuals for each cohort and skill level (skilled or unskilled) are randomly sampled from the data, and adequately weighted by the size of their corresponding cohort and skill level. These are the individuals who will be used for simulating the model.

Steps 4 to 10 are embedded in an optimization routine.

4. Start with a set of structural parameters Θ, or obtain it through an optimization algorithm.

Steps 5 to 7 are part of the algorithm computing the fixed point between the parameterization used in the forecasting rule and the parameters obtained fitting equation (11) to resulting equilibrium human capital prices.

5. If first iteration of that algorithm, solve for the Bellman equations imposing static expectations (current equilibrium human capital prices are assumed to remain constant forever). If not first iteration (assume that this is the jth iteration), impose that workers form expectations according to (11) fit to equilibrium human capital prices obtained in the previous iteration. Denote $\widehat{\boldsymbol{\phi}}^{j-1}$ the estimates of (11) fit to equilibrium human capital prices which arose in iteration $j-1$. Solve for the Bellman equations using $\widehat{\boldsymbol{\phi}}^{j-1}$ in equation (11).

6. For $t = 1995, \dots, 2005$, compute, by simulating the economy parameterized by Θ, the equilibrium vectors of human capital prices $\{r_t^{0,k}\}_{k=1}^7$ and $\{r_t^{1,k}\}_{k=1}^7$

that satisfy

$$H_t^{0,s} = \sum_{a=25}^{60} \sum_{i=1}^{1,000} N_{at}^0 h_{iat}^{0,s} d^s\left(\{r_t^{0,k}\}_{k=1}^7, \widetilde{\Omega}_{iat}\right), \quad s = 1, \dots, 7,$$

$$H_t^{1,s} = \sum_{a=25}^{60} \sum_{i=1}^{1,000} N_{at}^1 h_{iat}^{1,s} d^s\left(\{r_t^{1,k}\}_{k=1}^7, \widetilde{\Omega}_{iat}\right), \quad s = 1, \dots, 7,$$

$$r_t^{0,s} = \frac{\alpha_t^{0,s} Y_t^s (H_t^{0,s})^{\epsilon^s - 1}}{\alpha_t^{0,s} H_t^{0,s} + \alpha_t^{1,s} H_t^{1,s} + (1 - \alpha_t^{0,s} - \alpha_t^{1,s}) K_t^s}, \quad s = 1, \dots, 7,$$

$$r_t^{1,s} = \frac{\alpha_t^{1,s} Y_t^s (H_t^{1,s})^{\epsilon^s - 1}}{\alpha_t^{0,s} H_t^{0,s} + \alpha_t^{1,s} H_t^{1,s} + (1 - \alpha_t^{0,s} - \alpha_t^{1,s}) K_t^s}, \quad s = 1, \dots, 7,$$

$$r_t^K = \frac{(1 - \alpha_t^{0,s} - \alpha_t^{1,s}) Y_t^s (K_t^s)^{\epsilon^s - 1}}{\alpha_t^{0,s} (H_t^{0,s})^{\epsilon^s} + \alpha_t^{1,s} (H_t^{1,s})^{\epsilon^s} + (1 - \alpha_t^{0,s} - \alpha_t^{1,s}) (K_t^s)^{\epsilon^s}}, \quad s = 1, \dots, 7,$$

where N_{at}^e is the size of cohort with age a at year t and skill level e, and d^s is an indicator variable for whether sector s is chosen, as function of the state variables. $\widetilde{\Omega}_{iat}$ contains the state variables faced by individual i of age a at time t, excluding current human capital prices.

The economy is simulated by sequentially drawing the individual idiosyncratic shocks and computing the equilibrium human capital prices in each point in time.

Save $\{(\mathbf{r}_t^*)^j\}_{t=1995}^{2005}$, the equilibrium sequence of human capital prices obtained in this jth step. Estimate (11) for each sector-skill-level pair. Check convergence by comparing the $\widehat{\boldsymbol{\phi}}^j$ parameter vector obtained in this jth iteration with the one obtained in the previous iteration, $\widehat{\boldsymbol{\phi}}^{j-1}$.

7. In case of convergence, go to 9. Otherwise, go back to 6, using $\widehat{\boldsymbol{\phi}}^j$ as parameters of equation (11) used for future human capital price forecasts.

8. Estimate the auxiliary models with the data that are simulated in step 7. Let $\widehat{\delta}^S(\Theta)$ denote the estimates of these models stacked up.

9. Compute the Indirect Inference loss function:

$$Q(\Theta) = \left(\widehat{\delta} - \widehat{\delta}^S(\Theta)\right)' \Omega \left(\widehat{\delta} - \widehat{\delta}^S(\Theta)\right). \tag{23}$$

$Q(\Theta)$ is a measure of the distance between $\widehat{\delta}$ and $\widehat{\delta}^S(\Theta)$. Ω is a positive definite weighting matrix.

10. Use an optimization routine to guess a new set of structural parameters Θ and go back to 5 until Q is minimized.

The procedure described above is illustrated in Figure F.1.

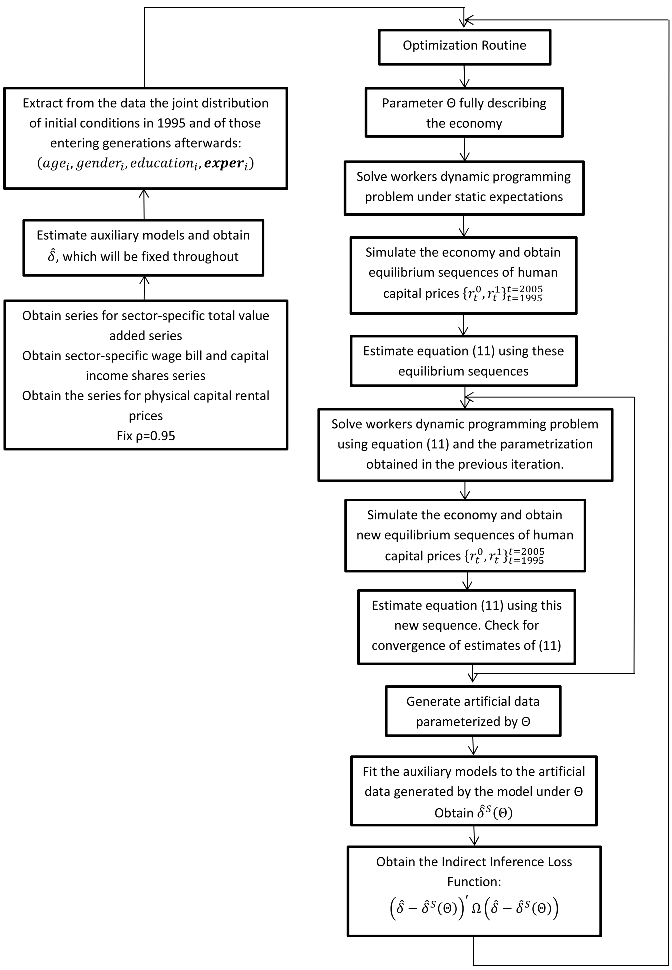

FIGURE F.1.—Estimation procedure.

APPENDIX G: AUXILIARY MODELS

The auxiliary models and targets used in the computation of the Indirect Inference loss function Q (see equation (23)) are described in Table G.I. Θ is the collection of all parameters that completely describe the economy.

Auxiliary models (1), (2), (4), (5), and (6) in Table G.I share the same regressors: year dummy variables, gender and education dummy variables, age, age squared, and sector-specific experience in each of the seven sectors. The auxiliary models in (3) regress changes in individual log-wages in eachsector ($\Delta \log w_{it}^s$) on time dummy variables and age, but only the variance of the resid-

TABLE G.I

AUXILIARY MODELS AND TARGETS EMPLOYED IN THE ESTIMATION PROCEDURE

Auxiliary Model	Coefficient: Fit to Actual Data	Coefficient: Fit to Simulated Data
(1) Log-wage linear regressions for each sector $k = 1, \dots, 7$	$\widehat{\beta}^k$	$(\widehat{\beta}^k)^S(\Theta)$
(2) Variance of the residuals from the log-wage linear regressions above $k = 1, \dots, 7$	$\widehat{\xi^2}^k$	$(\widehat{\xi^2}^k)^S(\Theta)$
(3) Within individual log-wage variance $k = 1, \dots, 7$	$\widehat{\sigma^2}^k$	$(\widehat{\sigma^2}^k)^S(\Theta)$
(4) Linear probability models for sectoral choices for each sector $k = 0, \dots, 7$	$\widehat{\gamma}^k$	$(\widehat{\gamma}^k)^S(\Theta)$
(5) Linear probability models for transition rates for every pair of sectors $j, k = 0, \dots, 7$	$\widehat{\varphi}^{jk}$	$(\widehat{\varphi}^{jk})^S(\Theta)$
(6) Return regressions $k = 0, \dots, 7$	$\widehat{\rho}^k$	$(\widehat{\rho}^k)^S(\Theta)$
(7) Persistence regressions $k = 0, \dots, 7$; $t = 1998, 2000, 2005$	$\widehat{\psi}^{t,k}$	$(\widehat{\psi}^{t,k})^S(\Theta)$
(8) Frequency regressions $k = 0, \dots, 7$	$\widehat{\chi}^k$	$(\widehat{\chi}^k)^S(\Theta)$
(9) Sector-Specific and Skill-Specific Wage Bill Shares $k = 1, \dots, 7$; $e = 0, 1$; $t = 1995, \dots, 2005$	$\widehat{s}_t^{e,k}$	$(\widehat{s}_t^{e,k})^S(\Theta)$
(10) Physical Capital Income Shares $k = 1, \dots, 7$; $t = 1995, \dots, 2005$	$\widehat{s}_{K,t}^k$	$(\widehat{s}_{K,t}^k)^S(\Theta)$

uals is recorded. The auxiliary models in (7) regress sectoral choice indicators in 1998, 2000, and 2005 on initial conditions such as sectoral dummy variables in 1994 (indicators of what was the sector of activity of a worker just before the start of the sample), age, age squared, gender, education, and sector-specific experiences accumulated up to 1994, the last year before the sample period starts. The auxiliary models in (8) regress the number of years workers spent in each sector on the same initial conditions as in (7). Only individuals observed during the whole sample period (those who were 25 to 50 years old in 1995) are included in the estimation of models (7) and (8).

The wage bill shares $\widehat{s}_t^{e,k}$ and physical capital income shares $\widehat{s}_{K,t}^k$ are computed using information available from the Brazilian National Accounts and the relative wage payments to skilled versus unskilled workers as measured in RAIS.

The Indirect Inference loss function $Q(\Theta)$ is computed as

$$Q(\Theta) = \sum_{i=1}^{10} L_i(\Theta), \tag{24}$$

where

$$L_1(\Theta) = \sum_{k=1}^{7}\big(\widehat{\beta}^k - (\widehat{\beta}^k)^S(\Theta)\big)'\widehat{V(\widehat{\beta}^k)}^{-1}\big(\widehat{\beta}^k - (\widehat{\beta}^k)^S(\Theta)\big),$$

$$L_2(\Theta) = \sum_{k=1}^{7}\left(\frac{\widehat{\xi^2}^k - (\widehat{\xi^2}^k)^S(\Theta)}{\widehat{\mathrm{se}(\widehat{\xi^2}^k)}}\right)^2,$$

$$L_3(\Theta) = \sum_{k=1}^{7}\left(\frac{\widehat{\sigma^2}^k - (\widehat{\sigma^2}^k)^S(\Theta)}{\widehat{\mathrm{se}(\widehat{\sigma^2}^k)}}\right)^2,$$

$$L_4(\Theta) = \sum_{k=0}^{7}\big(\widehat{\gamma}^k - (\widehat{\gamma}^k)^S(\Theta)\big)'\widehat{V(\widehat{\gamma}^k)}^{-1}\big(\widehat{\gamma}^k - (\widehat{\gamma}^k)^S(\Theta)\big),$$

$$L_5(\Theta) = \sum_{j=0}^{7}\sum_{k=0}^{7}\big(\widehat{\varphi}^{jk} - (\widehat{\varphi}^{jk})^S(\Theta)\big)'\widehat{V(\widehat{\varphi}^{jk})}^{-1}\big(\widehat{\varphi}^{jk} - (\widehat{\varphi}^{jk})^S(\Theta)\big),$$

$$L_6(\Theta) = \sum_{k=0}^{7}\big(\widehat{\rho}^k - (\widehat{\rho}^k)^S(\Theta)\big)'\widehat{V(\widehat{\rho}^k)}^{-1}\big(\widehat{\rho}^k - (\widehat{\rho}^k)^S(\Theta)\big),$$

$$L_7(\Theta) = \sum_{t\in\{1998,2000,2005\}}\sum_{k=0}^{7}\big(\widehat{\psi}^{t,k} - (\widehat{\psi}^{t,k})^S(\Theta)\big)'\widehat{V(\widehat{\psi}^{t,k})}^{-1} \times \big(\widehat{\psi}^{t,k} - (\widehat{\psi}^{t,k})^S(\Theta)\big),$$

$$L_8(\Theta) = \sum_{k=0}^{7}\big(\widehat{\chi}^k - (\widehat{\chi}^k)^S(\Theta)\big)'\widehat{V(\widehat{\chi}^k)}^{-1}\big(\widehat{\chi}^k - (\widehat{\chi}^k)^S(\Theta)\big),$$

$$L_9(\Theta) = \sum_{k=0}^{7}\sum_{e=0}^{1}\sum_{t=1995}^{2005} W^1_{ket}\big(\widehat{s}^{e,k}_t - (\widehat{s}^{e,k}_t)^S(\Theta)\big)^2,$$

$$L_{10}(\Theta) = \sum_{k=0}^{7}\sum_{t=1995}^{2005} W^2_{kt}\big(\widehat{s}^k_{K,t} - (\widehat{s}^k_{K,t})^S(\Theta)\big)^2.$$

$\widehat{V(\widehat{\beta}^k)}$, $\widehat{V(\widehat{\gamma}^k)}$, $\widehat{V(\widehat{\varphi}^{t,k})}$, $\widehat{V(\widehat{\psi}^{t,k})}^{-1}$, $\widehat{V(\widehat{\chi}^k)}^{-1}$, and $\widehat{V(\widehat{\rho}^k)}$ are the OLS variances under homoskedasticity and hence take the standard form $\widehat{\sigma}^2(X'X)^{-1}$. X is the matrix with the data on regressors and $\widehat{\sigma}^2$ is the variance of residuals. W^1_{ket} and W^2_{kt} are simple positive weights. After extensive experimentation, I selected constant weights $W^1_{ket} = W^2_{kt} = W$ so that L_9 and L_{10} have the same magnitude as L_1 to L_8 in the neighborhood of $\widehat{\Theta}$.

Tables G.II to G.XVI show the results of the auxiliary models fit to the actual data. All the coefficients shown in these tables, together with the sector-specific residual variances in the Data column of Table J.I, as well as factor shares $\widehat{s}_t^{e,k}$ and $\widehat{s}_{K,t}^k$ illustrated in Figure G.1, are all stacked up in vector $\widehat{\delta}$.

TABLE G.II

AUXILIARY MODELS (1): LOG-WAGE REGRESSIONS BY SECTOR[a]

	Agr/Mining	LT Manuf	HT Manuf	Construction	Trade	Trans/Util	Services
$I(t=1995)$	0.388	0.6202	0.8354	0.7184	0.6302	0.7933	0.6244
	(0.0069)	(0.0049)	(0.0095)	(0.0069)	(0.0053)	(0.0075)	(0.0035)
$I(t=1996)$	0.3939	0.6215	0.8175	0.746	0.6626	0.8027	0.6299
	(0.0069)	(0.0048)	(0.0095)	(0.0068)	(0.0052)	(0.0074)	(0.0034)
$I(t=1997)$	0.4245	0.6289	0.8251	0.766	0.6993	0.8313	0.6584
	(0.0067)	(0.0048)	(0.0096)	(0.0066)	(0.0051)	(0.0074)	(0.0034)
$I(t=1998)$	0.4334	0.6273	0.8057	0.8057	0.713	0.8407	0.711
	(0.0067)	(0.0049)	(0.0098)	(0.0065)	(0.0050)	(0.0074)	(0.0034)
$I(t=1999)$	0.3634	0.5554	0.7038	0.7273	0.655	0.7381	0.6535
	(0.0066)	(0.0049)	(0.0099)	(0.0068)	(0.0050)	(0.0074)	(0.0033)
$I(t=2000)$	0.3769	0.5645	0.7338	0.7417	0.6667	0.7295	0.6732
	(0.0066)	(0.0048)	(0.0098)	(0.0067)	(0.0049)	(0.0074)	(0.0033)
$I(t=2001)$	0.4043	0.5504	0.7346	0.73	0.6583	0.6892	0.6681
	(0.0065)	(0.0048)	(0.0097)	(0.0066)	(0.0048)	(0.0073)	(0.0033)
$I(t=2002)$	0.3359	0.4564	0.6106	0.6315	0.5689	0.593	0.5874
	(0.0064)	(0.0047)	(0.0097)	(0.0066)	(0.0048)	(0.0073)	(0.0032)
$I(t=2003)$	0.384	0.4788	0.6281	0.6528	0.5851	0.5859	0.5801
	(0.0063)	(0.0047)	(0.0096)	(0.0068)	(0.0047)	(0.0073)	(0.0032)
$I(t=2004)$	0.4077	0.5	0.6578	0.6678	0.5964	0.5819	0.5723
	(0.0062)	(0.0046)	(0.0094)	(0.0067)	(0.0046)	(0.0072)	(0.0032)
$I(t=2005)$	0.4621	0.5365	0.691	0.7078	0.6445	0.617	0.6118
	(0.0062)	(0.0046)	(0.0093)	(0.0066)	(0.0046)	(0.0072)	(0.0032)
Female	−0.2013	−0.3625	−0.4141	−0.2481	−0.2239	−0.2595	−0.3475
	(0.0046)	(0.0023)	(0.0047)	(0.0066)	(0.0021)	(0.0043)	(0.0014)
$I(\text{Educ}=2)$	0.2309	0.2045	0.2805	0.182	0.1236	0.163	0.2429
	(0.0036)	(0.0025)	(0.0055)	(0.0034)	(0.0031)	(0.0039)	(0.0020)
$I(\text{Educ}=3)$	0.9773	0.5821	0.6458	0.4972	0.2955	0.5647	0.6706
	(0.0066)	(0.0033)	(0.0061)	(0.0056)	(0.0034)	(0.0045)	(0.0021)
$I(\text{Educ}=4)$	1.7495	1.4555	1.5359	1.364	1.0545	1.3239	1.4995
	(0.0090)	(0.0044)	(0.0065)	(0.0077)	(0.0046)	(0.0056)	(0.0021)
$(\text{age}-25)$	0.0145	0.0246	0.0268	0.0162	0.0143	0.026	0.0207
	(0.0006)	(0.0004)	(0.0007)	(0.0006)	(0.0004)	(0.0006)	(0.0003)
$(\text{age}-25)^2$	−0.0004	−0.0006	−0.0004	−0.0003	−0.0002	−0.0004	−0.0004
	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
$\text{Exper}_{\text{Agr/Min}}$	0.0694	0.0315	0.0122	0.0092	0.0106	0.0358	0.0097
	(0.0006)	(0.0014)	(0.0029)	(0.0022)	(0.0020)	(0.0025)	(0.0018)
Exper_{LT}	0.058	0.08	0.042	0.0201	0.0426	0.0235	0.0248
	(0.0012)	(0.0004)	(0.0013)	(0.0013)	(0.0008)	(0.0014)	(0.0007)

(*Continues*)

TABLE G.II—*Continued*

	Agr/Mining	LT Manuf	HT Manuf	Construction	Trade	Trans/Util	Services
Exper_{HT}	0.1225	0.103	0.1049	0.0679	0.1089	0.0626	0.0784
	(0.0025)	(0.0010)	(0.0008)	(0.0021)	(0.0013)	(0.0021)	(0.0011)
$\text{Exper}_{\text{Const}}$	0.0496	0.0306	0.0337	0.0689	0.028	0.0255	0.0291
	(0.0024)	(0.0017)	(0.0031)	(0.0006)	(0.0017)	(0.0021)	(0.0011)
$\text{Exper}_{\text{Trade}}$	0.0413	0.0369	0.0288	0.0123	0.0559	0.0244	0.005
	(0.0019)	(0.0009)	(0.0018)	(0.0016)	(0.0004)	(0.0012)	(0.0007)
$\text{Exper}_{\text{T/U}}$	0.0895	0.0494	0.0298	0.048	0.056	0.0966	0.0399
	(0.0028)	(0.0018)	(0.0032)	(0.0018)	(0.0013)	(0.0006)	(0.0011)
$\text{Exper}_{\text{Serv}}$	0.055	0.0555	0.0528	0.0312	0.0426	0.0461	0.0756
	(0.0013)	(0.0009)	(0.0016)	(0.0010)	(0.0007)	(0.0010)	(0.0002)
Observations	135,259	348,617	112,262	129,819	359,593	177,658	1,221,815
R^2	0.4	0.41	0.52	0.31	0.25	0.44	0.44

[a]Each column refers to the linear regression $\log w_{it}^s = X_{it}\boldsymbol{\beta}^s + \varepsilon_{it}^s$. Sample restricted to individuals 25 to 60 years old at any point in time between 1995 and 2005. Standard errors in parentheses.

TABLE G.III

AUXILIARY MODELS (4): LINEAR PROBABILITY MODELS FOR SECTORAL CHOICES[a]

	Residual	Agr/Mining	LT Manuf	HT Manuf	Construction	Trade	Trans/Util	Services
$I(t=1995)$	0.6634	0.0541	0.0509	0.0123	0.0338	0.0518	0.0221	0.1116
	(0.0010)	(0.0003)	(0.0005)	(0.0003)	(0.0004)	(0.0005)	(0.0004)	(0.0008)
$I(t=1996)$	0.6623	0.0527	0.0482	0.0108	0.0348	0.0521	0.0223	0.1168
	(0.0010)	(0.0003)	(0.0005)	(0.0003)	(0.0004)	(0.0005)	(0.0003)	(0.0008)
$I(t=1997)$	0.6716	0.0522	0.0458	0.0099	0.035	0.0528	0.0203	0.1124
	(0.0010)	(0.0003)	(0.0005)	(0.0003)	(0.0003)	(0.0005)	(0.0003)	(0.0008)
$I(t=1998)$	0.6848	0.0508	0.0404	0.0081	0.0352	0.0513	0.0182	0.1112
	(0.0010)	(0.0003)	(0.0005)	(0.0003)	(0.0003)	(0.0005)	(0.0003)	(0.0008)
$I(t=1999)$	0.6906	0.0493	0.041	0.0073	0.0299	0.0519	0.0168	0.1131
	(0.0010)	(0.0003)	(0.0005)	(0.0003)	(0.0003)	(0.0005)	(0.0003)	(0.0008)
$I(t=2000)$	0.6872	0.0479	0.0441	0.009	0.0299	0.0531	0.0159	0.1129
	(0.0010)	(0.0003)	(0.0005)	(0.0003)	(0.0003)	(0.0005)	(0.0003)	(0.0008)
$I(t=2001)$	0.6819	0.0473	0.0457	0.0104	0.0304	0.0551	0.0161	0.1133
	(0.0010)	(0.0003)	(0.0005)	(0.0003)	(0.0003)	(0.0005)	(0.0003)	(0.0008)
$I(t=2002)$	0.6754	0.0464	0.0477	0.0105	0.0297	0.056	0.0157	0.1186
	(0.0010)	(0.0003)	(0.0005)	(0.0003)	(0.0003)	(0.0005)	(0.0003)	(0.0008)
$I(t=2003)$	0.6728	0.0467	0.0492	0.0115	0.027	0.0576	0.0155	0.1198
	(0.0010)	(0.0003)	(0.0005)	(0.0003)	(0.0003)	(0.0005)	(0.0003)	(0.0008)
$I(t=2004)$	0.6607	0.0472	0.0534	0.0135	0.0276	0.0613	0.0163	0.12
	(0.0010)	(0.0003)	(0.0005)	(0.0003)	(0.0003)	(0.0005)	(0.0003)	(0.0008)
$I(t=2005)$	0.6463	0.0472	0.0562	0.0153	0.029	0.065	0.0177	0.1233
	(0.0010)	(0.0003)	(0.0005)	(0.0003)	(0.0003)	(0.0005)	(0.0003)	(0.0008)
Female	−0.0026	−0.01	−0.0009	−0.0032	−0.0127	−0.0051	−0.0087	0.0431
	(0.0005)	(0.0002)	(0.0002)	(0.0001)	(0.0002)	(0.0002)	(0.0002)	(0.0004)

(*Continues*)

TABLE G.III—*Continued*

	Residual	Agr/Mining	LT Manuf	HT Manuf	Construction	Trade	Trans/Util	Services
$I(\text{Educ} = 2)$	−0.0054	−0.0234	0.004	0.0017	−0.0055	0.0176	0.0039	0.0071
	(0.0006)	(0.0002)	(0.0003)	(0.0002)	(0.0002)	(0.0003)	(0.0002)	(0.0004)
$I(\text{Educ} = 3)$	−0.0282	−0.0262	−0.0039	0.0056	−0.0096	0.0209	0.0042	0.0372
	(0.0007)	(0.0002)	(0.0003)	(0.0002)	(0.0002)	(0.0004)	(0.0002)	(0.0005)
$I(\text{Educ} = 4)$	−0.0401	−0.0252	−0.0066	0.0069	−0.0103	0.0035	0.0019	0.0699
	(0.0007)	(0.0002)	(0.0004)	(0.0002)	(0.0003)	(0.0004)	(0.0003)	(0.0006)
$(\text{age} - 25)$	0.011	−0.0002	−0.0025	−0.0011	−0.0003	−0.0034	−0.0006	−0.0029
	(0.0001)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0001)
$(\text{age} - 25)^2$	−0.0001	0	0	0	0	0.0001	0	0
	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
$\text{Exper}_{\text{Agr/Min}}$	−0.0794	0.0986	−0.0003	0.0005	−0.0023	−0.0041	0.0002	−0.0132
	(0.0002)	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0002)
Exper_{LT}	−0.0689	−0.0026	0.0845	0.0013	−0.0016	−0.0024	0	−0.0103
	(0.0001)	(0.0000)	(0.0001)	(0.0000)	(0.0000)	(0.0001)	(0.0000)	(0.0001)
Exper_{HT}	−0.0698	−0.0025	0.0007	0.0845	−0.0014	−0.0028	0.0002	−0.0088
	(0.0002)	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0001)
$\text{Exper}_{\text{Const}}$	−0.0641	−0.005	−0.0025	0.0003	0.0825	−0.0038	0.0004	−0.0078
	(0.0002)	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0002)
$\text{Exper}_{\text{Trade}}$	−0.0659	−0.0028	−0.0023	−0.0001	−0.0017	0.0843	0.0006	−0.0121
	(0.0001)	(0.0000)	(0.0001)	(0.0000)	(0.0000)	(0.0001)	(0.0000)	(0.0001)
$\text{Exper}_{\text{T/U}}$	−0.0727	−0.003	−0.0027	−0.0002	−0.0017	−0.004	0.095	−0.0106
	(0.0002)	(0.0001)	(0.0001)	(0.0000)	(0.0001)	(0.0001)	(0.0001)	(0.0001)
$\text{Exper}_{\text{Serv}}$	−0.0779	−0.0023	−0.0025	−0.0001	−0.0011	−0.0041	0.0001	0.0879
	(0.0001)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0001)
Observations	4,197,223	4,197,223	4,197,223	4,197,223	4,197,223	4,197,223	4,197,223	4,197,223
R^2	0.23	0.37	0.39	0.42	0.26	0.33	0.46	0.45

[a] Each column refers to the linear regression $d_{it}^s = X_{it}\boldsymbol{\beta}^s + \varepsilon_{it}^s$. d_{it}^s is a binary variable indicating whether worker i chose sector s at time t. Sample restricted to individuals 25 to 60 years old at any point in time between 1995 and 2005. Standard errors in parentheses.

TABLE G.IV

AUXILIARY MODELS (5): SECTORAL CHOICES, CONDITIONAL ON CHOOSING THE RESIDUAL SECTOR AT YEAR $t - 1$. LINEAR PROBABILITY MODELS FOR TRANSITION RATES FROM THE RESIDUAL SECTOR[a]

	Residual	Agr/Mining	LT Manuf	HT Manuf	Construction	Trade	Trans/Util	Services
$I(t = 1995)$	0.6887	0.0562	0.0492	0.0126	0.0417	0.0455	0.018	0.0882
	(0.0014)	(0.0004)	(0.0006)	(0.0003)	(0.0005)	(0.0006)	(0.0004)	(0.0010)
$I(t = 1996)$	0.7353	0.0466	0.0377	0.0068	0.0394	0.0396	0.0144	0.0802
	(0.0014)	(0.0004)	(0.0006)	(0.0003)	(0.0005)	(0.0007)	(0.0004)	(0.0010)
$I(t = 1997)$	0.7276	0.0471	0.04	0.0067	0.0409	0.0441	0.0136	0.0799
	(0.0014)	(0.0004)	(0.0006)	(0.0003)	(0.0005)	(0.0007)	(0.0004)	(0.0010)
$I(t = 1998)$	0.7415	0.0468	0.0352	0.0052	0.0408	0.0404	0.0122	0.0779
	(0.0014)	(0.0004)	(0.0006)	(0.0003)	(0.0005)	(0.0007)	(0.0004)	(0.0010)

(*Continues*)

TABLE G.IV—*Continued*

	Residual	Agr/Mining	LT Manuf	HT Manuf	Construction	Trade	Trans/Util	Services
$I(t=1999)$	0.7271	0.0479	0.0388	0.0056	0.0349	0.0441	0.0124	0.0892
	(0.0014)	(0.0004)	(0.0006)	(0.0003)	(0.0005)	(0.0006)	(0.0004)	(0.0010)
$I(t=2000)$	0.7449	0.0459	0.0383	0.0061	0.0361	0.0439	0.0108	0.0741
	(0.0014)	(0.0004)	(0.0006)	(0.0003)	(0.0005)	(0.0006)	(0.0003)	(0.0010)
$I(t=2001)$	0.7024	0.0489	0.0398	0.0071	0.0381	0.0487	0.013	0.1021
	(0.0014)	(0.0004)	(0.0006)	(0.0003)	(0.0005)	(0.0006)	(0.0003)	(0.0009)
$I(t=2002)$	0.7258	0.0476	0.0393	0.0059	0.0352	0.0467	0.0114	0.0879
	(0.0014)	(0.0004)	(0.0006)	(0.0003)	(0.0005)	(0.0006)	(0.0003)	(0.0009)
$I(t=2003)$	0.737	0.0482	0.038	0.0059	0.0312	0.0475	0.0114	0.0807
	(0.0014)	(0.0004)	(0.0006)	(0.0003)	(0.0005)	(0.0006)	(0.0003)	(0.0010)
$I(t=2004)$	0.7143	0.0494	0.0427	0.0079	0.0339	0.0532	0.0128	0.0858
	(0.0014)	(0.0004)	(0.0006)	(0.0003)	(0.0005)	(0.0006)	(0.0004)	(0.0010)
$I(t=2005)$	0.6932	0.0482	0.043	0.0075	0.0349	0.0565	0.0137	0.1032
	(0.0014)	(0.0004)	(0.0006)	(0.0003)	(0.0005)	(0.0007)	(0.0004)	(0.0010)
Female	0.0295	−0.0119	−0.0016	−0.0035	−0.0202	−0.0077	−0.0092	0.0245
	(0.0007)	(0.0002)	(0.0003)	(0.0001)	(0.0002)	(0.0003)	(0.0002)	(0.0005)
$I(\text{Educ}=2)$	−0.0113	−0.0236	0.0053	0.0014	−0.0072	0.0187	0.0041	0.0126
	(0.0008)	(0.0002)	(0.0003)	(0.0001)	(0.0003)	(0.0004)	(0.0002)	(0.0005)
$I(\text{Educ}=3)$	−0.0167	−0.0291	−0.0072	0.0028	−0.0147	0.0231	0.0026	0.0393
	(0.0009)	(0.0003)	(0.0004)	(0.0002)	(0.0003)	(0.0004)	(0.0002)	(0.0007)
$I(\text{Educ}=4)$	−0.0148	−0.0291	−0.0124	0.0033	−0.0169	0.0008	−0.0004	0.0695
	(0.0011)	(0.0003)	(0.0005)	(0.0002)	(0.0004)	(0.0005)	(0.0003)	(0.0008)
(age − 25)	0.0092	−0.0005	−0.0018	−0.0004	−0.0004	−0.0031	−0.0003	−0.0028
	(0.0001)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0001)	(0.0000)	(0.0001)
$(\text{age}-25)^2$	−0.0001	0	0	0	0	0.0001	0	0
	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
$\text{Exper}_{\text{Agr/Min}}$	−0.0117	0.0253	0.0001	0.0005	−0.0023	−0.0025	0.0002	−0.0096
	(0.0005)	(0.0001)	(0.0002)	(0.0001)	(0.0002)	(0.0002)	(0.0001)	(0.0003)
Exper_{LT}	−0.0087	−0.0021	0.0155	0.0015	−0.0009	0.0001	0.0002	−0.0057
	(0.0002)	(0.0001)	(0.0001)	(0.0000)	(0.0001)	(0.0001)	(0.0001)	(0.0002)
Exper_{HT}	−0.0087	−0.0022	0.0031	0.0105	−0.0008	0.0002	0.0007	−0.0028
	(0.0004)	(0.0001)	(0.0002)	(0.0001)	(0.0001)	(0.0002)	(0.0001)	(0.0003)
$\text{Exper}_{\text{Const}}$	−0.02	−0.005	−0.0016	0.0003	0.0303	−0.002	−0.0002	−0.0018
	(0.0004)	(0.0001)	(0.0002)	(0.0001)	(0.0001)	(0.0002)	(0.0001)	(0.0003)
$\text{Exper}_{\text{Trade}}$	−0.0063	−0.0025	−0.0007	0.0001	−0.0013	0.0166	0.0008	−0.0067
	(0.0002)	(0.0001)	(0.0001)	(0.0000)	(0.0001)	(0.0001)	(0.0001)	(0.0002)
$\text{Exper}_{\text{T/U}}$	−0.0035	−0.0029	−0.0011	0.0001	−0.0011	−0.0004	0.0134	−0.0045
	(0.0004)	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0002)	(0.0001)	(0.0002)
$\text{Exper}_{\text{Serv}}$	0.0002	−0.002	−0.0016	0	−0.0001	−0.0016	0.0004	0.0047
	(0.0002)	(0.0001)	(0.0001)	(0.0000)	(0.0001)	(0.0001)	(0.0000)	(0.0001)
Observations	1,704,438	1,704,438	1,704,438	1,704,438	1,704,438	1,704,438	1,704,438	1,704,438
R^2	0.02	0.04	0.02	0.01	0.05	0.03	0.02	0.02

[a]Each column refers to the linear regression $d^s_{it} = X_{it}\boldsymbol{\beta}^s + \varepsilon^s_{it}$. d^s_{it} is a binary variable indicating whether worker i chose sector s at time t. Sample restricted to individuals 25 to 60 years old at any point in time between 1995 and 2005 who chose the Residual Sector at time $t-1$. Standard errors in parentheses.

TABLE G.V

AUXILIARY MODELS (5): SECTORAL CHOICES, CONDITIONAL ON CHOOSING THE AGR/MINING SECTOR AT YEAR $t-1$. LINEAR PROBABILITY MODELS FOR TRANSITION RATES FROM AGR/MINING[a]

	Residual	Agr/Mining	LT Manuf	HT Manuf	Construction	Trade	Trans/Util	Services
$I(t=1995)$	0.2535	0.6575	0.0387	0.0061	0.0132	0.0093	0.006	0.0156
	(0.0054)	(0.0061)	(0.0021)	(0.0011)	(0.0013)	(0.0014)	(0.0011)	(0.0018)
$I(t=1996)$	0.2732	0.654	0.0311	0.0063	0.0099	0.01	0.0043	0.0111
	(0.0047)	(0.0053)	(0.0019)	(0.0009)	(0.0011)	(0.0012)	(0.0010)	(0.0016)
$I(t=1997)$	0.2923	0.6425	0.0229	0.0059	0.0094	0.0098	0.0045	0.0128
	(0.0047)	(0.0053)	(0.0019)	(0.0009)	(0.0011)	(0.0012)	(0.0010)	(0.0016)
$I(t=1998)$	0.3102	0.624	0.0206	0.005	0.0105	0.0102	0.0062	0.0134
	(0.0046)	(0.0052)	(0.0018)	(0.0009)	(0.0011)	(0.0012)	(0.0010)	(0.0015)
$I(t=1999)$	0.3296	0.6082	0.0201	0.0053	0.0067	0.0118	0.0052	0.0129
	(0.0045)	(0.0051)	(0.0018)	(0.0009)	(0.0011)	(0.0012)	(0.0010)	(0.0015)
$I(t=2000)$	0.3063	0.6318	0.02	0.0043	0.0083	0.0103	0.0054	0.0137
	(0.0045)	(0.0051)	(0.0018)	(0.0009)	(0.0011)	(0.0012)	(0.0010)	(0.0015)
$I(t=2001)$	0.33	0.5992	0.0255	0.0046	0.0073	0.0109	0.007	0.0154
	(0.0045)	(0.0051)	(0.0018)	(0.0009)	(0.0011)	(0.0012)	(0.0010)	(0.0015)
$I(t=2002)$	0.3108	0.5995	0.0389	0.0083	0.0069	0.0121	0.0066	0.017
	(0.0045)	(0.0050)	(0.0018)	(0.0009)	(0.0010)	(0.0011)	(0.0009)	(0.0015)
$I(t=2003)$	0.3005	0.6217	0.0317	0.0046	0.008	0.0128	0.0075	0.0133
	(0.0044)	(0.0050)	(0.0018)	(0.0009)	(0.0010)	(0.0011)	(0.0009)	(0.0015)
$I(t=2004)$	0.301	0.6081	0.0358	0.0102	0.0078	0.0139	0.0071	0.0161
	(0.0044)	(0.0049)	(0.0017)	(0.0009)	(0.0010)	(0.0011)	(0.0009)	(0.0014)
$I(t=2005)$	0.3065	0.6074	0.0316	0.0078	0.011	0.0128	0.0075	0.0154
	(0.0043)	(0.0049)	(0.0017)	(0.0009)	(0.0010)	(0.0011)	(0.0009)	(0.0014)
Female	0.0328	−0.026	−0.0028	−0.0024	−0.0054	−0.001	−0.0024	0.0071
	(0.0031)	(0.0035)	(0.0012)	(0.0006)	(0.0007)	(0.0008)	(0.0007)	(0.0010)
$I(\text{Educ}=2)$	−0.0154	−0.0024	0.0007	−0.0007	0.0028	0.0077	0.001	0.0063
	(0.0024)	(0.0027)	(0.0010)	(0.0005)	(0.0006)	(0.0006)	(0.0005)	(0.0008)
$I(\text{Educ}=3)$	−0.0504	0.0236	−0.0039	0.003	−0.0001	0.0094	−0.0009	0.0192
	(0.0044)	(0.0050)	(0.0017)	(0.0009)	(0.0010)	(0.0011)	(0.0009)	(0.0015)
$I(\text{Educ}=4)$	−0.0646	0.0311	−0.0058	0.0059	−0.0017	0.0045	−0.0022	0.0329
	(0.0060)	(0.0067)	(0.0024)	(0.0012)	(0.0014)	(0.0015)	(0.0013)	(0.0020)
$(\text{age}-25)$	0.0004	0.0029	−0.0016	−0.0002	−0.0003	−0.0006	−0.0003	−0.0004
	(0.0004)	(0.0004)	(0.0002)	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0001)
$(\text{age}-25)^2$	0	−0.0001	0	0	0	0	0	0
	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
$\text{Exper}_{\text{Agr/Min}}$	−0.0264	0.0282	0.0001	0	−0.0004	−0.0006	0.0001	−0.001
	(0.0004)	(0.0005)	(0.0002)	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0001)
Exper_{LT}	−0.018	−0.0036	0.0156	0.0015	0.0009	0.0006	0.0013	0.0017
	(0.0009)	(0.0010)	(0.0004)	(0.0002)	(0.0002)	(0.0002)	(0.0002)	(0.0003)
Exper_{HT}	−0.0168	−0.003	0.0059	0.0097	0.001	0.0011	0.0011	0.001
	(0.0018)	(0.0020)	(0.0007)	(0.0004)	(0.0004)	(0.0005)	(0.0004)	(0.0006)
$\text{Exper}_{\text{Const}}$	−0.0061	−0.0197	0.0006	0.0004	0.0182	0.0014	0.0013	0.0038
	(0.0018)	(0.0020)	(0.0007)	(0.0004)	(0.0004)	(0.0005)	(0.0004)	(0.0006)

(*Continues*)

TABLE G.V—*Continued*

	Residual	Agr/Mining	LT Manuf	HT Manuf	Construction	Trade	Trans/Util	Services
$\text{Exper}_{\text{Trade}}$	−0.018	0.0041	0.0015	0.0006	0.0009	0.0077	0.0018	0.0015
	(0.0014)	(0.0016)	(0.0006)	(0.0003)	(0.0003)	(0.0004)	(0.0003)	(0.0005)
$\text{Exper}_{\text{T/U}}$	−0.0175	0.0011	0.0016	0.0003	0.0001	0.002	0.0111	0.0013
	(0.0021)	(0.0024)	(0.0008)	(0.0004)	(0.0005)	(0.0005)	(0.0005)	(0.0007)
$\text{Exper}_{\text{Serv}}$	−0.016	0.0041	0.0016	−0.0001	0.0011	0.0011	0.0016	0.0067
	(0.0010)	(0.0011)	(0.0004)	(0.0002)	(0.0002)	(0.0002)	(0.0002)	(0.0003)
Observations	132,378	132,378	132,378	132,378	132,378	132,378	132,378	132,378
R^2	0.04	0.04	0.02	0.01	0.02	0.01	0.01	0.01

[a] Each column refers to the linear regression $d_{it}^s = X_{it}\boldsymbol{\beta}^s + \varepsilon_{it}^s$. d_{it}^s is a binary variable indicating whether worker i chose sector s at time t. Sample restricted to individuals 25 to 60 years old at any point in time between 1995 and 2005 who chose Agriculture/Mining at time $t-1$. Standard errors in parentheses.

TABLE G.VI

AUXILIARY MODELS (5): SECTORAL CHOICES, CONDITIONAL ON CHOOSING THE LT MANUFACTURING SECTOR AT YEAR $t-1$. LINEAR PROBABILITY MODELS FOR TRANSITION RATES FROM LT MANUFACTURING[a]

	Residual	Agr/Mining	LT Manuf	HT Manuf	Construction	Trade	Trans/Util	Services
$I(t=1995)$	0.2312	0.0241	0.6538	0.0143	0.016	0.0234	0.0082	0.0289
	(0.0030)	(0.0008)	(0.0035)	(0.0008)	(0.0007)	(0.0011)	(0.0006)	(0.0013)
$I(t=1996)$	0.2629	0.0216	0.637	0.0077	0.0149	0.0196	0.0079	0.0283
	(0.0029)	(0.0007)	(0.0033)	(0.0007)	(0.0007)	(0.0011)	(0.0006)	(0.0013)
$I(t=1997)$	0.2786	0.0264	0.6217	0.0076	0.0142	0.0191	0.0068	0.0257
	(0.0029)	(0.0007)	(0.0033)	(0.0007)	(0.0007)	(0.0011)	(0.0006)	(0.0012)
$I(t=1998)$	0.298	0.0257	0.6056	0.0063	0.0146	0.0187	0.0061	0.025
	(0.0028)	(0.0007)	(0.0033)	(0.0007)	(0.0007)	(0.0011)	(0.0006)	(0.0012)
$I(t=1999)$	0.288	0.0214	0.6266	0.0052	0.012	0.0181	0.0052	0.0235
	(0.0029)	(0.0007)	(0.0034)	(0.0007)	(0.0007)	(0.0011)	(0.0006)	(0.0013)
$I(t=2000)$	0.252	0.0213	0.659	0.0065	0.012	0.0196	0.0051	0.0244
	(0.0029)	(0.0007)	(0.0033)	(0.0007)	(0.0007)	(0.0011)	(0.0006)	(0.0012)
$I(t=2001)$	0.2706	0.022	0.641	0.0064	0.0125	0.0183	0.0048	0.0245
	(0.0028)	(0.0007)	(0.0033)	(0.0007)	(0.0007)	(0.0011)	(0.0006)	(0.0012)
$I(t=2002)$	0.2539	0.0212	0.6571	0.0061	0.012	0.0189	0.0056	0.0252
	(0.0028)	(0.0007)	(0.0033)	(0.0007)	(0.0006)	(0.0011)	(0.0006)	(0.0012)
$I(t=2003)$	0.2465	0.0214	0.6642	0.0067	0.0113	0.0193	0.0057	0.025
	(0.0028)	(0.0007)	(0.0032)	(0.0007)	(0.0006)	(0.0010)	(0.0006)	(0.0012)
$I(t=2004)$	0.2353	0.0229	0.673	0.0071	0.0122	0.0208	0.0058	0.023
	(0.0028)	(0.0007)	(0.0032)	(0.0007)	(0.0006)	(0.0010)	(0.0006)	(0.0012)
$I(t=2005)$	0.2357	0.0233	0.6696	0.008	0.0123	0.0212	0.0063	0.0235
	(0.0027)	(0.0007)	(0.0032)	(0.0007)	(0.0006)	(0.0010)	(0.0006)	(0.0012)
Female	0.0231	−0.0053	−0.0026	−0.0049	−0.0063	−0.0012	−0.0041	0.0011
	(0.0013)	(0.0003)	(0.0015)	(0.0003)	(0.0003)	(0.0005)	(0.0003)	(0.0006)

(*Continues*)

TABLE G.VI—*Continued*

	Residual	Agr/Mining	LT Manuf	HT Manuf	Construction	Trade	Trans/Util	Services
$I(\text{Educ}=2)$	−0.005	−0.0113	0.0021	0.0023	−0.0017	0.007	0.0016	0.0049
	(0.0014)	(0.0004)	(0.0016)	(0.0004)	(0.0003)	(0.0005)	(0.0003)	(0.0006)
$I(\text{Educ}=3)$	−0.0311	−0.0127	0.0162	0.0059	−0.0043	0.0104	0.0011	0.0145
	(0.0019)	(0.0005)	(0.0022)	(0.0005)	(0.0004)	(0.0007)	(0.0004)	(0.0008)
$I(\text{Educ}=4)$	−0.0464	−0.0118	0.0199	0.0096	−0.0054	0.008	0.0007	0.0255
	(0.0025)	(0.0007)	(0.0029)	(0.0006)	(0.0006)	(0.0010)	(0.0005)	(0.0011)
$(\text{age}-25)$	0.0013	−0.0001	0.001	−0.0005	0	−0.0008	−0.0001	−0.0009
	(0.0002)	(0.0001)	(0.0003)	(0.0001)	(0.0001)	(0.0001)	(0.0000)	(0.0001)
$(\text{age}-25)^2$	0	0	0	0	0	0	0	0
	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
$\text{Exper}_{\text{Agr/Min}}$	−0.0208	0.0195	0.0014	0.0001	−0.0002	−0.0007	0.0011	−0.0005
	(0.0009)	(0.0002)	(0.0010)	(0.0002)	(0.0002)	(0.0003)	(0.0002)	(0.0004)
Exper_{LT}	−0.0209	−0.001	0.0252	0.0002	−0.0008	−0.0011	−0.0002	−0.0013
	(0.0002)	(0.0001)	(0.0003)	(0.0001)	(0.0001)	(0.0001)	(0.0000)	(0.0001)
Exper_{HT}	−0.0191	−0.0009	0.0093	0.0085	−0.0002	−0.0011	0.0004	0.0031
	(0.0007)	(0.0002)	(0.0008)	(0.0002)	(0.0002)	(0.0003)	(0.0001)	(0.0003)
$\text{Exper}_{\text{Const}}$	−0.013	−0.0006	−0.0067	0.0006	0.0154	0.0009	0.0007	0.0028
	(0.0011)	(0.0003)	(0.0013)	(0.0003)	(0.0003)	(0.0004)	(0.0002)	(0.0005)
$\text{Exper}_{\text{Trade}}$	−0.0141	−0.0011	0.004	−0.0001	−0.0001	0.0091	0.0008	0.0014
	(0.0006)	(0.0002)	(0.0007)	(0.0002)	(0.0001)	(0.0002)	(0.0001)	(0.0003)
$\text{Exper}_{\text{T/U}}$	−0.0134	−0.0005	−0.0023	0.0004	0.0005	0.0027	0.0102	0.0024
	(0.0011)	(0.0003)	(0.0013)	(0.0003)	(0.0003)	(0.0004)	(0.0002)	(0.0005)
$\text{Exper}_{\text{Serv}}$	−0.0137	0.0005	−0.0006	0.0006	0.001	0.0015	0.0006	0.0101
	(0.0006)	(0.0001)	(0.0007)	(0.0001)	(0.0001)	(0.0002)	(0.0001)	(0.0002)
Observations	356,850	356,850	356,850	356,850	356,850	356,850	356,850	356,850
R^2	0.03	0.03	0.03	0.01	0.02	0.01	0.01	0.01

[a] Each column refers to the linear regression $d^s_{it} = X_{it}\boldsymbol{\beta}^s + \varepsilon^s_{it}$. d^s_{it} is a binary variable indicating whether worker i chose sector s at time t. Sample restricted to individuals 25 to 60 years old at any point in time between 1995 and 2005 who chose Low-Tech at time $t-1$. Standard errors in parentheses.

TABLE G.VII

AUXILIARY MODELS (5): SECTORAL CHOICES, CONDITIONAL ON CHOOSING THE HT MANUFACTURING SECTOR AT YEAR $t-1$. LINEAR PROBABILITY MODELS FOR TRANSITION RATES FROM HT MANUFACTURING[a]

	Residual	Agr/Mining	LT Manuf	HT Manuf	Construction	Trade	Trans/Util	Services
$I(t=1995)$	0.2074	0.036	0.0554	0.6304	0.0157	0.0201	0.0097	0.0254
	(0.0050)	(0.0013)	(0.0024)	(0.0063)	(0.0013)	(0.0019)	(0.0012)	(0.0027)
$I(t=1996)$	0.2527	0.0318	0.04	0.6005	0.0143	0.0208	0.01	0.03
	(0.0048)	(0.0012)	(0.0024)	(0.0061)	(0.0012)	(0.0019)	(0.0011)	(0.0027)
$I(t=1997)$	0.2571	0.0335	0.0362	0.6033	0.0132	0.0195	0.0085	0.0288
	(0.0048)	(0.0012)	(0.0024)	(0.0061)	(0.0013)	(0.0019)	(0.0011)	(0.0027)
$I(t=1998)$	0.2733	0.0397	0.0317	0.5857	0.0145	0.0195	0.0081	0.0275
	(0.0048)	(0.0012)	(0.0024)	(0.0061)	(0.0013)	(0.0019)	(0.0012)	(0.0027)

(*Continues*)

TABLE G.VII—*Continued*

	Residual	Agr/Mining	LT Manuf	HT Manuf	Construction	Trade	Trans/Util	Services
$I(t=1999)$	0.2794	0.0333	0.0365	0.5786	0.0133	0.0176	0.0093	0.0321
	(0.0049)	(0.0012)	(0.0024)	(0.0062)	(0.0013)	(0.0019)	(0.0012)	(0.0027)
$I(t=2000)$	0.2339	0.0336	0.0314	0.6333	0.0132	0.0176	0.0095	0.0275
	(0.0050)	(0.0013)	(0.0024)	(0.0063)	(0.0013)	(0.0019)	(0.0012)	(0.0027)
$I(t=2001)$	0.2412	0.0329	0.0329	0.6284	0.0128	0.0175	0.0077	0.0265
	(0.0049)	(0.0012)	(0.0024)	(0.0062)	(0.0013)	(0.0019)	(0.0012)	(0.0027)
$I(t=2002)$	0.2363	0.0319	0.0352	0.623	0.0129	0.0196	0.0098	0.0314
	(0.0049)	(0.0012)	(0.0024)	(0.0062)	(0.0013)	(0.0019)	(0.0012)	(0.0027)
$I(t=2003)$	0.2231	0.0317	0.0343	0.6482	0.0125	0.0208	0.0077	0.0217
	(0.0049)	(0.0012)	(0.0024)	(0.0062)	(0.0013)	(0.0019)	(0.0012)	(0.0027)
$I(t=2004)$	0.215	0.0336	0.0376	0.6529	0.0126	0.0195	0.0084	0.0205
	(0.0049)	(0.0012)	(0.0024)	(0.0062)	(0.0013)	(0.0019)	(0.0012)	(0.0027)
$I(t=2005)$	0.2096	0.032	0.0333	0.6616	0.0134	0.0189	0.0069	0.0242
	(0.0048)	(0.0012)	(0.0023)	(0.0060)	(0.0012)	(0.0018)	(0.0011)	(0.0026)
Female	0.0176	−0.0032	−0.0086	−0.0045	−0.0041	−0.0005	−0.0029	0.0061
	(0.0023)	(0.0006)	(0.0011)	(0.0029)	(0.0006)	(0.0009)	(0.0005)	(0.0013)
$I(\text{Educ}=2)$	−0.018	−0.015	−0.0005	0.0241	−0.0013	0.0042	0.0015	0.005
	(0.0026)	(0.0007)	(0.0013)	(0.0033)	(0.0007)	(0.0010)	(0.0006)	(0.0015)
$I(\text{Educ}=3)$	−0.0398	−0.0164	−0.0038	0.048	−0.0048	0.0039	0.0016	0.0112
	(0.0029)	(0.0007)	(0.0014)	(0.0037)	(0.0008)	(0.0011)	(0.0007)	(0.0016)
$I(\text{Educ}=4)$	−0.0579	−0.0166	−0.0057	0.0598	−0.0056	0.0062	0.0006	0.0193
	(0.0032)	(0.0008)	(0.0015)	(0.0040)	(0.0008)	(0.0012)	(0.0008)	(0.0017)
$(\text{age}-25)$	0.001	0.0002	−0.0006	0.0005	0.0001	−0.0004	−0.0001	−0.0006
	(0.0004)	(0.0001)	(0.0002)	(0.0005)	(0.0001)	(0.0001)	(0.0001)	(0.0002)
$(\text{age}-25)^2$	0.0001	0	0	−0.0001	0	0	0	0
	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
$\text{Exper}_{\text{Agr/Min}}$	−0.0099	0.0168	0.0021	−0.0076	−0.001	−0.0006	0.0013	−0.0011
	(0.0017)	(0.0004)	(0.0008)	(0.0021)	(0.0004)	(0.0006)	(0.0004)	(0.0009)
Exper_{LT}	−0.016	−0.002	0.006	0.012	−0.0001	−0.0005	−0.0005	0.0011
	(0.0007)	(0.0002)	(0.0003)	(0.0009)	(0.0002)	(0.0003)	(0.0002)	(0.0004)
Exper_{HT}	−0.0192	−0.0022	−0.0013	0.0273	−0.0011	−0.0014	−0.0007	−0.0015
	(0.0004)	(0.0001)	(0.0002)	(0.0006)	(0.0001)	(0.0002)	(0.0001)	(0.0002)
$\text{Exper}_{\text{Const}}$	−0.0128	−0.0017	0.0016	−0.018	0.021	0.0011	0.001	0.0078
	(0.0017)	(0.0004)	(0.0008)	(0.0021)	(0.0004)	(0.0007)	(0.0004)	(0.0009)
$\text{Exper}_{\text{Trade}}$	−0.012	−0.0021	−0.0007	0.0053	−0.0004	0.0067	0.0001	0.003
	(0.0010)	(0.0002)	(0.0005)	(0.0012)	(0.0003)	(0.0004)	(0.0002)	(0.0005)
$\text{Exper}_{\text{T/U}}$	−0.0121	−0.0015	−0.001	0.0014	−0.0011	0.0026	0.0089	0.0028
	(0.0018)	(0.0004)	(0.0009)	(0.0022)	(0.0005)	(0.0007)	(0.0004)	(0.0010)
$\text{Exper}_{\text{Serv}}$	−0.015	−0.0017	−0.0003	0.0057	0.0006	0.0009	0.0004	0.0094
	(0.0009)	(0.0002)	(0.0004)	(0.0011)	(0.0002)	(0.0003)	(0.0002)	(0.0005)
Observations	115,689	115,689	115,689	115,689	115,689	115,689	115,689	115,689
R^2	0.03	0.03	0.01	0.04	0.03	0.01	0.01	0.01

[a] Each column refers to the linear regression $d_{it}^s = X_{it}\boldsymbol{\beta}^s + \varepsilon_{it}^s$. d_{it}^s is a binary variable indicating whether worker i chose sector s at time t. Sample restricted to individuals 25 to 60 years old at any point in time between 1995 and 2005 who chose High-Tech at time $t-1$. Standard errors in parentheses.

TABLE G.VIII

AUXILIARY MODELS (5): SECTORAL CHOICES, CONDITIONAL ON CHOOSING THE CONSTRUCTION SECTOR AT YEAR $t-1$. LINEAR PROBABILITY MODELS FOR TRANSITION RATES FROM CONSTRUCTION[a]

	Residual	Agr/Mining	LT Manuf	HT Manuf	Construction	Trade	Trans/Util	Services
$I(t=1995)$	0.4216	0.0162	0.0271	0.0039	0.4434	0.0232	0.0142	0.0503
	(0.0060)	(0.0012)	(0.0017)	(0.0010)	(0.0066)	(0.0018)	(0.0014)	(0.0031)
$I(t=1996)$	0.4319	0.0115	0.0208	0.0027	0.4666	0.0179	0.0074	0.0411
	(0.0055)	(0.0011)	(0.0016)	(0.0010)	(0.0061)	(0.0016)	(0.0013)	(0.0029)
$I(t=1997)$	0.4498	0.0115	0.0187	0.0022	0.448	0.02	0.0066	0.0431
	(0.0054)	(0.0011)	(0.0015)	(0.0009)	(0.0059)	(0.0016)	(0.0013)	(0.0028)
$I(t=1998)$	0.4674	0.0109	0.016	0.0019	0.4445	0.0169	0.0064	0.036
	(0.0052)	(0.0010)	(0.0015)	(0.0009)	(0.0058)	(0.0016)	(0.0013)	(0.0027)
$I(t=1999)$	0.5132	0.0135	0.0179	0.0018	0.3841	0.0192	0.007	0.0433
	(0.0052)	(0.0010)	(0.0015)	(0.0009)	(0.0057)	(0.0016)	(0.0012)	(0.0027)
$I(t=2000)$	0.4688	0.0119	0.017	0.0043	0.4267	0.0182	0.0056	0.0476
	(0.0053)	(0.0011)	(0.0015)	(0.0009)	(0.0059)	(0.0016)	(0.0013)	(0.0028)
$I(t=2001)$	0.4668	0.0128	0.0159	0.0043	0.4235	0.0196	0.0099	0.0472
	(0.0053)	(0.0010)	(0.0015)	(0.0009)	(0.0058)	(0.0016)	(0.0013)	(0.0028)
$I(t=2002)$	0.4532	0.0125	0.0185	0.0021	0.4362	0.0207	0.0088	0.048
	(0.0052)	(0.0010)	(0.0015)	(0.0009)	(0.0058)	(0.0016)	(0.0013)	(0.0027)
$I(t=2003)$	0.4642	0.015	0.0184	0.0047	0.4225	0.0225	0.0085	0.0441
	(0.0052)	(0.0010)	(0.0015)	(0.0009)	(0.0058)	(0.0016)	(0.0013)	(0.0027)
$I(t=2004)$	0.4383	0.0141	0.0212	0.004	0.4467	0.0224	0.0084	0.0448
	(0.0054)	(0.0011)	(0.0016)	(0.0009)	(0.0059)	(0.0016)	(0.0013)	(0.0028)
$I(t=2005)$	0.4273	0.0148	0.0189	0.0041	0.453	0.0236	0.0097	0.0486
	(0.0054)	(0.0011)	(0.0015)	(0.0009)	(0.0059)	(0.0016)	(0.0013)	(0.0028)
Female	−0.0353	−0.0019	−0.0074	−0.0043	0.0482	−0.0016	−0.0053	0.0075
	(0.0051)	(0.0010)	(0.0015)	(0.0009)	(0.0056)	(0.0015)	(0.0012)	(0.0027)
$I(\text{Educ}=2)$	−0.0266	−0.0036	0.0065	0.0034	−0.0078	0.009	0.0054	0.0138
	(0.0026)	(0.0005)	(0.0007)	(0.0005)	(0.0029)	(0.0008)	(0.0006)	(0.0014)
$I(\text{Educ}=3)$	−0.0775	−0.0045	0.0031	0.0067	0.0246	0.0108	0.0104	0.0264
	(0.0043)	(0.0009)	(0.0012)	(0.0008)	(0.0048)	(0.0013)	(0.0010)	(0.0023)
$I(\text{Educ}=4)$	−0.1004	−0.0059	0.0024	0.0061	0.0659	0.0044	0.0056	0.0218
	(0.0059)	(0.0012)	(0.0017)	(0.0010)	(0.0065)	(0.0018)	(0.0014)	(0.0031)
$(\text{age}-25)$	0.0039	−0.0002	−0.001	−0.0003	0	−0.0009	−0.0003	−0.0012
	(0.0005)	(0.0001)	(0.0001)	(0.0001)	(0.0005)	(0.0001)	(0.0001)	(0.0002)
$(\text{age}-25)^2$	−0.0001	0	0	0	0	0	0	0
	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
$\text{Exper}_{\text{Agr/Min}}$	−0.0334	0.0161	0.0033	0.0008	0.0114	0.0009	0.0013	−0.0003
	(0.0019)	(0.0004)	(0.0005)	(0.0003)	(0.0021)	(0.0006)	(0.0005)	(0.0010)
Exper_{LT}	−0.0267	0.0008	0.0122	0.0021	0.0062	0.0011	0.0014	0.0029
	(0.0011)	(0.0002)	(0.0003)	(0.0002)	(0.0012)	(0.0003)	(0.0003)	(0.0006)
Exper_{HT}	−0.033	−0.0003	0.0039	0.01	0.0119	0.0016	0.0013	0.0046
	(0.0018)	(0.0004)	(0.0005)	(0.0003)	(0.0020)	(0.0006)	(0.0004)	(0.0010)
$\text{Exper}_{\text{Const}}$	−0.0389	−0.0008	−0.0007	0	0.0426	−0.0012	−0.0002	−0.0008
	(0.0005)	(0.0001)	(0.0002)	(0.0001)	(0.0006)	(0.0002)	(0.0001)	(0.0003)

(*Continues*)

TABLE G.VIII—*Continued*

	Residual	Agr/Mining	LT Manuf	HT Manuf	Construction	Trade	Trans/Util	Services
$Exper_{Trade}$	−0.0246	−0.0008	0.0004	0.0007	0.0095	0.0092	0.0026	0.003
	(0.0013)	(0.0003)	(0.0004)	(0.0002)	(0.0015)	(0.0004)	(0.0003)	(0.0007)
$Exper_{T/U}$	−0.0267	−0.0002	0.0007	0.0003	0.0123	0.0006	0.0113	0.0016
	(0.0016)	(0.0003)	(0.0005)	(0.0003)	(0.0018)	(0.0005)	(0.0004)	(0.0008)
$Exper_{Serv}$	−0.0291	−0.0006	0.0005	0.0001	0.016	0.0005	0.0007	0.0118
	(0.0009)	(0.0002)	(0.0002)	(0.0001)	(0.0009)	(0.0003)	(0.0002)	(0.0004)
Observations	130,950	130,950	130,950	130,950	130,950	130,950	130,950	130,950
R^2	0.05	0.02	0.02	0.01	0.05	0.01	0.01	0.01

[a]Each column refers to the linear regression $d_{it}^s = X_{it}\boldsymbol{\beta}^s + \varepsilon_{it}^s$. d_{it}^s is a binary variable indicating whether worker i chose sector s at time t. Sample restricted to individuals 25 to 60 years old at any point in time between 1995 and 2005 who chose Construction at time $t-1$. Standard errors in parentheses.

TABLE G.IX

AUXILIARY MODELS (5): SECTORAL CHOICES, CONDITIONAL ON CHOOSING THE TRADE SECTOR AT YEAR $t-1$. LINEAR PROBABILITY MODELS FOR TRANSITION RATES FROM TRADE[a]

	Residual	Agr/Mining	LT Manuf	HT Manuf	Construction	Trade	Trans/Util	Services
$I(t=1995)$	0.2367	0.014	0.0264	0.0048	0.0158	0.6452	0.0128	0.0442
	(0.0035)	(0.0005)	(0.0012)	(0.0006)	(0.0007)	(0.0040)	(0.0009)	(0.0017)
$I(t=1996)$	0.2679	0.0109	0.0216	0.0038	0.0157	0.6322	0.0098	0.0382
	(0.0033)	(0.0005)	(0.0011)	(0.0006)	(0.0007)	(0.0038)	(0.0008)	(0.0016)
$I(t=1997)$	0.2828	0.011	0.0193	0.0028	0.0155	0.6203	0.0105	0.0378
	(0.0033)	(0.0005)	(0.0011)	(0.0006)	(0.0007)	(0.0037)	(0.0008)	(0.0016)
$I(t=1998)$	0.2871	0.0108	0.0176	0.0032	0.0151	0.6207	0.009	0.0365
	(0.0032)	(0.0005)	(0.0011)	(0.0006)	(0.0007)	(0.0037)	(0.0008)	(0.0016)
$I(t=1999)$	0.2918	0.0106	0.0172	0.0028	0.0139	0.6208	0.0085	0.0344
	(0.0032)	(0.0005)	(0.0011)	(0.0006)	(0.0007)	(0.0036)	(0.0008)	(0.0016)
$I(t=2000)$	0.2726	0.0111	0.0184	0.0035	0.0143	0.6315	0.0096	0.039
	(0.0031)	(0.0005)	(0.0011)	(0.0005)	(0.0007)	(0.0036)	(0.0008)	(0.0015)
$I(t=2001)$	0.2837	0.0109	0.0179	0.0028	0.0136	0.6245	0.0098	0.0368
	(0.0031)	(0.0005)	(0.0010)	(0.0005)	(0.0007)	(0.0036)	(0.0008)	(0.0015)
$I(t=2002)$	0.268	0.0117	0.0184	0.0025	0.0131	0.6382	0.009	0.0392
	(0.0031)	(0.0005)	(0.0010)	(0.0005)	(0.0006)	(0.0035)	(0.0008)	(0.0015)
$I(t=2003)$	0.2594	0.0124	0.0196	0.0026	0.0129	0.6462	0.0087	0.0381
	(0.0030)	(0.0005)	(0.0010)	(0.0005)	(0.0006)	(0.0035)	(0.0008)	(0.0015)
$I(t=2004)$	0.2478	0.0128	0.021	0.0038	0.0133	0.6538	0.0095	0.038
	(0.0030)	(0.0005)	(0.0010)	(0.0005)	(0.0006)	(0.0034)	(0.0008)	(0.0015)
$I(t=2005)$	0.2427	0.0127	0.0219	0.0034	0.0139	0.6538	0.0104	0.0412
	(0.0030)	(0.0005)	(0.0010)	(0.0005)	(0.0006)	(0.0034)	(0.0008)	(0.0015)
Female	0.0115	−0.0015	−0.0018	−0.0022	−0.0046	−0.0007	−0.0067	0.006
	(0.0013)	(0.0002)	(0.0004)	(0.0002)	(0.0003)	(0.0015)	(0.0003)	(0.0007)
$I(\text{Educ}=2)$	−0.0073	−0.0078	−0.001	0.0011	−0.0043	0.0185	0.0016	−0.0009
	(0.0019)	(0.0003)	(0.0006)	(0.0003)	(0.0004)	(0.0022)	(0.0005)	(0.0009)

(*Continues*)

TABLE G.IX—*Continued*

	Residual	Agr/Mining	LT Manuf	HT Manuf	Construction	Trade	Trans/Util	Services
$I(\text{Educ} = 3)$	−0.0296	−0.0082	−0.0032	0.0021	−0.0056	0.0351	0.0005	0.0089
	(0.0021)	(0.0003)	(0.0007)	(0.0004)	(0.0004)	(0.0024)	(0.0005)	(0.0010)
$I(\text{Educ} = 4)$	−0.0401	−0.008	−0.0014	0.0067	−0.0069	0.0156	0.0018	0.0323
	(0.0029)	(0.0004)	(0.0010)	(0.0005)	(0.0006)	(0.0033)	(0.0007)	(0.0014)
$(\text{age} - 25)$	0.0022	0	−0.0005	−0.0002	0	0	−0.0001	−0.0014
	(0.0002)	(0.0000)	(0.0001)	(0.0000)	(0.0000)	(0.0003)	(0.0001)	(0.0001)
$(\text{age} - 25)^2$	0	0	0	0	0	0	0	0
	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
$\text{Exper}_{\text{Agr/Min}}$	−0.018	0.0162	0.0028	0.0008	0.0013	−0.0047	0.0021	−0.0006
	(0.0014)	(0.0002)	(0.0005)	(0.0002)	(0.0003)	(0.0016)	(0.0004)	(0.0007)
Exper_{LT}	−0.0159	0.0001	0.0101	0.0008	0.0001	0.0028	0.0007	0.0012
	(0.0005)	(0.0001)	(0.0002)	(0.0001)	(0.0001)	(0.0006)	(0.0001)	(0.0003)
Exper_{HT}	−0.0144	−0.0002	0.003	0.0068	0.0002	0.0007	0.001	0.0029
	(0.0009)	(0.0001)	(0.0003)	(0.0002)	(0.0002)	(0.0011)	(0.0002)	(0.0005)
$\text{Exper}_{\text{Const}}$	−0.0086	0	0.0011	0.0007	0.0157	−0.0163	0.0014	0.006
	(0.0012)	(0.0002)	(0.0004)	(0.0002)	(0.0002)	(0.0013)	(0.0003)	(0.0006)
$\text{Exper}_{\text{Trade}}$	−0.0187	−0.0004	−0.0006	−0.0001	−0.0007	0.0229	−0.0002	−0.0021
	(0.0003)	(0.0000)	(0.0001)	(0.0000)	(0.0001)	(0.0003)	(0.0001)	(0.0001)
$\text{Exper}_{\text{T/U}}$	−0.0135	−0.0001	0.0011	0.0004	0.0006	−0.004	0.013	0.0024
	(0.0009)	(0.0001)	(0.0003)	(0.0002)	(0.0002)	(0.0011)	(0.0002)	(0.0005)
$\text{Exper}_{\text{Serv}}$	−0.0121	−0.0001	0.0003	0.0005	0.0003	−0.0026	0.001	0.0126
	(0.0005)	(0.0001)	(0.0002)	(0.0001)	(0.0001)	(0.0006)	(0.0001)	(0.0002)
Observations	360,312	360,312	360,312	360,312	360,312	360,312	360,312	360,312
R^2	0.02	0.02	0.01	0.01	0.02	0.03	0.01	0.02

[a] Each column refers to the linear regression $d_{it}^s = X_{it}\boldsymbol{\beta}^s + \varepsilon_{it}^s$. d_{it}^s is a binary variable indicating whether worker i chose sector s at time t. Sample restricted to individuals 25 to 60 years old at any point in time between 1995 and 2005 who chose Trade at time $t-1$. Standard errors in parentheses.

TABLE G.X

AUXILIARY MODELS (5): SECTORAL CHOICES, CONDITIONAL ON CHOOSING THE TRANS/UTIL/COMM SECTOR AT YEAR $t-1$. LINEAR PROBABILITY MODELS FOR TRANSITION RATES FROM TRANS/UTIL/COMM[a]

	Residual	Agr/Mining	LT Manuf	HT Manuf	Construction	Trade	Trans/Util	Services
$I(t = 1995)$	0.1981	0.0126	0.0195	0.0035	0.0149	0.028	0.6806	0.0427
	(0.0041)	(0.0008)	(0.0011)	(0.0006)	(0.0011)	(0.0015)	(0.0049)	(0.0021)
$I(t = 1996)$	0.2196	0.0117	0.0165	0.0046	0.0157	0.0238	0.6693	0.0389
	(0.0039)	(0.0008)	(0.0011)	(0.0006)	(0.0011)	(0.0014)	(0.0047)	(0.0020)
$I(t = 1997)$	0.2547	0.0118	0.0169	0.0037	0.0161	0.0234	0.6354	0.0381
	(0.0039)	(0.0008)	(0.0011)	(0.0006)	(0.0010)	(0.0014)	(0.0046)	(0.0020)
$I(t = 1998)$	0.2534	0.011	0.0149	0.003	0.017	0.0225	0.6389	0.0393
	(0.0039)	(0.0008)	(0.0011)	(0.0006)	(0.0010)	(0.0014)	(0.0046)	(0.0020)

(*Continues*)

TABLE G.X—*Continued*

	Residual	Agr/Mining	LT Manuf	HT Manuf	Construction	Trade	Trans/Util	Services
$I(t = 1999)$	0.2648	0.0118	0.0141	0.0027	0.0147	0.0222	0.6318	0.0378
	(0.0039)	(0.0008)	(0.0011)	(0.0006)	(0.0010)	(0.0014)	(0.0046)	(0.0020)
$I(t = 2000)$	0.2412	0.0122	0.0142	0.0034	0.0162	0.0235	0.6496	0.0398
	(0.0039)	(0.0008)	(0.0011)	(0.0006)	(0.0010)	(0.0014)	(0.0046)	(0.0020)
$I(t = 2001)$	0.2515	0.0124	0.015	0.0041	0.0144	0.0232	0.6379	0.0414
	(0.0039)	(0.0008)	(0.0011)	(0.0006)	(0.0010)	(0.0014)	(0.0046)	(0.0020)
$I(t = 2002)$	0.2385	0.0132	0.0153	0.0037	0.0167	0.0235	0.6464	0.0426
	(0.0038)	(0.0008)	(0.0011)	(0.0006)	(0.0010)	(0.0014)	(0.0046)	(0.0020)
$I(t = 2003)$	0.2272	0.0136	0.0159	0.0044	0.0153	0.0241	0.6514	0.0481
	(0.0038)	(0.0008)	(0.0011)	(0.0006)	(0.0010)	(0.0014)	(0.0046)	(0.0019)
$I(t = 2004)$	0.2276	0.0143	0.0179	0.0043	0.0139	0.0252	0.6573	0.0395
	(0.0038)	(0.0008)	(0.0011)	(0.0006)	(0.0010)	(0.0014)	(0.0046)	(0.0019)
$I(t = 2005)$	0.2196	0.0148	0.0179	0.004	0.015	0.0259	0.6592	0.0436
	(0.0038)	(0.0007)	(0.0010)	(0.0006)	(0.0010)	(0.0014)	(0.0045)	(0.0019)
Female	0.0097	−0.0009	−0.0021	−0.0009	−0.0038	−0.0021	−0.0109	0.0111
	(0.0022)	(0.0004)	(0.0006)	(0.0003)	(0.0006)	(0.0008)	(0.0026)	(0.0011)
$I(\text{Educ} = 2)$	0.0005	−0.006	0.0002	0.0001	−0.0022	0.0058	0.0002	0.0014
	(0.0020)	(0.0004)	(0.0005)	(0.0003)	(0.0005)	(0.0007)	(0.0023)	(0.0010)
$I(\text{Educ} = 3)$	−0.0285	−0.0065	−0.0015	0.0009	−0.003	0.0039	0.0252	0.0095
	(0.0023)	(0.0005)	(0.0006)	(0.0004)	(0.0006)	(0.0008)	(0.0027)	(0.0012)
$I(\text{Educ} = 4)$	−0.0407	−0.0055	−0.0008	0.0015	−0.0037	0.0008	0.0299	0.0185
	(0.0028)	(0.0005)	(0.0008)	(0.0004)	(0.0007)	(0.0010)	(0.0033)	(0.0014)
$(\text{age} - 25)$	−0.0004	0	−0.0007	−0.0002	0	−0.0011	0.0039	−0.0016
	(0.0003)	(0.0001)	(0.0001)	(0.0000)	(0.0001)	(0.0001)	(0.0004)	(0.0002)
$(\text{age} - 25)^2$	0.0001	0	0	0	0	0	−0.0002	0
	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
$\text{Exper}_{\text{Agr/Min}}$	−0.0144	0.0199	0.0036	0.0011	−0.0001	−0.0002	−0.0099	−0.0002
	(0.0015)	(0.0003)	(0.0004)	(0.0002)	(0.0004)	(0.0005)	(0.0017)	(0.0007)
Exper_{LT}	−0.0156	0.0004	0.0052	0.0005	−0.0005	0.0011	0.0078	0.0011
	(0.0008)	(0.0002)	(0.0002)	(0.0001)	(0.0002)	(0.0003)	(0.0009)	(0.0004)
Exper_{HT}	−0.0152	−0.0005	0.0019	0.0036	−0.0003	0.0009	0.0071	0.0025
	(0.0012)	(0.0002)	(0.0003)	(0.0002)	(0.0003)	(0.0004)	(0.0014)	(0.0006)
$\text{Exper}_{\text{Const}}$	−0.0135	−0.0005	0	0.0006	0.0133	−0.0001	−0.0018	0.0019
	(0.0012)	(0.0002)	(0.0003)	(0.0002)	(0.0003)	(0.0004)	(0.0014)	(0.0006)
$\text{Exper}_{\text{Trade}}$	−0.016	−0.0008	0.0006	0.0002	−0.0009	0.0056	0.0108	0.0003
	(0.0007)	(0.0001)	(0.0002)	(0.0001)	(0.0002)	(0.0003)	(0.0009)	(0.0004)
$\text{Exper}_{\text{T/U}}$	−0.0195	−0.0008	−0.0008	−0.0001	−0.0012	−0.0014	0.0267	−0.0028
	(0.0004)	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0004)	(0.0002)
$\text{Exper}_{\text{Serv}}$	−0.0149	−0.0004	−0.0003	0	−0.0002	−0.0002	0.0075	0.0085
	(0.0006)	(0.0001)	(0.0002)	(0.0001)	(0.0002)	(0.0002)	(0.0007)	(0.0003)
Observations	178,749	178,749	178,749	178,749	178,749	178,749	178,749	178,749
R^2	0.03	0.03	0.01	0	0.02	0.01	0.04	0.02

[a] Each column refers to the linear regression $d_{it}^s = X_{it}\boldsymbol{\beta}^s + \varepsilon_{it}^s$. d_{it}^s is a binary variable indicating whether worker i chose sector s at time t. Sample restricted to individuals 25 to 60 years old at any point in time between 1995 and 2005 who chose Trans/Util/Comm at time $t-1$. Standard errors in parentheses.

TABLE G.XI

AUXILIARY MODELS (5): SECTORAL CHOICES, CONDITIONAL ON CHOOSING THE SERVICES SECTOR AT YEAR $t-1$. LINEAR PROBABILITY MODELS FOR TRANSITION RATE FROM SERVICES[a]

	Residual	Agr/Mining	LT Manuf	HT Manuf	Construction	Trade	Trans/Util	Services
$I(t=1995)$	0.2045	0.0085	0.0146	0.0049	0.0151	0.0189	0.0105	0.7228
	(0.0015)	(0.0002)	(0.0004)	(0.0003)	(0.0004)	(0.0005)	(0.0003)	(0.0016)
$I(t=1996)$	0.2241	0.0065	0.0116	0.0037	0.0129	0.0179	0.009	0.7142
	(0.0014)	(0.0002)	(0.0004)	(0.0003)	(0.0003)	(0.0005)	(0.0003)	(0.0016)
$I(t=1997)$	0.2514	0.0064	0.012	0.0037	0.0133	0.0175	0.0082	0.6875
	(0.0014)	(0.0002)	(0.0004)	(0.0003)	(0.0003)	(0.0005)	(0.0003)	(0.0016)
$I(t=1998)$	0.2454	0.0062	0.0114	0.0033	0.013	0.017	0.0073	0.6963
	(0.0014)	(0.0002)	(0.0004)	(0.0003)	(0.0003)	(0.0005)	(0.0003)	(0.0016)
$I(t=1999)$	0.2529	0.0063	0.0112	0.0036	0.0122	0.0172	0.0075	0.6892
	(0.0014)	(0.0002)	(0.0004)	(0.0002)	(0.0003)	(0.0004)	(0.0003)	(0.0016)
$I(t=2000)$	0.2347	0.0059	0.0119	0.0041	0.0127	0.0177	0.0073	0.7058
	(0.0014)	(0.0002)	(0.0004)	(0.0002)	(0.0003)	(0.0004)	(0.0003)	(0.0015)
$I(t=2001)$	0.2699	0.0063	0.0126	0.0043	0.0125	0.019	0.008	0.6674
	(0.0014)	(0.0002)	(0.0004)	(0.0002)	(0.0003)	(0.0004)	(0.0003)	(0.0015)
$I(t=2002)$	0.2357	0.0068	0.0119	0.0041	0.0128	0.0181	0.0074	0.7034
	(0.0014)	(0.0002)	(0.0004)	(0.0002)	(0.0003)	(0.0004)	(0.0003)	(0.0015)
$I(t=2003)$	0.2298	0.0066	0.0123	0.0043	0.0123	0.0194	0.0072	0.7081
	(0.0014)	(0.0002)	(0.0004)	(0.0002)	(0.0003)	(0.0004)	(0.0003)	(0.0015)
$I(t=2004)$	0.2274	0.0069	0.0136	0.0051	0.0125	0.0195	0.0078	0.7071
	(0.0014)	(0.0002)	(0.0004)	(0.0002)	(0.0003)	(0.0004)	(0.0003)	(0.0015)
$I(t=2005)$	0.2385	0.0067	0.0141	0.0054	0.0133	0.0212	0.008	0.6928
	(0.0014)	(0.0002)	(0.0004)	(0.0002)	(0.0003)	(0.0004)	(0.0003)	(0.0015)
Female	−0.0085	−0.0014	−0.0022	−0.0015	−0.0047	−0.0022	−0.0035	0.024
	(0.0006)	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0002)	(0.0001)	(0.0006)
$I(\text{Educ}=2)$	0.003	−0.0031	0.0018	0.001	−0.0027	0.004	0.0012	−0.0053
	(0.0008)	(0.0001)	(0.0002)	(0.0001)	(0.0002)	(0.0003)	(0.0002)	(0.0009)
$I(\text{Educ}=3)$	−0.0203	−0.0032	−0.0006	0.0019	−0.0045	0.0035	0.001	0.0223
	(0.0009)	(0.0001)	(0.0002)	(0.0002)	(0.0002)	(0.0003)	(0.0002)	(0.0009)
$I(\text{Educ}=4)$	−0.0309	−0.0031	−0.0015	0.0012	−0.0051	0.0001	0.0001	0.0393
	(0.0009)	(0.0001)	(0.0002)	(0.0002)	(0.0002)	(0.0003)	(0.0002)	(0.0010)
$(\text{age}-25)$	−0.0006	−0.0001	−0.0006	−0.0003	0	−0.0011	−0.0003	0.0029
	(0.0001)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0001)
$(\text{age}-25)^2$	0	0	0	0	0	0	0	−0.0001
	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
$\text{Exper}_{\text{Agr/Min}}$	−0.0107	0.0149	0.0041	0.0011	0.0007	0.001	0.0016	−0.0127
	(0.0008)	(0.0001)	(0.0002)	(0.0001)	(0.0002)	(0.0003)	(0.0002)	(0.0009)
Exper_{LT}	−0.0088	0.0003	0.0119	0.0026	0.0006	0.0025	0.001	−0.0102
	(0.0003)	(0.0000)	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0004)
Exper_{HT}	−0.0092	0	0.0056	0.0122	0.0007	0.0022	0.0017	−0.0132
	(0.0005)	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0002)	(0.0001)	(0.0006)
$\text{Exper}_{\text{Const}}$	−0.0029	0.0001	0.001	0.0007	0.0238	0.0008	0.0013	−0.0248
	(0.0005)	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0002)	(0.0001)	(0.0006)

(*Continues*)

TABLE G.XI—*Continued*

	Residual	Agr/Mining	LT Manuf	HT Manuf	Construction	Trade	Trans/Util	Services
$\text{Exper}_{\text{Trade}}$	−0.0086	−0.0001	0.0016	0.0007	0.0001	0.0102	0.0014	−0.0053
	(0.0003)	(0.0000)	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0004)
$\text{Exper}_{\text{T/U}}$	−0.0082	0.0002	0.0011	0.0005	0.0007	0.0018	0.0101	−0.0063
	(0.0005)	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0002)	(0.0001)	(0.0006)
$\text{Exper}_{\text{Serv}}$	−0.0199	−0.0002	−0.0005	−0.0002	−0.0006	−0.0008	−0.0001	0.0225
	(0.0001)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0001)
Observations	1,217,857	1,217,857	1,217,857	1,217,857	1,217,857	1,217,857	1,217,857	1,217,857
R^2	0.04	0.02	0.02	0.02	0.04	0.02	0.01	0.06

[a]Each column refers to the linear regression $d_{it}^s = X_{it}\boldsymbol{\beta}^s + \varepsilon_{it}^s$. d_{it}^s is a binary variable indicating whether worker i chose sector s at time t. Sample restricted to individuals 25 to 60 years old at any point in time between 1995 and 2005 who chose Services at time $t-1$. Standard errors in parentheses.

TABLE G.XII

AUXILIARY MODELS (6): SECTORAL CHOICES IN 1998 REGRESSED ON INITIAL CONDITIONS IN 1995[a]

	Residual	Agr/Mining	LT	HT	Const	Trade	Trans/Util	Services
$I(s_{1994} = \text{Residual})$	0.6356	0.0738	0.0501	0.0104	0.0507	0.0457	0.0222	0.1114
	(0.0026)	(0.0009)	(0.0013)	(0.0008)	(0.0010)	(0.0013)	(0.0010)	(0.0021)
$I(s_{1994} = \text{Agr/Mining})$	0.4365	0.4116	0.0449	0.0077	0.0238	0.0256	0.0084	0.0415
	(0.0077)	(0.0027)	(0.0039)	(0.0023)	(0.0029)	(0.0039)	(0.0029)	(0.0063)
$I(s_{1994} = \text{LT})$	0.4634	0.0755	0.3375	0.0024	0.0377	0.0289	0.0104	0.0442
	(0.0050)	(0.0017)	(0.0025)	(0.0015)	(0.0019)	(0.0025)	(0.0018)	(0.0040)
$I(s_{1994} = \text{HT})$	0.4488	0.0788	0.0282	0.3303	0.0412	0.0232	0.0054	0.0441
	(0.0075)	(0.0026)	(0.0038)	(0.0022)	(0.0028)	(0.0038)	(0.0028)	(0.0061)
$I(s_{1994} = \text{Const})$	0.5039	0.0653	0.0391	0.006	0.2307	0.0381	0.0124	0.1045
	(0.0070)	(0.0024)	(0.0036)	(0.0021)	(0.0026)	(0.0035)	(0.0026)	(0.0056)
$I(s_{1994} = \text{Trade})$	0.459	0.066	0.0398	0.0015	0.0402	0.3239	0.0173	0.0522
	(0.0052)	(0.0018)	(0.0027)	(0.0016)	(0.0020)	(0.0026)	(0.0019)	(0.0042)
$I(s_{1994} = \text{Trans/Util})$	0.4057	0.0671	0.0217	−0.0012	0.0307	0.0221	0.3731	0.0808
	(0.0073)	(0.0025)	(0.0037)	(0.0022)	(0.0028)	(0.0037)	(0.0027)	(0.0059)
$I(s_{1994} = \text{Services})$	0.3645	0.0636	0.0296	0.0052	0.0364	0.0192	0.0114	0.4701
	(0.0038)	(0.0013)	(0.0019)	(0.0011)	(0.0014)	(0.0019)	(0.0014)	(0.0031)
Female	0.0088	−0.021	−0.0047	−0.0065	−0.0248	−0.0091	−0.0156	0.0729
	(0.0018)	(0.0006)	(0.0009)	(0.0005)	(0.0007)	(0.0009)	(0.0007)	(0.0015)
$I(\text{Educ} = 2)$	0.0125	−0.0403	0.0025	0.0031	−0.0162	0.0258	0.0039	0.0087
	(0.0021)	(0.0007)	(0.0011)	(0.0006)	(0.0008)	(0.0011)	(0.0008)	(0.0017)
$I(\text{Educ} = 3)$	0.0004	−0.0418	−0.0117	0.0056	−0.0241	0.0209	0.0035	0.0473
	(0.0026)	(0.0009)	(0.0013)	(0.0008)	(0.0010)	(0.0013)	(0.0010)	(0.0021)
$I(\text{Educ} = 4)$	−0.0379	−0.0412	−0.0114	0.01	−0.0254	0.0027	−0.0009	0.1042
	(0.0028)	(0.0010)	(0.0014)	(0.0008)	(0.0011)	(0.0014)	(0.0010)	(0.0023)
$(\text{age} - 25)$	0.0009	0.0006	−0.0009	−0.0006	0.0004	−0.0017	0.0003	0.001
	(0.0003)	(0.0001)	(0.0002)	(0.0001)	(0.0001)	(0.0002)	(0.0001)	(0.0003)

(*Continues*)

TABLE G.XII—*Continued*

	Residual	Agr/Mining	LT Manuf	HT Manuf	Construction	Trade	Trans/Util	Services
$(\text{age}-25)^2$	0.0001	0	0	0	0	0	0	−0.0001
	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
$\text{Exper}_{\text{Agr/Min}}$	−0.0333	0.037	−0.0001	0.001	0.0011	−0.0005	0.0016	−0.0068
	(0.0014)	(0.0005)	(0.0007)	(0.0004)	(0.0005)	(0.0007)	(0.0005)	(0.0011)
Exper_{LT}	−0.0272	−0.0038	0.0303	0.0032	−0.0006	0.0007	0.0013	−0.0039
	(0.0006)	(0.0002)	(0.0003)	(0.0002)	(0.0002)	(0.0003)	(0.0002)	(0.0005)
Exper_{HT}	−0.0274	−0.0047	0.0052	0.0283	−0.0006	0.0005	0.0019	−0.0032
	(0.0009)	(0.0003)	(0.0005)	(0.0003)	(0.0003)	(0.0005)	(0.0003)	(0.0007)
$\text{Exper}_{\text{Const}}$	−0.0318	−0.0068	−0.0017	0.0002	0.0491	−0.0024	0.0016	−0.0082
	(0.0011)	(0.0004)	(0.0005)	(0.0003)	(0.0004)	(0.0005)	(0.0004)	(0.0009)
$\text{Exper}_{\text{Trade}}$	−0.0259	−0.0032	0.0007	0.001	−0.0009	0.032	0.0016	−0.0052
	(0.0007)	(0.0002)	(0.0003)	(0.0002)	(0.0003)	(0.0003)	(0.0003)	(0.0006)
$\text{Exper}_{\text{T/U}}$	−0.0265	−0.0044	0.0001	0.0007	−0.0002	−0.0002	0.0417	−0.0113
	(0.0010)	(0.0003)	(0.0005)	(0.0003)	(0.0004)	(0.0005)	(0.0004)	(0.0008)
$\text{Exper}_{\text{Serv}}$	−0.0277	−0.0025	−0.0008	0.0002	0.0003	−0.0008	0.0014	0.0298
	(0.0004)	(0.0001)	(0.0002)	(0.0001)	(0.0002)	(0.0002)	(0.0002)	(0.0003)
Observations	299,915	299,915	299,915	299,915	299,915	299,915	299,915	299,915
R^2	0.16	0.22	0.27	0.31	0.18	0.23	0.37	0.37

[a]Each column refers to the linear regression $d^s_{i,1998} = X_{i,1995}\boldsymbol{\beta}^s + \varepsilon^s_{i,1998}$. $d^s_{i,1998}$ is a binary variable indicating whether worker i chose sector s in year 1998. Sample restricted to all individuals 25 to 50 years old in 1995 (born between 1945 and 1970). Standard errors in parentheses.

TABLE G.XIII

AUXILIARY MODELS (6): SECTORAL CHOICES IN 2000 REGRESSED ON INITIAL CONDITIONS IN 1995[a]

	Residual	Agr/Mining	LT	HT	Const	Trade	Trans/Util	Services
$I(s_{1994} = \text{Residual})$	0.5908	0.0816	0.0583	0.0107	0.0458	0.0541	0.025	0.1337
	(0.0028)	(0.0009)	(0.0014)	(0.0008)	(0.0010)	(0.0014)	(0.0010)	(0.0023)
$I(s_{1994} = \text{Agr/Mining})$	0.4697	0.341	0.0534	0.013	0.0235	0.0344	0.0124	0.0526
	(0.0082)	(0.0028)	(0.0041)	(0.0023)	(0.0028)	(0.0041)	(0.0030)	(0.0067)
$I(s_{1994} = \text{LT})$	0.491	0.0822	0.2691	0.0087	0.0299	0.0426	0.014	0.0624
	(0.0053)	(0.0018)	(0.0026)	(0.0015)	(0.0018)	(0.0026)	(0.0019)	(0.0043)
$I(s_{1994} = \text{HT})$	0.4703	0.0876	0.0453	0.2494	0.0319	0.0351	0.0115	0.0688
	(0.0079)	(0.0027)	(0.0039)	(0.0023)	(0.0027)	(0.0039)	(0.0029)	(0.0065)
$I(s_{1994} = \text{Const})$	0.5188	0.0751	0.0483	0.0049	0.1628	0.0434	0.0177	0.1289
	(0.0074)	(0.0025)	(0.0037)	(0.0021)	(0.0025)	(0.0037)	(0.0027)	(0.0060)
$I(s_{1994} = \text{Trade})$	0.4941	0.0744	0.0478	0.002	0.0375	0.2466	0.0238	0.0737
	(0.0055)	(0.0019)	(0.0027)	(0.0016)	(0.0019)	(0.0028)	(0.0020)	(0.0045)
$I(s_{1994} = \text{Trans/Util})$	0.4346	0.0758	0.0371	0.0002	0.0283	0.032	0.3023	0.0898
	(0.0077)	(0.0026)	(0.0038)	(0.0022)	(0.0027)	(0.0038)	(0.0029)	(0.0063)
$I(s_{1994} = \text{Services})$	0.3952	0.0704	0.0387	0.0051	0.0341	0.0268	0.0151	0.4144
	(0.0040)	(0.0014)	(0.0020)	(0.0012)	(0.0014)	(0.0020)	(0.0015)	(0.0033)

(*Continues*)

TABLE G.XIII—*Continued*

	Residual	Agr/Mining	LT Manuf	HT Manuf	Construction	Trade	Trans/Util	Services
Female	0.0098	−0.0236	−0.0046	−0.0069	−0.0239	−0.0123	−0.0195	0.081
	(0.0019)	(0.0007)	(0.0010)	(0.0005)	(0.0007)	(0.0010)	(0.0007)	(0.0016)
$I(\text{Educ} = 2)$	−0.0186	−0.0426	0.0077	0.0048	−0.0102	0.0319	0.008	0.019
	(0.0022)	(0.0008)	(0.0011)	(0.0006)	(0.0008)	(0.0011)	(0.0008)	(0.0018)
$I(\text{Educ} = 3)$	−0.0471	−0.0453	−0.0119	0.0099	−0.0176	0.0293	0.0074	0.0754
	(0.0027)	(0.0009)	(0.0014)	(0.0008)	(0.0009)	(0.0014)	(0.0010)	(0.0022)
$I(\text{Educ} = 4)$	−0.0971	−0.0444	−0.0111	0.0133	−0.0188	0.0049	0.0027	0.1505
	(0.0030)	(0.0010)	(0.0015)	(0.0009)	(0.0010)	(0.0015)	(0.0011)	(0.0025)
$(\text{age} - 25)$	−0.0007	0.0008	−0.0009	−0.0007	0.0004	−0.0019	0.0004	0.0026
	(0.0004)	(0.0001)	(0.0002)	(0.0001)	(0.0001)	(0.0002)	(0.0001)	(0.0003)
$(\text{age} - 25)^2$	0.0002	0	0	0	0	0	0	−0.0001
	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
$\text{Exper}_{\text{Agr/Min}}$	−0.024	0.0332	−0.001	−0.0002	0.0005	−0.0019	0.0015	−0.0081
	(0.0014)	(0.0005)	(0.0007)	(0.0004)	(0.0005)	(0.0007)	(0.0005)	(0.0012)
Exper_{LT}	−0.0204	−0.0044	0.0283	0.0027	−0.0002	−0.0002	0.0011	−0.0069
	(0.0006)	(0.0002)	(0.0003)	(0.0002)	(0.0002)	(0.0003)	(0.0002)	(0.0005)
Exper_{HT}	−0.0174	−0.0056	0.0042	0.0244	−0.0002	−0.0009	0.0017	−0.0063
	(0.0010)	(0.0003)	(0.0005)	(0.0003)	(0.0003)	(0.0005)	(0.0004)	(0.0008)
$\text{Exper}_{\text{Const}}$	−0.0146	−0.0081	−0.0029	0.0007	0.0378	−0.0029	0.0009	−0.0108
	(0.0011)	(0.0004)	(0.0006)	(0.0003)	(0.0004)	(0.0006)	(0.0004)	(0.0009)
$\text{Exper}_{\text{Trade}}$	−0.0167	−0.0038	−0.0004	0.001	−0.0012	0.0288	0.0012	−0.0089
	(0.0007)	(0.0002)	(0.0004)	(0.0002)	(0.0002)	(0.0004)	(0.0003)	(0.0006)
$\text{Exper}_{\text{T/U}}$	−0.0136	−0.005	−0.0018	0.0006	−0.0002	−0.0012	0.0347	−0.0135
	(0.0010)	(0.0003)	(0.0005)	(0.0003)	(0.0003)	(0.0005)	(0.0004)	(0.0008)
$\text{Exper}_{\text{Serv}}$	−0.0199	−0.0028	−0.0017	0.0001	−0.0001	−0.0016	0.0011	0.025
	(0.0005)	(0.0002)	(0.0002)	(0.0001)	(0.0002)	(0.0002)	(0.0002)	(0.0004)
Observations	296,070	296,070	296,070	296,070	296,070	296,070	296,070	296,070
R^2	0.08	0.17	0.2	0.22	0.12	0.16	0.26	0.29

[a]Each column refers to the linear regression $d^s_{i,2000} = X_{i,1995}\boldsymbol{\beta}^s + \varepsilon^s_{i,2000}$. $d^s_{i,2000}$ is a binary variable indicating whether worker i chose sector s in year 2000. Sample restricted to all individuals 25 to 50 years old in 1995 (born between 1945 and 1970). Standard errors in parentheses.

TABLE G.XIV

AUXILIARY MODELS (6): SECTORAL CHOICES IN 2005 REGRESSED ON INITIAL CONDITIONS IN 1995[a]

	Residual	Agr/Mining	LT	HT	Const	Trade	Trans/Util	Services
$I(s_{1994} = \text{Residual})$	0.5278	0.0904	0.0636	0.0127	0.0404	0.0648	0.0294	0.1708
	(0.0029)	(0.0010)	(0.0014)	(0.0008)	(0.0009)	(0.0015)	(0.0011)	(0.0025)
$I(s_{1994} = \text{Agr/Mining})$	0.4718	0.2806	0.0658	0.0131	0.0179	0.0439	0.0202	0.0867
	(0.0086)	(0.0030)	(0.0042)	(0.0024)	(0.0028)	(0.0044)	(0.0032)	(0.0073)
$I(s_{1994} = \text{LT})$	0.4971	0.0893	0.2018	0.0129	0.03	0.0457	0.0197	0.1034
	(0.0055)	(0.0019)	(0.0027)	(0.0016)	(0.0018)	(0.0028)	(0.0021)	(0.0047)

(*Continues*)

TABLE G.XIV—*Continued*

	Residual	Agr/Mining	LT Manuf	HT Manuf	Construction	Trade	Trans/Util	Services
$I(s_{1994} = \text{HT})$	0.4929	0.094	0.059	0.1699	0.0317	0.0427	0.019	0.0907
	(0.0082)	(0.0028)	(0.0040)	(0.0023)	(0.0026)	(0.0042)	(0.0031)	(0.0070)
$I(s_{1994} = \text{Const})$	0.5132	0.0813	0.052	0.0108	0.1105	0.0461	0.0252	0.161
	(0.0077)	(0.0027)	(0.0038)	(0.0022)	(0.0025)	(0.0039)	(0.0029)	(0.0066)
$I(s_{1994} = \text{Trade})$	0.5225	0.0836	0.0536	0.0073	0.0345	0.1755	0.0273	0.0958
	(0.0058)	(0.0020)	(0.0028)	(0.0016)	(0.0018)	(0.0029)	(0.0022)	(0.0049)
$I(s_{1994} = \text{Trans/Util})$	0.4698	0.0841	0.0436	0.0021	0.0266	0.0383	0.2215	0.114
	(0.0081)	(0.0028)	(0.0039)	(0.0023)	(0.0026)	(0.0041)	(0.0030)	(0.0068)
$I(s_{1994} = \text{Services})$	0.4348	0.0784	0.042	0.0076	0.0296	0.0297	0.0191	0.3589
	(0.0042)	(0.0015)	(0.0021)	(0.0012)	(0.0014)	(0.0022)	(0.0016)	(0.0036)
Female	0.0021	−0.0254	−0.0043	−0.0098	−0.0233	−0.0141	−0.0233	0.0981
	(0.0020)	(0.0007)	(0.0010)	(0.0006)	(0.0006)	(0.0010)	(0.0007)	(0.0017)
$I(\text{Educ} = 2)$	−0.0522	−0.0422	0.0121	0.0066	−0.0051	0.036	0.0127	0.0322
	(0.0023)	(0.0008)	(0.0012)	(0.0007)	(0.0008)	(0.0012)	(0.0009)	(0.0020)
$I(\text{Educ} = 3)$	−0.1202	−0.0467	−0.0058	0.0121	−0.0127	0.0416	0.0113	0.1203
	(0.0028)	(0.0010)	(0.0014)	(0.0008)	(0.0009)	(0.0014)	(0.0011)	(0.0024)
$I(\text{Educ} = 4)$	−0.1347	−0.0468	−0.014	0.0135	−0.0161	0.0063	0.0038	0.188
	(0.0031)	(0.0011)	(0.0015)	(0.0009)	(0.0010)	(0.0016)	(0.0012)	(0.0027)
(age − 25)	−0.0011	0.0006	−0.0012	−0.0007	0.0006	−0.0019	0.0004	0.0034
	(0.0005)	(0.0002)	(0.0002)	(0.0001)	(0.0001)	(0.0002)	(0.0002)	(0.0004)
$(\text{age} - 25)^2$	0.0005	0	0	0	0	0	−0.0001	−0.0003
	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
$\text{Exper}_{\text{Agr/Min}}$	−0.0229	0.0263	0.0034	0.002	0.0015	−0.0015	0.0025	−0.0112
	(0.0015)	(0.0005)	(0.0007)	(0.0004)	(0.0005)	(0.0008)	(0.0006)	(0.0013)
Exper_{LT}	−0.0124	−0.0044	0.0237	0.0027	−0.0004	0.0004	0.0011	−0.0106
	(0.0007)	(0.0002)	(0.0003)	(0.0002)	(0.0002)	(0.0003)	(0.0002)	(0.0006)
Exper_{HT}	−0.0121	−0.0059	0.0037	0.0223	−0.0008	−0.0002	0.0011	−0.0082
	(0.0010)	(0.0003)	(0.0005)	(0.0003)	(0.0003)	(0.0005)	(0.0004)	(0.0008)
$\text{Exper}_{\text{Const}}$	−0.0122	−0.0077	−0.0019	0.0006	0.0324	−0.0023	0.0016	−0.0105
	(0.0012)	(0.0004)	(0.0006)	(0.0003)	(0.0004)	(0.0006)	(0.0004)	(0.0010)
$\text{Exper}_{\text{Trade}}$	−0.0085	−0.0043	−0.0013	0.0005	−0.0014	0.0239	0.0018	−0.0106
	(0.0007)	(0.0003)	(0.0004)	(0.0002)	(0.0002)	(0.0004)	(0.0003)	(0.0006)
$\text{Exper}_{\text{T/U}}$	−0.0078	−0.005	−0.0018	0.0006	−0.0001	−0.0018	0.0281	−0.0123
	(0.0011)	(0.0004)	(0.0005)	(0.0003)	(0.0003)	(0.0005)	(0.0004)	(0.0009)
$\text{Exper}_{\text{Serv}}$	−0.0138	−0.0029	−0.0017	0	0.0002	−0.0016	0.001	0.0188
	(0.0005)	(0.0002)	(0.0002)	(0.0001)	(0.0002)	(0.0002)	(0.0002)	(0.0004)
Observations	281,739	281,739	281,739	281,739	281,739	281,739	281,739	281,739
R^2	0.05	0.11	0.13	0.15	0.08	0.09	0.16	0.21

[a] Each column refers to the linear regression $d^s_{i,2005} = X_{i,1995}\boldsymbol{\beta}^s + \varepsilon^s_{i,2005}$. $d^s_{i,2005}$ is a binary variable indicating whether worker i chose sector s in year 2005. Sample restricted to all individuals 25 to 50 years old in 1995 (born between 1945 and 1970). Standard errors in parentheses.

TABLE G.XV

AUXILIARY MODEL (7): FREQUENCY OF CHOICES BETWEEN 1995 AND 2005 REGRESSED ON INITIAL CONDITIONS IN 1995[a]

	Residual	Agr/Mining	LT	HT	Const	Trade	Trans/Util	Services
$I(s_{1994} = \text{Residual})$	6.8258	0.8389	0.5866	0.119	0.4837	0.5552	0.2556	1.3352
	(0.0191)	(0.0074)	(0.0109)	(0.0066)	(0.0066)	(0.0105)	(0.0083)	(0.0178)
$I(s_{1994} = \text{Agr/Mining})$	4.8692	4.2529	0.5485	0.113	0.2312	0.3345	0.1317	0.5189
	(0.0556)	(0.0216)	(0.0318)	(0.0194)	(0.0192)	(0.0305)	(0.0242)	(0.0519)
$I(s_{1994} = \text{LT})$	5.1136	0.8165	3.5605	0.0584	0.3321	0.3739	0.126	0.6189
	(0.0355)	(0.0138)	(0.0203)	(0.0124)	(0.0123)	(0.0195)	(0.0154)	(0.0332)
$I(s_{1994} = \text{HT})$	5.0373	0.8623	0.385	3.4133	0.3528	0.2904	0.1059	0.553
	(0.0530)	(0.0206)	(0.0303)	(0.0185)	(0.0183)	(0.0291)	(0.0230)	(0.0495)
$I(s_{1994} = \text{Const})$	5.5268	0.7519	0.4705	0.062	2.3314	0.4195	0.1733	1.2646
	(0.0499)	(0.0194)	(0.0285)	(0.0174)	(0.0172)	(0.0274)	(0.0217)	(0.0466)
$I(s_{1994} = \text{Trade})$	5.1471	0.7609	0.4504	0.0276	0.3867	3.3428	0.221	0.6634
	(0.0371)	(0.0144)	(0.0212)	(0.0129)	(0.0128)	(0.0204)	(0.0162)	(0.0347)
$I(s_{1994} = \text{Trans/Util})$	4.6403	0.7552	0.309	−0.0083	0.2913	0.2798	3.8991	0.8336
	(0.0520)	(0.0202)	(0.0297)	(0.0181)	(0.0180)	(0.0285)	(0.0226)	(0.0486)
$I(s_{1994} = \text{Services})$	4.128	0.7164	0.361	0.0567	0.3495	0.2335	0.1478	5.0071
	(0.0274)	(0.0106)	(0.0157)	(0.0095)	(0.0095)	(0.0150)	(0.0119)	(0.0256)
Female	0.0569	−0.2381	−0.039	−0.0808	−0.2422	−0.115	−0.1963	0.8545
	(0.0129)	(0.0050)	(0.0074)	(0.0045)	(0.0045)	(0.0071)	(0.0056)	(0.0121)
$I(\text{Educ} = 2)$	−0.1289	−0.4404	0.057	0.0457	−0.1275	0.3135	0.0783	0.2023
	(0.0152)	(0.0059)	(0.0087)	(0.0053)	(0.0052)	(0.0083)	(0.0066)	(0.0142)
$I(\text{Educ} = 3)$	−0.4333	−0.4716	−0.1245	0.0872	−0.2025	0.2998	0.065	0.78
	(0.0183)	(0.0071)	(0.0105)	(0.0064)	(0.0063)	(0.0101)	(0.0080)	(0.0171)
$I(\text{Educ} = 4)$	−0.7661	−0.467	−0.1536	0.1229	−0.2224	0.0453	0.0103	1.4306
	(0.0203)	(0.0079)	(0.0116)	(0.0071)	(0.0070)	(0.0112)	(0.0088)	(0.0190)
$(\text{age} - 25)$	−0.0023	0.0079	−0.0086	−0.0068	0.0012	−0.0217	0.0032	0.0271
	(0.0030)	(0.0012)	(0.0017)	(0.0010)	(0.0010)	(0.0016)	(0.0013)	(0.0028)
$(\text{age} - 25)^2$	0.0025	−0.0004	−0.0002	0	−0.0001	0.0005	−0.0005	−0.0018
	(0.0001)	(0.0000)	(0.0001)	(0.0000)	(0.0000)	(0.0001)	(0.0001)	(0.0001)
$\text{Exper}_{\text{Agr/Min}}$	−0.3335	0.3721	0.0168	0.0085	0.0114	−0.0121	0.0185	−0.0817
	(0.0097)	(0.0038)	(0.0056)	(0.0034)	(0.0034)	(0.0053)	(0.0042)	(0.0091)
Exper_{LT}	−0.2589	−0.0407	0.314	0.0327	−0.0019	0.0058	0.0142	−0.0653
	(0.0042)	(0.0016)	(0.0024)	(0.0015)	(0.0015)	(0.0023)	(0.0018)	(0.0040)
Exper_{HT}	−0.2598	−0.0511	0.0554	0.283	−0.0038	0.0035	0.0178	−0.0452
	(0.0064)	(0.0025)	(0.0037)	(0.0022)	(0.0022)	(0.0035)	(0.0028)	(0.0060)
$\text{Exper}_{\text{Const}}$	−0.2541	−0.076	−0.0223	0.0068	0.4463	−0.0245	0.0164	−0.0927
	(0.0077)	(0.0030)	(0.0044)	(0.0027)	(0.0027)	(0.0042)	(0.0033)	(0.0072)
$\text{Exper}_{\text{Trade}}$	−0.218	−0.0366	0.0004	0.0099	−0.0098	0.3135	0.017	−0.0764
	(0.0048)	(0.0019)	(0.0028)	(0.0017)	(0.0017)	(0.0027)	(0.0021)	(0.0045)
$\text{Exper}_{\text{T/U}}$	−0.2292	−0.0464	−0.006	0.0077	−0.0012	−0.0065	0.3952	−0.1135
	(0.0068)	(0.0026)	(0.0039)	(0.0024)	(0.0024)	(0.0037)	(0.0030)	(0.0064)

(*Continues*)

TABLE G.XV—*Continued*

	Residual	Agr/Mining	LT Manuf	HT Manuf	Construction	Trade	Trans/Util	Services
$\text{Exper}_{\text{Serv}}$	−0.2472	−0.0254	−0.0128	0.0016	0.0027	−0.0102	0.0127	0.2787
	(0.0031)	(0.0012)	(0.0018)	(0.0011)	(0.0011)	(0.0017)	(0.0013)	(0.0029)
Observations	281,739	281,739	281,739	281,739	281,739	281,739	281,739	281,739
R^2	0.27	0.33	0.41	0.42	0.32	0.35	0.47	0.5

[a]Each column refers to the linear regression $n_i^s = X_{i,1995}\boldsymbol{\beta}^s + \varepsilon_i^s$. n_i^s is the total number of years spent in sector s between 1995 and 2005. Sample restricted to all individuals 25 to 50 years old in 1995 (born between 1945 and 1970). Standard errors in parentheses.

TABLE G.XVI

AUXILIARY MODELS (8): CONDITIONAL ON SWITCHING BETWEEN $t-1$ AND t, REGRESS INDICATOR VARIABLE FOR RETURNING TO THE ORIGINAL SECTOR ON COVARIATES RETURN REGRESSIONS[a]

	Residual	Agr/Mining	LT	HT	Const	Trade	Trans/Util	Services
$I(t=1995)$	0.24	0.3319	0.1752	0.1873	0.1666	0.1389	0.1965	0.1617
	(0.0036)	(0.0111)	(0.0057)	(0.0090)	(0.0078)	(0.0060)	(0.0091)	(0.0042)
$I(t=1996)$	0.28	0.233	0.1102	0.0458	0.1313	0.0861	0.0869	0.1464
	(0.0030)	(0.0109)	(0.0060)	(0.0096)	(0.0081)	(0.0062)	(0.0095)	(0.0047)
$I(t=1997)$	0.2724	0.2292	0.1033	0.0504	0.1377	0.0938	0.0429	0.136
	(0.0033)	(0.0093)	(0.0055)	(0.0088)	(0.0075)	(0.0058)	(0.0086)	(0.0044)
$I(t=1998)$	0.2921	0.2265	0.0744	0.0302	0.1164	0.0735	0.0449	0.1079
	(0.0032)	(0.0093)	(0.0055)	(0.0088)	(0.0073)	(0.0057)	(0.0083)	(0.0042)
$I(t=1999)$	0.3089	0.2159	0.0815	0.0369	0.0788	0.073	0.0303	0.1066
	(0.0032)	(0.0091)	(0.0054)	(0.0087)	(0.0071)	(0.0056)	(0.0083)	(0.0042)
$I(t=2000)$	0.2745	0.1994	0.0954	0.0553	0.1011	0.0764	0.0392	0.1134
	(0.0031)	(0.0088)	(0.0055)	(0.0088)	(0.0067)	(0.0056)	(0.0082)	(0.0041)
$I(t=2001)$	0.3143	0.2378	0.094	0.0664	0.1192	0.0901	0.0532	0.135
	(0.0031)	(0.0090)	(0.0057)	(0.0095)	(0.0072)	(0.0055)	(0.0084)	(0.0042)
$I(t=2002)$	0.2773	0.2079	0.0952	0.0472	0.0894	0.0796	0.0381	0.096
	(0.0030)	(0.0087)	(0.0054)	(0.0092)	(0.0071)	(0.0054)	(0.0081)	(0.0039)
$I(t=2003)$	0.2753	0.2255	0.0929	0.051	0.0876	0.0893	0.0494	0.1176
	(0.0030)	(0.0088)	(0.0055)	(0.0092)	(0.0071)	(0.0054)	(0.0082)	(0.0041)
$I(t=2004)$	0.2759	0.2513	0.1199	0.0615	0.1038	0.0984	0.0598	0.1355
	(0.0031)	(0.0088)	(0.0055)	(0.0094)	(0.0070)	(0.0054)	(0.0083)	(0.0041)
$I(t=2005)$	0.2754	0.2193	0.1085	0.0772	0.1144	0.0938	0.0562	0.14
	(0.0030)	(0.0086)	(0.0056)	(0.0094)	(0.0074)	(0.0054)	(0.0083)	(0.0041)
Female	−0.018	−0.0343	−0.0038	−0.0241	−0.0825	−0.0163	−0.0424	0.0079
	(0.0015)	(0.0061)	(0.0026)	(0.0046)	(0.0074)	(0.0024)	(0.0050)	(0.0018)
$I(\text{Educ}=2)$	−0.0311	−0.0691	0.012	0.0046	−0.0231	0.0333	0.0207	0.0198
	(0.0018)	(0.0048)	(0.0028)	(0.0049)	(0.0035)	(0.0034)	(0.0044)	(0.0024)
$I(\text{Educ}=3)$	−0.0754	−0.1379	−0.0158	0.0276	−0.063	0.045	−0.0003	0.0264
	(0.0022)	(0.0094)	(0.0039)	(0.0058)	(0.0061)	(0.0038)	(0.0054)	(0.0027)

(*Continues*)

TABLE G.XVI—*Continued*

	Residual	Agr/Mining	LT	HT	Const	Trade	Trans/Util	Services
$I(\text{Educ} = 4)$	−0.1072	−0.1314	−0.0385	0.0082	−0.0972	−0.0027	−0.013	0.0407
	(0.0027)	(0.0135)	(0.0053)	(0.0065)	(0.0093)	(0.0050)	(0.0070)	(0.0029)
(age − 25)	0.0008	−0.0054	−0.0014	−0.0005	0.0006	−0.003	0.0037	−0.0025
	(0.0003)	(0.0008)	(0.0004)	(0.0007)	(0.0006)	(0.0004)	(0.0007)	(0.0003)
$(\text{age} - 25)^2$	0	0.0001	−0.0001	0	0	0	−0.0002	0
	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
$\text{Exper}_{\text{Agr/Min}}$	−0.0049	0.0074	0.0051	0.0017	−0.0093	−0.0033	0.0016	−0.0111
	(0.0009)	(0.0010)	(0.0017)	(0.0028)	(0.0026)	(0.0023)	(0.0027)	(0.0019)
Exper_{LT}	−0.0102	−0.0091	0.0109	0.0013	−0.0078	−0.0045	−0.0044	−0.0031
	(0.0005)	(0.0017)	(0.0005)	(0.0013)	(0.0015)	(0.0010)	(0.0017)	(0.0008)
Exper_{HT}	−0.0128	0.0044	0.0014	0.0071	−0.0023	−0.0066	−0.0023	−0.0035
	(0.0009)	(0.0036)	(0.0014)	(0.0009)	(0.0026)	(0.0017)	(0.0026)	(0.0012)
$\text{Exper}_{\text{Const}}$	0.0153	−0.018	−0.007	−0.0021	0.0227	−0.0092	−0.006	0.0016
	(0.0007)	(0.0031)	(0.0019)	(0.0027)	(0.0009)	(0.0018)	(0.0023)	(0.0011)
$\text{Exper}_{\text{Trade}}$	−0.0081	−0.0122	−0.008	−0.0078	−0.0051	0.0119	−0.0006	−0.0008
	(0.0005)	(0.0029)	(0.0011)	(0.0019)	(0.0018)	(0.0005)	(0.0016)	(0.0008)
$\text{Exper}_{\text{T/U}}$	−0.0124	−0.0054	−0.0103	−0.0149	−0.0092	−0.01	0.009	−0.0016
	(0.0009)	(0.0042)	(0.0021)	(0.0031)	(0.0022)	(0.0016)	(0.0008)	(0.0013)
$\text{Exper}_{\text{Serv}}$	−0.0095	0.002	−0.0048	0.0008	0.0074	−0.0041	−0.0017	0.0053
	(0.0004)	(0.0020)	(0.0010)	(0.0016)	(0.0012)	(0.0009)	(0.0012)	(0.0004)
Observations	348,034	30,726	76,376	23,089	48,859	85,007	30,183	161,233
R^2	0.02	0.03	0.02	0.04	0.03	0.02	0.03	0.01

[a]Each column refers to the linear regression $d^s_{i,t+1} = X_{i,t+1}\boldsymbol{\beta}^s + \varepsilon^s_{i,t+1}$. $d^s_{i,t+1}$ is a binary variable indicating whether worker i chose sector s at time $t+1$. Sample restricted to individuals 25 to 60 years old at any point in time between 1995 and 2005 who chose sector s at time $t-1$ but chose a sector $k \neq s$ at time t. Standard errors in parentheses.

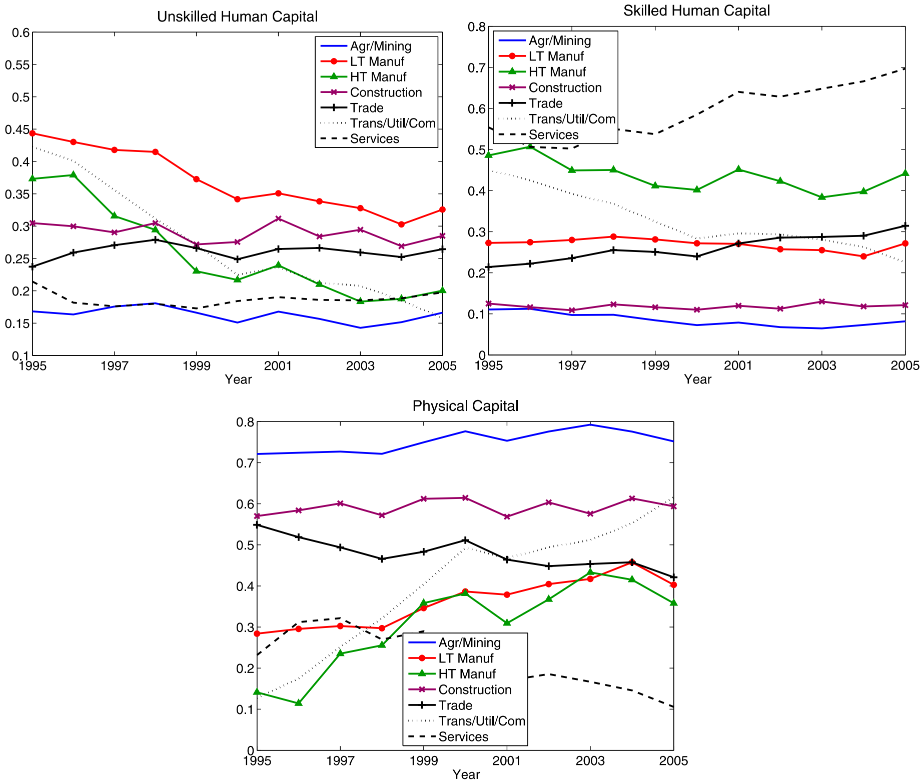

FIGURE G.1.—Evolution of factor shares between 1995 and 2005.

APPENDIX H: SOLVING THE BELLMAN EQUATION

Given (i) the parameter set Θ that fully parameterizes the economy (see Section 5.1); (ii) the distribution of initial conditions across the population; (iii) real value added series for each sector; and (iv) economy-wide rental prices of physical capital, we can simulate individual choices and compute the sector-specific equilibrium human capital prices as described in Section 3.3.

The distribution of initial conditions is given by the joint distribution of gender, education, age, and sector-specific experiences as found in the data in 1995, the first sample period. From 1996 onward, I need to include the initial conditions of entering generations (those who are 25 years old) and keep track of the decisions generated by the model of the older generations.

In order to simulate the individual decisions for the parameter set Θ, I must first solve the Bellman equations given by (4) and (5). The Bellman equations are solved by backward recursion, starting at the terminal age $A = 60$ and going back until the next to initial age of 26 is reached. Some difficulties arise in the solution of (4)–(5). First, in order to compute expectations, I must integrate the value function—which is a nonlinear and non-separable function of the state variables, including the human capital shocks—with respect to all idiosyncratic shocks (those affecting the human capital production functions and those affecting preferences for sectors). The multidimensional integrals with respect to the human capital idiosyncratic shocks do not have a closed-form solution and hence must be approximated. Second, remember that the human capital prices $\{r_t^{0,k}\}_{k=1}^7$ or $\{r_t^{1,k}\}_{k=1}^7$ (current and lagged) are included in the state variables and these are continuous variables. Consequently, I have a large state space with continuous variables.

In order to deal with these problems in a way that still makes estimation feasible, I approximate the solution of the Bellman equation using similar methods as in Keane and Wolpin (1994), Rust (1994 and 1997), and Lee and Wolpin (2006).

Consider a worker with gender g, education level e, type h, age a at period t. Suppose that this worker chose to work at sector s in the previous period $t-1$ ($d_{t-1}=s$). That worker starts period t with sector-specific experience given by the vector **Exper** and faces lagged and twice human capital prices for her skill level given by the vectors $\mathbf{r_{-1}}$ and $\mathbf{r_{-2}}$, respectively. Let $\boldsymbol{\phi}$ and Σ_ξ denote a parameterization of equation (11). Define $\mathrm{EMAX}_a(g, e, h, s, \mathbf{Exper}, \mathbf{r_{-1}}, \mathbf{r_{-2}}) = E_{\boldsymbol{\varepsilon},\boldsymbol{\eta},\boldsymbol{\xi}} V_a(g, e, h, \mathbf{Exper}, \mathbf{r_{-1}}, \mathbf{r_{-2}}, \boldsymbol{\varepsilon}, \boldsymbol{\eta}, \boldsymbol{\xi} | d_{t-1} = s)$ as the expected value this worker gets at age a and time t, *before any idiosyncratic and aggregate shocks are revealed and before age a's choice is made*.

Let

$$\Delta = \left\{ (\mathrm{exper}^1, \dots, \mathrm{exper}^7, r_{-1}^1, \dots, r_{-1}^7, r_{-2}^1, \dots, r_{-2}^7) \middle| \sum_{s=1}^{7} \mathrm{exper}^s \leq 9; \underline{r}^s \leq r_{-1}^s, r_{-2}^s \leq \overline{r}^s \right\}.$$

$\underline{r}^s$ and $\overline{r}^s$ are lower and upper bounds for human capital prices in sector s.[1] For each age a, period t, gender g, education level e, type h, and sector s, I approximate $\mathrm{EMAX}_a(g, e, h, s, \cdot)$ defined on Δ with the following backward recursion procedure.

Repeat the following algorithm for all $g \in \{\mathrm{Male}, \mathrm{Female}\}$, $e \in \{1, 2, 3, 4\}$, $h \in \{1, 2, 3\}$, and $s \in \{0, 1, 2, 3, 4, 5, 6, 7\}$.

[1] $\underline{r}^s$ and $\bar{r}^s$ represent bounds for human capital prices over which the value functions are computed. One needs to make sure that the lower bounds are sufficiently smaller than the sector-specific equilibrium human capital prices and that the upper bounds are sufficiently larger than the sector-specific equilibrium human capital prices (at all years of the sample period and at all years in the simulation exercise). These bounds are chosen after extensive experimentation with the model, and under different parameter values.

(1) Start with terminal age $a = A = 60$. Draw $N = 600$ points at random:

$$\{\boldsymbol{\delta}^n \equiv (\text{exper}^{1,n}, \dots, \text{exper}^{7,n}, r_{-1}^{1,n}, \dots, r_{-1}^{7,n}, r_{-2}^{1,n}, \dots, r_{-2}^{7,n})\}_{n=1}^{N} \in \Delta.$$

For each n, approximate $\text{EMAX}_A(g, e, h, s, \boldsymbol{\delta}^n)$ by first jointly drawing idiosyncratic shocks $\boldsymbol{\varepsilon}$ and $\boldsymbol{\xi}$, and for each of these drawn shocks, integrate over $\boldsymbol{\eta}$. The distributional assumption regarding $\boldsymbol{\eta}$ yields a convenient closed-form solution for the integral over that variable (see McFadden (1981) and Rust (1994)). I then use Monte Carlo integration over 300 draws of vectors $\boldsymbol{\varepsilon}$ and $\boldsymbol{\xi}$.

(2) Approximate $\text{EMAX}_A(g, e, h, s, \cdot)$ by fitting a second-order polynomial regression of $\text{EMAX}_A(g, e, h, s, \boldsymbol{\delta}^n)_{n=1}^{N}$ on $\{1, \text{exper}^{1,n}, \dots, \text{exper}^{7,n}, \widetilde{r}^{1,n}, \dots, \widetilde{r}^{7,n}, \widetilde{r}^{1,n} I(\widetilde{r}^{1,n} > c^1), \dots, \widetilde{r}^{7,n} I(\widetilde{r}^{7,n} > c^7)\}$, where $\widetilde{r}^{s,n} = r_{-1}^{s,n} (\frac{r_{-1}^{s,n}}{r_{-2}^{s,n}})^{\phi_1^{sk,s}}$, and $sk = 0$ if $e \leq 2$ and $sk = 1$ otherwise.[2]

(3) Follow the same approximation procedures and approximate $\text{EMAX}_a(g, e, h, s, \cdot)$ for $a = 59, \dots, 26$ repeatedly using equations (4) and (5).

The terms $\widetilde{r}^{s,n} I(\widetilde{r}^{s,n} > c^s)$ make the approximation of EMAX look like splines, with the only difference that the thresholds c^s (the spline nodes) are not chosen optimally, but rather fixed at $c^s = (\underline{r}^s + \bar{r}^s)/2$. Choosing a vector $\mathbf{c}$ optimally is desirable (in the sense of maximizing the R^2 of the linear regression used in the approximation stage); however, it would add tremendously to computational time.[3] I get, nevertheless, very good fit for the polynomial regressions ($R^2 > 0.95$ for each and a, g, e, h, s).

APPENDIX I: STANDARD ERRORS

The Indirect Inference estimator is defined by

$$\widehat{\Theta} = \arg\min_{\Theta} (\widehat{\delta} - \widehat{\delta}^S(\Theta))' \widehat{\Omega} (\widehat{\delta} - \widehat{\delta}^S(\Theta)),$$

where $\widehat{\Omega}$ is a positive definite matrix with $\Omega = p \lim \widehat{\Omega}$. Since the model is assumed to be correctly specified:

$$\delta_0 \equiv p \lim \widehat{\delta} = \delta(\Theta_0).$$

[2]Note that equation (11) implies that $r_{t+1}^{sk,s} = \exp(\phi_0^{sk,s}) r_t^{sk,s} (\frac{r_t^{sk,s}}{r_{t-1}^{sk,s}})^{\phi_1^{sk,s}} \exp(\xi_t^{sk,s})$, so that EMAX_A depends on lagged and twice lagged human capital prices only through $r_{t-1}^{sk,s} (\frac{r_{t-1}^{sk,s}}{r_{t-2}^{sk,s}})^{\phi_1^{sk,s}}$.

[3]The numerical computation of the loss function at each guess over the estimation procedure takes over 2.5 minutes using state-of-the-art parallel computing over 24 processors and state-of-the-art computing power. In addition, the model has 209 parameters, making the optimization search especially difficult and time consuming.

Define

$$\begin{aligned}
\widetilde{g}^S(\Theta) &\equiv \widehat{\delta} - \widehat{\delta}^S(\Theta), \\
\widetilde{g}^S(\Theta_0) &= \widehat{\delta} - \delta_0 + \delta_0 - \widehat{\delta}^S(\Theta_0), \\
\sqrt{N}\widetilde{g}^S(\Theta_0) &= \sqrt{N}(\widehat{\delta} - \delta_0) + \sqrt{N}\big(\widehat{\delta}^S(\Theta_0) - \delta_0\big) \\
&= \sqrt{N}(\widehat{\delta} - \delta_0) + \frac{\sqrt{N^S}}{\sqrt{S}}\big(\widehat{\delta}^S(\Theta_0) - \delta_0\big) \\
&\Rightarrow N\left(0, \mathrm{AVAR}(\widehat{\delta}) + \frac{1}{S}\mathrm{AVAR}\big(\widehat{\delta}^S(\Theta_0)\big)\right).
\end{aligned}$$

The first-order condition to the minimization problem is

$$\frac{\partial \widetilde{g}^S(\widehat{\Theta})}{\partial \Theta}\widehat{\Omega}\widetilde{g}^S(\widehat{\Theta}) = 0.$$

The mean value theorem applied to $\widetilde{g}^S(\widehat{\Theta})$ gives

$$\left(\frac{\partial \widetilde{g}^S(\widehat{\Theta})}{\partial \Theta}\right)'\widehat{\Omega}\left(\widetilde{g}^S(\Theta_0) + \left(\frac{\partial \widetilde{g}^S(\overline{\Theta})}{\partial \Theta}\right)(\widehat{\Theta} - \Theta_0)\right) = 0,$$

where $\overline{\Theta} \in [\Theta_0, \widehat{\Theta}]$:

$$\begin{aligned}
\sqrt{N}(\widehat{\Theta} - \Theta_0) = &\left[\left(\frac{\partial \widetilde{g}^S(\widehat{\Theta})}{\partial \Theta}\right)'\widehat{\Omega}\left(\frac{\partial \widetilde{g}^S(\Theta_0)}{\partial \Theta}\right)\right]^{-1} \\
&\times \left(\frac{\partial \widetilde{g}^S(\overline{\Theta})}{\partial \Theta}\right)'\widehat{\Omega}\sqrt{N}\widetilde{g}^S(\Theta_0).
\end{aligned}$$

Taking the limit $N \to \infty$ (which implies $S \times N \to \infty$, for S fixed), we have

$$\begin{aligned}
&\frac{\partial \widetilde{g}^S(\widehat{\Theta})}{\partial \Theta} \xrightarrow{p} E\left[\frac{\partial g(\Theta_0)}{\partial \Theta}\right] \equiv G_0, \\
&\sqrt{N}(\widehat{\Theta} - \Theta_0) \Rightarrow N\Bigg(0, \big(G_0'\Omega G_0\big)^{-1}G_0'\Omega \\
&\qquad \times \left[\mathrm{AVAR}(\widehat{\delta}) + \frac{1}{S}\mathrm{AVAR}\big(\widehat{\delta}^S(\Theta_0)\big)\right] \\
&\qquad \times \Omega G_0\big(G_0'\Omega G_0\big)^{-1}\Bigg).
\end{aligned}$$

Consequently:

$$\operatorname{Var}(\widehat{\Theta}-\Theta_0) \approx \left(G_0'\Omega G_0\right)^{-1} G_0'\Omega \left[\frac{\operatorname{AVAR}(\widehat{\delta}) + \frac{1}{S}\operatorname{AVAR}(\widehat{\delta}^S(\Theta_0))}{N}\right] \times \Omega G_0 \left(G_0'\Omega G_0\right)^{-1}.$$

Plugging estimates for the above quantities:

$$\widehat{\operatorname{AVAR}(\widehat{\delta})} = N \times \widehat{\operatorname{Var}(\widehat{\delta})},$$

$$\widehat{\operatorname{AVAR}\big(\widehat{\delta}^S(\Theta_0)\big)} = S \times N \times \widehat{\operatorname{Var}\big(\widehat{\delta}^S(\Theta_0)\big)},$$

$$\widehat{\operatorname{Var}(\widehat{\Theta}-\Theta_0)} = \left(\frac{\partial \widetilde{g}^S(\widehat{\Theta})}{\partial \Theta}\widehat{\Omega}\frac{\partial \widetilde{g}^S(\widehat{\Theta})}{\partial \Theta}\right)^{-1}\left(\frac{\partial \widetilde{g}^S(\widehat{\Theta})}{\partial \Theta}\right)'\widehat{\Omega} \times \left[\widehat{\operatorname{Var}(\widehat{\delta})} + \widehat{\operatorname{Var}\big(\widehat{\delta}^S(\Theta_0)\big)}\right] \times \widehat{\Omega}\left(\frac{\partial \widetilde{g}^S(\widehat{\Theta})}{\partial \Theta}\right)\left(\frac{\partial \widetilde{g}^S(\widehat{\Theta})}{\partial \Theta}\widehat{\Omega}\frac{\partial \widetilde{g}^S(\widehat{\Theta})}{\partial \Theta}\right)^{-1}.$$

Although $\widehat{\operatorname{Var}(\widehat{\delta})}$ can be computed using the GMM equations that define $\widehat{\delta}$, the size of the problem makes the asymptotic variance have a very cumbersome expression. For this reason, $\widehat{\operatorname{Var}(\widehat{\delta})}$ will be computed by bootstrap.

Since the model is assumed to be correctly specified, $\widehat{\operatorname{Var}(\widehat{\delta}^S(\Theta_0))}$ can also be computed by bootstrap with the original data. The procedure is as follows: (1) extract 1,000 individuals per generation and skill level from 1995 to 2005. (2) Repeatedly draw these individuals with replacement. (3) For each drawn sample j, fit $\widehat{\delta}^j = (X^{j\prime}WX^j)^{-1}X^{j\prime}WY^j$, where W is a weighting matrix that corrects for the sampling scheme.

I.1. *Weighting Matrix*

$$\widehat{\Omega} = \begin{bmatrix} \widehat{V(\widehat{\beta})}^{-1} & & & & & & & \\ & \widehat{V(\widehat{\xi}^2)}^{-1} & & & & & & \\ & & \widehat{V(\widehat{\sigma^2})}^{-1} & & & & & \\ & & & \widehat{V(\widehat{\gamma})}^{-1} & & & & \\ & & & & \widehat{V(\widehat{\varphi})}^{-1} & & & \\ & & & & & \widehat{V(\widehat{\rho})}^{-1} & & \\ & & & & & & \widehat{V(\widehat{\psi})}^{-1} & \\ & & & & & & & \widehat{V(\widehat{\chi})}^{-1} \end{bmatrix}.$$

I.2. *Computation of* G_0

(1) For each component n of Θ, sample 20 points $\widehat{\Theta} + \varepsilon_n e_n$, where $|\varepsilon_n|$ is small, and compute $\widehat{\delta}^S(\widehat{\Theta} + \varepsilon_n e_n)$.

(2) Fit a second-order polynomial of $\{\widehat{\delta}^S(\widehat{\Theta} + \varepsilon_n e_n)\}$ on $\{\widehat{\Theta}_n + \varepsilon_n\}$.

(3) Obtain an approximation for $\frac{\partial \delta}{\partial \Theta_n}|_{\Theta=\widehat{\Theta}}$ by looking at the derivative of the polynomial at $\widehat{\Theta}_n$.

APPENDIX J: GOODNESS OF FIT

The Indirect Inference method is very similar to the Simulated Method of Moments. Suppose we had a single auxiliary model, $y = X\beta + \varepsilon$, and let the weighting matrix be $X'X$. The Indirect Inference loss function becomes

$$(25) \qquad \begin{aligned} Q(\Theta) &= \big(\widehat{\beta} - \widehat{\beta}^S(\Theta)\big)' X'X \big(\widehat{\beta} - \widehat{\beta}^S(\Theta)\big) \\ &= \big(X\widehat{\beta} - X\widehat{\beta}^S(\Theta)\big)' \big(X\widehat{\beta} - X\widehat{\beta}^S(\Theta)\big) \\ &= \big(\widehat{E}[y|X] - \widehat{E}\big[y(\Theta)|X\big]\big)' \big(\widehat{E}[y|X] - \widehat{E}\big[y(\Theta)|X\big]\big), \end{aligned}$$

where $\widehat{E}$ denotes the best linear predictor operator and $y(\Theta)$ are the data generated by the model under parameter Θ.

In that case, Indirect Inference matches best linear predictors. Since the weighting matrix used in the Indirect Inference procedure described in Section G is block diagonal, with the blocks given by the variance of residuals times the inverse of the cross-product matrix, I use that observation in investigating the goodness of fit of the model in Figures J.1 to J.8. Each of these figures plots the best linear predictor in the data versus the best linear predictor under the model conditional on covariates for each individual observed in the data set. Figure J.1 investigates the fit of the log-wage regressions, Figure J.2 investigates the fit of the linear probability models of sectoral choice, Figure J.3 investigates the fit of the linear probability models for transition rates, Figure J.4 investigates the fit of the return regressions, Figures J.5, J.6, and J.7 investigate the fit of the persistence regressions, and Figure J.8 investigates the fit of the frequency regressions. Overall, the model is able to match best linear predictors in the data reasonably well.

Table J.I shows how the model fits cross-sectional wage variance (Table J.I.A) as well as the volatility of within individual yearly log-wage changes (Table J.I.B).

Table J.II compares the expected number of years spent in each sector for individuals who are 25 to 50 years in 1995 as found in the data to those predicted by the model. These moments were not imposed in the estimation.

Finally, Table J.III compares wage bill and physical capital income shares in the data to those predicted by the model.

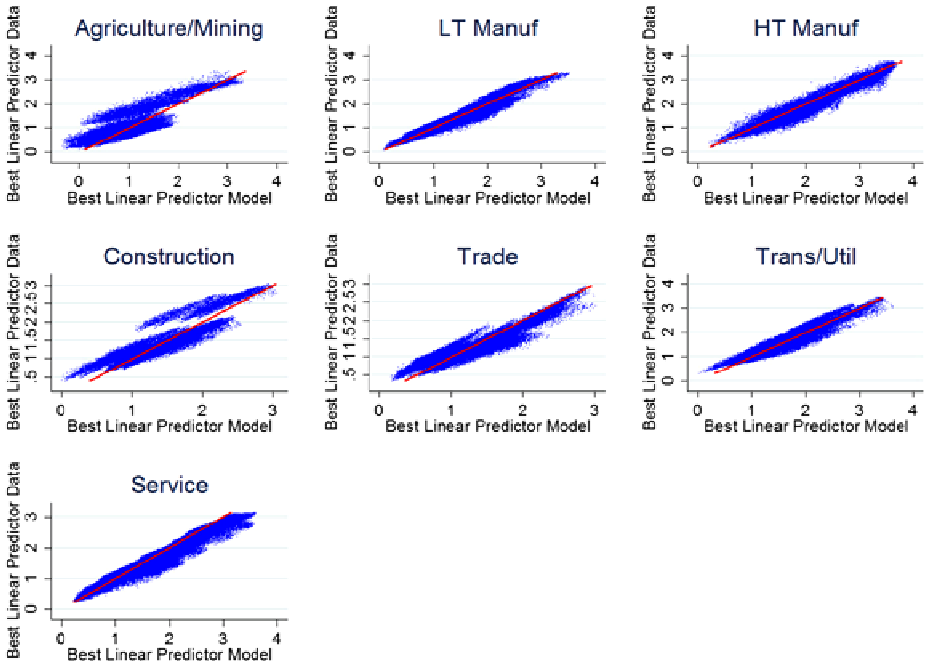

FIGURE J.1.—Goodness of fit—log-wage regressions. The vertical axis displays the best linear predictors of log wages in the data. The horizontal axis displays the best linear predictors of log wages implied by the model. The distribution of the conditioning variables is extracted from the data. A perfect model fit would lead to all the points over the 45° line.

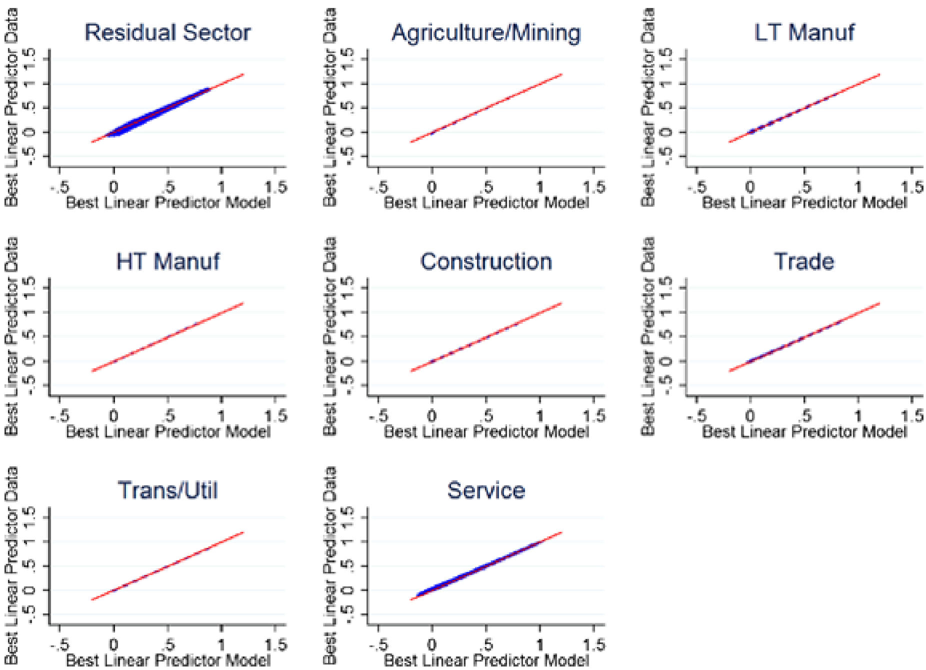

FIGURE J.2.—Goodness of fit—sectoral choice regressions. The vertical axis displays the best linear predictors of choices in the data. The horizontal axis displays the best linear predictors of choices implied by the model. The distribution of the conditioning variables is extracted from the data. A perfect model fit would lead to all the points over the 45° line.

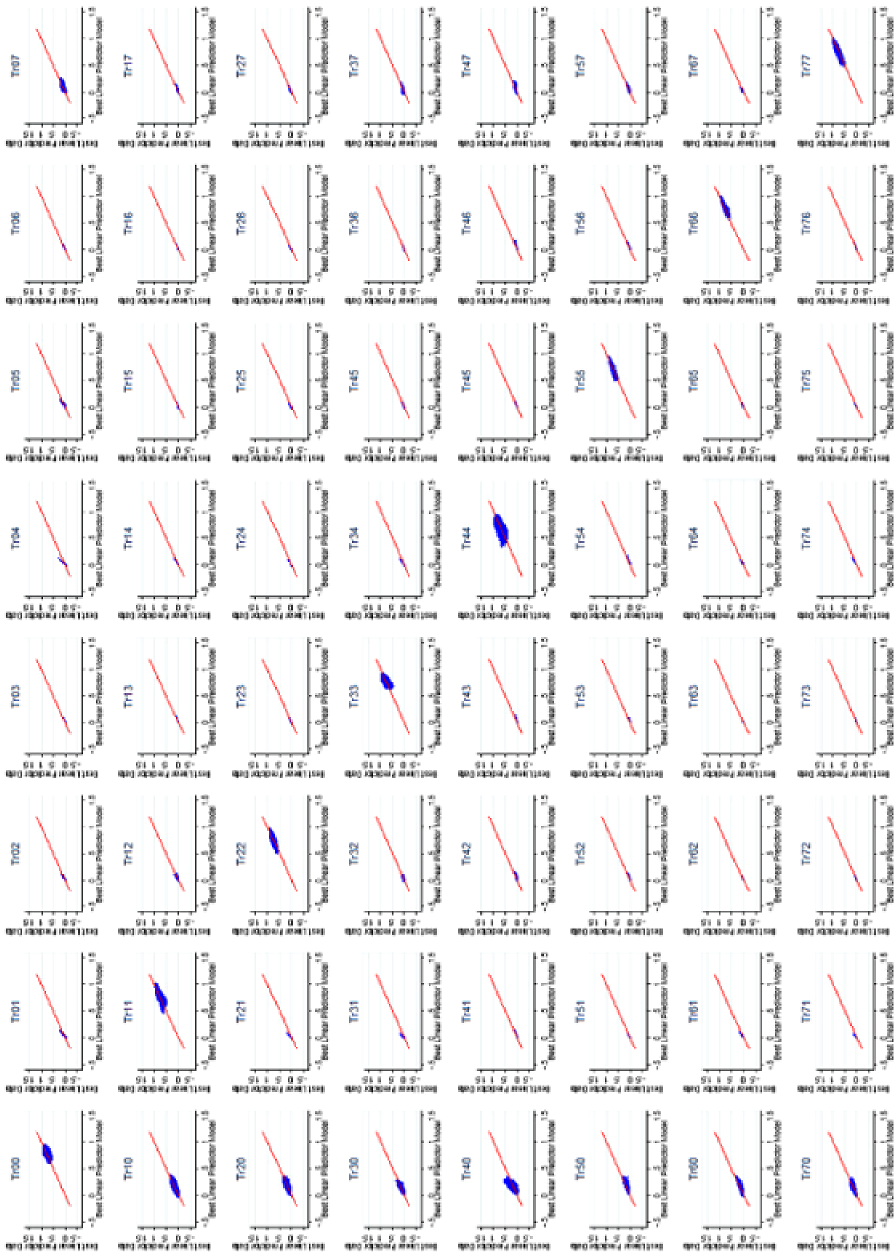

FIGURE J.3.—Goodness of fit—transition rates regressions. The vertical axis displays the best linear predictors of 1-year transition rates in the data. The horizontal axis displays the best linear predictors of 1-year transition rates implied by the model. The distribution of the conditioning variables is extracted from the data. A perfect model fit would lead to all the points over the 45° line.

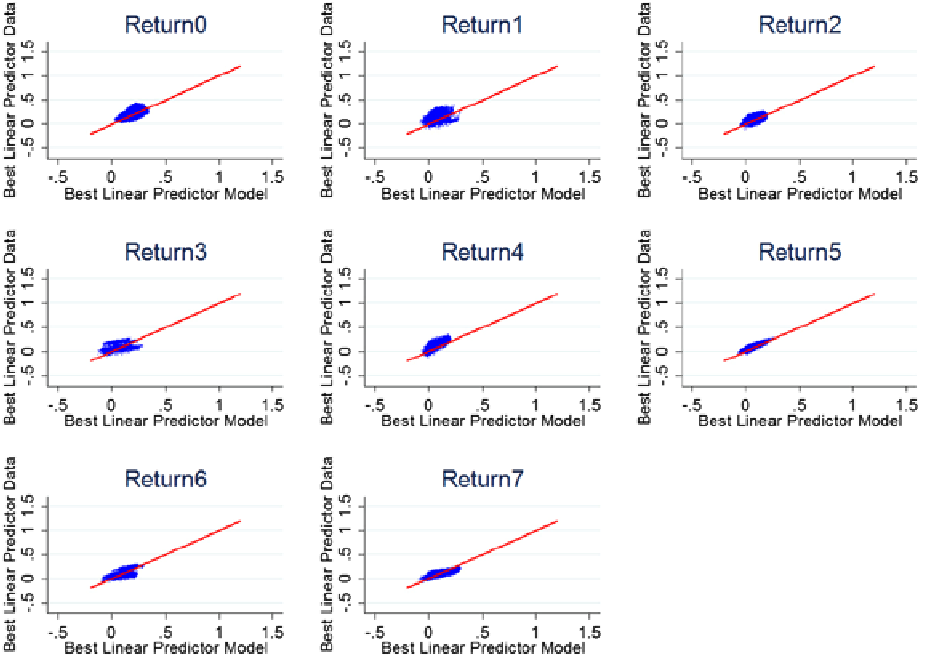

FIGURE J.4.—Goodness of fit—return regressions. The vertical axis displays the best linear predictors of choices in the data. The horizontal axis displays the best linear predictors of choices implied by the model. The distribution of the conditioning variables is extracted from the data. A perfect model fit would lead to all the points over the 45° line.

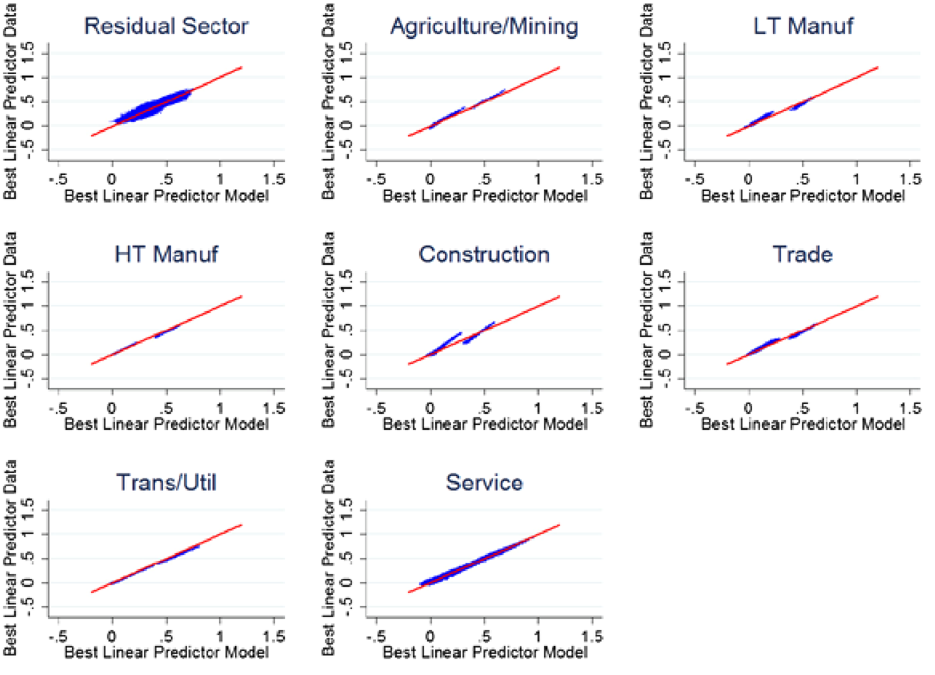

FIGURE J.5.—Goodness of fit—1998 persistence regressions. The vertical axis displays the best linear predictors of choices in the data. The horizontal axis displays the best linear predictors of choices implied by the model. The distribution of the conditioning variables is extracted from the data. A perfect model fit would lead to all the points over the 45° line.

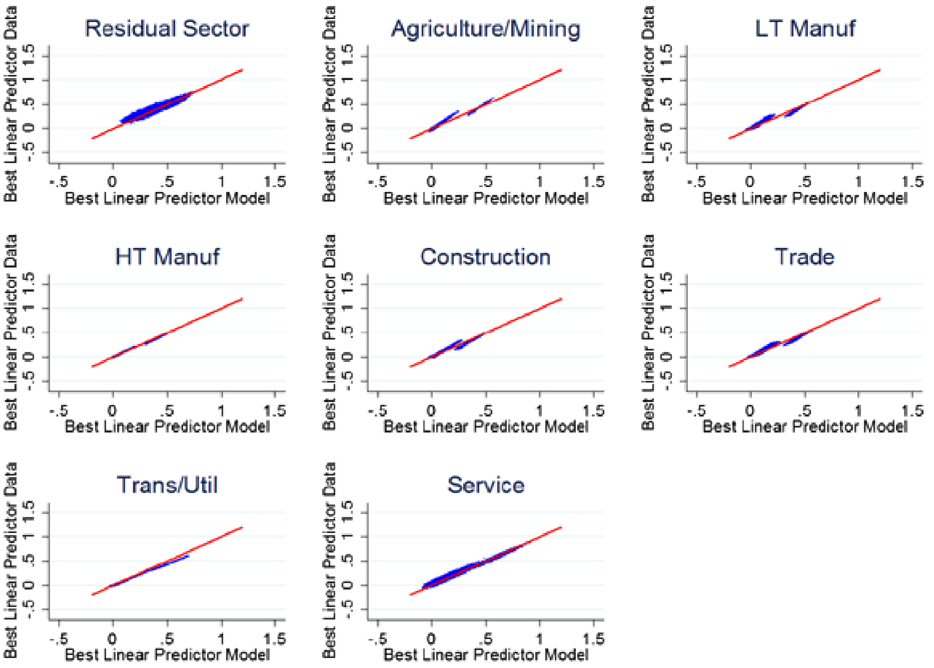

FIGURE J.6.—Goodness of fit—2000 persistence regressions. The vertical axis displays the best linear predictors of choices in the data. The horizontal axis displays the best linear predictors of choices implied by the model. The distribution of the conditioning variables is extracted from the data. A perfect model fit would lead to all the points over the 45° line.

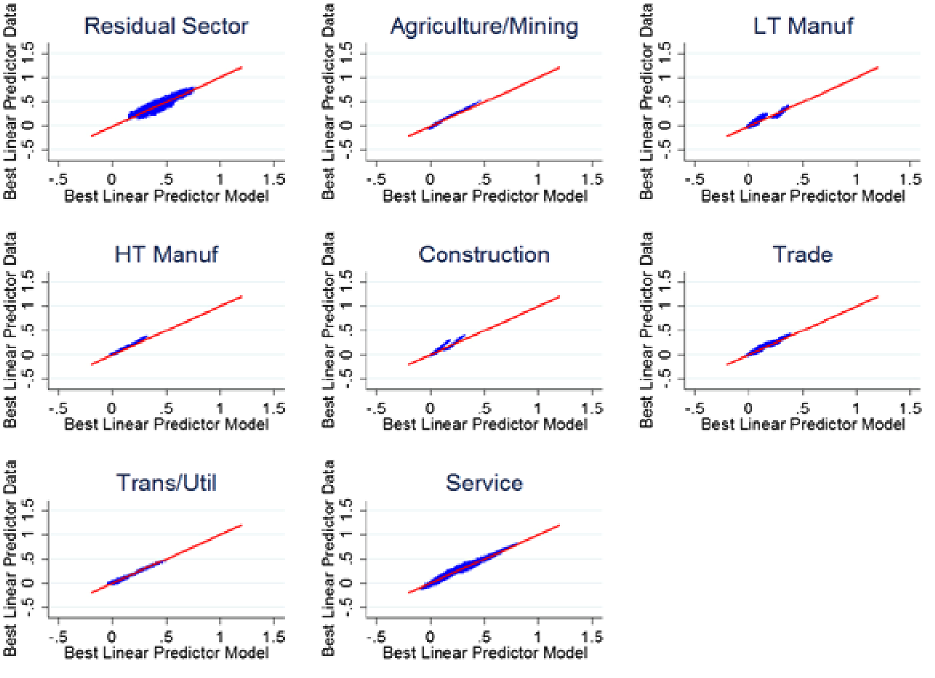

FIGURE J.7.—Goodness of fit—2005 persistence regressions. The vertical axis displays the best linear predictors of choices in the data. The horizontal axis displays the best linear predictors of choices implied by the model. The distribution of the conditioning variables is extracted from the data. A perfect model fit would lead to all the points over the 45° line.

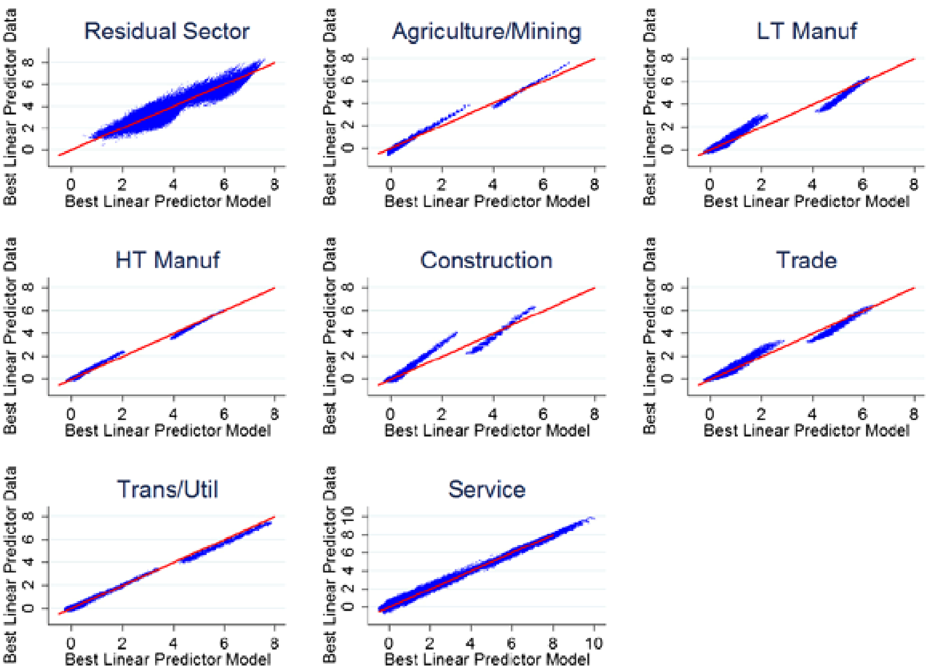

FIGURE J.8.—Goodness of fit—frequency regressions. The vertical axis displays the best linear predictors of choices in the data. The horizontal axis displays the best linear predictors of choices implied by the model. The distribution of the conditioning variables is extracted from the data. A perfect model fit would lead to all the points over the 45° line.

TABLE J.I

WAGE DISPERSION: DATA VERSUS MODEL

Sector	Data	Model
A. Variance of Residuals of log-Wage Regressions by Sector		
Agriculture/Mining	0.31	0.26
LT Manufacturing	0.35	0.36
HT Manufacturing	0.37	0.38
Construction	0.30	0.32
Trade	0.33	0.33
Trans/Util	0.37	0.37
Services	0.51	0.51
B. Variance of Within Individual Yearly Changes in log(wages)		
Agriculture/Mining	0.08	0.08
LT Manufacturing	0.06	0.06
HT Manufacturing	0.06	0.05
Construction	0.12	0.08
Trade	0.08	0.08
Trans/Util	0.07	0.06
Services	0.10	0.10

The next few tables (Tables J.IV to J.VII) investigate persistence in the formal sector versus persistence in the Residual Sector and how well the model matches these features of the data. Since flows of workers into the Residual Sector and back into the formal sector are large, one may wonder whether there are workers who switch back and forth multiple times between these two sectors. Tables J.IV and J.V show that 87% of individuals never switch from the formal sector to the Residual Sector, or switch only once, over 11 years.

TABLE J.II

EXPECTED NUMBER OF YEARS SPENT IN EACH SECTOR FOR INDIVIDUALS AGED 25 TO 50 IN 1995: DATA VERSUS MODEL

	Data	Model
Residual	4.51	4.61
Agriculture/Mining	0.35	0.35
LT Manufacturing	0.87	1.02
HT Manufacturing	0.29	0.36
Construction	0.34	0.31
Trade	0.80	0.88
Transportation/Utilities	0.49	0.53
Services	3.34	2.93

TABLE J.III

WAGE BILL AND PHYSICAL CAPITAL INCOME SHARES: DATA VERSUS MODEL

		Agr/Mining	LT	HT	Const	Trade	Trans/Util	Services
		Unskilled Wage Bill Shares						
1995	Data	0.17	0.44	0.37	0.30	0.24	0.42	0.21
	Model	0.18	0.44	0.32	0.29	0.23	0.43	0.16
2005	Data	0.17	0.33	0.20	0.28	0.26	0.16	0.20
	Model	0.17	0.31	0.20	0.29	0.29	0.14	0.20
		Skilled Wage Bill Shares						
1995	Data	0.11	0.27	0.49	0.13	0.21	0.45	0.55
	Model	0.09	0.28	0.51	0.13	0.24	0.42	0.53
2005	Data	0.08	0.27	0.44	0.12	0.31	0.23	0.70
	Model	0.07	0.26	0.36	0.10	0.28	0.24	0.67
		Physical Human Capital Income Shares						
1995	Data	0.72	0.28	0.14	0.57	0.55	0.13	0.23
	Model	0.73	0.29	0.17	0.58	0.52	0.16	0.31
2005	Data	0.75	0.40	0.36	0.59	0.42	0.62	0.11
	Model	0.76	0.44	0.44	0.60	0.43	0.63	0.13

The same fraction of individuals never switch from the Residual Sector to the formal sector, or switch only once. Table J.VI shows that more than 95% of individuals had at most two different spells in the Residual Sector over 11 years. Table J.VII shows that more than 96% of individuals had at most two different spells in the formal sector over 11 years. Therefore, employment in the formal sector or in the Residual Sector is quite persistent, and very few workers switch back and forth repeatedly. Neither of these moments were imposed in the estimation procedure, but the model matches them well.

TABLE J.IV

DISTRIBUTION OF NUMBER OF TIMES AN INDIVIDUAL SWITCHES FROM THE FORMAL TO THE RESIDUAL SECTOR: DATA VERSUS MODEL SAMPLE: INDIVIDUALS AGED 25 TO 50 IN 1995 (IN %)

# of Switches	Data	Model
0	40.5	42.4
1	46.2	43.6
2	11.5	12.7
3	1.7	1.2
4	0.1	0.1

TABLE J.V

DISTRIBUTION OF NUMBER OF TIMES AN INDIVIDUAL SWITCHES FROM THE RESIDUAL TO THE FORMAL SECTOR: DATA VERSUS MODEL SAMPLE: INDIVIDUALS AGED 25 TO 50 IN 1995 (IN %)

# of Switches	Data	Model
0	43.4	43.7
1	44.1	42.5
2	10.8	12.4
3	1.6	1.4
4	0.1	0.0

TABLE J.VI

DISTRIBUTION OF NUMBER OF DISTINCT SPELLS IN THE RESIDUAL SECTOR: DATA VERSUS MODEL SAMPLE: INDIVIDUALS AGED 25 TO 50 IN 1995 (IN %)

# of Spells	Data	Model
1	62.6	66.5
2	32.0	28.8
3	5.0	4.5
4	0.5	0.2
5	0.0	0.0

TABLE J.VII

DISTRIBUTION OF NUMBER OF DISTINCT SPELLS IN THE FORMAL SECTOR: DATA VERSUS MODEL SAMPLE: INDIVIDUALS AGED 25 TO 50 IN 1995 (IN %)

# of Spells	Data	Model
1	77.7	72.2
2	18.6	24.2
3	3.4	3.4
4	0.3	0.2
5	0.0	0.0

The fit of the sectoral log-wage regressions illustrated in Figure J.1 is not as good as the fit of the remaining auxiliary models—even though average wages by sector fit very well. I believe this is due to the fact that the choice probabilities (employment regressions) receive a large weight as each choice probability regression includes all individuals in the data set, whereas the sectoral log-wage regressions only include individuals working in that sector. As heterogeneity in employment choices is mainly explained by heterogeneity in wages, the model must adjust wages in such a way that it explains choice probabilities very well, departing from a perfect fit in wages. Balancing weights between the wage regressions and the choice probabilities is a choice the researcher must make. It is possible to obtain a much better fit for sectoral log wages at the expense of a worse fit in choice probabilities.

APPENDIX K: DISPERSION OF COSTS OF MOBILITY

Figures K.1 and K.2 show how dispersed costs of mobility (before preference shocks) are, by plotting the nonparametric densities of these costs. These costs are dispersed because they depend on workers' observable and unobservable components of costs of mobility (age, gender, education, and λ_i). There is considerable variability in workers' abilities to arbitrage wage differentials, and a lot of that variability is explained by their demographic characteristics. In particular, these costs in terms of conditional annual average wages are substantially higher for women, less educated, and older workers.

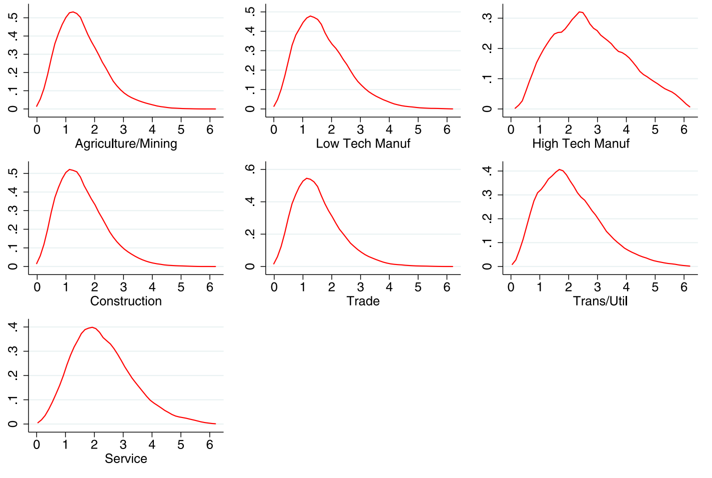

FIGURE K.1.—Nonparametric density of costs of mobility—any formal sector as origin.

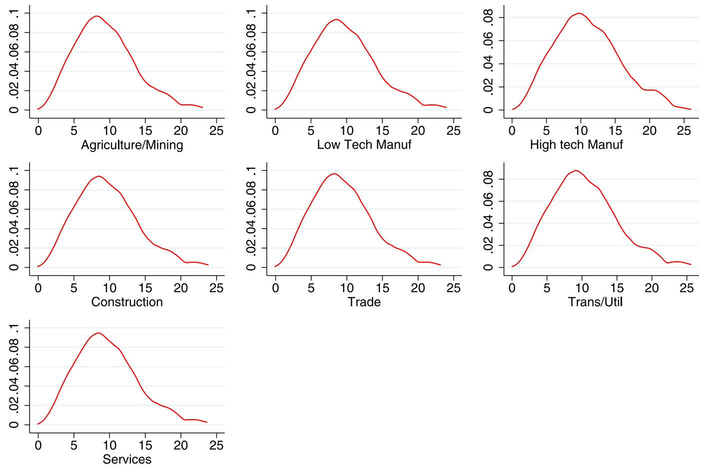

FIGURE K.2.—Nonparametric density of costs of mobility—residual sector as origin.

APPENDIX L: STEADY STATE

The economy is simulated as follows:

1. Productivity terms $z_t^s \equiv p_t^s A_t^s$ $(s = 1, \dots, 7)$ are recovered for $t = 2005$, the last period in the sample. z_{2005}^s is recovered as a residual of equation (1) for $s = 1, \dots, 7$:

$$z_{2005}^s = Y_{2005}^s / \big(\widehat{\alpha}_{2005}^{0,s}\big(H_{2005}^{0,s}(\widehat{\Theta})\big)^{\widehat{\epsilon}^s} + \widehat{\alpha}_{2005}^{1,s}\big(H_{2005}^{1,s}(\widehat{\Theta})\big)^{\widehat{\epsilon}^s} + \big(1 - \widehat{\alpha}_{2005}^{0,s} - \widehat{\alpha}_{2005}^{1,s}\big)\big(K_{2005}^s(\widehat{\Theta})\big)^{\widehat{\epsilon}^s}\big)^{1/\widehat{\epsilon}^s},$$

where $\widehat{\Theta}$ is the vector of estimated parameters, and Y_{2005}^s is observed data.

2. Initially set $A_{2005}^s = z_{2005}^s$ $(s = 1, \dots, 7)$. Prices of all tradeable sectors are set to 1 in 2005 and throughout the simulation. The prices of the non-tradeable sectors are determined in equilibrium.

For the simulations, $A_t^s = A_{2005}^s$ $(s = 1, \dots, 7)$ for all t, productivity will be fixed over time. Analogously, the factor shares will be fixed at their 2005 value.

3. Entering generations all look alike. The distribution of gender and education is given by the distribution of the cohort born in 1980 (last generation to enter the estimation, in 2005). The new generations enter the simulation with zero experience.

4. As a result of the previous step, the composition of the population will change as compared to 2005, since the entering generations will look different from the entering generations used in estimation. In particular, they will be more educated (the 1980 cohort is more educated than, say, the 1960 cohort). Consequently, the simulated economy will be richer in human capital than the

economy used in estimation. I allow for the capital stock to accompany the growth in human capital. Hence, the economy-wide rental price of capital will be fixed to r^K_{2005} and the capital stock will be determined so that the marginal product of capital in each sector equals r^K_{2005}. Simulate this economy until the economy reaches a steady state. After the steady state is reached, the capital stock is fixed at the steady state level.

5. The steady state prices for the non-tradeable sectors are then normalized to 1. The value of A^s_t $(s = 4, \dots, 7)$ is reset so that z^s_t $(s = 4, \dots, 7)$ satisfy (19).

6. Once the steady state is reached, the economy is shocked with a once-and-for-all tariff reduction that decreases the domestic price of High-Tech Manufacturing by 30%. That is, the new domestic price of High-Tech Manufacturing is now of 0.7 and persists indefinitely at this level.

7. Prices of the non-tradeable sectors and physical rental prices adjust endogenously to the shock (the stock of physical capital is fixed during the counterfactual experiments). How the latter will adjust will depend on the assumptions made regarding the mobility of physical capital.

APPENDIX M: COSTS OF MOBILITY VERSUS SECTOR-SPECIFIC EXPERIENCE

A natural question to ask is what type of barrier is more important in explaining sluggish labor market adjustment: is it sector-specific experience, or is it costs of mobility? However, answering this question is not trivial. One cannot simply remove costs of mobility from the model and ask how the dynamics of transition compares to an economy with costs of mobility. The pre-shock steady state equilibrium without costs of mobility will look completely different, with an overinflated High-Tech sector and a much more compressed wage structure. Nevertheless, I conduct an experiment where I gradually decrease costs of mobility and compare the speed of adjustment under these different cost structures. The speed of reallocation under different cost structures is illustrated in Figure M.1. In particular, notice that 40% of the reallocation is completed in the first year under the actual structure of costs of mobility, but 71% is completed in the first year when costs of mobility are proportionally reduced by 50%. Sixty percent of the reallocation is completed by the end of the second year under the actual structure of costs of mobility, but almost 90% is completed by the end of the second year when costs of mobility are proportionally reduced by 50%. Finally, as can be seen in Figure M.1, small reductions in costs of mobility lead to significantly faster reallocation, showing the relative importance of costs of mobility compared to sector-specific experience in explaining the delayed labor market adjustment following the simulated trade shock.

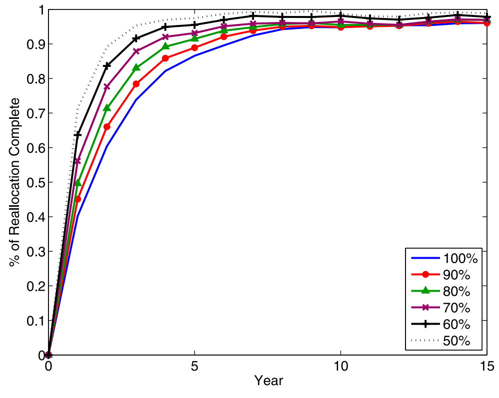

FIGURE M.1.—Speed of reallocation under different structures of costs of mobility. Simulations performed when costs of mobility are proportionally reduced to 90%, 80%, 70%, 60%, and 50% of the originally estimated costs of mobility.

APPENDIX N: ADDITIONAL COUNTERFACTUAL SIMULATIONS

This section conducts two additional sets of counterfactual exercises. First, a 10% adverse shock in the price of High-Tech Manufacturing is analyzed (as opposed to the 30% shock considered in Section 7). Next, I study a situation where the rental price of physical capital is fixed throughout the simulation exercise, so that the total stock of physical capital is allowed to respond to shocks.

Table N.I illustrates the speed of reallocation of the labor market under the three regimes of capital mobility studied in Section 7. Except for the case where capital is imperfectly mobile, adjustment is slower and the magnitude of adjustment is smaller, as expected.

TABLE N.I

SPEED OF REALLOCATION: SHOCK OF 30% VERSUS SHOCK OF 10% IN THE PRICE OF HIGH-TECH OUTPUT[a]

	Percentage of Reallocation Complete	Shock of 30%	Shock of 10%
Perfect K Mob.	80%	4 years	8 years
	95%	9 years	16 years
No K Mob.	80%	4 years	6 years
	95%	9 years	9 years
Imperfect K Mob.	80%	14 years	11 years
	95%	29 years	18 years

[a]Shock of 30% in the price of High-Tech Manufacturing. Imperfect mobility of capital: maximum rate of 10% per year.

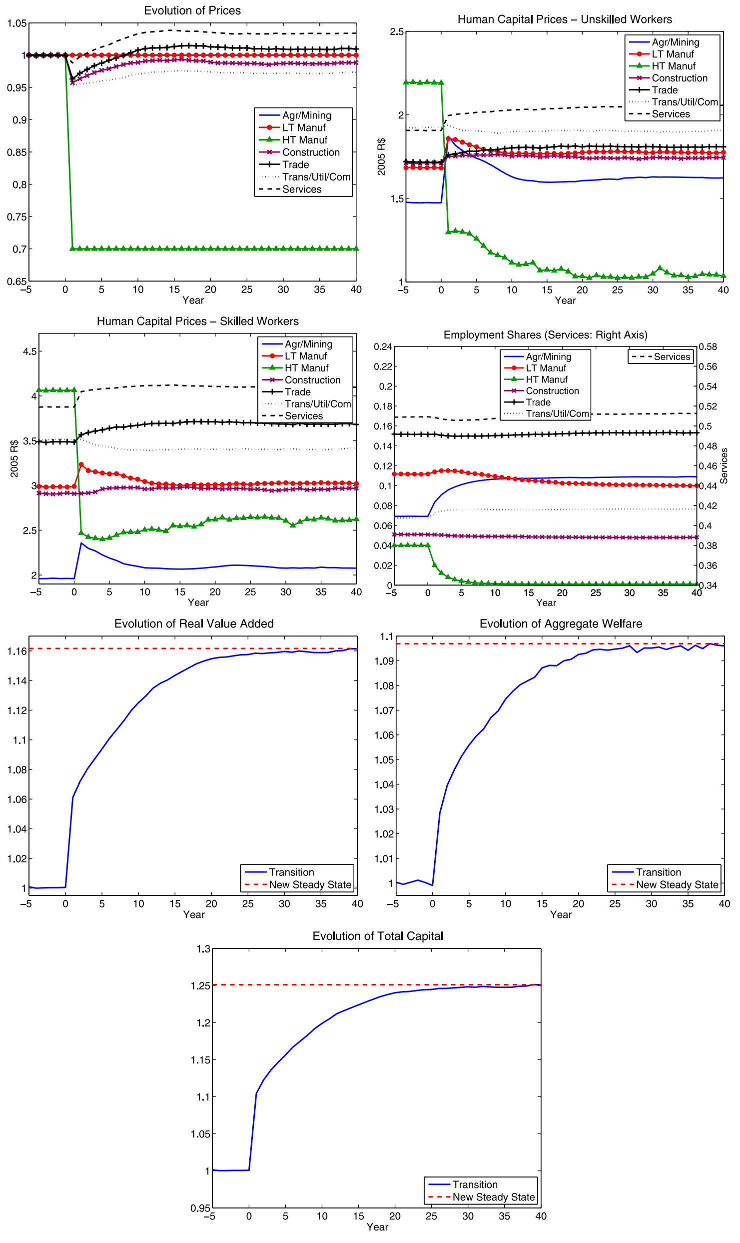

FIGURE N.1.—Dynamics under *Perfect Capital Mobility* following the adverse price shock in the High-Tech Manufacturing sector illustrated in the left upper panel. The rental price of physical capital is fixed over time. The prices of the non-tradeable sectors adjust in equilibrium. The evolution of human capital prices, employment shares, real value added, aggregate welfare, and total capital stock following the shock are subsequently displayed in that order.

TABLE N.II

WELFARE CHANGES (IN %) OF WORKERS WHO WERE EMPLOYED IN HT MANUFACTURING THE YEAR BEFORE THE SHOCK[a]

Overall	−7.6
	By Demographics
Old/Unskilled	−13.2
Old/Skilled	−21.0
Young/Unskilled	−2.8
Young/Skilled	−2.6

[a]Shock of 30% in the price of High-Tech Manufacturing. Perfect physical capital mobility and fixed rental price of physical capital.

I now describe the results obtained in the simulation where the rental price of physical capital is fixed over time. The implicit assumption here is that capital is a traded intermediate good, whose price is determined in international markets. The economy's total capital stock is therefore allowed to react to the simulated trade shock, which, as before, consists of a once-and-for-all 30% adverse shock in the price of High-Tech Manufacturing output. Efficient allocation of capital is assumed throughout. The transitional dynamics are illustrated in Figure N.1.

The main results are as follows: (1) 80% (95%) of labor reallocation is completed after 11 (20) years. (2) Long-term aggregate welfare (real value added) gains are of 10% (16%). (3) Total stock of physical capital increases by 25%. (4) Adjustment costs equal 21%. (5) The distribution of welfare losses among workers initially employed in High-Tech Manufacturing is shown in Table N.II. (6) The economy-wide skill-premium decreases by 0.4%.

The main qualitative results obtained in Section 7 are still valid: (1) There is a large labor market response to the trade shock, but adjustment may take several years to be complete. (2) Adjustment costs are economically significant. (3) Trade-induced welfare effects depend on the initial sector of employment and on worker demographics.

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