

# Technical Introduction to the 6th Vintage of the CompNet Dataset

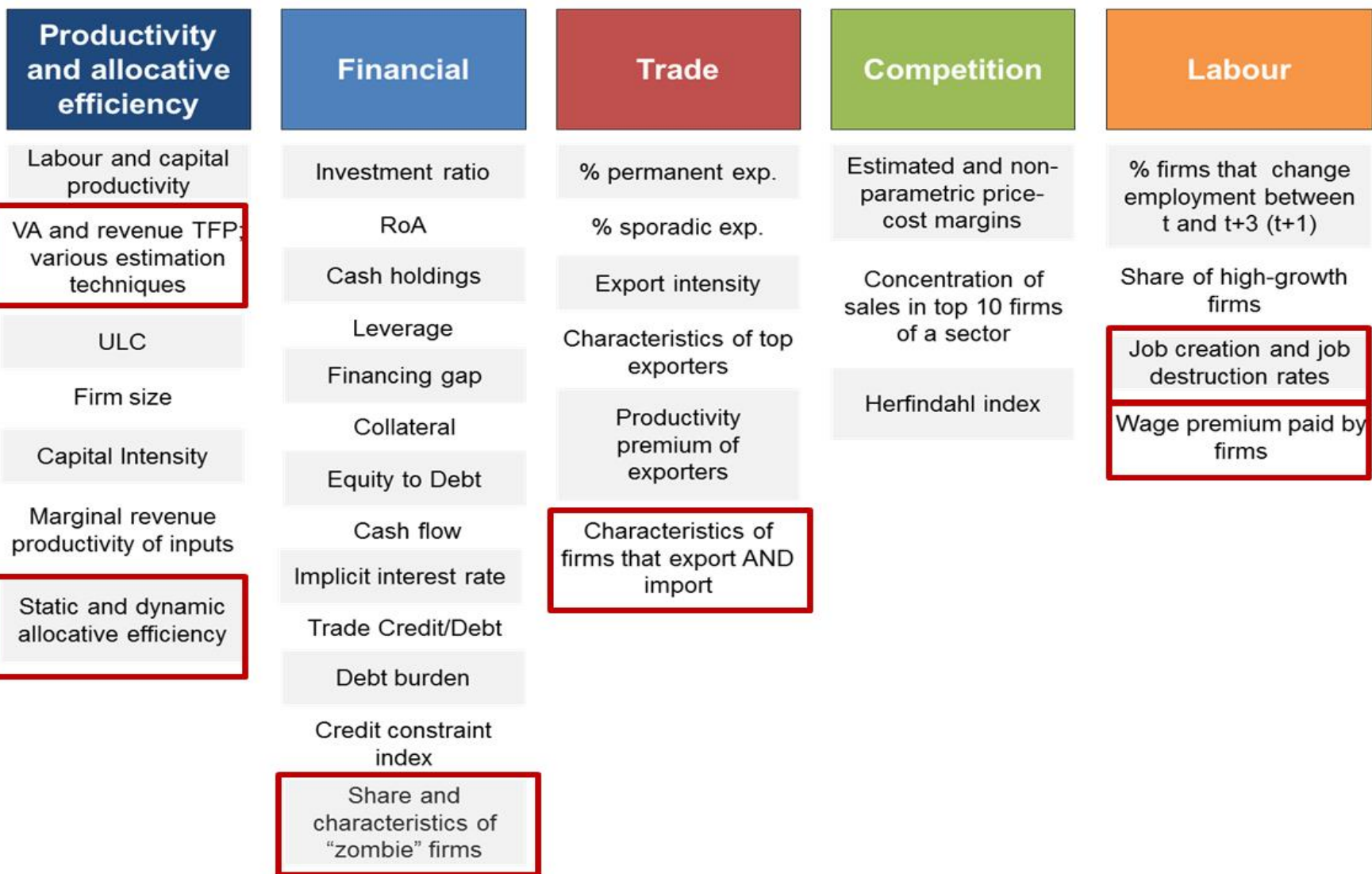


Peter Haug, IWH

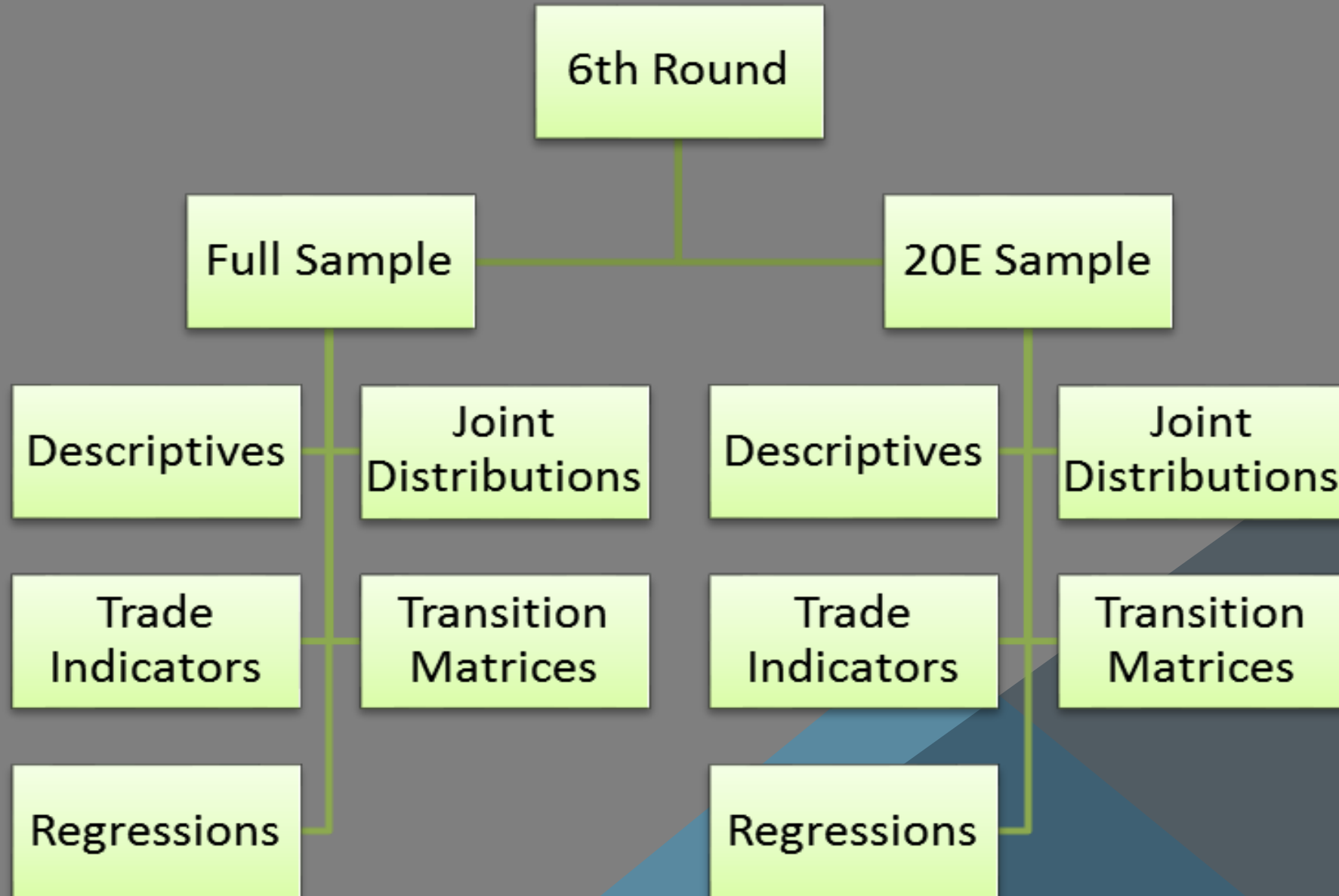
# Outline

- What can you find in the CompNet database (6<sup>th</sup> round)?
- How to read the content?
- What can you do with it?
- How can you get access to the data?

# Overview of indicators



# 6<sup>th</sup> vintage database: overall structure



# File name conventions

*Content\_dimension\_sample\_countries .dta*

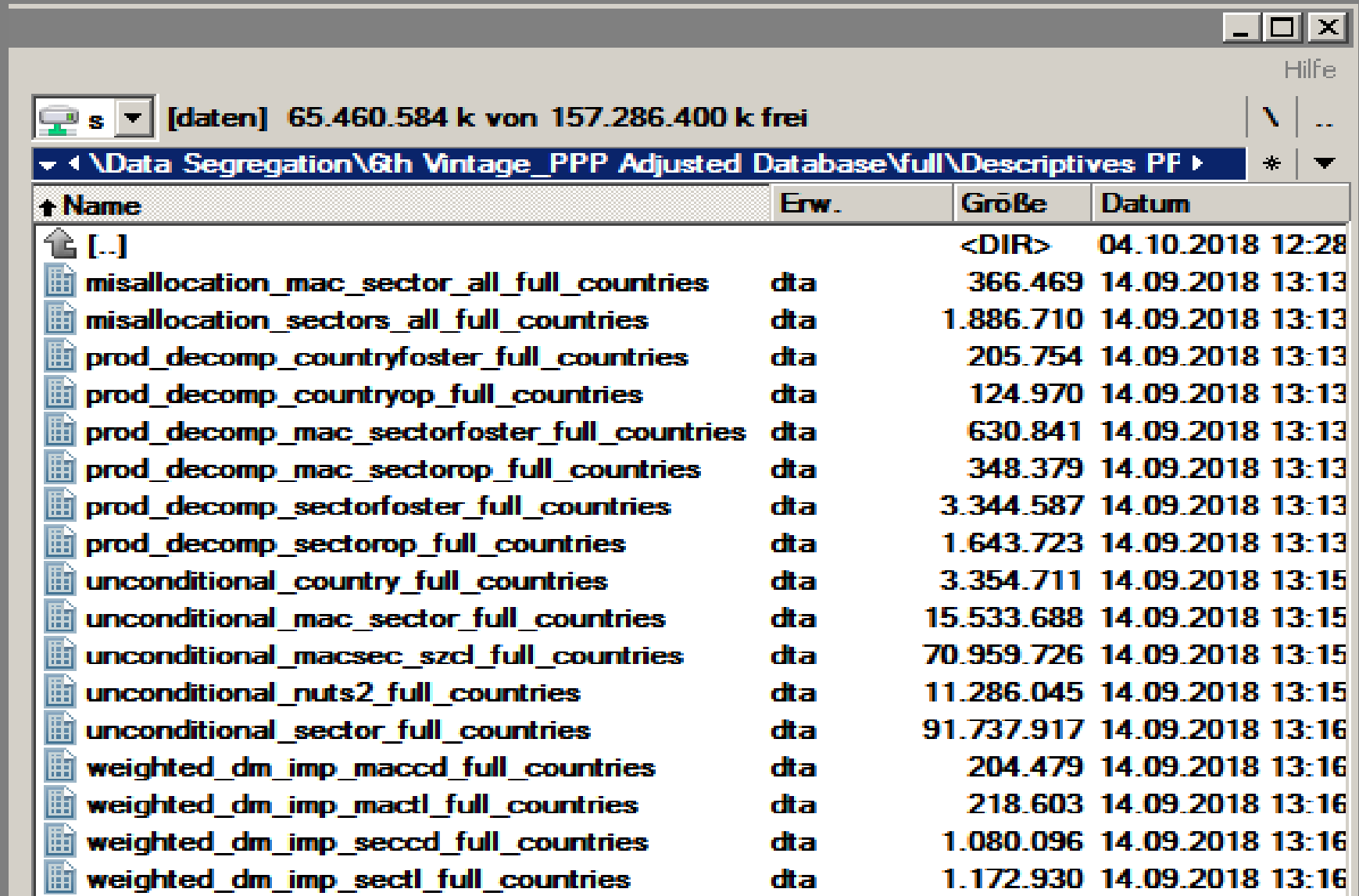
1. *Content*: area of study covered by the dataset
2. *dimension*: level of aggregation of the database
3. *sample*: sample on which the dataset is built:
  - a. "full" : all firms with at least 1 employee
  - b. "20E" : all firms with at least 20 employees

"countries" indicates that the content is presented separately for each country, no matter what the dimension is.

# Content – column variables

- *variable\_p1, \*\_p5, \*\_p10, \*\_p25, \*\_p50, \*\_p75, \*\_p95, \*\_p99*: percentiles
- *variable\_mean*: mean
- *variable\_sd*: standard deviation
- *variable\_skew, variable\_kurt*: skewness and kurtosis
- *variable\_tot\_mark*: actual number of observations in sample with non-missing values
- ***variable\_sum\_weights*: weighted number of observations – base for descriptive statistics**
- Format relevant for *unconditional\**, *jd\** and *transition\_matrix\**

# Descriptives



Name	Erw.	Größe	Datum
[..]		<DIR>	04.10.2018 12:28
misallocation_mac_sector_all_full_countries	dta	366.469	14.09.2018 13:13
misallocation_sectors_all_full_countries	dta	1.886.710	14.09.2018 13:13
prod_decomp_countryfoster_full_countries	dta	205.754	14.09.2018 13:13
prod_decomp_countryop_full_countries	dta	124.970	14.09.2018 13:13
prod_decomp_mac_sectorfoster_full_countries	dta	630.841	14.09.2018 13:13
prod_decomp_mac_sectorop_full_countries	dta	348.379	14.09.2018 13:13
prod_decomp_sectorfoster_full_countries	dta	3.344.587	14.09.2018 13:13
prod_decomp_sectorop_full_countries	dta	1.643.723	14.09.2018 13:13
unconditional_country_full_countries	dta	3.354.711	14.09.2018 13:15
unconditional_mac_sector_full_countries	dta	15.533.688	14.09.2018 13:15
unconditional_macsec_szcl_full_countries	dta	70.959.726	14.09.2018 13:15
unconditional_nuts2_full_countries	dta	11.286.045	14.09.2018 13:15
unconditional_sector_full_countries	dta	91.737.917	14.09.2018 13:16
weighted_dm_imp_maccd_full_countries	dta	204.479	14.09.2018 13:16
weighted_dm_imp_mactl_full_countries	dta	218.603	14.09.2018 13:16
weighted_dm_imp_seccd_full_countries	dta	1.080.096	14.09.2018 13:16
weighted_dm_imp_sectl_full_countries	dta	1.172.930	14.09.2018 13:16

# Descriptives

- *unconditional\*.dta*: all productivity, financial, labour and competition indicators available in CompNet's database
- *prod\_decomp\_\*.dta*: productivity decomposition measures à la Foster (foster) and Olley and Parkes (OP)
- *weighted\_dm\_imp\_\*.dta*: labor share weighted Dobbelaere Mairesse (2013) indicator
- *misallocation\_\*.dta*: contain the user dispersion measures of 46 productivity and markup variables like labour productivity, capital productivity or DeLoecker & Warzynski markups



# Descriptives- example

Data Editor (Browse) - [unconditional\_country\_full\_countries]

File Edit View Data Tools

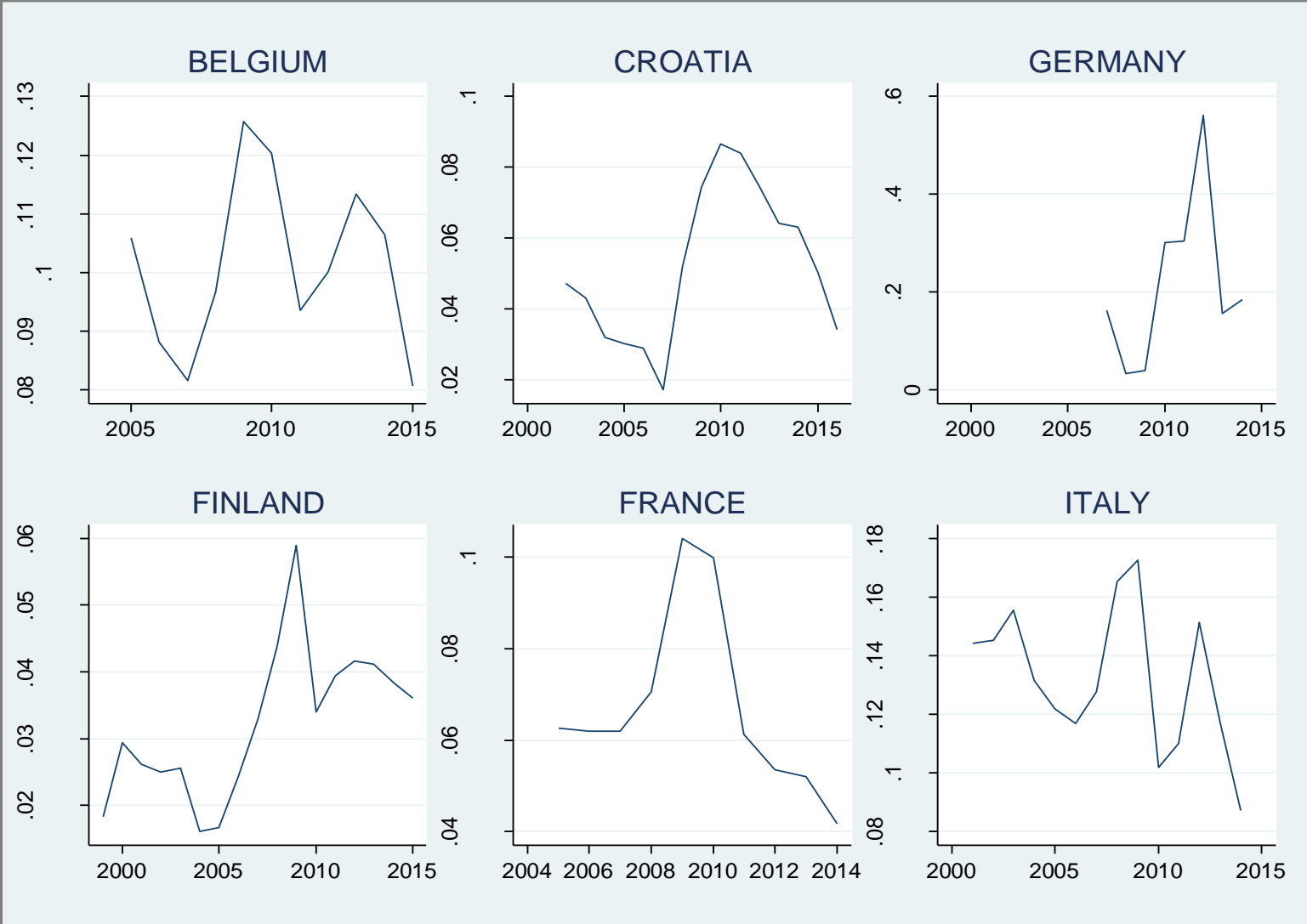


1C

CROATIA

	country	year	D_~acCD_kurt	D_~acCD_mean	D_Zo~acCD_p1	D_Z~acCD_p10	D_Z~acCD_p25	D_Zo~acCD_p5	D_Z~acCD_p50	D_Z~acCD_p75	D_Z~acCD_p90	D_Z~acCD_p95	D_Z~acCD_p99	D_Zo~acCD_sd	D_~acCD_skew	D_Zombie_M..	D_Zombie_M..	D_~acTL_kurt
1	CROATIA	2002	.	.	.	.	.	.	.	.	.	.	.	.	.	8483	8490	.
2	CROATIA	2003	.	.	.	.	.	.	.	.	.	.	.	.	.	9054.9998	9065	.
3	CROATIA	2004	.	.	.	.	.	.	.	.	.	.	.	.	.	8990.9999	9003	15.77748
4	CROATIA	2005	.	.	.	.	.	.	.	.	.	.	.	.	.	9074.0001	9085	17.21577
5	CROATIA	2006	.	.	.	.	.	.	.	.	.	.	.	.	.	9922.0001	9934	18.03596
6	CROATIA	2007	.	.	.	.	.	.	.	.	.	.	.	.	.	10230	10245	19.341
7	CROATIA	2008	.	.	.	.	.	.	.	.	.	.	.	.	.	10815	10830	19.23591
8	CROATIA	2009	.	.	.	.	.	.	.	.	.	.	.	.	.	10937	10945	17.70056
9	CROATIA	2010	.	.	.	.	.	.	.	.	.	.	.	.	.	11668	11686	16.99108
10	CROATIA	2011	.	.	.	.	.	.	.	.	.	.	.	.	.	11799	11817	17.26839
11	CROATIA	2012	.	.	.	.	.	.	.	.	.	.	.	.	.	11544	11562	16.3528
12	CROATIA	2013	.	.	.	.	.	.	.	.	.	.	.	.	.	11964	11986	17.70478
13	CROATIA	2014	.	.	.	.	.	.	.	.	.	.	.	.	.	12249	12268	19.27154
14	CROATIA	2015	.	.	.	.	.	.	.	.	.	.	.	.	.	12361	12378	18.92116
15	CROATIA	2016	.	.	.	.	.	.	.	.	.	.	.	.	.	12361	13150	18.37629
16	FINLAND	1999	1.736643	.6971802	0	0	0	0	1	1	1	1	1	.4594922	-.8582793	25864	16134	.
17	FINLAND	2000	1.665883	.688887	0	0	0	0	1	1	1	1	1	.4629631	-.8160164	25796	16308	.
18	FINLAND	2001	1.652442	.6872407	0	0	0	0	1	1	1	1	1	.4636314	-.8077385	25799.999	16376	5.626716
19	FINLAND	2002	1.688902	.691652	0	0	0	0	1	1	1	1	1	.4618254	-.8300015	25799.001	16226	5.57304
20	FINLAND	2003	1.702433	.6932463	0	0	0	0	1	1	1	1	1	.4611607	-.8381126	25503.999	16000	5.731252
21	FINLAND	2004	1.697496	.6926671	0	0	0	0	1	1	1	1	1	.461403	-.8351621	25366	15978	5.693591
22	FINLAND	2005	1.570225	.6766137	0	0	0	0	1	1	1	1	1	.4677835	-.7551326	25189.999	15834	5.670615
23	FINLAND	2006	1.679322	.6905094	0	0	0	0	1	1	1	1	1	.4622984	-.82421	23221	15717	5.671486
24	FINLAND	2007	1.67281	.680338	0	0	0	0	1	1	1	1	1	.4632738	-.8333832	23218	15015	5.87747

# Descriptives – Share of credit constrained firms in manufacturing (20E)



- File: unconditional\_ma\_c\_sector\_20e\_countries.dta
- Variable: SAFE\_mean

# Joint Distributions

[daten] 65.460.584 k von 157.286.400 k frei

▼ \6th Vintage\_PPP Adjusted Database\Full\Joint distributions PPP\_new\\*

Name	↓Erw.	Größe	Datum	Attr.
↑ [..]		<DIR>	27.09.2018 17:22	—c
[jd_d_zombie_nothg]		<DIR>	14.09.2018 13:17	—c
[jd_d_zombie_intcov]		<DIR>	14.09.2018 13:17	—c
[jd_d_zombie_mu_maccd]		<DIR>	14.09.2018 13:18	—c
[jd_d_zombie_mu_mactl]		<DIR>	14.09.2018 13:18	—c
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[jd_d_zombie_mu_sectl]		<DIR>	14.09.2018 13:19	—c
[jd_d_zombie_negprof]		<DIR>	14.09.2018 13:20	—c
[jd_d_zombie_nothg]		<DIR>	14.09.2018 13:20	—c
[jd_dummy_exp]		<DIR>	14.09.2018 13:16	—c
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[jd_invest_ratio]		<DIR>	14.09.2018 13:23	—c
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[jd_lntfp_rev_mactl]		<DIR>	27.09.2018 17:21	—c
[jd_lntfp_rev_seccd]		<DIR>	27.09.2018 17:21	—c
[jd_lntfp_rev_sectl]		<DIR>	27.09.2018 17:22	—c
[jd_lntfp_va_maccd]		<DIR>	27.09.2018 17:22	—c
[jd_lntfp_va_seccd]		<DIR>	27.09.2018 17:22	—c
[jd_safe]		<DIR>	27.09.2018 17:22	—c
[jd_t10_exp_country]		<DIR>	14.09.2018 13:44	—c

▼ \6th Vintage\_PPP Adjusted Database\Full\Joint distributions PPP\_new\jd\_l\\*

Name	↓Erw.	Größe	Datum	Attr.
↑ [..]		<DIR>	27.09.2018 17:21	—c
jd_l_sector_full_countries	dta	754.774.937	27.09.2018 16:05	a-c
jd_l_nuts2_full_countries	dta	79.572.926	27.09.2018 16:05	a-c
jd_l_macsec_szcl_full_countries	dta	526.327.452	27.09.2018 16:06	a-c
jd_l_mac_sector_full_countries	dta	118.717.608	27.09.2018 16:07	a-c
jd_l_country_full_countries	dta	15.645.538	27.09.2018 16:07	a-c

# Joint Distributions

- *jd\_conditional\_variable\_dimension\_sample\_countries.dta*: actually conditional (empirical) distributions
- Each line in jd-files : **Conditional on** the fact that a dummy variable has a certain value (e.g. firm is exporter) or the firm belongs to a certain centile/size class of a continuous variable (e.g. centiles of the number of employees) the empirical distribution (mean, percentiles, extrema, moments, numbers of observations ) of a certain column variable is as follows

# Joint distribution example

Data Editor (Edit) - [jd\_country\_full\_countries]

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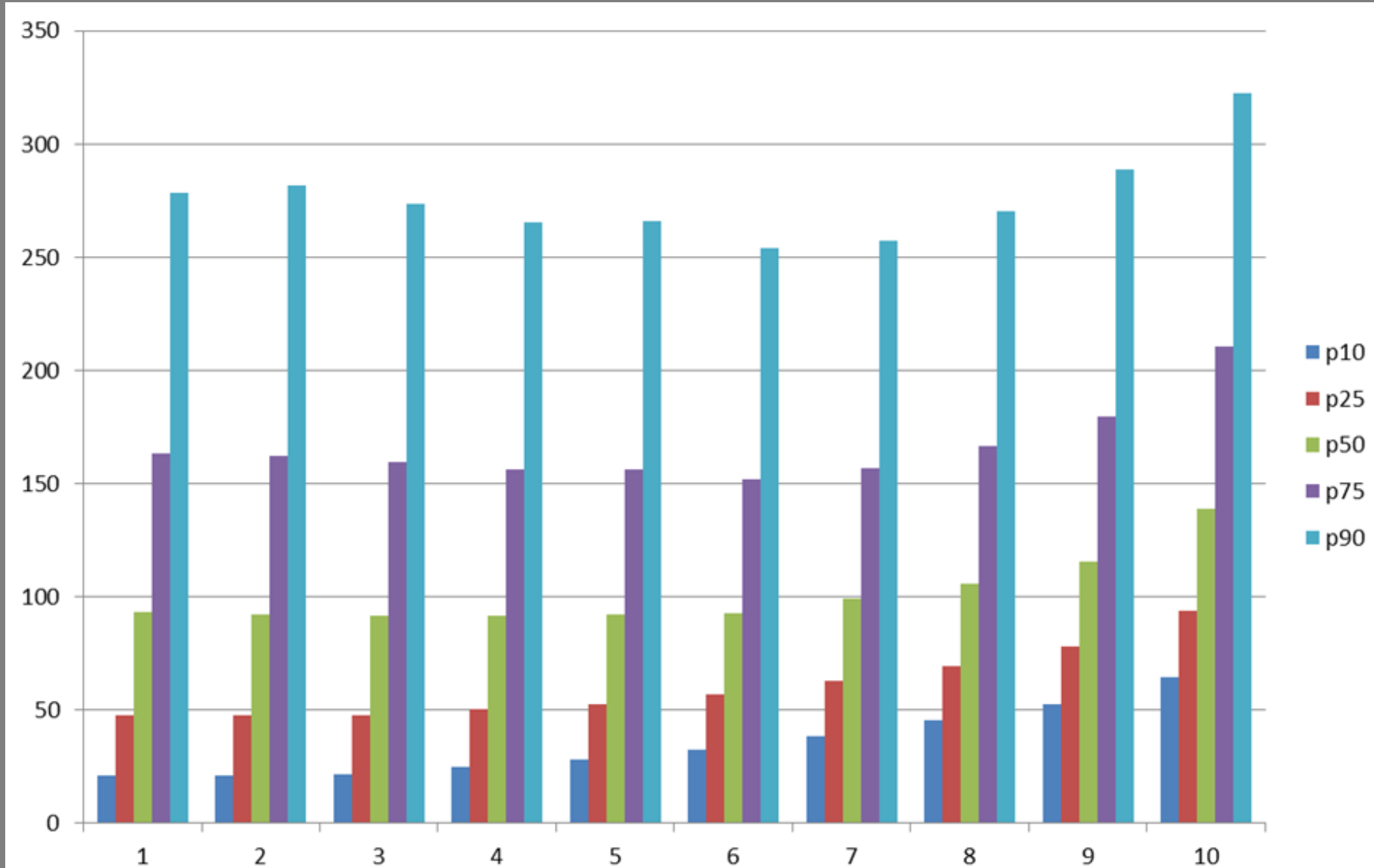


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	country	year	ct_1	D_~acCD_kurt	D_~acCD_mean	D_Zo~acCD_p1	D_Z~acCD_p10	D_Z~acCD_p25	D_Zo~acCD_p5	D_Z~acCD_p50	D_Z~acCD_p75	D_Z~acCD_p90	D_Z~acCD_p95	D_Z~acCD_p99	D_Zo~acCD_sd	D_~acCD_skew	D_Zombie_M..	D_Zombie_M..	D
1	BELGIUM	2004	10	3.108734	.2062314	0	0	0	0	0	0	1	1	1	.4046303	1.452148	34865.389	6380	
2	BELGIUM	2004	20	3.067896	.2081126	0	0	0	0	0	0	1	1	1	.4059895	1.438018	34885.568	6408	
3	BELGIUM	2004	30	3.008794	.2109027	0	0	0	0	0	0	1	1	1	.4079813	1.417319	34881.81	6398	
4	BELGIUM	2004	40	3.379691	.1946271	0	0	0	0	0	0	1	1	1	.3959436	1.542625	34998.399	6545	
5	BELGIUM	2004	50	3.332218	.1965573	0	0	0	0	0	0	1	1	1	.3974245	1.52716	35058.117	6669	
6	BELGIUM	2004	60	3.14684	.2045092	0	0	0	0	0	0	1	1	1	.4033724	1.46521	35125.849	6753	
7	BELGIUM	2004	70	3.549116	.1880583	0	0	0	0	0	0	1	1	1	.3907872	1.596595	35206.871	6858	
8	BELGIUM	2004	80	3.901098	.1758156	0	0	0	0	0	0	1	1	1	.3806906	1.703261	35266.857	6943	
9	BELGIUM	2004	90	3.699831	.1826004	0	0	0	0	0	0	1	1	1	.3863657	1.643116	35366.267	7112	
10	BELGIUM	2004	100	3.504976	.1897235	0	0	0	0	0	0	1	1	1	.3920924	1.582712	37719.629	19249	
11	BELGIUM	2004	.	2.860119	.2182998	0	0	0	0	0	0	1	1	1	.4131185	1.363862	41116.24	7798	
12	BELGIUM	2005	10	3.921694	.1751513	0	0	0	0	0	0	1	1	1	.3801246	1.709296	34892.826	6735	
13	BELGIUM	2005	20	3.571143	.1872389	0	0	0	0	0	0	1	1	1	.390132	1.603479	34943.59	6782	
14	BELGIUM	2005	30	3.775971	.1799693	0	0	0	0	0	0	1	1	1	.3841902	1.666124	34944.775	6767	

# Joint distribution example: Labour productivity distribution by size decile in Sweden 2011



- File: `jd_l_country_all_countries`
- Variables: `ct_l`, `lprod_p10...lprod_p90`

# Transition Matrices

[daten] 65.460.584 k von 157.286.400 k frei

\\Compnet\Data\Data Segregation\6th Vintage\_PPP Adjusted Database\full\Transition Matrice

Name	↓ Erw.	Größe	Datum	Attr.
[..]		<DIR>	14.09.2018 14:19	—c
transition_matrix_sector_full_countries	dta	1.404.441.544	14.09.2018 13:15	-a-c
transition_matrix_mac_sector_full_countries	dta	247.336.215	14.09.2018 13:13	-a-c
transition_matrix_country_full_countries	dta	30.440.458	14.09.2018 13:13	-a-c

# Transition matrices

- Same structure as joint distributions
- Conditional variable  $TRmat\_l\_$ : the quintile of labour transition
- $fromq^*_to\_*$  ( $*=1$  to  $5$  or missing): observations that have changed from the  $*$  labour quintile three years ago to currently the  $*$ th labour quintile



# Transition Matrices

Data Editor (Browse) - [transition\_matrix\_country\_full\_countries]

File Edit View Data Tools

country[1] BELGIUM

	country	year	TRmat_l_co-y	D_~acCD_kurt	D_~acCD_mean	D_Zo~acCD_p1	D_Z~acCD_p10	D_Z~acCD_p25	D_Zo~acCD_p5	D_Z~acCD_p50	D_Z~acCD_p75	D_Z~acCD_p90	D_Z~acCD_p95	D_Z~acCD_p99	D_Zo~acCD_sd	D_~acCD_skew	D_Zombie_M..	D_Zombie_M..	D_~acTL_k
1	BELGIUM	2004	from_q._to_.	2.860119	.2182998	0	0	0	0	0	0	1	1	1	.4131185	1.363862	41116.24	7798	
2	BELGIUM	2004	from_q._to_1	3.075386	.2077648	0	0	0	0	0	0	1	1	1	.4057168	1.44062	118937.14	21818	
3	BELGIUM	2004	from_q._to_2	3.30991	.1974787	0	0	0	0	0	0	1	1	1	.3981128	1.519839	64515.531	12245	
4	BELGIUM	2004	from_q._to_3	3.422619	.1929165	0	0	0	0	0	0	1	1	1	.3946024	1.556476	70801.906	13736	
5	BELGIUM	2004	from_q._to_4	3.930755	.1748607	0	0	0	0	0	0	1	1	1	.3798592	1.711945	74877.479	16722	
6	BELGIUM	2004	from_q._to_5	3.17687	.2031739	0	0	0	0	0	0	1	1	1	.4023745	1.475422	24242.699	14794	
7	BELGIUM	2005	from_q._to_.	3.278951	.198773	0	0	0	0	0	0	1	1	1	.3991003	1.50962	42444.776	8486	
8	BELGIUM	2005	from_q._to_1	3.728925	.1815854	0	0	0	0	0	0	1	1	1	.3855109	1.651946	118146.68	22887	
9	BELGIUM	2005	from_q._to_2	4.09693	.1697062	0	0	0	0	0	0	1	1	1	.375389	1.75981	64413.268	12873	
10	BELGIUM	2005	from_q._to_3	4.145613	.1682561	0	0	0	0	0	0	1	1	1	.3741066	1.773588	70765.081	14362	
11	BELGIUM	2005	from_q._to_4	4.756645	.152037	0	0	0	0	0	0	1	1	1	.359067	1.938207	76039.598	17491	
12	BELGIUM	2005	from_q._to_5	3.417174	.1931317	0	0	0	0	0	0	1	1	1	.3947683	1.554726	24720.6	15367	
13	BELGIUM	2006	from_q._to_.	3.992322	.1729129	0	0	0	0	0	0	1	1	1	.3781936	1.729833	41618.442	8733	
14	BELGIUM	2006	from_q._to_1	4.209544	.166391	0	0	0	0	0	0	1	1	1	.372439	1.79152	119194.55	24034	14.36
15	BELGIUM	2006	from_q._to_2	4.691965	.1535982	0	0	0	0	0	0	1	1	1	.3605766	1.921449	64158.348	13375	11.0
16	BELGIUM	2006	from_q._to_3	4.866984	.1494483	0	0	0	0	0	0	1	1	1	.3565416	1.966465	71959.662	15190	11.95
17	BELGIUM	2006	from_q._to_4	5.378518	.1385486	0	0	0	0	0	0	1	1	1	.345485	2.092491	74874.478	17009	14.56
18	BELGIUM	2006	from_q._to_5	3.83226	.1780753	0	0	0	0	0	0	1	1	1	.3825872	1.682932	27675.523	17281	30.12
19	BELGIUM	2007	from_q._to_.	4.390859	.1613295	0	0	0	0	0	0	1	1	1	.3678614	1.841429	32941.377	6843	
20	BELGIUM	2007	from_q._to_1	4.666029	.1542336	0	0	0	0	0	0	1	1	1	.3611888	1.914688	56035.396	11103	35.4
21	BELGIUM	2007	from_q._to_2	5.037646	.1456196	0	0	0	0	0	0	1	1	1	.352772	2.009389	18255.397	3710	29.60
22	BELGIUM	2007	from_q._to_3	5.164937	.1428935	0	0	0	0	0	0	1	1	1	.350021	2.040818	14946.406	3079	28.92
23	BELGIUM	2007	from_q._to_4	6.092665	.1258059	0	0	0	0	0	0	1	1	1	.3317013	2.256693	10901.452	2342	37.34
24	BELGIUM	2007	from_q._to_5	5.017079	.1460702	0	0	0	0	0	0	1	1	1	.3532881	2.004265	2561.2023	1585	36.81
25	BELGIUM	2007	from_q1_to_.	4.249624	.1652437	0	0	0	0	0	0	1	1	1	.3715242	1.802671	7532.3939	1500	
26	BELGIUM	2007	from_q1_to_1	4.696371	.1534908	0	0	0	0	0	0	1	1	1	.3604769	1.922595	53198.477	10607	10.66
27	BELGIUM	2007	from_q1_to_2	4.959532	.1473465	0	0	0	0	0	0	1	1	1	.3545048	1.989857	16056.817	3298	9.7
28	BELGIUM	2007	from_q1_to_3	4.915958	.1483284	0	0	0	0	0	0	1	1	1	.3555646	1.978878	6119.302	1276	9.675
29	BELGIUM	2007	from_q1_to_4	5.935042	.1284073	0	0	0	0	0	0	1	1	1	.334991	2.221495	1743.6878	374	15.57
30	BELGIUM	2007	from_q1_to_5	5.85232	.1298173	.	0	0	0	0	0	1	1	.	.338529	2.202798	118.86304	70	27.53
31	BELGIUM	2007	from_q2_to_.	5.568954	.1348978	0	0	0	0	0	0	1	1	1	.3422732	2.137511	1291.2975	260	
32	BELGIUM	2007	from_q2_to_1	4.754596	.1520859	0	0	0	0	0	0	1	1	1	.359181	1.937678	11336.67	2336	11.75

# Regression

- Estimations of production functions (Cobb-Douglas, Translog)
- Macro sector and sector levels
- Exel- and .txt versions available
- Estimation method: Instrumental variable approach with lags and interaction terms (Woolridge 2009)
- Trade module: export deciles, export premiums

# Regressions – CD-production function

	A	B	C	D	E	F	G	H	I	J
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
VARIABLES		Nace rev.2 mac-sector: 1	Nace rev.2 mac-sector: 2	Nace rev.2 mac-sector: 3	Nace rev.2 mac-sector: 4	Nace rev.2 mac-sector: 5	Nace rev.2 mac-sector: 6	Nace rev.2 mac-sector: 7	Nace rev.2 mac-sector: 8	Nace rev.2 mac-sector: 9
lnl		0.366*** (0.00600)	0.482*** (0.00545)	0.753*** (0.00566)	0.769*** (0.0111)	0.285*** (0.0119)	0.676*** (0.00898)	0.110*** (0.0141)	0.765*** (0.00522)	0.710*** (0.00909)
lnm		0.661*** (0.0135)	0.521*** (0.00887)	0.451*** (0.00658)	0.255*** (0.00791)	0.932*** (0.0299)	0.359*** (0.0127)	1.235*** (0.0389)	0.331*** (0.00540)	0.403*** (0.0116)
lnrk		0.0141*** (0.00330)	0.0335*** (0.00184)	0.0144*** (0.00191)	0.0772*** (0.00494)	0.0174*** (0.00547)	0.0867*** (0.00423)	-0.188*** (0.0161)	0.0504*** (0.00225)	0.0813*** (0.00497)
ln_K_l1		0.0753*** (0.0159)	0.0244** (0.00990)	-0.0441*** (0.00834)	0.00542 (0.0195)	0.0715*** (0.0202)	0.0984*** (0.00851)	0.0260 (0.0418)	-0.0164*** (0.00597)	-0.0676*** (0.0120)
ln_M_l1		-0.251*** (0.0258)	-0.144*** (0.0136)	-0.115*** (0.00667)	-0.124*** (0.0103)	0.169*** (0.0425)	-0.154*** (0.00895)	-0.319*** (0.0254)	-0.168*** (0.00559)	-0.113*** (0.00877)
k2_l1		0.00232 (0.00354)	0.00409** (0.00204)	0.00615*** (0.00221)	0.00793* (0.00464)	0.0169*** (0.00369)	0.0179*** (0.00200)	-0.0658*** (0.00708)	0.0633*** (0.00248)	0.0538*** (0.00360)
m2_l1		0.0384*** (0.00453)	0.0332*** (0.00336)	-0.00681*** (0.00147)	0.0165*** (0.00192)	-0.0599*** (0.0125)	0.0593*** (0.00308)	-0.0102 (0.00703)	0.000418 (0.00135)	0.0391*** (0.00238)
k3_l1		0.00139*** (0.000484)	0.00125*** (0.000349)	0.00151*** (0.000215)	0.000689 (0.000450)	0.000863*** (0.000275)	-0.00196*** (0.000274)	0.00829*** (0.000553)	-0.00629*** (0.000327)	-0.00325*** (0.000375)
m3_l1		-0.000833 (0.000543)	-0.00147*** (0.000270)	0.00441*** (0.000150)	0.00427*** (0.000274)	0.00470*** (0.00112)	-0.00300*** (0.000356)	-0.00648*** (0.000842)	0.00662*** (0.000202)	0.00121*** (0.000291)
km_l1		-0.0188*** (0.00590)	-0.0172*** (0.00384)	0.0210*** (0.00264)	0.00552 (0.00459)	-0.0358*** (0.00689)	-0.0361*** (0.00434)	0.113*** (0.00902)	0.0244*** (0.00252)	-0.0148*** (0.00365)
k2m_l1		-0.00100 (0.00135)	-0.00119** (0.000522)	-0.00219*** (0.000329)	0.00110 (0.000820)	-0.00241** (0.000955)	0.00413*** (0.000556)	-0.0161*** (0.00117)	0.00172*** (0.000454)	0.000930* (0.000538)
km2_l1		-0.000394 (0.00144)	0.000768* (0.000439)	-0.00472*** (0.000288)	-0.00734*** (0.000590)	0.00218* (0.00119)	-0.00331*** (0.000635)	0.00942*** (0.00117)	-0.0116*** (0.000392)	-0.00632*** (0.000510)
Observations		159,951	283,153	412,690	116,338	112,355	78,140	157,553	212,394	103,758
R-squared		0.946	0.908	0.696	0.810	0.910	0.796	0.501	0.766	0.800
Hansen J statistic		0	0	0	0	0	0	0	0	0
Robust standard errors in parentheses										
*** p<0.01, ** p<0.05, * p<0.1										

# Trade module

- Full and 20E
- Similar structure: descriptives, joint distributions, regression and transition matrices
- Main differences:
  - contains export-related variables
  - For most countries: only manufacturing business

# Trade module – descriptives

- Only *unconditional\*.dta* files
- Selection of trade-related variables:
  - Export dummies e.g. *Dummy\_exp*
  - Firm export ratios, e.g. *exp\_ratio*, *exp\_vad*, *imp\_intensity*
  - Export shares: *exp\_share\_sector/country*, *tot\_exp\_value\_sector/\_country*,
  - Ranking *t5/t10\_exp\_sec*, *t5/t10\_exp\_country*

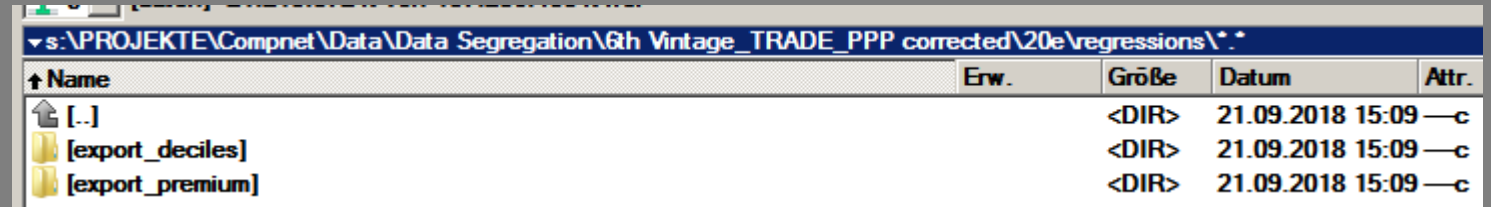
# Trade module – joint distributions

- Reduced number of joint distributions
- Focus on export-related conditional variables
- and productivity variables

# Trade module – regressions

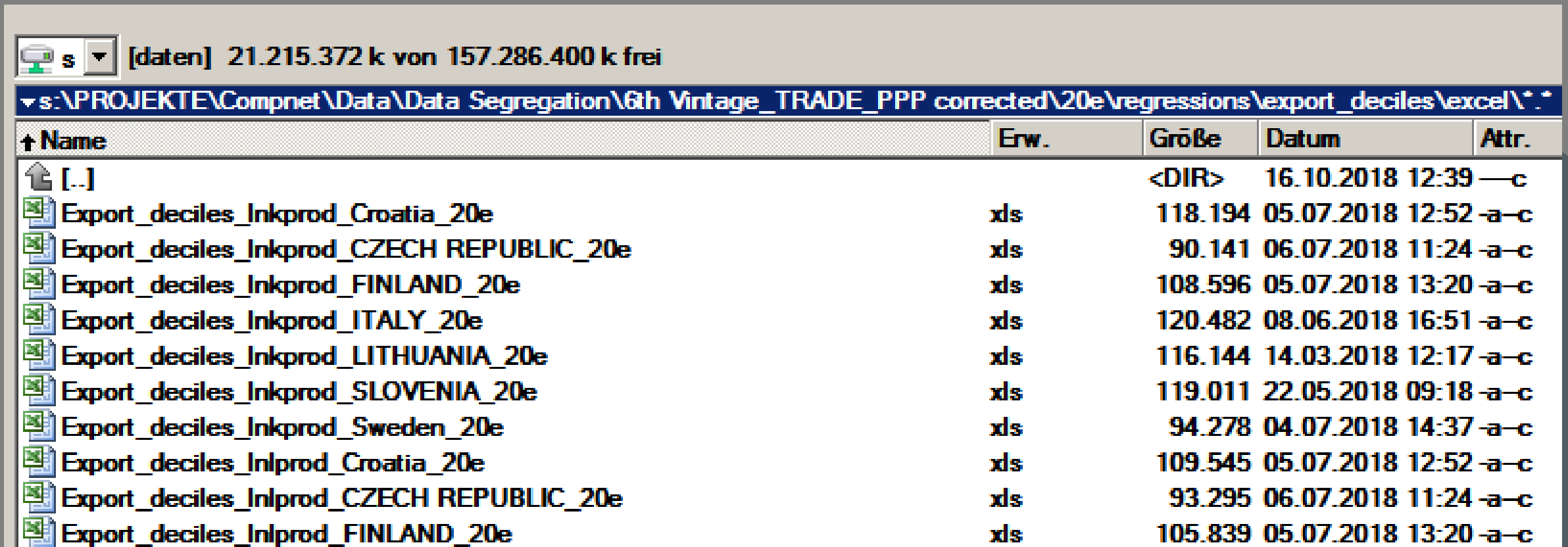
- *export\_deciles: determinants of probability to export (weighted Probit regression)*
- *export\_premium: determinants of several productivity measures including export dummy (weighted pooled linear regressions)*

# Trade module - regressions



Path: s:\PROJEKTE\Compnet\Data\Data Segregation\6th Vintage\_TRADE\_PPP corrected\20e\regressions\\*

Name	Erw.	Größe	Datum	Attr.
[..]		<DIR>	21.09.2018 15:09	—c
[export_deciles]		<DIR>	21.09.2018 15:09	—c
[export_premium]		<DIR>	21.09.2018 15:09	—c



Drive: s [daten] 21.215.372 k von 157.286.400 k frei

Path: s:\PROJEKTE\Compnet\Data\Data Segregation\6th Vintage\_TRADE\_PPP corrected\20e\regressions\export\_deciles\excel\\*

Name	Erw.	Größe	Datum	Attr.
[..]		<DIR>	16.10.2018 12:39	—c
Export_deciles_Inkprod_Croatia_20e	xls	118.194	05.07.2018 12:52	-a-c
Export_deciles_Inkprod_CZECH REPUBLIC_20e	xls	90.141	06.07.2018 11:24	-a-c
Export_deciles_Inkprod_FINLAND_20e	xls	108.596	05.07.2018 13:20	-a-c
Export_deciles_Inkprod_ITALY_20e	xls	120.482	08.06.2018 16:51	-a-c
Export_deciles_Inkprod_LITHUANIA_20e	xls	116.144	14.03.2018 12:17	-a-c
Export_deciles_Inkprod_SLOVENIA_20e	xls	119.011	22.05.2018 09:18	-a-c
Export_deciles_Inkprod_Sweden_20e	xls	94.278	04.07.2018 14:37	-a-c
Export_deciles_Inlprod_Croatia_20e	xls	109.545	05.07.2018 12:52	-a-c
Export_deciles_Inlprod_CZECH REPUBLIC_20e	xls	93.295	06.07.2018 11:24	-a-c
Export_deciles_Inlprod_FINLAND_20e	xls	105.839	05.07.2018 13:20	-a-c



# Trade module – regressions – export\_deciles

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1																	
2		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
3	VARIABLES	Dummy_exp	Dummy_exp	Dummy_exp	Dummy_exp	Dummy_exp	Dummy_exp	Dummy_exp	Dummy_exp	Dummy_exp	Dummy_exp	Dummy_exp	Dummy_exp	Dummy_exp	Dummy_exp	Dummy_exp	Dummy_exp
4																	
5	10.ct_Inlprod	-2.264***	-0.918***	0.812**	-2.255***	-0.703	-0.695**	-1.250***	-1.280***	-1.176***	-3.351***	-1.618***	0.142	-0.659***	-0.514***	-0.996***	-1.089***
6		(0.147)	(0.248)	(0.365)	(0.580)	(0.755)	(0.316)	(0.253)	(0.419)	(0.250)	(0.519)	(0.178)	(0.141)	(0.242)	(0.158)	(0.217)	(0.194)
7	20.ct_Inlprod	-1.939***	-0.614**	1.398***	-1.703***	-0.146	-0.471	-1.202***	-0.984***	-0.487**	-2.148***	-1.035***	-0.0796	-0.563**	-0.322**	-0.568***	-1.008***
8		(0.141)	(0.253)	(0.364)	(0.582)	(0.757)	(0.312)	(0.238)	(0.253)	(0.224)	(0.502)	(0.163)	(0.116)	(0.240)	(0.144)	(0.185)	(0.179)
9	30.ct_Inlprod	-1.285***	-0.982***	1.695***	-0.879	0.0179	-0.149	-0.612***	-0.844***	-0.795***	-1.705***	-0.816***	-0.0630	-0.637***	-0.291**	-0.496***	-0.780***
10		(0.140)	(0.233)	(0.369)	(0.597)	(0.770)	(0.313)	(0.231)	(0.233)	(0.188)	(0.459)	(0.145)	(0.114)	(0.215)	(0.140)	(0.164)	(0.177)
11	40.ct_Inlprod	-0.982***	-0.512**	1.768***	-1.085*	0.00861	-0.331	-0.676***	-0.527**	-0.760***	-1.867***	-0.511***	-0.193*	-0.372*	-0.0759	-0.254*	-0.390**
12		(0.141)	(0.234)	(0.377)	(0.611)	(0.794)	(0.314)	(0.220)	(0.240)	(0.171)	(0.443)	(0.138)	(0.115)	(0.209)	(0.140)	(0.154)	(0.179)
13	50.ct_Inlprod	-0.692***	-0.614***	2.129***	-0.951	0.516	-0.284	-0.527**	-0.556***	-0.548***	-1.551***	-0.635***	0.0230	-0.157	0.0339	-0.271*	-0.0169
14		(0.142)	(0.212)	(0.386)	(0.629)	(0.825)	(0.319)	(0.214)	(0.210)	(0.164)	(0.444)	(0.134)	(0.120)	(0.213)	(0.140)	(0.162)	(0.183)
15	60.ct_Inlprod	-0.395***	-0.613***	2.032***	-0.960	-0.0749	-0.219	-0.418*	-0.428**	-0.472***	-1.719***	-0.627***	-0.148	-0.0296	0.0998	0.0213	-0.0142
16		(0.144)	(0.222)	(0.400)	(0.672)	(0.842)	(0.326)	(0.219)	(0.202)	(0.166)	(0.434)	(0.134)	(0.121)	(0.223)	(0.141)	(0.162)	(0.184)
17	70.ct_Inlprod	-0.324**	-0.485**	2.009***	-0.908	0.254	-0.512**	-0.388*	-0.378**	-1.757***	-0.530***	0.0927	-0.0329	-0.0329	0.209	-0.0337	-0.0700
18		(0.145)	(0.225)	(0.422)	(0.856)	(0.346)	(0.220)	(0.201)	(0.164)	(0.448)	(0.134)	(0.126)	(0.231)	(0.143)	(0.154)	(0.185)	(0.185)
19	80.ct_Inlprod	-0.0106	-0.159	2.272***	-0.0574	-0.197	-0.0778	-0.0756	-0.147	-0.577	-0.369***	0.218*	-0.125	0.189	0.146	-0.0945	
20		(0.151)	(0.221)	(0.470)	(0.874)	(0.356)	(0.224)	(0.211)	(0.166)	(0.459)	(0.134)	(0.123)	(0.225)	(0.147)	(0.159)	(0.192)	
21	90.ct_Inlprod	0.0972	0.000984	1.032**			0.120	0.258	-0.211	0.229	-0.260	-0.175	-0.0217	-0.0117	0.225	0.126	0.225
22		(0.160)	(0.218)	(0.504)			(0.363)	(0.251)	(0.211)	(0.166)	(0.610)	(0.143)	(0.124)	(0.227)	(0.154)	(0.160)	(0.197)
23	100o.ct_Inlprod	-	-	-			-	-	-	-	-	-	-	-	-	-	-
24																	
25	3.szclass	-0.928***	-1.700***	-0.732***	-1.211***	-0.398*	-1.165***	-1.031***	-1.910***	-0.706***	-1.909***	-1.221***	-1.222***	-0.821***	-1.307***	-0.821***	-0.840***
26		(0.0708)	(0.260)	(0.122)	(0.215)	(0.223)	(0.152)	(0.163)	(0.184)	(0.130)	(0.351)	(0.0802)	(0.0850)	(0.104)	(0.0733)	(0.0980)	(0.0718)
27	4.szclass	-0.237***	-1.171***	-0.314***	-0.417*	-0.261	-0.109	-0.283*	-0.626***	0.0588	-0.437	-0.475***	-0.269***	0.238**	-0.446***	-0.0863	-0.203***
28		(0.0668)	(0.244)	(0.119)	(0.215)	(0.226)	(0.152)	(0.157)	(0.184)	(0.132)	(0.344)	(0.0769)	(0.0806)	(0.102)	(0.0710)	(0.0979)	(0.0671)
29	5o.szclass	-	-	-			-	-	-	-	-	-	-	-	-	-	-
30																	
31	2005.year	-0.367***	0.460**	-0.0730	0.555***	0.508**	0.0985	0.463**	-0.00763	0.184	0.761**	0.612***	0.0145	0.307*	0.226**	0.801***	0.343***
32		(0.102)	(0.216)	(0.161)	(0.202)	(0.249)	(0.173)	(0.196)	(0.206)	(0.176)	(0.325)	(0.115)	(0.125)	(0.184)	(0.0934)	(0.161)	(0.125)
33	2006.year	-0.319***	0.668***	0.00900	0.173	0.814***	0.211	0.493**	0.325	0.262	0.746**	0.618***	0.156	0.243	0.174*	0.761***	0.449***
34		(0.102)	(0.221)	(0.165)	(0.207)	(0.256)	(0.172)	(0.197)	(0.204)	(0.172)	(0.375)	(0.115)	(0.127)	(0.179)	(0.0922)	(0.157)	(0.127)
35	2007.year	-0.203**	0.675***	0.0194	0.381*	0.676***	0.297*	0.469**	0.112	0.479***	1.064***	0.363***	0.187	0.402**	0.243***	0.745***	0.498***
36		(0.102)	(0.224)	(0.161)	(0.199)	(0.251)	(0.174)	(0.192)	(0.200)	(0.176)	(0.376)	(0.109)	(0.128)	(0.183)	(0.0919)	(0.153)	(0.126)
37	2008.year	-0.178*	0.655***	-0.130	0.275	0.541**	0.154	0.254	0.269	0.256	1.709***	0.437***	0.144	0.483***	0.110	0.706***	0.279**
38		(0.0954)	(0.218)	(0.163)	(0.191)	(0.247)	(0.167)	(0.183)	(0.188)	(0.171)	(0.383)	(0.0993)	(0.123)	(0.179)	(0.0842)	(0.148)	(0.119)
39	2009.year	-0.247***	0.644***	0.0693	0.474**	0.424	0.266	0.372**	0.150	0.0986	0.927***	0.393***	0.275**	0.283	0.312***	0.684***	0.421***
40		(0.0952)	(0.220)	(0.166)	(0.195)	(0.261)	(0.168)	(0.185)	(0.185)	(0.171)	(0.315)	(0.100)	(0.124)	(0.175)	(0.0863)	(0.145)	(0.123)
41	2010.year	-0.291***	0.354	0.0196	0.397**	0.452*	0.162	0.425**	0.0919	0.135	0.776**	0.358***	0.186	0.0709	0.159*	0.487***	0.267**
42		(0.0965)	(0.220)	(0.162)	(0.194)	(0.251)	(0.169)	(0.180)	(0.186)	(0.170)	(0.377)	(0.101)	(0.126)	(0.176)	(0.0859)	(0.147)	(0.119)

# Trade module – regressions – export premiums

	(1)	(2)	(3)
<b>VARIABLES</b>	<b>Export_premium1</b>	<b>Export_premium2</b>	<b>Export_premium3</b>
1.Dummy_exp	0.0866*** (0.00716)		0.00314 (0.0282)
11.sector	0.402*** (0.0212)	-0.0483* (0.0139)	0.588*** (0.0481)
33.sector	0.0313*** (0.0119)	-0.0174 (0.0112)	0.0654*** (0.0183)
1.crisis	0.0729*** (0.0123)	-0.136*** (0.00563)	0.0351** (0.0140)
2.crisis	0.0828*** (0.00784)	-0.0232*** (0.00399)	0.0389*** (0.0102)
3.szclass	3.713*** (0.00847)	0.00893 (0.00687)	-0.180*** (0.0264)
4.szclass	3.757*** (0.00918)	-0.00529 (0.00687)	-0.138*** (0.0271)
5.szclass	3.885*** (0.0118)		
0b.crisis#0b.Dummy_exp	0 (0)		0 (0)
0b.crisis#1o.Dummy_exp	0 (0)		0 (0)
1o.crisis#0b.Dummy_exp	0 (0)		0 (0)
1.crisis#1.Dummy_exp	-0.0350** (0.0163)		0.0648 (0.0563)
2o.crisis#0b.Dummy_exp	0 (0)		0 (0)
2.crisis#1.Dummy_exp	0.0405*** (0.0106)		0.00132 (0.0400)
1.Dummy_exp_3y		0.0100** (0.00418)	
1.Dummy_exp_new		0.00939 (0.0128)	
1.Dummy_stop_exp		0.0162 (0.0130)	
1.Dummy_exp_switch		-0.00379 (0.0174)	
Constant		0.0377*** (0.00889)	3.884*** (0.0276)
Observations	36,053	30,529	6,317
R-squared	0.987	0.023	0.126
Robust standard errors in parentheses			
*** p<0.01, ** p<0.05, * p<0.1			

- File :  
Export\_premium\_Inlprod\_FINLAND\_2oe
- Export premium 1: log(labour productivity) all observations
- Export premium 2: Change in log(labour productivity) all observations
- Export premium 3: log(labour productivity) of firms that have not exported for the past three years (but might have in the current period)
- crisis: 0 before 2008, 1: 2008-2009, 2: after 2009

# How to get access to the data set

- Please fill in the online request form <https://www.comp-net.org/data/>
- Provide the additional information, e.g. attach a CV
- Decision on short notice
- A word of warning: Some files are large!

Thank you for your attention!

The background features a solid grey color. In the bottom right corner, there are two overlapping geometric shapes: a larger, dark blue triangle pointing upwards and to the right, and a smaller, teal triangle pointing upwards and to the right, partially overlapping the bottom-left corner of the dark blue triangle.

# References

Dobbelaere, S., & Mairesse, J. (2013). "Panel data estimates of the production function and product labour market imperfections". *Journal of Applied Econometrics*. John Wiley & Sons, Ltd., vol 28(1), 1-46.(2013)

Wooldridge, J. (2009): On estimating firm-level production functions using proxy variables to control for unobservable, *Economic Letters* , 104(3):112-114.

# Data sources and coverage

- Original micro data based on financial enterprise statistics or business registers
- Data provided by national central banks or statistical offices of about 18 European countries
- Data privacy protection: Stata code run by the data providers to produce final output + strict confidentiality controls  $\Rightarrow$  identification of single firms in the CompNet database impossible

# Data sources and coverage II

- Mostly non-financial corporations
- Time span: majority 2003-2015
- about 40% of the relevant population in employment or firm numbers, significant variation between countries and over time

# Representativeness

- Reweighting procedure to ensure that number of firms in the sample of certain size class has equal weight than in the total population (EUROSTAT)
- Descriptive statistics in database are not identical with sample statistics (STATA sum command with option "aweight")



# Elimination of cross-country price differences

- Deflator value added (based on Eurostat), base year = 2005
- Country specific price differences beyond exchange rates and inflation: Purchasing Power Parity gross value added 2005