

Trade in Services: IT and Task Content

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Why Services?

Dramatic change of the role of services in the economy

- in 1950 30% of GDP and a negligible share of trade
- in 2010 75% of GDP and at least 20% of world trade
- double digit growth in the past years

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We know very little about services

- few contributions from the international trade literature

Research Question

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Why services have become tradable?

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We focus on:

- one country: Belgium, for 10 years
- both import and export
- firm-level approach
- extensive margin

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Our idea:

- Technological change

- 1 Introduction
- 2 Data
- 3 Empirical strategy and results
- 4 Conclusions

Literature review

Services Trade:

- Freund and Weinhold (2002)
- Breinlich and Cricuscolo (2009)
- Kelle and Kleinert (2010)

Task approach:

- Autor et al. (2003)
- Spitz-Oener (2006)
- Oldenski (2009)
- Grossman and Rossi-Hansberg (2008)

What is trade in services?

Four modes of trade in services:

- *Mode 1 (Cross-Border)*: when the service is produced in the territory of one country and consumed in the territory of any other country;
- *Mode 2 (Consumption Abroad)*: when the service is consumed in the territory of one country by the resident of another country;
- *Mode 3 (Presence Abroad)*: when the service is provided by a supplier of one country, through commercial presence in the territory of any other country;
- *Mode 4 (Presence of Natural Person)*: when the service supplier of one country, through presence of natural persons provides the service in the territory of any other country.

Data

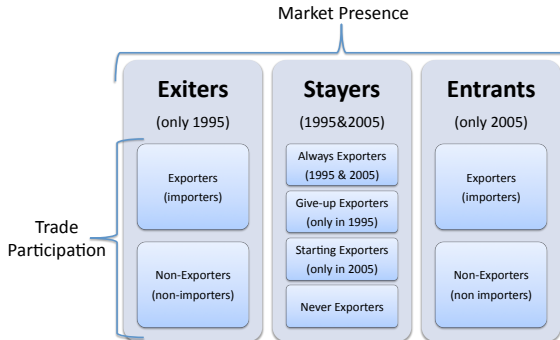
Firm level data of the NBB

Firm-level panel with balance-sheet information on Belgian firms covering the period 1995-2005 augmented with trade in services by product type and origin/destination.

Qualification and Career Survey, BIBB/IAB

Five cross-sections (1979, 1985/86, 1991/92, 1998/99 and 2005/06) with information on the tasks performed by employees.

Sorting firms:



Decomposing the increase: Exports

		Aggregate		Extensive Margins		Intensive Margins	
		1995	2005	1995	2005	1995	2005
Entrants	Non Exp	-	0.00	-	-	-	-
	Exp	-	11,562.26	-	6,360	-	1.8180
Stayers	Non Exp	0.00	0.00	-	-	-	-
	Give-up Exp	1,435.59	0.00	1,852	-	0.7752	-
	Start Exp	0.00	2,609.08	-	4,808	-	0.5427
	Always Exp	13,247.54	50,258.96	1,861	1,861	7.1185	27.0064
Exiters	Non Exp	0.00	-	-	-	-	-
	Exp	3,531.67	-	1,633	-	2.1627	-
TOTAL		18,214.80	64,430.30	5346	13029	3.3521*	9.7890*
GROWTH		253.73%		143.71%		192.02%	
YEARLY GROWTH		13.5%		9.3%		11.3%	

*mean

Values are in million euros

Decomposing the increase

Extensive Margins

	Export				Import			
	1995	Perc.	2005	Perc.	1995	Perc.	2005	Perc.
Manufacturing	868	16%	1065	8%	1439	28%	1880	20%
Services	4478	84%	11963	92%	3611	72%	7482	80%
Total	5346		13028		5050		9363	

Aggregate

	Export				Import			
	1995	Perc.	2005	Perc.	1995	Perc.	2005	Perc.
Manufacturing	1866.10	10%	9110.93	14%	2864.85	15%	9583.97	16%
Services	16348.68	90%	55318.45	86%	15751.18	85%	50172.87	84%
Total	18214.79		64429.39		18616.04		59756.84	

Decomposing the increase

Export		
Rank	Sector	Change
1	Professional, Scientific and Technical Activities	3539
2	Information, art and communication	766
3	Construction	660
4	Transport Services	639
5	Wholesale and retail trade	620
6	Other Services	572
7	Hotel and restaurants	257
8	Insurance, reinsurance and pension funding	158
9	Health and veterinary	144
10	<i>Manufacture of fabricated metal products</i>	75

Measuring Technological Change

Use of computers

It is a dummy variable that takes value one if the worker uses computers, terminals and electronic data processing machines

$$Comp_k = \frac{\text{number of workers in sector } k \text{ using computers}}{\text{total number of workers in sector } k}$$

1979	1985	1992	1998	2005
0.06	0.12	0.28	0.53	0.68

Measuring Technological Change

- tasks performed by 30,000 individuals, classified by occupation and industry
- tasks classified by repetitiveness and cognitive content

Classification	Task
N-R Analytical	researching, analyzing, evaluating and planning, making plans, constructions, designing, sketching, working out rules/prescriptions, using and interpreting rules
N-R Interactive	negotiating, lobbying, coordinating, organizing, teaching or training, selling, buying, advising customers, advertising, entertaining or presenting, employ or manage personnel
N-R Manual	repairing or renovating houses, apartments and machines, restoring of art/monuments, serving or accommodating
Routine Cognitive	calculating, bookkeeping, correcting of texts/data, measuring of length/weight/temperature
Routine Manual	operating or controlling machines, equip machines

Measuring Technological Change

$$Task_{i,j,t} = \frac{\text{number of activities in category } j, \text{ performed by } i \text{ at time } t}{\text{total number of activities in category } j \text{ at time } t}$$

Where: $t = (1992, 2005)$ and

$$j = \left\{ \begin{array}{l} 1 : \text{analytical tasks} \\ 2 : \text{interactive tasks} \\ 3 : \text{routine cognitive tasks} \\ 4 : \text{routine manual tasks} \\ 5 : \text{non - routine manual tasks} \end{array} \right\}$$

Measuring Technological Change

	Non Routine Tasks			Routine Tasks	
	Analytic	Interactive	Manual	Cognitive	Manual
1979	4.3207	9.2181	14.9391	35.7309	31.3286
1985	9.6879	10.0509	21.2473	34.4865	27.4534
1992	11.4382	17.0881	19.8563	27.5687	23.4034
1998	11.9421	31.2207	27.5000	20.4292	17.1051
2005	12.4212	31.5947	23.3416	15.8105	23.6850

Empirical Strategy for stayers and exiters

We use an Heckman (1979) two-step procedure to make stayers and exiters comparable (survival):

- Selection equation:

$$Stayer_i = \beta_i^0 + \beta^1 Age_i + \beta^2 Prod_i + \beta^3 Size_i + \beta^4 \frac{k}{l_i} + \beta^5 \frac{ik}{l_i} + \beta^6 \frac{w}{l_i} + \beta^7 Ind_k + \mu_i$$

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- Two strategies for the outcome equation for stayers and exiters

① Use of computer

$$Exp_i = \alpha_i^0 + \alpha^1 Prod_i + \alpha^2 Size_i + \alpha^3 \frac{k}{I_i} + \alpha^4 \frac{w}{I_i} + \alpha^5 \frac{ik}{I_i} + \alpha^6 IM_i + \eta^0 \Delta WC_k + \eta^1 \Delta Comp_k + v_i$$

② Tasks j

$$Exp_i = \alpha_i^0 + \alpha^1 Prod_i + \alpha^2 Size_i + \alpha^3 \frac{k}{I_i} + \alpha^4 \frac{w}{I_i} + \alpha^5 \frac{ik}{I_i} + \alpha^6 IM_i + \eta^0 \Delta WC_k + \eta^j \Delta Task_{j,k} + v_i$$

Empirical Strategy for entrants

No need to use an Heckman (1979) two-step procedure since there are no selection issues:

- Similarly to the outcome equation we saw before (no IM ratio):

$$Exp_i = \alpha_i^0 + \alpha^1 Prod_i + \alpha^2 Size_i + \alpha^3 \frac{k}{l}_i + \alpha^4 \frac{w}{l}_i + \alpha^5 \frac{ik}{l}_i + \eta^0 \Delta WC_k + \eta^1 \Delta Comp_k + v_i$$

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Results Export, spec. 1

	Robust standard errors						Clustered standard errors					
	Selection	Stayers			Exiters	Entrants	Selection	Stayers			Exiters	Entrants
		Start	Give up	Always				Start	Give up	Always		
Age	0.0814 ^a (0.012)						0.0814 ^a (0.013)					
Productivity	0.2050 ^a (0.008)	0.0215 ^a (0.002)	0.0131 ^a (0.001)	0.0197 ^a (0.001)	0.0327 ^a (0.003)	0.0381 ^a (0.002)	0.2050 ^a (0.021)	0.0215 ^a (0.007)	0.0131 ^a (0.005)	0.0197 ^a (0.004)	0.0327 ^a (0.009)	0.0381 ^a (0.009)
Size	0.0538 ^a (0.004)	0.0260 ^a (0.001)	0.0178 ^a (0.001)	0.0317 ^a (0.001)	0.0432 ^a (0.002)	0.0401 ^a (0.001)	0.0538 ^a (0.012)	0.0260 ^a (0.006)	0.0178 ^a (0.002)	0.0317 ^a (0.007)	0.0432 ^a (0.008)	0.0401 ^a (0.010)
Capital Int.	0.0988 ^a (0.003)	0.0043 ^a (0.001)	-0.0001 (0.000)	0.0015 ^a (0.000)	0.0051 ^a (0.001)	-0.0051 ^a (0.001)	0.0988 ^a (0.003)	0.0043 ^a (0.003)	-0.0001 (0.002)	0.0015 (0.002)	0.0051 (0.002)	-0.0051 ^b (0.004)
Skill Intensity	-0.1009 ^a (0.008)	-0.0035 ^a (0.001)	0.0010 (0.001)	-0.0020 ^b (0.001)	0.0060 ^a (0.002)	0.0077 ^a (0.001)	-0.1009 ^a (0.008)	-0.0035 (0.003)	0.0010 (0.002)	-0.0020 (0.002)	0.0060 (0.005)	0.0077 ^b (0.003)
Int Capital Int	-0.0035 ^a (0.001)	-0.0001 (0.000)	0.0003 ^b (0.000)	0.0002 (0.000)	-0.0002 (0.000)	0.0005 ^b (0.000)	-0.0035 (0.002)	-0.0001 (0.000)	0.0003 (0.000)	0.0002 (0.000)	-0.0002 (0.001)	0.0005 (0.001)
Δ White Collar		0.0656 ^a (0.015)	0.0271 ^a (0.009)	0.0799 ^a (0.011)	0.3804 ^a (0.035)	0.4415 ^a (0.021)		0.0656 (0.102)	0.0271 (0.044)	0.0799 (0.065)	0.3804 ^b (0.166)	0.4415 ^b (0.187)
Δ Computer		0.0503 ^a (0.006)	0.0075 ^b (0.004)	0.0076 ^c (0.004)	0.0495 ^a (0.012)	0.1837 ^a (0.009)		0.0503 (0.082)	0.0075 (0.012)	0.0076 (0.049)	0.0495 (0.069)	0.1837 (0.129)
IM		0.0968 ^a (0.011)	0.0127 ^b (0.006)	0.0514 ^a (0.008)	0.1328 ^a (0.020)			0.0968 (0.079)	0.0127 (0.045)	0.0514 (0.044)	0.1328 (0.086)	
Constant	0.7549 ^a (0.027)	-0.0166 ^a (0.005)	0.0067 ^b (0.003)	-0.0087 ^b (0.004)	-0.0293 ^a (0.010)	0.0110 (0.003)	0.7549 ^a (0.001)	-0.0166 (0.048)	0.0067 (0.019)	-0.0087 (0.030)	-0.0293 (0.049)	0.0110 (0.037)
Industry Dummies							Yes					
Observations	125093	95512	95512	95512	29563	58550	125093	95512	95512	95512	29563	58550
R ²	.	0.0218	0.0310	0.0741	0.0825	0.0753	.	0.0218	0.0310	0.0741	0.0825	0.0753

Robust standard errors in parentheses ^a p<0.01, ^b p<0.05, ^c p<0.1

Industry clustered st.err. in parentheses ^a p<0.01, ^b p<0.05, ^c p<0.1

Results Export, spec. 2

	Robust standard errors					Clustered standard errors						
	Selection	Stayers			Exiters	Entrants	Selection	Stayers			Exiters	Entrants
		Start	Give up	Always				Start	Give up	Always		
Age	0.0814 ^a (0.012)						0.0814 ^a (0.013)					
Productivity	0.2050 ^a (0.008)	0.0309 ^a (0.002)	0.0165 ^a (0.001)	0.0285 ^a (0.002)	0.0413 ^a (0.003)	0.0361 ^a (0.002)	0.2050 ^a (0.021)	0.0309 ^a (0.008)	0.0165 ^a (0.004)	0.0285 ^a (0.005)	0.0413 ^a (0.007)	0.0361 ^a (0.008)
Size	0.0538 ^a (0.004)	0.0289 ^a (0.001)	0.0188 ^a (0.001)	0.0344 ^a (0.001)	0.0455 ^a (0.002)	0.0397 ^a (0.001)	0.0538 ^a (0.012)	0.0289 ^a (0.007)	0.0188 ^a (0.001)	0.0344 ^a (0.007)	0.0455 ^a (0.008)	0.0397 ^a (0.010)
Capital Intensity	0.0988 ^a (0.003)	0.0089 ^a (0.001)	0.0016 ^a (0.001)	0.0058 ^a (0.001)	0.0096 ^a (0.001)	-0.0045 ^a (0.001)	0.0988 ^a (0.003)	0.0089 ^b (0.004)	0.0016 (0.001)	0.0058 ^c (0.003)	0.0096 ^a (0.003)	-0.0045 ^c (0.002)
Skill Intensity	-0.1009 ^a (0.008)	-0.0072 ^a (0.001)	-0.0004 (0.001)	-0.0055 ^a (0.001)	0.0020 (0.002)	0.0084 ^a (0.001)	-0.1009 ^a (0.008)	-0.0072 ^c (0.004)	-0.0004 (0.002)	-0.0055 ^c (0.003)	0.0020 (0.004)	0.0084 ^b (0.003)
Intangible Capital Intensity	-0.0035 ^a (0.001)	-0.0003 (0.000)	0.0003 ^b (0.000)	0.0000 (0.000)	-0.0005 (0.000)	0.0009 ^a (0.000)	-0.0035 (0.002)	-0.0003 (0.000)	0.0003 (0.000)	0.0000 (0.000)	-0.0005 (0.001)	0.0009 (0.001)
Δ White Collar		0.0023 (0.017)	0.0070 (0.010)	0.0270 ^b (0.012)	-0.2555 ^a (0.077)	-0.1712 ^b (0.067)		0.0023 (0.066)	0.0070 (0.044)	0.0270 (0.042)	-0.2555 ^c (0.148)	-0.1712 (0.292)
Δ Routine Cognitive		-0.0001 ^a (0.000)	0.0000 ^c (0.000)	-0.0001 ^a (0.000)	-0.0002 ^a (0.000)	-0.0004 ^a (0.000)		-0.0001 (0.000)	0.0000 (0.000)	-0.0001 (0.000)	-0.0002 ^c (0.000)	-0.0004 (0.000)
Δ Routine Manual		-0.0016 ^a (0.000)	-0.0005 ^a (0.000)	-0.0011 ^a (0.000)	-0.0021 ^a (0.000)	-0.0015 ^a (0.000)		-0.0016 ^c (0.001)	-0.0005 ^c (0.000)	-0.0011 ^b (0.000)	-0.0021 ^a (0.001)	-0.0015 (0.001)
Δ Non-Routine Manual		0.0004 ^a (0.000)	0.0004 ^a (0.000)	0.0006 ^a (0.000)	0.0011 ^a (0.000)	0.0013 ^a (0.000)		0.0004 (0.001)	0.0004 ^c (0.000)	0.0006 ^c (0.000)	0.0011 ^a (0.000)	0.0013 ^c (0.001)
Δ Interactive		-0.0035 ^a (0.000)	-0.0013 ^a (0.000)	-0.0027 ^a (0.000)	-0.0049 ^a (0.000)	-0.0072 ^a (0.000)		0.0035 ^a (0.001)	-0.0013 ^a (0.000)	-0.0027 ^a (0.000)	-0.0049 ^a (0.001)	-0.0072 ^a (0.001)
Δ Analytical		0.0033 ^a (0.000)	0.0008 ^a (0.000)	0.0014 ^a (0.000)	0.0019 ^a (0.000)	0.0078 ^a (0.000)		0.0033 ^a (0.001)	0.0008 ^b (0.000)	0.0014 ^b (0.001)	0.0019 ^b (0.001)	0.0078 ^a (0.002)
IM		0.2043 ^a (0.016)	0.0518 ^a (0.010)	0.1510 ^a (0.012)	0.2262 ^a (0.025)			0.2043 ^b (0.085)	0.0518 (0.036)	0.1510 ^b (0.055)	0.2262 ^a (0.059)	
Constant	0.7549 ^a (0.027)	0.0017 (0.007)	0.0104 ^b (0.005)	-0.0114 ^b (0.005)	0.0136 (0.012)	0.1518 ^a (0.006)	0.7549 ^a (0.001)	0.0017 (0.031)	0.0104 (0.017)	-0.0114 (0.021)	0.0136 (0.029)	0.1518 ^a (0.031)
Industry Dummies	Yes						Yes					
Observations	125093	95512	95512	95512	29563	58550	125093	95512	95512	95512	29563	58550
R ²	-	0.0328	0.0343	0.0864	0.0958	0.1053	-	0.0328	0.0343	0.0864	0.0958	0.1053

Robust standard errors in parentheses ^a p<0.01, ^b p<0.05, ^c p<0.1

Industry clustered st. err. in parentheses ^a p<0.01, ^b p<0.05, ^c p<0.1



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Further Results

Are results driven by service firms?

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- We run separate regressions for Service and Manufacturing firms

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- We run separate regressions for Service and Manufacturing firms
- Results hold only for Services firms

Further Results

Does technology matter also in level terms?

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Does technology matter also in level terms?

- We add levels to the baseline regressions
- Levels matter: a sort of “Increasing Returns to Technological Change”

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- We interact the computer dummy and the tasks variables with Size, Productivity, Capital and Skill intensity

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Heterogeneous effects?

- We interact the computer dummy and the tasks variables with Size, Productivity, Capital and Skill intensity
- We find that:
 - for the computer interaction, productivity (+) and capital intensity (-) matter especially for entrants
 - for the tasks interaction, productivity and size have a positive effect on the likelihood of trading services

Conclusions

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- Churning is at work
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- Multidimensional tasks change over time provides finer and richer results
- Churning works for services sector firms only
- Technology has heterogeneous effects across firms
- Results are robust controlling for liberalization and offshoring

Thank you!

Decomposing the increase: Imports

		Aggregate		Extensive Margins		Intensive Margins	
		1995	2005	1995	2005	1995	2005
Entrants	Non Imp	-	0.00	-	-	-	-
	Imp	-	10,400.96	-	3,522	-	2.928
Stayers	Non Imp	0.00	0.00	-	-	-	-
	Give-up Imp	1,208.29	0.00	1,521	-	0.7944	-
	Start Imp	0.00	3,645.49	-	3,720	-	0.9799
	Always Exp	14,103.75	45,722.35	2,131	2,131	6.6183	21.455
Exiters	Non Imp	0.00	-	-	-	-	-
	Imp	3,303.99	-	1,397	-	2.3650	-
TOTAL		18,616.03	59,768.80	5,049	9,373	3.6870*	6.3766*
GROWTH		221.06%		85.64%		72.94%	
YEARLY GROWTH		12.4%		6.3%		5.6%	

*mean

Values are in million euros

Decomposing the increase

Import		
Rank	Sector	Change
1	Professional, Scientific and Technical Activities	1476
2	Wholesale and retail trade	809
3	Information, art and communication	331
4	Other Services	300
5	Construction	288
6	Transport Services	275
7	<i>Manufacture of fabricated metal products</i>	113
8	Hotel and restaurants	109
9	Financial Services	88
10	<i>Chemical Industry, Rubber and Synthetic Material</i>	85

Trading Countries

Table: Top 10 trading countries (number of firms)

Rank	Country	Export		
		1995	Country	2005
1	Nederland	1,978	Nederland	5,176
2	France	1,813	France	4,512
3	Germany	1,459	Germany	3,010
4	Great Britain	1,131	Great Britain	2,736
5	USA	1,095	Luxembourg	1,670
6	Switzerland	604	USA	1,530
7	Luxembourg	541	Switzerland	1,110
8	Italy	462	Italy	1,065
9	Spain	351	Spain	903
10	Sweden	272	Sweden	547

Non EU export, spec.1

	Robust standard errors						Clustered standard errors						
	Selection	Stayers			Exiters	Entrants	Selection	Stayers			Exiters	Entrants	
		Start	Give up	Always				Start	Give up	Always			
Age	0.0814 ^a (0.012)						0.0814 ^a (0.013)						
Productivity	0.2050 ^a (0.008)	0.0067 ^a (0.001)	0.0069 ^a (0.001)	0.0089 ^a (0.001)	0.0130 ^a (0.002)	0.0132 ^a (0.001)	0.2050 ^a (0.021)	0.0067 ^b (0.003)	0.0069 ^a (0.002)	0.0089 ^a (0.002)	0.0130 ^a (0.004)	0.0132 ^a (0.003)	
Size	0.0538 ^a (0.004)	0.0094 ^a (0.001)	0.0103 ^a (0.001)	0.0114 ^a (0.001)	0.0151 ^a (0.001)	0.0141 ^a (0.001)	0.0538 ^a (0.012)	0.0094 ^a (0.003)	0.0103 ^a (0.002)	0.0114 ^a (0.002)	0.0151 ^a (0.004)	0.0141 ^a (0.004)	
Capital Intensity	0.0988 ^a (0.003)	0.0011 ^a (0.000)	0.0006 ^b (0.000)	0.0009 ^a (0.000)	0.0032 ^a (0.001)	-0.0016 ^a (0.000)	0.0988 ^a (0.003)	0.0011 ^a (0.001)	0.0006 ^a (0.001)	0.0009 ^a (0.001)	0.0032 ^b (0.001)	-0.0016 ^b (0.001)	
Skill Intensity	-0.1009 ^a (0.008)	-0.0008 (0.001)	0.0005 (0.001)	-0.0021 ^a (0.001)	0.0024 ^b (0.001)	0.0023 ^a (0.000)	-0.1009 ^a (0.008)	-0.0008 (0.002)	0.0005 (0.001)	-0.0021 ^c (0.001)	0.0024 (0.002)	0.0023 ^c (0.001)	
Intangible Capital Intensity	-0.0035 ^a (0.001)	0.0002 ^c (0.000)	0.0002 ^c (0.000)	0.0002 ^c (0.000)	-0.0000 (0.000)	0.0003 ^b (0.000)	-0.0035 (0.002)	0.0002 (0.000)	0.0002 (0.000)	0.0002 (0.000)	-0.0000 (0.000)	0.0003 ^b (0.000)	
Δ White Collar		0.0191 ^b (0.009)	0.0072 (0.006)	0.0236 ^a (0.007)	0.1268 ^a (0.021)	0.1315 ^a (0.011)		0.0191 (0.032)	0.0072 (0.021)	0.0236 (0.022)	0.1268 ^c (0.066)	0.1315 ^b (0.051)	
Δ Computer		0.0171 ^a (0.003)	0.0101 ^a (0.003)	0.0099 ^a (0.002)	0.0297 ^a (0.007)	0.0447 ^a (0.005)		0.0171 (0.024)	0.0101 (0.010)	0.0099 (0.012)	0.0297 (0.028)	0.0447 (0.033)	
IM		0.0326 ^a (0.006)	0.0186 ^a (0.005)	0.0284 ^a (0.005)	0.0700 ^a (0.013)			0.0326 (0.028)	0.0186 (0.022)	0.0284 (0.018)	0.0700 ^c (0.035)		
Constant	0.7549 ^a (0.027)	-0.0092 ^a (0.003)	-0.0051 ^b (0.002)	-0.0109 ^a (0.002)	-0.0260 ^a (0.006)	0.0033 ^b (0.001)	0.7549 ^a (0.001)	-0.0092 ^a (0.015)	-0.0051 ^a (0.010)	-0.0109 ^a (0.010)	-0.0260 ^a (0.020)	0.0033 (0.009)	
Industry Dummies		Yes						Yes					
Observations	125093	95512	95512	95512	29563	58550	125093	95512	95512	95512	29563	58550	
R ²	.	0.0108	0.0219	0.0319	0.0336	0.0327	.	0.0108	0.0219	0.0319	0.0336	0.0327	

Robust standard errors in parentheses ^a p<0.01, ^b p<0.05, ^c p<0.1

Industry clustered st.err. in parentheses ^a p<0.01, ^b p<0.05, ^c p<0.1

Non EU export, spec.2

	Robust standard errors					Clustered standard errors						
	Selection	Stayers			Exiters	Entrants	Selection	Stayers			Exiters	Entrants
		Start	Give up	Always				Start	Give up	Always		
Age	0.0814 ^a (0.012)						0.0814 ^a (0.013)					
Productivity	0.2050 ^a (0.008)	0.0092 ^a (0.001)	0.0085 ^a (0.001)	0.0109 ^a (0.001)	0.0150 ^a (0.002)	0.0126 ^a (0.001)	0.2050 ^a (0.021)	0.0092 ^a (0.003)	0.0085 ^a (0.002)	0.0109 ^a (0.002)	0.0150 ^a (0.003)	0.0126 ^a (0.003)
Size	0.0538 ^a (0.004)	0.0102 ^a (0.001)	0.0108 ^a (0.001)	0.0120 ^a (0.001)	0.0157 ^a (0.001)	0.0140 ^a (0.001)	0.0538 ^a (0.012)	0.0102 ^a (0.003)	0.0108 ^a (0.001)	0.0120 ^a (0.002)	0.0157 ^a (0.004)	0.0140 ^a (0.004)
Capital Intensity	0.0988 ^a (0.003)	0.0023 ^a (0.000)	0.0014 ^a (0.000)	0.0019 ^a (0.000)	0.0044 ^a (0.001)	-0.0014 ^a (0.000)	0.0988 ^a (0.003)	0.0023 ^a (0.001)	0.0014 ^a (0.001)	0.0019 ^b (0.001)	0.0044 ^a (0.001)	-0.0014 ^b (0.001)
Skill Intensity	-0.1009 ^a (0.008)	-0.0017 ^b (0.001)	-0.0002 ^a (0.001)	-0.0029 ^a (0.001)	0.0015 (0.001)	0.0024 ^a (0.000)	-0.1009 ^a (0.008)	-0.0017 (0.002)	-0.0002 (0.001)	-0.0029 ^b (0.001)	0.0015 (0.002)	0.0024 ^c (0.001)
Intangible Capital Intensity	-0.0035 ^a (0.001)	0.0001 (0.000)	0.0001 (0.000)	0.0001 (0.000)	-0.0001 (0.000)	0.0004 ^a (0.000)	-0.0035 (0.002)	0.0001 (0.000)	0.0001 (0.000)	0.0001 (0.000)	-0.0001 (0.000)	0.0004 ^a (0.000)
Δ White Collar		0.0078 (0.010)	-0.0004 (0.007)	0.0136 ^c (0.008)	-0.0704 ^c (0.037)	0.0545 (0.035)		0.0078 (0.021)	-0.0004 (0.022)	0.0136 (0.020)	-0.0704 (0.055)	0.0545 (0.087)
Δ Routine Cognitive		-0.0001 ^a (0.000)	-0.0001 ^a (0.000)	-0.0001 ^a (0.000)	-0.0002 ^a (0.000)	-0.0001 ^a (0.000)		-0.0001 (0.000)	-0.0001 ^a (0.000)	-0.0001 ^c (0.000)	-0.0002 ^a (0.000)	-0.0001 (0.000)
Δ Routine Manual		-0.0004 ^a (0.000)	-0.0003 ^a (0.000)	-0.0003 ^a (0.000)	-0.0006 ^a (0.000)	-0.0001 (0.000)		-0.0004 ^c (0.000)	-0.0003 ^b (0.000)	-0.0003 ^a (0.000)	-0.0006 ^a (0.000)	-0.0001 (0.000)
Δ Non-Routine Manual		0.0003 ^a (0.000)	0.0002 ^a (0.000)	0.0002 ^a (0.000)	0.0004 ^a (0.000)	0.0005 ^a (0.000)		0.0003 ^c (0.000)	0.0002 ^b (0.000)	0.0002 ^b (0.000)	0.0004 ^b (0.000)	0.0005 ^b (0.000)
Δ Interactive		-0.0013 ^a (0.000)	-0.0007 ^a (0.000)	-0.0007 ^a (0.000)	-0.0017 ^a (0.000)	-0.0019 ^a (0.000)		-0.0013 ^a (0.000)	-0.0007 ^a (0.000)	-0.0007 ^a (0.000)	-0.0017 ^a (0.000)	-0.0019 ^a (0.000)
Δ Analytical		0.0011 ^a (0.000)	0.0006 ^a (0.000)	0.0005 ^a (0.000)	0.0009 ^a (0.000)	0.0022 ^a (0.000)		0.0011 ^a (0.000)	0.0006 ^a (0.000)	0.0005 ^a (0.000)	0.0009 ^a (0.000)	0.0022 ^a (0.000)
IM		0.0625 ^a (0.009)	0.0375 ^a (0.007)	0.0515 ^a (0.008)	0.0933 ^a (0.016)			0.0625 ^b (0.026)	0.0375 ^b (0.017)	0.0515 ^b (0.019)	0.0933 ^a (0.026)	
Constant	0.7549 ^a (0.027)	-0.0006 (0.004)	-0.0009 (0.004)	-0.0096 ^a (0.003)	-0.0058 (0.007)	0.0372 ^a (0.003)	0.7549 ^a (0.001)	-0.0006 (0.010)	-0.0009 (0.008)	-0.0096 (0.008)	-0.0058 (0.012)	0.0372 ^a (0.008)
Industry Dummies	Yes						Yes					
Observations	125093	95512	95512	95512	29563	58550	125093	95512	95512	95512	29563	58550
R ²	-	0.0161	0.0246	0.0355	0.0398	0.0425	-	0.0161	0.0246	0.0355	0.0398	0.0425

Robust standard errors in parentheses ^a p<0.01, ^b p<0.05, ^c p<0.1

Industry clustered st. err. in parentheses ^a p<0.01, ^b p<0.05, ^c p<0.1



Non EU import, spec.2

	Robust standard errors					Clustered standard errors						
	Selection	Stayers			Exiters	Entrants	Selection	Stayers			Exiters	Entrants
		Start	Give up	Always				Start	Give up	Always		
Age	0.0814 ^a (0.012)						0.0814 ^a (0.013)					
Productivity	0.2050 ^a (0.008)	0.0126 ^a (0.001)	0.0083 ^a (0.001)	0.0114 ^a (0.001)	0.0131 ^a (0.002)	0.0146 ^a (0.001)	0.2050 ^a (0.021)	0.0126 ^a (0.003)	0.0085 ^a (0.002)	0.0114 ^a (0.002)	0.0131 ^a (0.005)	0.0146 ^a (0.002)
Size	0.0538 ^a (0.004)	0.0154 ^a (0.001)	0.0100 ^a (0.001)	0.0153 ^a (0.001)	0.0156 ^a (0.001)	0.0167 ^a (0.001)	0.0538 ^a (0.012)	0.0154 ^a (0.002)	0.0108 ^a (0.001)	0.0153 ^a (0.003)	0.0156 ^a (0.003)	0.0167 ^a (0.003)
Capital Intensity	0.0988 ^a (0.003)	0.0020 ^a (0.000)	0.0004 (0.000)	0.0017 ^a (0.000)	0.0024 ^a (0.001)	-0.0009 ^a (0.000)	0.0988 ^a (0.003)	0.0020 ^b (0.001)	0.0014 ^c (0.001)	0.0017 ^c (0.001)	0.0024 (0.002)	-0.0009 (0.001)
Skill Intensity	-0.1009 ^a (0.008)	-0.0029 ^a (0.001)	-0.0014 ^b (0.001)	-0.0036 ^a (0.001)	-0.0000 (0.001)	0.0009 ^b (0.000)	-0.1009 ^a (0.008)	-0.0029 ^b (0.001)	-0.0002 (0.001)	-0.0036 ^a (0.001)	-0.0000 (0.002)	0.0009 (0.001)
Intangible Capital Intensity	-0.0035 ^a (0.001)	0.0002 ^b (0.000)	0.0003 ^a (0.000)	0.0006 ^a (0.000)	0.0001 (0.000)	0.0007 ^a (0.000)	-0.0035 (0.002)	0.0002 (0.000)	0.0001 (0.000)	0.0006 ^b (0.000)	0.0001 (0.001)	0.0007 ^a (0.000)
White Collar		0.0361 ^a (0.011)	0.0054 (0.009)	0.0163 ^c (0.050)	0.0514 (0.044)	0.1464 ^a		0.0361 (0.035)	-0.0004 (0.022)	0.0163 (0.027)	0.0514 (0.092)	0.1464 (0.130)
Routine Cognitive		0.0000 (0.000)	0.0000 (0.000)	0.0000 ^a (0.000)	-0.0000 (0.000)	0.0000 (0.000)		0.0000 (0.000)	-0.0001 ^a (0.000)	0.0000 (0.000)	-0.0000 (0.000)	0.0000 (0.000)
Routine Manual		-0.0004 ^a (0.000)	-0.0002 ^a (0.000)	-0.0003 ^a (0.000)	-0.0003 ^c (0.000)	0.0001 (0.000)		-0.0004 ^c (0.000)	-0.0003 ^b (0.000)	-0.0003 ^c (0.000)	-0.0003 (0.000)	0.0001 (0.000)
Non-Routine Manual		0.0005 ^a (0.000)	0.0002 ^a (0.000)	0.0002 ^a (0.000)	0.0002 ^c (0.000)	0.0003 ^a (0.000)		0.0005 ^a (0.000)	0.0002 ^b (0.000)	0.0002 (0.000)	0.0002 (0.000)	0.0003 (0.000)
Interactive		-0.0010 ^a (0.000)	-0.0004 ^a (0.000)	-0.0007 ^a (0.000)	-0.0009 ^a (0.000)	-0.0012 ^a (0.000)		-0.0010 ^a (0.000)	-0.0007 ^a (0.000)	-0.0007 ^b (0.000)	-0.0009 ^b (0.000)	-0.0012 ^a (0.001)
Analytical		0.0010 ^a (0.000)	0.0005 ^a (0.000)	0.0009 ^a (0.000)	0.0010 ^a (0.000)	0.0017 ^a (0.000)		0.0010 ^a (0.000)	0.0006 ^a (0.000)	0.0009 ^a (0.000)	0.0010 ^b (0.000)	0.0017 ^a (0.001)
IM		0.0619 ^a (0.010)	0.0176 ^b (0.007)	0.0386 ^a (0.008)	0.0626 ^a (0.015)			0.0619 ^b (0.025)	0.0375 ^b (0.017)	0.0386 (0.026)	0.0626 (0.039)	
Constant	0.7549 ^a (0.027)	-0.0036 (0.005)	0.0021 (0.004)	-0.0031 (0.004)	-0.0036 (0.007)	0.0279 ^a (0.003)	0.7549 ^a (0.001)	-0.0036 (0.012)	-0.0009 (0.008)	-0.0031 (0.013)	-0.0036 (0.017)	0.0279 ^a (0.006)
Industry Dummies	Yes						Yes					
Observations	125093	95512	95512	95512	29563	58550	125093	95512	95512	95512	29563	58550
R ²		0.0266	0.0231	0.0485	0.0379	0.0496		0.0266	0.0246	0.0485	0.0379	0.0496

Robust standard errors in parentheses ^a p<0.01, ^b p<0.05, ^c p<0.1

Industry clustered st. err. in parentheses ^a p<0.01, ^b p<0.05, ^c p<0.1



Export, spec.1, only services firms

	Robust standard errors					Clustered standard errors				
	Stayers			Exiters	Entrants	Stayers			Exiters	Entrants
	Start	Give up	Always			Start	Give up	Always		
Productivity	0.0246 ^a (0.002)	0.0136 ^a (0.001)	0.0213 ^a (0.001)	0.0549 ^a (0.004)	0.0383 ^a (0.002)	0.0246 ^b (0.009)	0.0136 ^b (0.005)	0.0213 ^a (0.006)	0.0549 ^a (0.017)	0.0383 ^a (0.010)
Size	0.0281 ^a (0.001)	0.0152 ^a (0.001)	0.0331 ^a (0.001)	0.0510 ^a (0.002)	0.0408 ^a (0.001)	0.0281 ^a (0.009)	0.0152 ^a (0.002)	0.0331 ^a (0.010)	0.0510 ^a (0.011)	0.0408 ^a (0.012)
Capital Intensity	0.0056 ^a (0.001)	0.0002 (0.000)	0.0020 ^a (0.001)	0.0146 ^a (0.002)	-0.0053 ^a (0.001)	0.0056 (0.004)	0.0002 (0.002)	0.0020 (0.002)	0.0146 ^c (0.008)	-0.0053 ^b (0.002)
Skill Intensity	-0.0044 ^a (0.001)	0.0014 ^c (0.001)	-0.0022 ^b (0.001)	-0.0027 (0.002)	0.0085 ^a (0.001)	-0.0044 (0.004)	0.0014 (0.002)	-0.0022 (0.002)	-0.0027 (0.008)	0.0085 ^b (0.004)
Intangible Capital Int.	-0.0003 ^c (0.000)	-0.0000 (0.000)	-0.0001 (0.000)	-0.0008 ^b (0.000)	0.0004 ^c (0.000)	-0.0003 (0.000)	-0.0000 (0.000)	-0.0001 (0.000)	-0.0008 (0.001)	0.0004 (0.001)
Δ White Collar	0.0987 ^a (0.018)	0.0115 (0.010)	0.0856 ^a (0.012)	0.7872 ^a (0.061)	0.5141 ^a (0.021)	0.0987 (0.140)	0.0115 (0.053)	0.0856 (0.088)	0.7872 ^b (0.293)	0.5141 ^b (0.228)
Δ Computer	0.0663 ^a (0.007)	-0.0026 (0.004)	0.0081 ^c (0.005)	0.1370 ^a (0.017)	0.2078 ^a (0.010)	0.0663 (0.086)	-0.0026 (0.017)	0.0081 (0.055)	0.1370 (0.084)	0.2078 (0.140)
IM	0.1310 ^a (0.012)	0.0239 ^a (0.006)	0.0662 ^a (0.009)	0.3456 ^a (0.036)		0.1310 (0.097)	0.0239 (0.048)	0.0662 (0.052)	0.3456 ^c (0.166)	
Constant	-0.0339 ^a (0.006)	0.0035 (0.003)	-0.0149 ^a (0.004)	-0.1401 ^a (0.019)	0.0071 ^b (0.003)	-0.0339 (0.054)	0.0035 (0.021)	-0.0149 (0.034)	-0.1401 (0.087)	0.0071 (0.040)
Observations	82278	82278	82278	25661	53754	82278	82278	82278	25661	53754
R-squared	0.0224	0.0258	0.0732	0.0911	0.0775	0.0224	0.0258	0.0732	0.0911	0.0775

Robust st.err. in parentheses ^a p<0.01, ^b p<0.05, ^c p<0.1 Ind. clustered st.err. in par. ^a p<0.01, ^b p<0.05, ^c p<0.1

Export, spec.2, only services firms

	Robust standard errors					Clustered standard errors				
	Stayers			Exiters	Entrants	Stayers			Exiters	Entrants
	Start	Give up	Always			Start	Give up	Always		
Productivity	0.0413 ^a (0.003)	0.0208 ^a (0.002)	0.0338 ^a (0.002)	0.0528 ^a (0.005)	0.0363 ^a (0.002)	0.0413 ^a (0.008)	0.0208 ^a (0.005)	0.0338 ^a (0.005)	0.0528 ^a (0.009)	0.0363 ^a (0.009)
Size	0.0334 ^a (0.001)	0.0175 ^a (0.001)	0.0370 ^a (0.001)	0.0505 ^a (0.002)	0.0404 ^a (0.001)	0.0334 ^a (0.009)	0.0175 ^a (0.002)	0.0370 ^a (0.010)	0.0505 ^a (0.010)	0.0404 ^a (0.012)
Capital Intensity	0.0138 ^a (0.001)	0.0037 ^a (0.001)	0.0082 ^a (0.001)	0.0144 ^a (0.002)	-0.0047 ^a (0.001)	0.0138 ^a (0.004)	0.0037 ^b (0.001)	0.0082 ^a (0.003)	0.0144 ^a (0.004)	-0.0047 ^c (0.003)
Skill Intensity	-0.0111 ^a (0.002)	-0.0015 (0.001)	-0.0073 ^a (0.001)	-0.0019 (0.003)	0.0091 ^a (0.001)	-0.0111 ^b (0.004)	-0.0015 (0.003)	-0.0073 ^b (0.005)	-0.0019 (0.005)	0.0091 ^b (0.004)
Intangible Capital Int.	-0.0006 ^a (0.000)	-0.0002 (0.000)	-0.0003 ^b (0.000)	-0.0009 ^b (0.000)	0.0009 ^a (0.000)	-0.0006 ^b (0.000)	-0.0002 (0.000)	-0.0003 (0.000)	-0.0009 (0.001)	0.0009 (0.001)
Δ White Collar	-0.0031 (0.021)	-0.0180 (0.011)	0.0130 (0.014)	-0.4374 ^a (0.127)	-0.5762 ^a (0.095)	-0.0031 (0.091)	-0.0180 (0.053)	0.0130 (0.055)	-0.4374 ^a (0.126)	-0.5762 (0.370)
Routine Cognitive	0.0001 ^a (0.000)	-0.0001 ^a (0.000)	0.0000 (0.000)	-0.0002 ^c (0.000)	0.0000 (0.000)	0.0001 (0.000)	-0.0001 (0.000)	0.0000 (0.000)	-0.0002 ^b (0.000)	0.0000 (0.000)
Routine Manual	-0.0027 ^a (0.000)	-0.0008 ^a (0.000)	-0.0016 ^a (0.000)	-0.0033 ^a (0.001)	-0.0027 ^a (0.000)	-0.0027 ^a (0.001)	-0.0008 ^b (0.000)	-0.0016 ^a (0.000)	-0.0033 ^a (0.001)	-0.0027 ^c (0.001)
Non-Routine Manual	0.0008 ^a (0.000)	0.0006 ^a (0.000)	0.0008 ^a (0.000)	0.0015 ^a (0.000)	0.0016 ^a (0.000)	0.0008 (0.001)	0.0006 ^a (0.000)	0.0008 ^c (0.000)	0.0015 ^a (0.000)	0.0016 (0.001)
Interactive	-0.0035 ^a (0.000)	-0.0008 ^a (0.000)	-0.0027 ^a (0.000)	-0.0048 ^a (0.001)	-0.0089 ^a (0.000)	-0.0035 ^a (0.000)	-0.0008 ^a (0.000)	-0.0027 ^a (0.001)	-0.0048 ^a (0.001)	-0.0089 ^a (0.001)
Analytical	0.0048 ^a (0.000)	0.0005 ^a (0.000)	0.0018 ^a (0.001)	0.0015 ^b (0.001)	0.0079 ^a (0.000)	0.0048 ^a (0.001)	0.0005 (0.000)	0.0018 ^b (0.001)	0.0015 ^a (0.000)	0.0079 ^a (0.002)
IM	0.3198 ^a (0.023)	0.1049 ^a (0.013)	0.2084 ^a (0.018)	0.3350 ^a (0.039)		0.3198 ^a (0.080)	0.1049 ^b (0.040)	0.2084 ^a (0.053)	0.3350 ^a (0.080)	
Constant	-0.0439 ^a (0.012)	-0.0222 ^a (0.007)	-0.0329 ^a (0.009)	-0.0313 (0.020)	0.1828 ^a (0.008)	-0.0439 (0.039)	-0.0222 (0.019)	-0.0329 (0.024)	-0.0313 (0.042)	0.1828 ^a (0.025)
Observations	82278	82278	82278	25661	53754	82278	82278	82278	25661	53754
R-squared	0.0389	0.0294	0.0894	0.1023	0.1117	0.0389	0.0294	0.0894	0.1023	0.1117

Robust st. err. in parentheses ^a p<0.01, ^b p<0.05, ^c p<0.1

Ind. clustered st. err. in par. ^a p<0.01, ^b p<0.05, ^c p<0.1

Import, spec.1, only services firms

	Robust standard errors					Clustered standard errors				
	Stayers			Exiters	Entrants	Stayers			Exiters	Entrants
	Start	Give up	Always			Start	Give up	Always		
Productivity	0.0213 ^a (0.002)	0.0130 ^a (0.001)	0.0240 ^a (0.001)	0.0477 ^a (0.004)	0.0332 ^a (0.001)	0.0213 ^b (0.007)	0.0130 ^b (0.005)	0.0240 ^a (0.007)	0.0477 ^a (0.014)	0.0332 ^a (0.006)
Size	0.0310 ^a (0.001)	0.0133 ^a (0.001)	0.0333 ^a (0.001)	0.0420 ^a (0.002)	0.0383 ^a (0.001)	0.0310 ^a (0.004)	0.0133 ^a (0.002)	0.0333 ^a (0.006)	0.0420 ^a (0.007)	0.0383 ^a (0.007)
Capital Intensity	0.0028 ^a (0.001)	-0.0002 (0.000)	0.0017 ^a (0.000)	0.0130 ^a (0.002)	-0.0036 ^a (0.001)	0.0028 (0.003)	-0.0002 (0.002)	0.0017 (0.003)	0.0130 ^b (0.006)	-0.0036 ^c (0.002)
Skill Intensity	-0.0038 ^a (0.001)	-0.0005 (0.001)	-0.0054 ^a (0.001)	-0.0044 ^c (0.002)	0.0039 ^a (0.001)	-0.0038 (0.003)	-0.0005 (0.002)	-0.0054 (0.003)	-0.0044 (0.003)	0.0039 (0.003)
Intangible Capital Int.	0.0002 (0.000)	-0.0001 (0.000)	0.0004 ^a (0.000)	-0.0006 ^b (0.000)	0.0009 ^a (0.000)	0.0002 (0.000)	-0.0001 (0.000)	0.0004 ^a (0.000)	-0.0006 (0.001)	0.0009 ^c (0.000)
Δ White Collar	0.0436 ^a (0.014)	0.0053 (0.009)	0.0191 (0.012)	0.6257 ^a (0.055)	0.3248 ^a (0.016)	0.0436 (0.094)	0.0053 (0.037)	0.0191 (0.071)	0.6257 ^b (0.221)	0.3248 ^b (0.108)
Δ Computer	0.0199 ^a (0.005)	-0.0116 ^a (0.003)	0.0066 ^c (0.004)	0.1072 ^a (0.015)	0.0747 ^a (0.007)	0.0199 (0.033)	-0.0116 (0.010)	0.0066 (0.025)	0.1072 ^b (0.048)	0.0747 (0.063)
IM	0.0744 ^a (0.010)	0.0174 ^a (0.006)	0.0623 ^a (0.008)	0.2995 ^a (0.032)		0.0744 (0.078)	0.0174 (0.040)	0.0623 (0.064)	0.2995 ^b (0.130)	
Constant	-0.0102 ^b (0.005)	0.0060 ^b (0.003)	-0.0157 ^a (0.004)	-0.1233 ^a (0.016)	0.0202 ^a (0.002)	-0.0102 (0.035)	0.0060 (0.017)	-0.0157 (0.029)	-0.1233 ^c (0.065)	0.0202 (0.017)
Observations	82278	82278	82278	25661	53754	82278	82278	82278	25661	53754
R-squared	0.0379	0.0246	0.0830	0.0805	0.0848	0.0379	0.0246	0.0830	0.0805	0.0848

Robust st.err. in parentheses ^a p<0.01, ^b p<0.05, ^c p<0.1 Ind. clustered st.err. in par. ^a p<0.01, ^b p<0.05, ^c p<0.1

Import, spec.2, only services firms

	Robust standard errors					Clustered standard errors				
	Stayers			Exiters	Entrants	Stayers			Exiters	Entrants
	Start	Give up	Always			Start	Give up	Always		
Productivity	0.0349 ^a (0.002)	0.0215 ^a (0.002)	0.0347 ^a (0.002)	0.0479 ^a (0.004)	0.0322 ^a (0.001)	0.0349 ^a (0.006)	0.0208 ^a (0.005)	0.0347 ^a (0.007)	0.0479 ^a (0.012)	0.0322 ^a (0.005)
Size	0.0352 ^a (0.001)	0.0159 ^a (0.001)	0.0366 ^a (0.001)	0.0421 ^a (0.002)	0.0381 ^a (0.001)	0.0352 ^a (0.003)	0.0175 ^a (0.002)	0.0366 ^a (0.005)	0.0421 ^a (0.006)	0.0381 ^a (0.007)
Capital Intensity	0.0095 ^a (0.001)	0.0039 ^a (0.001)	0.0069 ^a (0.001)	0.0133 ^a (0.002)	-0.0033 ^a (0.001)	0.0095 ^a (0.002)	0.0037 ^b (0.001)	0.0069 ^a (0.002)	0.0133 ^a (0.004)	-0.0033 ^c (0.002)
Skill Intensity	-0.0094 ^a (0.001)	-0.0041 ^a (0.001)	-0.0098 ^a (0.001)	-0.0046 ^c (0.002)	0.0042 ^a (0.001)	-0.0094 ^a (0.002)	-0.0015 (0.001)	-0.0098 ^a (0.003)	-0.0046 (0.007)	0.0042 (0.003)
Intangible Capital Int.	-0.0001 (0.000)	-0.0003 ^a (0.000)	0.0002 (0.000)	-0.0006 ^b (0.000)	0.0011 ^a (0.000)	-0.0001 (0.000)	-0.0002 (0.000)	0.0002 (0.000)	-0.0006 (0.000)	0.0011 ^b (0.000)
Δ White Collar	-0.0344 ^b (0.017)	-0.0320 ^a (0.011)	-0.0363 ^a (0.014)	-0.0255 (0.108)	0.1860 ^b (0.078)	-0.0344 (0.089)	-0.0180 (0.053)	-0.0363 (0.059)	-0.0255 (0.127)	0.1860 (0.250)
Routine Cognitive	-0.0001 ^b (0.000)	-0.0002 ^a (0.000)	-0.0001 ^a (0.000)	-0.0003 ^a (0.000)	-0.0001 (0.000)	-0.0001 (0.000)	-0.0001 (0.000)	-0.0001 ^c (0.000)	-0.0003 ^a (0.000)	-0.0001 (0.000)
Routine Manual	-0.0017 ^a (0.000)	-0.0008 ^a (0.000)	-0.0013 ^a (0.000)	-0.0021 ^a (0.001)	-0.0002 (0.000)	-0.0017 ^a (0.001)	-0.0008 ^b (0.000)	-0.0013 ^a (0.000)	-0.0021 ^a (0.000)	-0.0002 (0.001)
Non-Routine Manual	0.0007 ^a (0.000)	0.0005 ^a (0.000)	0.0008 ^a (0.000)	0.0014 ^a (0.000)	0.0012 ^a (0.000)	0.0007 ^a (0.000)	0.0006 ^a (0.000)	0.0008 ^a (0.000)	0.0014 ^a (0.000)	0.0012 (0.001)
Interactive	-0.0017 ^a (0.000)	-0.0002 (0.000)	-0.0014 ^a (0.000)	-0.0012 ^a (0.001)	-0.0030 ^a (0.000)	-0.0017 ^a (0.000)	-0.0008 ^a (0.000)	-0.0014 ^a (0.000)	-0.0012 ^c (0.001)	-0.0030 ^a (0.001)
Analytical	0.0015 ^a (0.000)	-0.0004 ^a (0.000)	0.0007 ^a (0.000)	0.0009 ^b (0.001)	0.0037 ^a (0.000)	0.0015 ^a (0.000)	0.0005 (0.000)	0.0007 ^a (0.000)	0.0009 ^c (0.000)	0.0037 ^a (0.001)
IM	0.2274 ^a (0.021)	0.1121 ^a (0.012)	0.1838 ^a (0.017)	0.3040 ^a (0.035)		0.2274 ^a (0.057)	0.1049 ^b (0.040)	0.1838 ^a (0.047)	0.3040 ^a (0.099)	
Constant	-0.0449 ^b (0.011)	-0.0365 ^a (0.006)	-0.0473 ^a (0.009)	-0.0874 ^a (0.018)	0.0745 ^a (0.006)	-0.0449 (0.027)	-0.0222 (0.019)	-0.0473 ^b (0.019)	-0.0874 (0.051)	0.0745 ^a (0.016)
Observations	82278	82278	82278	25661	53754	82278	82278	82278	25661	53754
R-squared	0.0446	0.0273	0.0914	0.0842	0.0970	0.0446	0.0294	0.0914	0.0842	0.0970

Robust st. err. in parentheses ^a p<0.01, ^b p<0.05, ^c p<0.1

Ind. clustered st. err. in par. ^a p<0.01, ^b p<0.05, ^c p<0.1

Import, spec.1, using levels

	Robust standard errors						Clustered standard errors						
	Selection	Stayers			Exiters	Entrants	Selection	Stayers			Exiters	Entrants	
		Start	Give up	Always				Start	Give up	Always			
Age	0.0814 ^a (0.012)						0.0814 ^a (0.013)						
Productivity	0.2050 ^a (0.008)	0.0219 ^a (0.002)	0.0142 ^a (0.001)	0.0278 ^a (0.001)	0.0358 ^a (0.003)	0.0337 ^a (0.001)	0.2050 ^a (0.021)	0.0219 ^a (0.005)	0.0142 ^a (0.004)	0.0278 ^a (0.005)	0.0358 ^a (0.008)	0.0337 ^a (0.005)	
Size	0.0538 ^a (0.004)	0.0312 ^a (0.001)	0.0157 ^a (0.001)	0.0434 ^a (0.001)	0.0449 ^a (0.002)	0.0416 ^a (0.001)	0.0538 ^a (0.012)	0.0312 ^a (0.003)	0.0157 ^a (0.002)	0.0434 ^a (0.006)	0.0449 ^a (0.005)	0.0416 ^a (0.007)	
Capital Intensity	0.0988 ^a (0.003)	0.0035 ^a (0.001)	0.0006 (0.000)	0.0033 ^a (0.000)	0.0080 ^a (0.001)	-0.0023 ^a (0.001)	0.0988 ^a (0.003)	0.0035 (0.002)	0.0006 (0.001)	0.0033 (0.002)	0.0080 ^a (0.003)	-0.0023 (0.002)	
Skill Intensity	-0.1009 ^a (0.008)	-0.0041 ^a (0.001)	-0.0013 ^c (0.001)	-0.0086 ^a (0.002)	-0.0015 (0.001)	0.0039 ^a (0.001)	-0.1009 ^a (0.008)	-0.0041 (0.003)	-0.0013 (0.001)	-0.0086 ^a (0.003)	-0.0015 (0.003)	0.0039 (0.005)	
Intangible Capital Int.	-0.0035 ^a (0.001)	0.0002 (0.000)	0.0001 (0.000)	0.0011 ^a (0.000)	0.0004 (0.000)	0.0011 ^a (0.000)	-0.0035 (0.002)	0.0002 (0.000)	0.0001 (0.000)	0.0011 ^b (0.000)	0.0004 (0.001)	0.0011 ^b (0.001)	
Δ White Collar		0.0623 ^a (0.014)	0.0220 ^a (0.008)	0.0728 ^a (0.012)	0.3422 ^a (0.038)	0.2431 ^a (0.021)		0.0623 (0.072)	0.0220 (0.033)	0.0728 (0.063)	0.3422 ^b (0.125)	0.2431 ^c (0.128)	
Δ Computer		0.0534 ^a (0.006)	0.0125 ^a (0.003)	0.0559 ^a (0.004)	0.0881 ^a (0.011)	0.0432 ^a (0.007)		0.0534 ^b (0.023)	0.0125 (0.014)	0.0559 ^c (0.031)	0.0881 ^a (0.031)	0.0432 (0.078)	
Computer 1995		0.0396 ^a (0.004)	0.0217 ^a (0.002)	0.0450 ^a (0.003)	0.0434 ^a (0.006)	0.0575 ^a (0.004)		0.0396 ^b (0.015)	0.0217 ^c (0.011)	0.0450 ^a (0.016)	0.0434 ^b (0.020)	0.0575 (0.051)	
IM		0.0798 ^a (0.010)	0.0279 ^a (0.006)	0.0768 ^a (0.008)	0.1650 ^a (0.021)			0.0798 (0.055)	0.0279 (0.031)	0.0768 (0.046)	0.1650 ^b (0.068)		
Constant	0.7549 ^a (0.027)	-0.0313 ^a (0.006)	-0.0099 ^a (0.003)	-0.0455 ^a (0.004)	-0.0722 ^a (0.011)	-0.0022 (0.003)	0.7549 ^a (0.001)	-0.0313 (0.024)	-0.0099 (0.014)	-0.0455 ^c (0.025)	-0.0722 ^c (0.036)	-0.0022 (0.015)	
Observations	125093	95512	95512	95512	29563	58550	125093	95512	95512	95512	29563	58550	
R ²		0.0394	0.0281	0.1118	0.0918	0.0967		0.0394	0.0281	0.1118	0.0918	0.0967	
0.0945													

Robust standard errors in parentheses ^a p<0.01, ^b p<0.05, ^c p<0.1

Industry clustered st. err. in parentheses ^a p<0.01, ^b p<0.05, ^c p<0.1

