



NO COUNTRY FOR YOUNG FIRMS? START-UP DYNAMICS AND NATIONAL POLICIES

Nick Johnstone

OECD - Structural Policy Division
Directorate for Science, Technology and Innovation

Based on work by

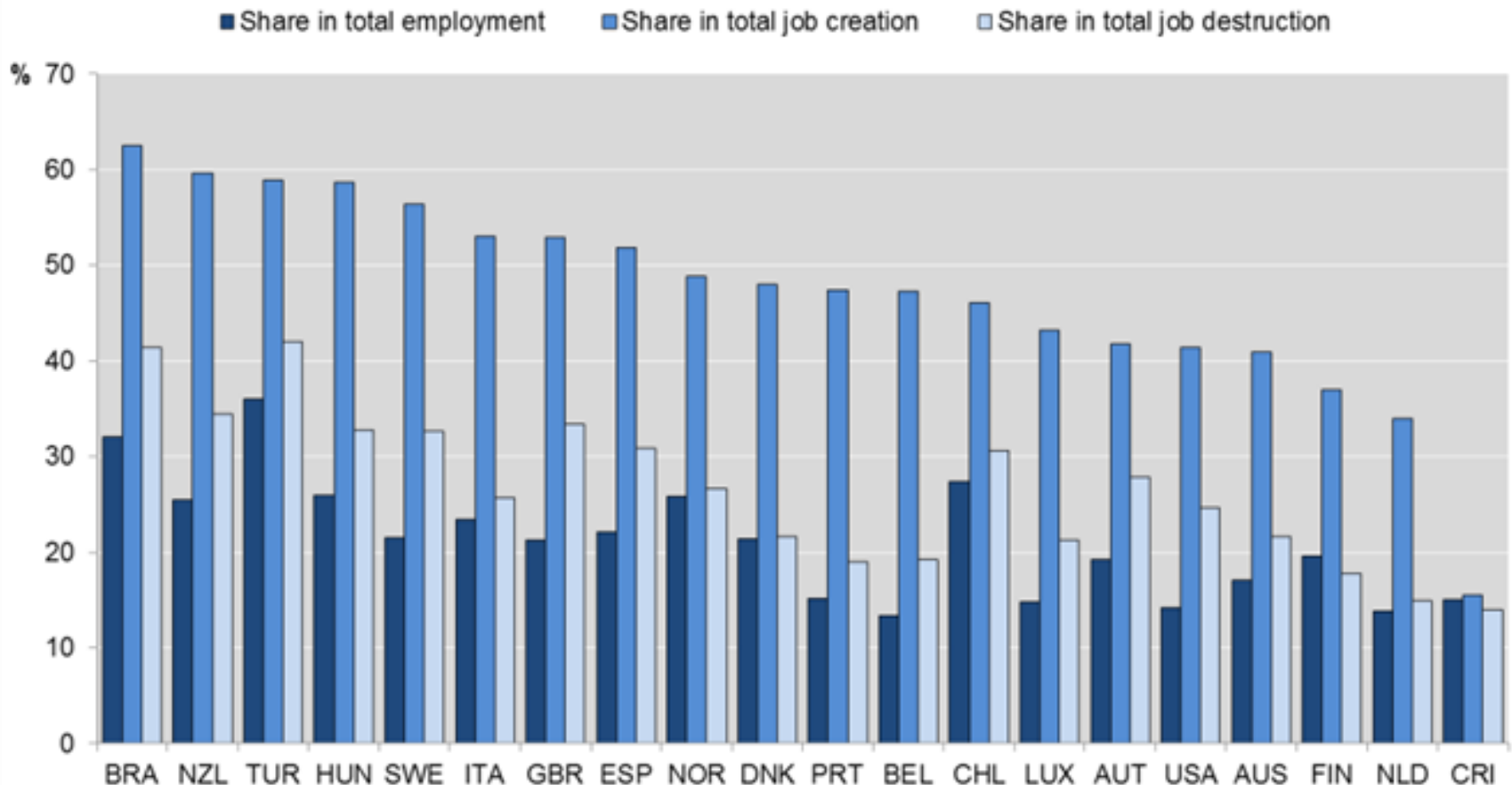
Flavio Calvino, Chiara Criscuolo, and Carlo Menon

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Young firms are the engine of job creation

Share in total employment; total job creation; total job destruction; accounted for by firms aged 5 or less



Note: Manufacturing, construction, and non-financial business services. Figures for Chile are preliminary. Owing to methodological differences, figures may deviate from officially published national statistics.

Source: OECD DynEmp v.2 database.



No country for young firms?

- The policy settings may disproportionately benefit incumbents
 - the prevailing policy environment may have been implicitly designed with the needs and conditions of incumbents in mind
- New or prospective entrants may be more negatively affected by policies which hinder growth or impose an extra-cost on risk
- This is policy relevant in the light of the key contribution of start-ups to job creation across OECD member countries



Research questions

- How bankruptcy regulation, contract enforcement and access to finance affect young (vs. incumbent) firms?
 - ...especially in risky and finance-dependent sectors (high growth potential)
 - ...along the 5 different elements of the “net growth decomposition”:
 - Net job creation=(number of units) * (initial average size) * (survival share) * (employment growth)



Results preview

- Start-ups in *volatile* sectors and in sectors that have higher *dispersion* are more exposed to national framework conditions
- Start-ups appear systematically more exposed than incumbents
 - along all the 5 elements of the decomposition but survival share
 - Survival share of *entrants* does not seem particularly related to policies, but survival of *incumbents* does (especially in financially dependent industries)
- Timely bankruptcy procedures, strong contract enforcement and access to finance are all relevant

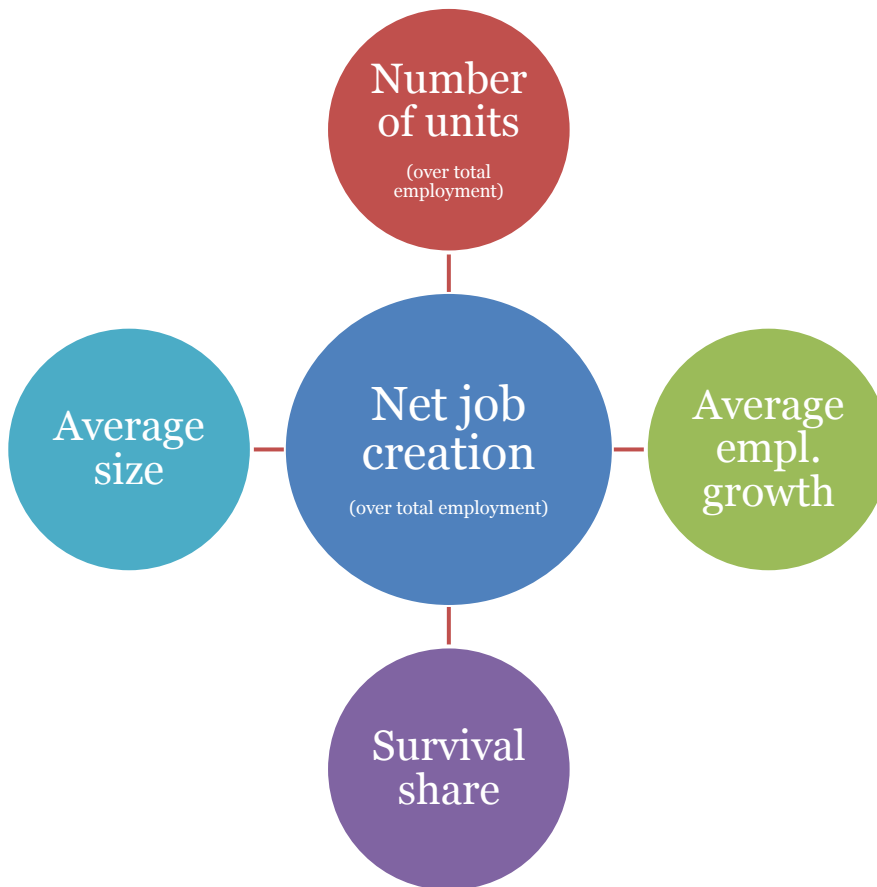


DECONSTRUCTING ENTRY



Deconstructing job creation

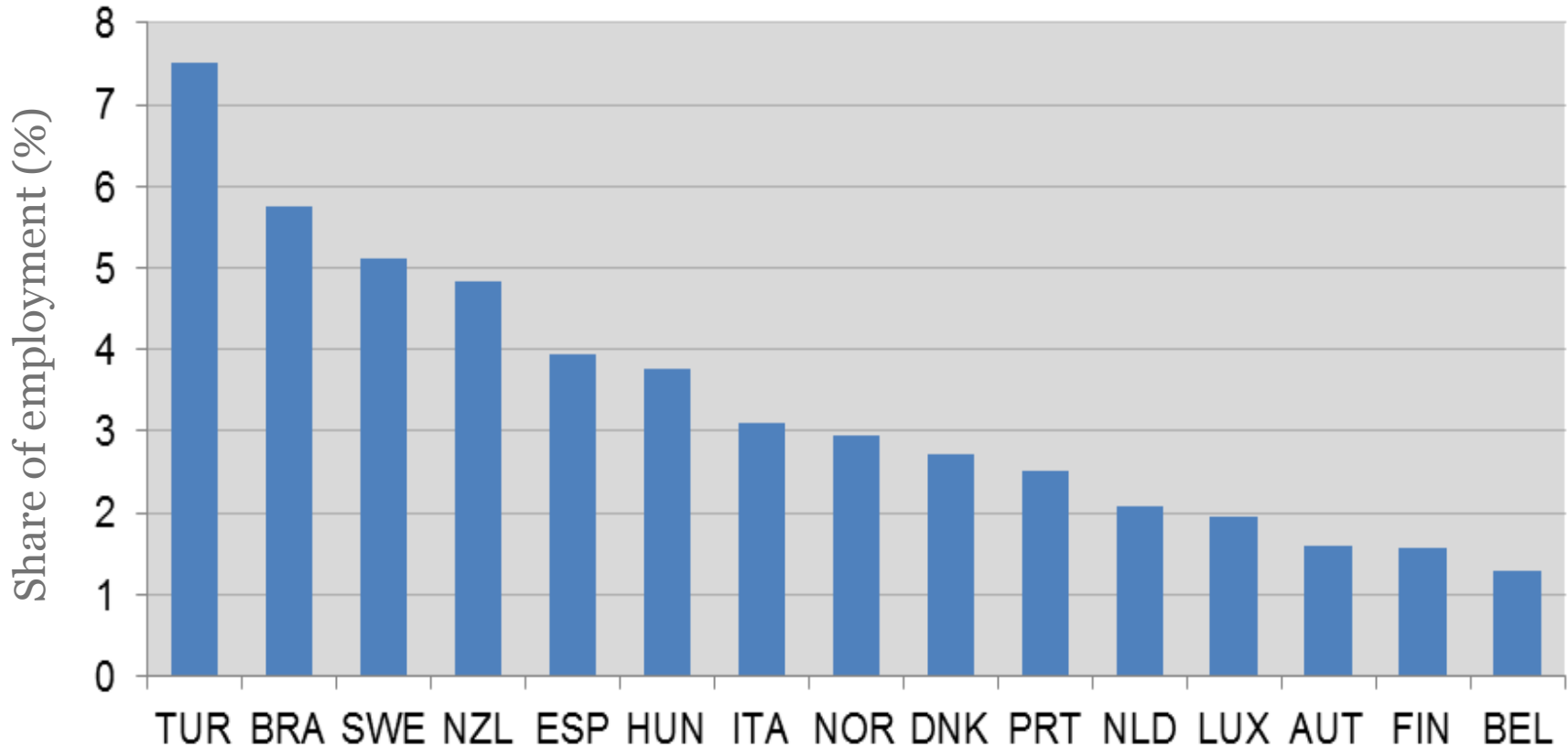
- The net job contribution of different firms can be decomposed into four components
- Cross-country differences across countries (OECD, 2014, 2015)



Significant cross-country heterogeneity in each element as well as within-country differences between incumbents and entrants



Net job creation by surviving entrants relative to total employment

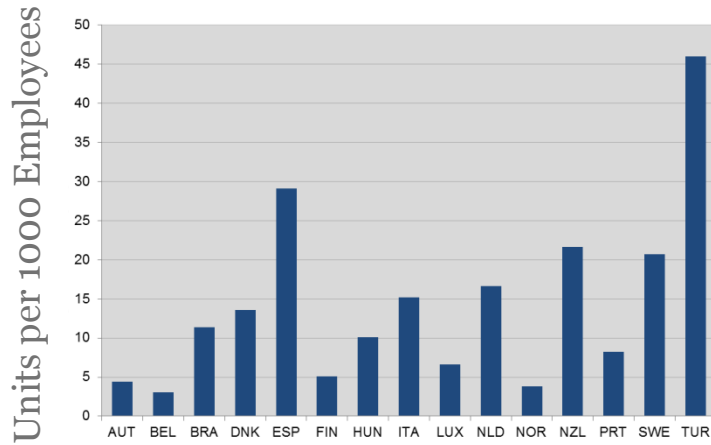


Source: Calvino, Criscuolo and Menon (2015)

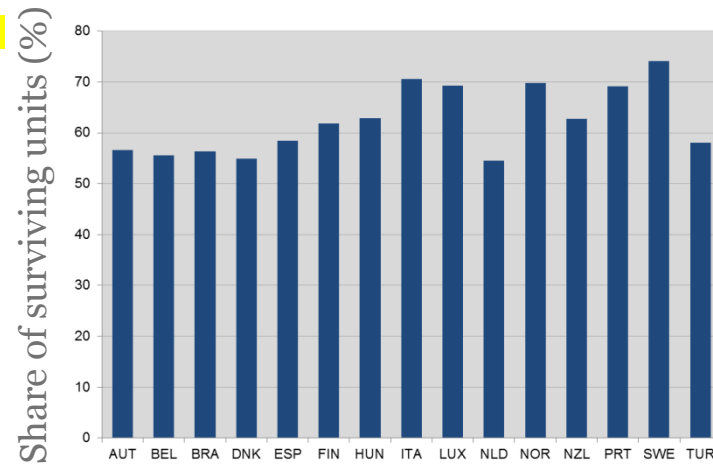


Net job creation by surviving entrants is a combination of four elements

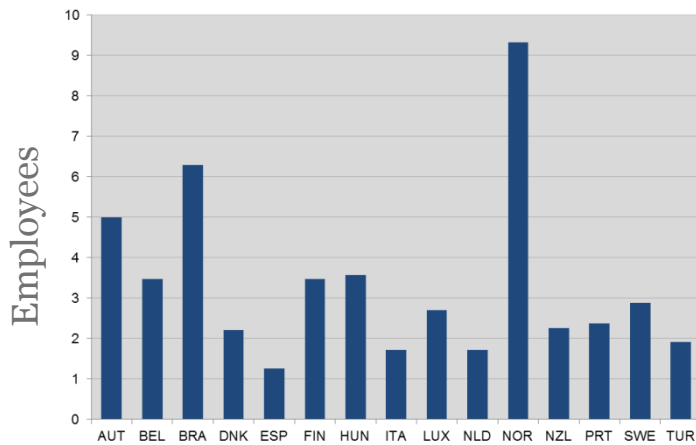
Start-up ratio



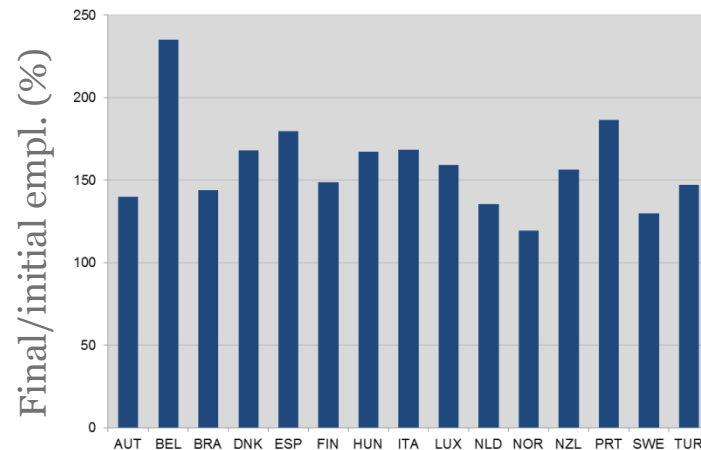
Survival rate (after 3 years)



Average size at entry



Average post-entry growth



Source: Calvino, Criscuolo and Menon (2015)



DATA & THE DYNEMP PROJECT



DynEmp: the project

- **Aim:** to provide cross-country evidence on employment dynamics from confidential national business registers
- **How:** Network of International experts and common Stata routine
- **Outcome:** Micro-aggregated harmonized database for 20+ countries
 - Phase I : *DynEmp Express* database, 18 countries
 - Phase II: *DynEmp v.2* database, ongoing
 - Phase III: **DynEmp v.3**, end of 2016



The DynEmp v.2 database

- 20+ countries successfully included in the database, so far
- General time span covered: 2001-2011
- Improving on previous analyses, the DynEmp v.2 database
 - enables disentangling the role of policies for *entrants vs. incumbents*
 - at detailed sector and country level
 - following cohorts of firms



Industry variables: definitions

The methodology requires the definition of “policy exposure” proxies:

- Volatility (DynEmp v.2)
 - average *within-firm* variation of employment growth rates over time
- Growth dispersion (DynEmp v.2)
 - measure of *between-firm* (cross-sectional) variation of employment growth rates at a given time
- Financial input intensity (I/O tables)
 - proxies the extent to which an industry relies on external finance



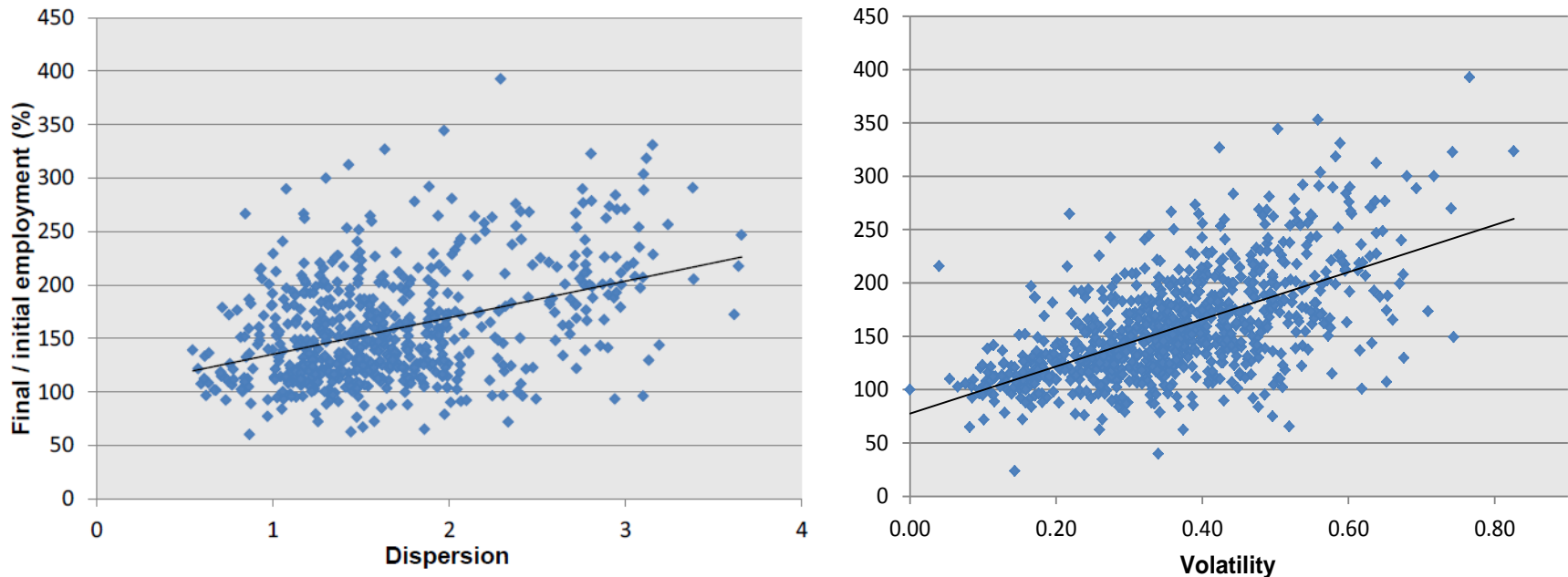
Industry variables: rationale

- Volatility: volatile sectors have higher growth potential but are more risky
 - many policies are either targeted at lowering risk or are implicitly imposing an extra cost to risk
 - likely to impact more new firms
- Growth dispersion: correlates positively with the rate of job reallocation
 - policies and framework conditions may hamper an efficient reallocation of resources



Dispersion and volatility are correlated with employment growth of start-ups

Aggregate start-up post-entry growth in the first 3 years of life vs. dispersion (left) and volatility (right).



Note: Data aggregated at the country-2 digit sector –year level. Dispersion is defined as the difference in average employment growth rate between the top and bottom 10% of firms, respectively, at a given point in time. Volatility is defined as the average standard deviation of the employment growth rate at firm level over time.

Source: OECD DynEmp v.2 database. Data for some countries are still preliminary



Policy variables (country-specific)

- **Access to finance**
 - Seed or early stage policies (equity-based vs. tax-based, OECD)
 - Venture Capital availability (WEF)
 - Government controlled banks (WB)
 - Easiness to access bank loans (WEF)
 - Percentage of foreign banks (WB)
 - Independence of banking supervision (WB)
- **Bankruptcy regulation**
 - Resolving insolvency (time, WB)
- **Contract enforcement**
 - Enforcing contracts (time, WB)
 - Indicator of courts' specialization (OECD)



METHODOLOGY & RESULTS



Framework of analysis: intuition

- Some sectoral characteristics (volatility; growth dispersion and financial dependence)...
- ...and how long they have been in business (entrants vs incumbents)...
- ...make firms more/less exposed to certain national policies and institutional frameworks



Empirical strategy

- $Y_{cst} = \alpha + \beta * Pol_{ct} * Exp_{st} + \theta_t + \kappa_c + \gamma_s + \epsilon_{cst}$
- Y is : i) net job contribution, ii) average size, iii) number of units, iv) average employment growth, v) survival share
- Separate estimates for entrants and incumbents
- Country, sector and year dummies
- SUR, winsorization, additional controls for average employment growth and survival share



Results - industry variable: volatility

Policy / Var. dep.		Net job contribution	Average size	No. of units	Employment growth	Survival share
Resolving insolvency time	Incumbents	-0.0432**	0.0215	-0.0651***	-0.0116***	0.000907
	Entrants	-0.129***	-0.0118	-0.0955***	-0.0296***	0.00175
	Diff.	-0.086**	-0.033	-0.030	-0.018	0.001
Enforcing contracts time	Incumbents	-0.0136	-0.00107	-0.0126	-0.00561**	0.0013
	Entrants	-0.0820***	-0.0883***	0.015	-0.0177*	0.00565
	Diff.	-0.068**	-0.087***	0.028	-0.012	0.004
Specialized tribunals	Incumbents	0.00275	0.0105	-0.015	0.00295	-0.0018
	Entrants	0.0829***	0.0774***	0.0188	0.0218*	0.00319
	Diff.	0.080**	0.067**	0.034	0.019	0.005
Finance policy tax-based	Incumbents	0.0291	0.0310*	-0.0037	0.00405	-0.00318
	Entrants	0.0837***	0.0634**	-0.00717	0.0271**	0.00158
	Diff.	0.055	0.032	-0.003	0.023*	0.005
Finance policy equity-based	Incumbents	0.0243	-0.00919	0.0232	0.0222***	-0.00647*
	Entrants	0.0911**	-0.0146	0.0276	0.0689***	-0.00402
	Diff.	0.067	-0.005	0.004	0.047***	0.002
VC availability	Incumbents	0.0829***	-0.0545***	0.134***	0.0147***	-0.00362
	Entrants	0.193***	0.0292	0.137***	0.0355***	-0.00041
	Diff.	0.110***	0.084***	0.003	0.021*	0.003
Access to loans	Incumbents	0.0699***	-0.0466***	0.113***	0.0141***	-0.00354
	Entrants	0.161***	0.0287	0.103***	0.0324***	-0.0016
	Diff.	0.091***	0.075**	-0.010	0.018	0.002
% of gov. controlled banks	Incumbents	-0.0516***	0.0742***	-0.128***	-0.00784**	0.00116
	Entrants	-0.148***	0.0141	-0.154***	-0.0119	0.00112
	Diff.	-0.096***	-0.060**	-0.026	-0.004	0.000
Foreign banks	Incumbents	0.0344*	0.0221	0.0166	0.00101	0.00554*
	Entrants	0.0741**	0.0866***	-0.00654	0.0142	0.00539
	Diff.	0.040	0.065**	-0.023	0.013	0.000
Supervision indep. index	Incumbents	-0.00646	0.0306**	-0.0415**	0.00749***	0.00419
	Entrants	0.0149	0.0768***	-0.0763***	0.016	-0.00403
	Diff.	0.021	0.046*	-0.035	0.009	-0.008



Venture capital availability in most volatile sectors

Policy / Dep. var.		Net job contrib.	Average size	No. of units	Empl. growth	Survival share
VC availability	Incumbents	0.0829***	-0.0545***	0.134***	0.0147***	-0.00362
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	Diff.	0.110***	0.084***	0.003	0.021*	0.003

- In most volatile sectors, VC availability is positively related to net job contribution by surviving entrants
 - Especially via number of units and employment growth
 - Significant difference between entrants and incumbents



Results - industry variable: volatility

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Resolving insolvency in most volatile sectors

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	Entrants	-0.129***	-0.0118	-0.0955***	-0.0296***	0.00175
	Diff.	-0.086**	-0.033	-0.030	-0.018	0.001

- In most volatile sectors, longer bankruptcy procedures are negatively related to net job contribution by surviving entrants
 - Especially via number of units and post-entry employment growth
 - Significant difference between entrants and incumbents



Results (volatility) - synopsis

		Net Job Contribution		Average Size		Nr. Units		Employment Growth		Survival Share	
		Entrants	Incumbents	Entrants	Incumbents	Entrants	Incumbents	Entrants	Incumbents	Entrants	Incumbents
Bankruptcy legislation											
	resolving insolvency time	--	-			--	--	--	--		
Contract Enforcement											
	time	--		--				-			
	specialized tribunals	++		++				+			
Access to Finance											
	VC availability	++	+		--	++	++	++	+		
	Access to Loans	++	+		--	++	++	++	++		
Finance Policies											
	tax based	++		++	++			++			
	Equity based	++						++	++		-
Competition/Independence in Banking Sector											
	% gov. controlled banks	--	-		++	--	--		--		
	Share of foreign banks	+	+	++							+
	Supervision Ind. Index			++	+	--	-		+		



Summary of results (i)

- Start-ups in **volatile** sectors and in sectors that have higher **dispersion** are more exposed to national policies and framework conditions
 - Promoting policies that lower risk and tackle policy failures that impose extra-cost to risk
- **Start-ups** appear systematically more exposed to the policy environment than **incumbents** especially in more volatile, dispersed and financially dependent sectors



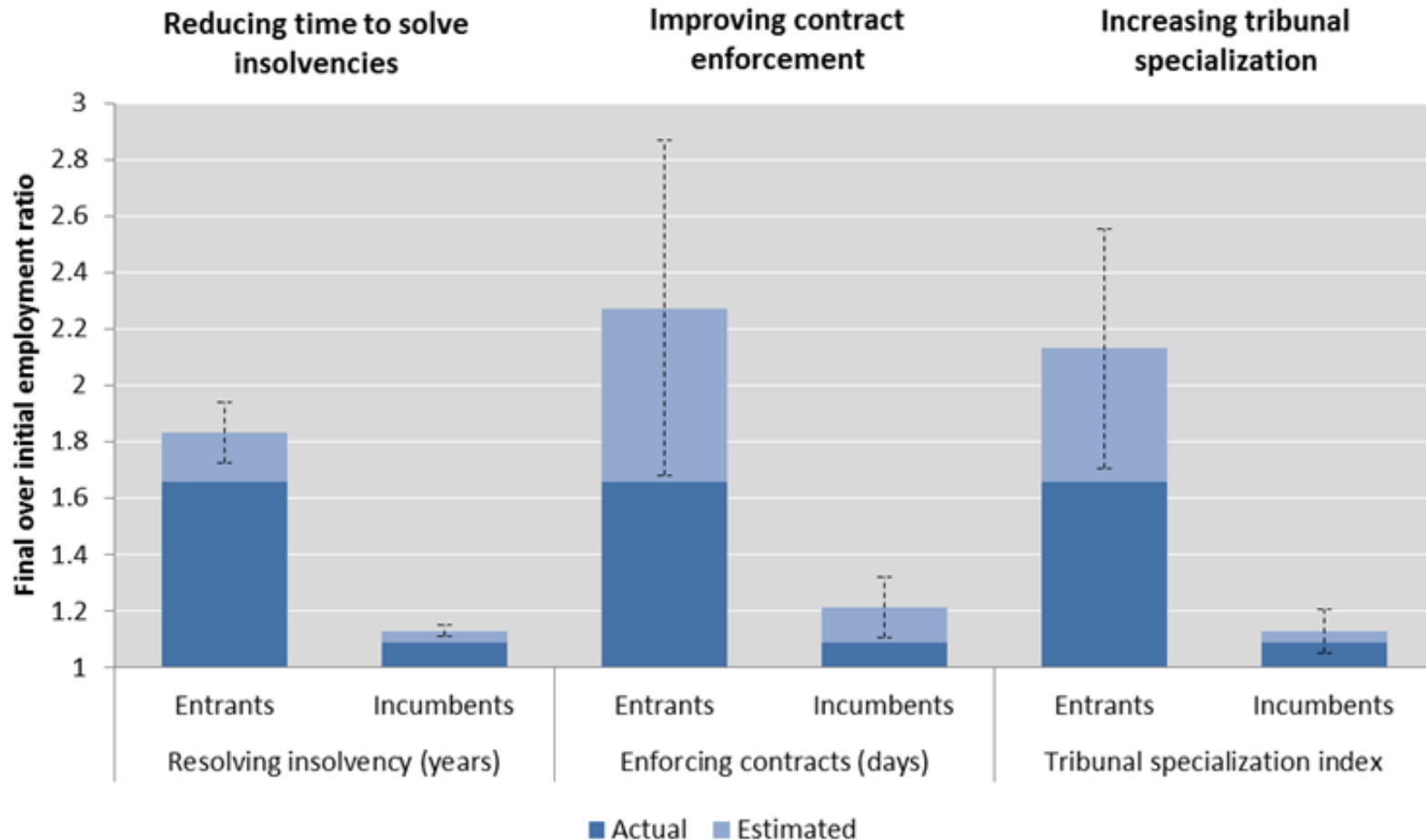
Summary of results (ii)

- **Employment growth, average size and number of units** generally respond more for **entrants** than incumbents
- **Survival share** of entrants does not seem particularly related to policies. Survival of **incumbents** does, especially in financially dependent industries
 - Some policies (especially inefficient bankruptcy regulations) seem to slow down the reallocation process
- Timely **bankruptcy** procedures, strong **contract enforcement** and **access to finance** seem to be key for an environment conducive to employment growth



Reform simulation: bankruptcy regulation and civil justice

Italy: estimated effect in the information technology and other information services sector



Notes: The bars show the effect ceteris paribus of policy changes on the response variable if the econometric estimates reported in the paper are interpreted causally. Dashed lines show 95% confidence intervals. The response variable is final over initial employment ratio.



Other regulations

- EPL & PMR (OECD)
 - Significant only when the industry variable is volatility
 - More stringent EPL or PMR associated with lower net job creation
 - EPL has a stronger linkage with entrants
 - PMR has similar effects for entrants and incumbents



Robustness

- Horse-race including all policy variables together
- Interacted year-country dummies
- Different winsorization levels
- 5-year rather than 3-year interval
- OLS rather than SUR, with clustered s.e. (industry)
- Survival share regression as a Tobit



Conclusions and next steps

- Exposure to policy in volatile sectors is particularly relevant
 - Characterized by higher employment growth
- Regulatory incumbency
 - Importance of considering potential impacts on entrants, even if they might not have a strong “voice”
- Future research
 - Characterization of volatility, link to wage inequality, further policy indicators, policy uncertainty
 - Link of volatility and dispersion to productivity



ON-GOING WORK: DYNEMP AND DIGITALIZATION



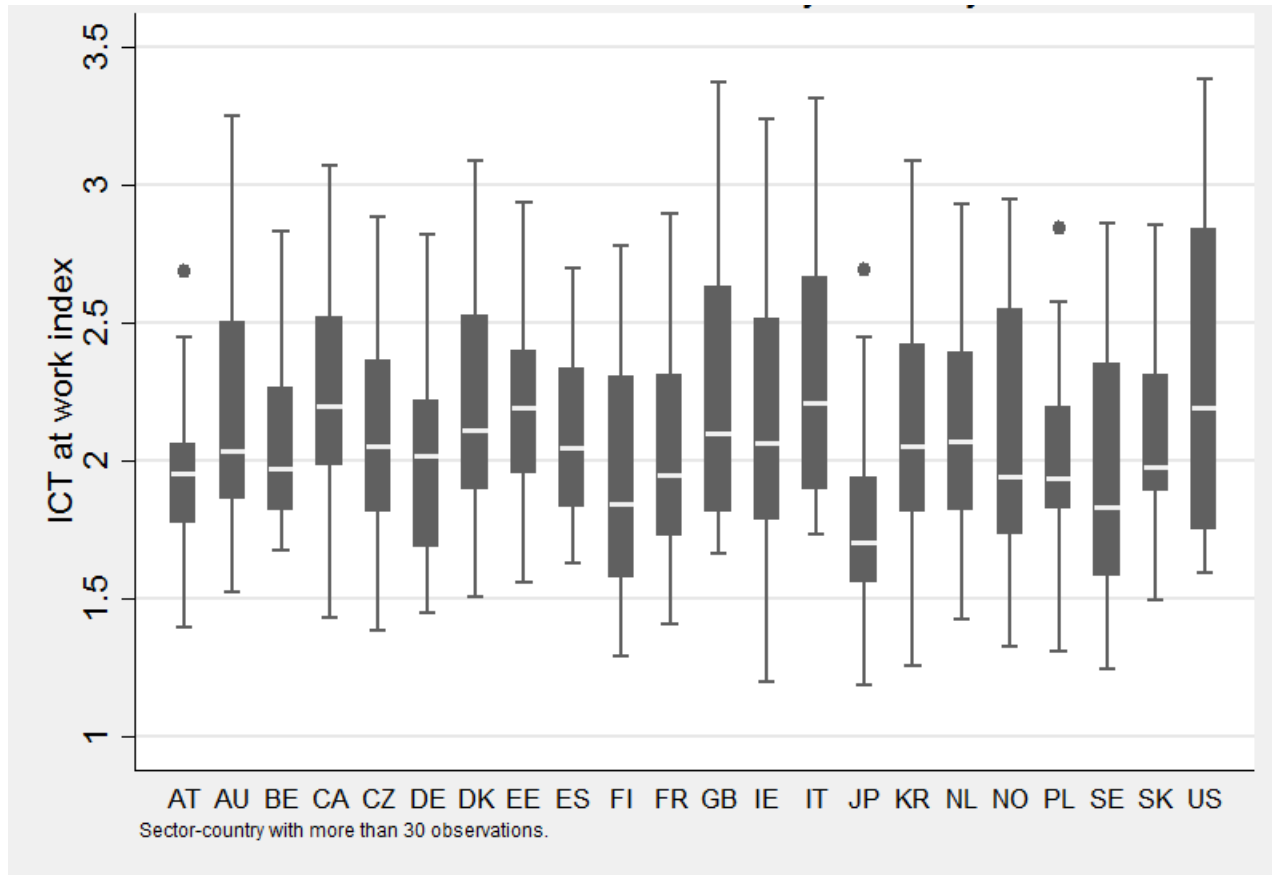
What are we talking about?

- Digital economy: hard to measure across countries/sectors
 - Our approach: intensity of IT-skilled/occupations (PIAAC: IT skills at work; LFS: computing professionals); some indicators of “take-up” of hardware and software



Large differences in digitalisation - mostly across sectors than countries

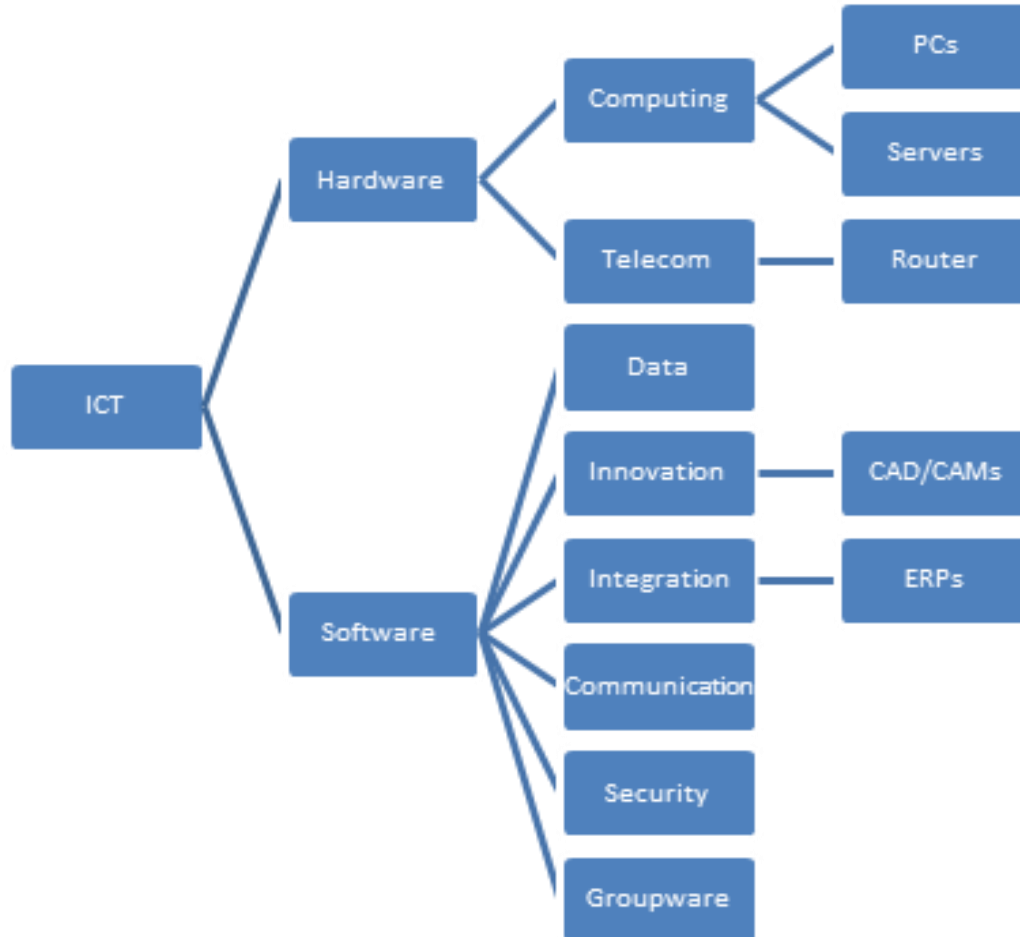
Use of ICT at work index – PIAAC – Distribution of sector values by country



Source: Elaboration on the database of the Survey of Adult Skills (PIAAC, 2012).



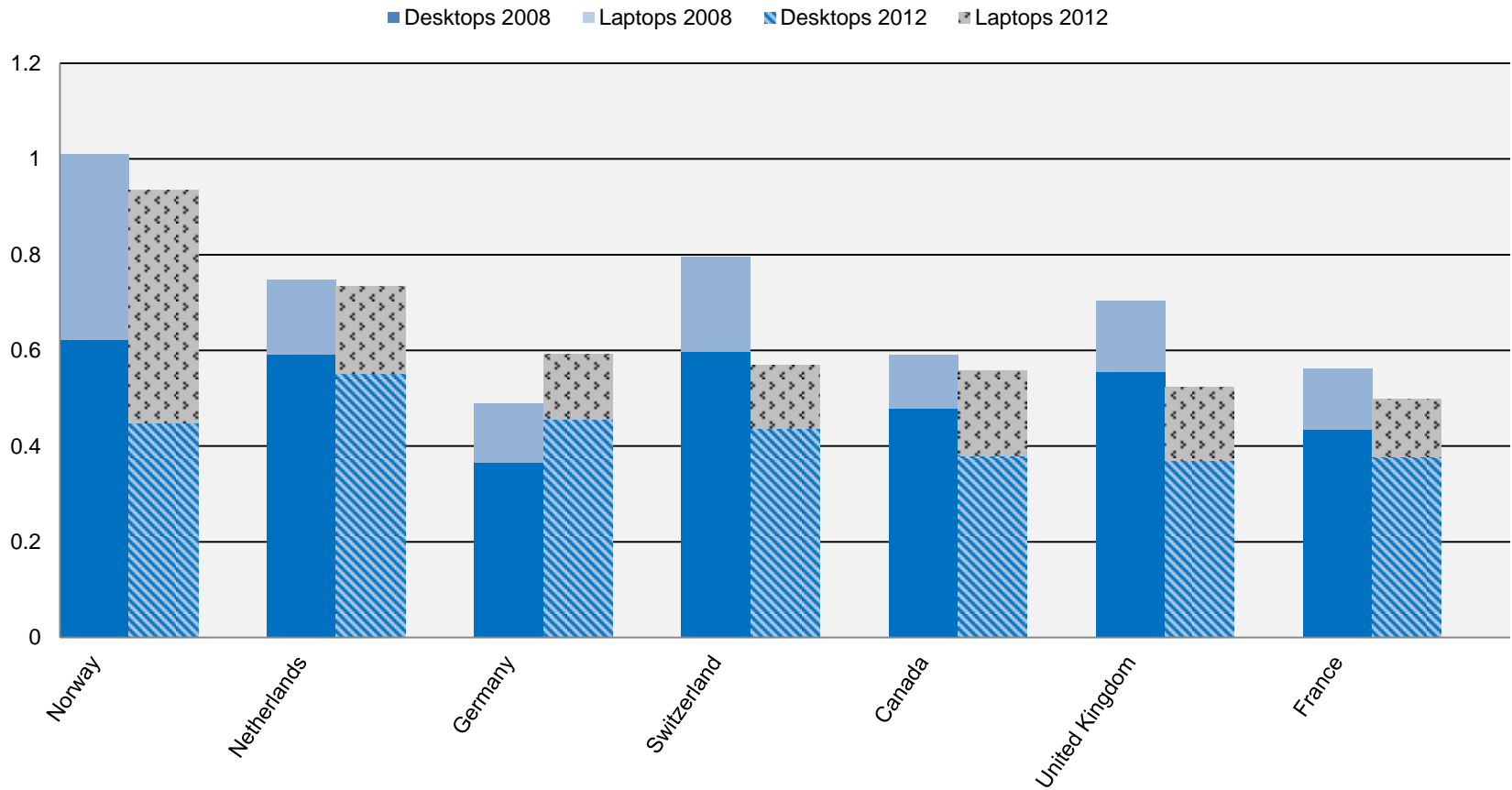
ICT Hardware and Software Disaggregation



Source: Destefano et al. (2016) forthcoming



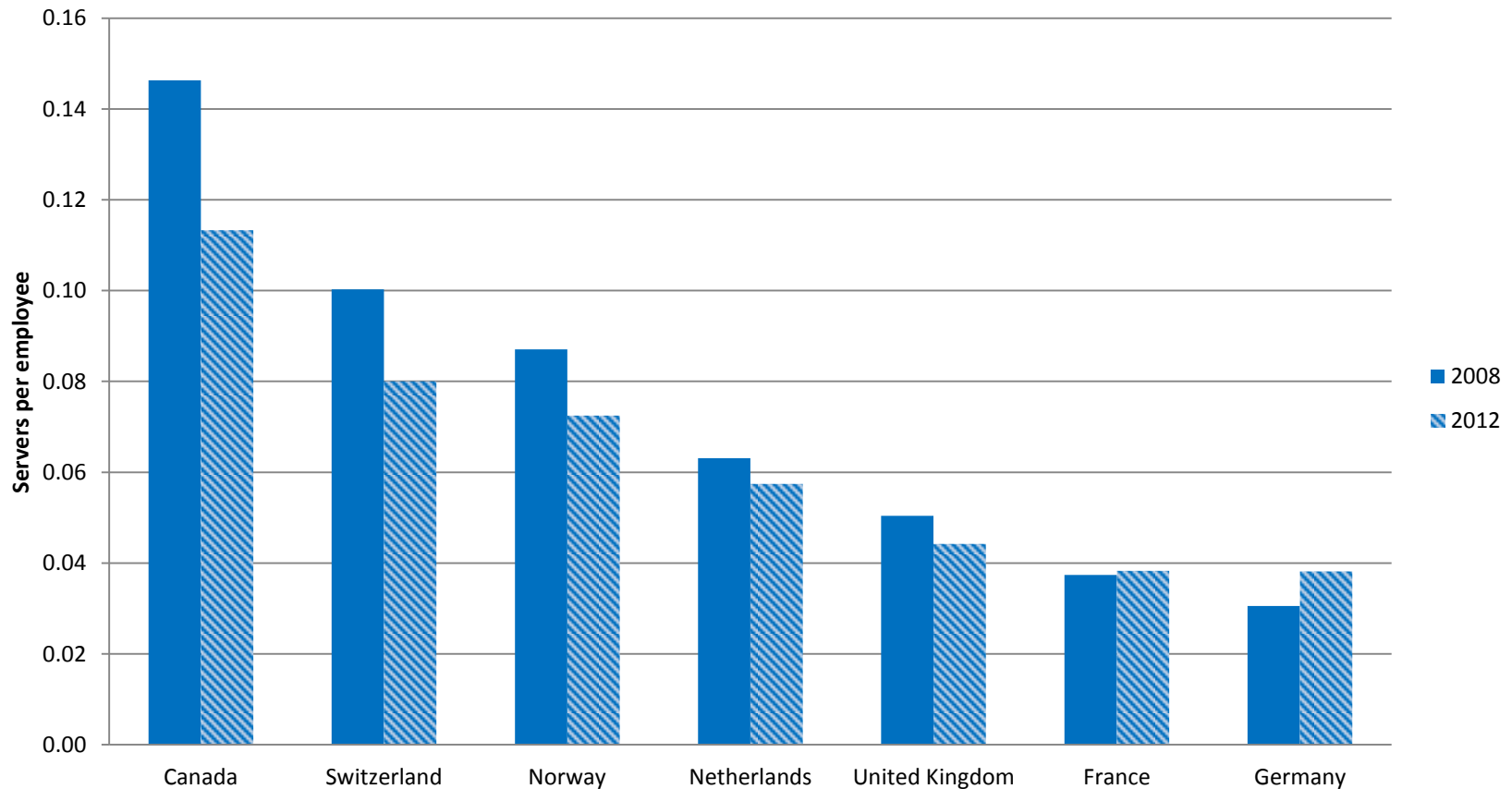
PC Intensity, 2008 to 2012



Source: Destefano et al. (2016) forthcoming



Server Intensity, 2008 to 2012



Source: Destefano et al. (2016) forthcoming



Empirical evidence that digitalisation is strongly correlated with firm dynamism...

- Results from new econometric analysis (at sector-year-country level) show that the intensity of IT skills is robustly *positively* correlated with
 - Net Employment Growth Rate
 - Employment growth dispersion (p90-p50)
 - Entry rate
 - Share of young-small firms and their growth rate
- And *negatively* correlated with
 - Median age of firms in the top 10% of employment growth distribution



...but the strength of this association varies across countries

- Especially with the average growth of small-young firms, which we know already being very dependent on policy
 - cf. forthcoming STI policy paper “No country for young firms?”
- This may suggest that there are country-specific factors that put grit in the wheels
 - Education/Skills?
 - Managerial capabilities and organizational change?
 - Policies for experimentation/entrepreneurship?



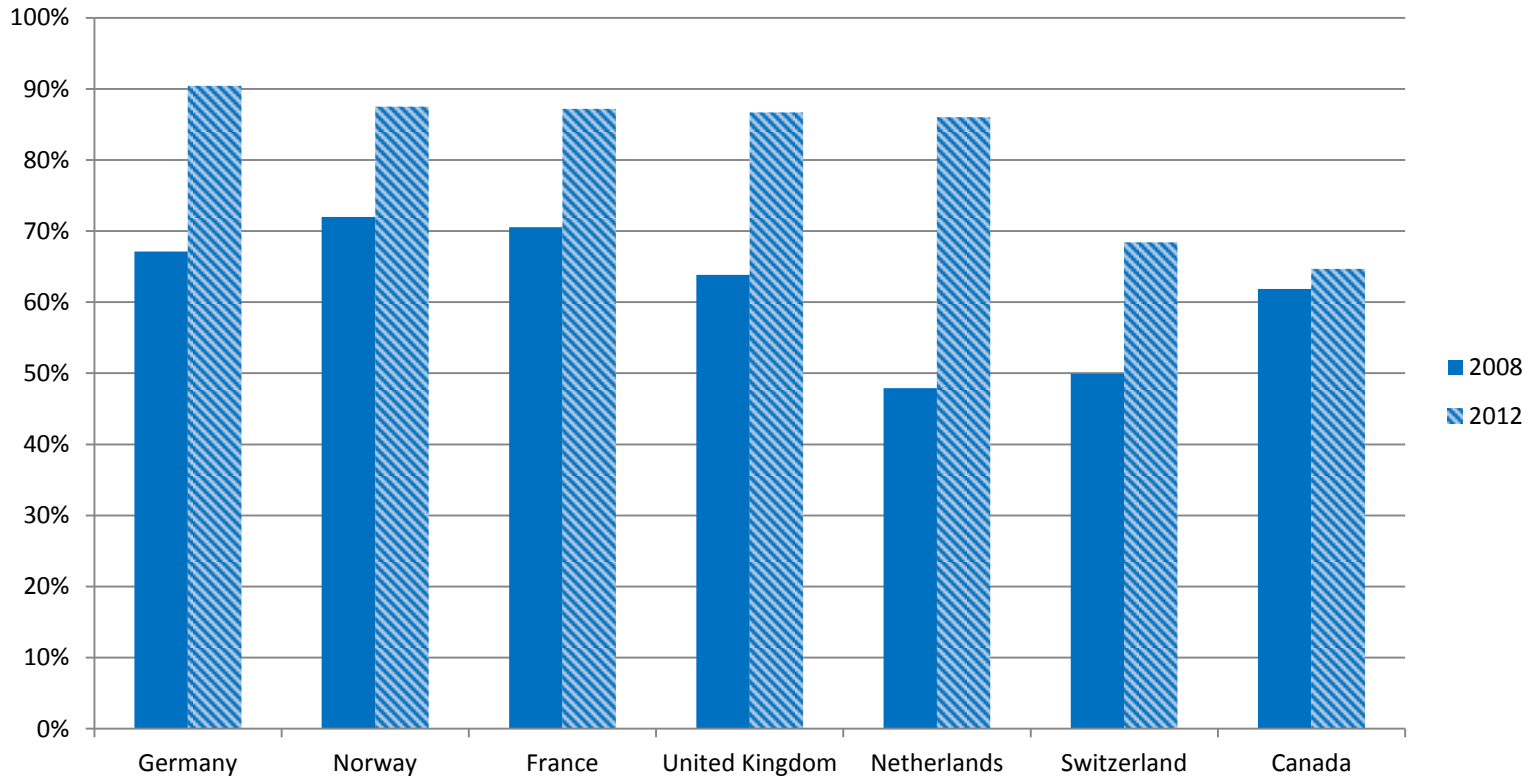
How does this link to public policy?

Ideas for future research

- Positive link with net employment growth rate at country/sector level: no evidence for “job tragedy” even at sectoral level
 - Although correlated with churning (job creation + job destruction)
- Digitalisation is an intrinsic technological component which thus tends to vary more across sectors than across countries...
- However there are important differences in the degree to which the technological disruption is translated into business dynamism
- Young firms/entrepreneurship is a key channel through which the IT revolution translates into economic dynamism



Information Integration Software, 2008 to 2012





THANK YOU!

Nick.Johnstone@oecd.org

DynEmp@oecd.org



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The growth decomposition (entrants)

- We decompose normalized net job creation by surviving entrants as follows (a=age group; c=country; t=time)

$$\frac{EMP_{act}^{surv}(t+j)}{EMP_{ct}(t)} = \frac{EMP_{act}^{surv}(t+j)}{EMP_{act}^{surv}(t)} * \frac{EMP_{act}^{surv}(t)}{NrUnits_{act}^{surv}(t)} * \frac{NrUnits_{act}^{surv}(t)}{NrUnit_{act}(t)} * \frac{NrUnit_{act}(t)}{EMP_{ct}(t)}$$

Average post-entry
growth rate

Average size
at entry

Survival
share

Start-up
ratio

Note: $NrUnits_{act}^{surv}(t)$ identifies the number of entrants in country c surviving between time t and t + j and $NrUnit_{act}(t)$ identifies the total number of entrants in country c at time t.

Source: Calvino, Criscuolo and Menon (2015)



Regressions results with volatility – three-year period

		(1)	(2)	(3)	(4)	(5)
Policy / Var. dep.		Net job contribution	Average size	No. of units	Employment growth	Survival share
Resolving insolvency time	Incumbents	-0.0432**	0.0215	-0.0651***	-0.0116***	0.000907
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	Entrants	0.0741**	0.0866***	-0.00654	0.0142	0.00539
	Diff.	0.040	0.065**	-0.023	0.013	0.000
Supervision indep. index	Incumbents	-0.00646	0.0306**	-0.0415**	0.00749***	0.00419
	Entrants	0.0149	0.0768***	-0.0763***	0.016	-0.00403
	Diff.	0.021	0.046*	-0.035	0.009	-0.008



Regressions results with volatility – three-year period

Policy / Var. dep.		(1)	(2)	(3)	(4)	(5)
		Net job contribution	Average size	No. of units	Employment growth	Survival share
Resolving insolvency time	Incumbents	-0.0432**	0.0215	-0.0651***	-0.0116***	0.000907
	Entrants	-0.129***	-0.0118	-0.0955***	-0.0296***	0.00175
	Diff.	-0.086**	-0.033	-0.030	-0.018	0.001
Enforcing contracts time	Incumbents	-0.0136	-0.00107	-0.0126	-0.00561**	0.0013
	Entrants	-0.0820***	-0.0883***	0.015	-0.0177*	0.00565
	Diff.	-0.068**	-0.087***	0.028	-0.012	0.004
Specialized tribunals	Incumbents	0.00275	0.0105	-0.015	0.00295	-0.0018
	Entrants	0.0829***	0.0774***	0.0188	0.0218*	0.00319
	Diff.	0.080**	0.067**	0.034	0.019	0.005
Finance policy tax-based	Incumbents	0.0291	0.0310*	-0.0037	0.00405	-0.00318
	Entrants	0.0837***	0.0634**	-0.00717	0.0271**	0.00158
	Diff.	0.055	0.032	-0.003	0.023*	0.005
Finance policy equity-based	Incumbents	0.0243	-0.00919	0.0232	0.0222***	-0.00647*
	Entrants	0.0911**	-0.0146	0.0276	0.0689***	-0.00402
	Diff.	0.067	-0.005	0.004	0.047***	0.002
VC availability	Incumbents	0.0829***	-0.0545***	0.134***	0.0147***	-0.00362
	Entrants	0.193***	0.0292	0.137***	0.0355***	-0.00041
	Diff.	0.110***	0.084***	0.003	0.021*	0.003
Access to loans	Incumbents	0.0699***	-0.0466***	0.113***	0.0141***	-0.00354
	Entrants	0.161***	0.0287	0.103***	0.0324***	-0.0016
	Diff.	0.091***	0.075**	-0.010	0.018	0.002
% of gov. controlled banks	Incumbents	-0.0516***	0.0742***	-0.128***	-0.00784**	0.00116
	Entrants	-0.148***	0.0141	-0.154***	-0.0119	0.00112
	Diff.	-0.096***	-0.060**	-0.026	-0.004	0.000
Foreign banks	Incumbents	0.0344*	0.0221	0.0166	0.00101	0.00554*
	Entrants	0.0741**	0.0866***	-0.00654	0.0142	0.00539
	Diff.	0.040	0.065**	-0.023	0.013	0.000
Supervision indep. index	Incumbents	-0.00646	0.0306**	-0.0415**	0.00749***	0.00419
	Entrants	0.0149	0.0768***	-0.0763***	0.016	-0.00403
	Diff.	0.021	0.046*	-0.035	0.009	-0.008



Regressions results with growth dispersion – three-year period

Policy / Var. dep.		(1)	(2)	(3)	(4)	(5)
		Net job contribution	Average size	No. of units	Employment growth	Survival share
Resolving insolvency time	Incumbents	-0.0245	0.0139	-0.0368**	-0.00688***	0.00872***
	Entrants	-0.0734***	0.00462	-0.0582***	-0.0296***	0.0104**
	Diff.	-0.049*	-0.009	-0.021	-0.023**	0.002
Enforcing contracts time	Incumbents	-0.0426***	-0.00146	-0.0380**	0.000397	-0.00209
	Entrants	-0.0542**	-0.0198	-0.000681	-0.0252***	-0.000156
	Diff.	-0.012	-0.018	0.037	-0.026***	0.002
Specialized tribunals	Incumbents	0.0172	-0.0116	0.0386**	-0.00588**	0.000509
	Entrants	0.0766***	0.0552**	0.0367*	0.00338	0.00343
	Diff.	0.059*	0.067**	-0.002	0.009	0.003
Finance policy tax-based	Incumbents	0.012	0.00846	0.0154	-0.0005	-0.0109***
	Entrants	0.0885***	0.0692***	-0.0071	0.0395***	-0.00679
	Diff.	0.077**	0.061**	-0.023	0.040***	0.004
Finance policy equity-based	Incumbents	0.0451**	-0.0059	0.0409*	0.0119***	-0.000499
	Entrants	0.0457	-0.041	0.0194	0.0418***	0.00968
	Diff.	0.001	-0.035	-0.022	0.030**	0.010
VC availability	Incumbents	0.0792***	-0.00522	0.0818***	0.00614**	-0.00772***
	Entrants	0.118***	-0.00709	0.0880***	0.0389***	-0.00528
	Diff.	0.039	-0.002	0.006	0.032***	0.002
Access to loans	Incumbents	0.0762***	-0.00806	0.0789***	0.00636**	-0.00555**
	Entrants	0.103***	-0.0157	0.0784***	0.0361***	-0.00269
	Diff.	0.027	-0.008	-0.001	0.030***	0.003
% of gov. controlled banks	Incumbents	-0.0347**	0.0186	-0.0507***	-0.00586**	0.00886***
	Entrants	-0.0581**	0.0378*	-0.0702***	-0.0265***	0.0118**
	Diff.	-0.023	0.019	-0.020	-0.021**	0.003
Foreign banks	Incumbents	0.0564***	0.00163	0.0557***	0.000216	0.00829***
	Entrants	0.0213	0.0363	-0.00173	-0.0129	0.0115**
	Diff.	-0.035	0.035	-0.057*	-0.013	0.003
Supervision indep. index	Incumbents	0.0133	-0.00994	0.02	0.0000354	0.00470*
	Entrants	0.0213	0.0143	-0.0229	0.0157*	0.00289
	Diff.	0.008	0.024	-0.043	0.016	-0.002



Regressions results with growth dispersion – three-year period

Policy / Var. dep.		(1)	(2)	(3)	(4)	(5)
		Net job contribution	Average size	No. of units	Employment growth	Survival share
Resolving insolvency time	Incumbents	-0.0245	0.0139	-0.0368**	-0.00688***	0.00872***
	Entrants	-0.0734***	0.00462	-0.0582***	-0.0296***	0.0104**
	Diff.	-0.049*	-0.009	-0.021	-0.023**	0.002
Enforcing contracts time	Incumbents	-0.0426***	-0.00146	-0.0380**	0.000397	-0.00209
	Entrants	-0.0542**	-0.0198	-0.000681	-0.0252***	-0.000156
	Diff.	-0.012	-0.018	0.037	-0.026***	0.002
Specialized tribunals	Incumbents	0.0172	-0.0116	0.0386**	-0.00588**	0.000509
	Entrants	0.0766***	0.0552**	0.0367*	0.00338	0.00343
	Diff.	0.059*	0.067**	-0.002	0.009	0.003
Finance policy tax-based	Incumbents	0.012	0.00846	0.0154	-0.0005	-0.0109***
	Entrants	0.0885***	0.0692***	-0.0071	0.0395***	-0.00679
	Diff.	0.077**	0.061**	-0.023	0.040***	0.004
Finance policy equity-based	Incumbents	0.0451**	-0.0059	0.0409*	0.0119***	-0.000499
	Entrants	0.0457	-0.041	0.0194	0.0418***	0.00968
	Diff.	0.001	-0.035	-0.022	0.030**	0.010
VC availability	Incumbents	0.0792***	-0.00522	0.0818***	0.00614**	-0.00772***
	Entrants	0.118***	-0.00709	0.0880***	0.0383***	-0.00528
	Diff.	0.039	-0.002	0.006	0.032***	0.002
Access to loans	Incumbents	0.0762***	-0.00806	0.0789***	0.00636**	-0.00555**
	Entrants	0.103***	-0.0157	0.0784***	0.0361***	-0.00269
	Diff.	0.027	-0.008	-0.001	0.030***	0.003
% of gov. controlled banks	Incumbents	-0.0347**	0.0186	-0.0507***	-0.00586**	0.00886***
	Entrants	-0.0581**	0.0378*	-0.0702***	-0.0265***	0.0118**
	Diff.	-0.023	0.019	-0.020	-0.021**	0.003
Foreign banks	Incumbents	0.0564***	0.00163	0.0557***	0.000216	0.00829***
	Entrants	0.0213	0.0363	-0.00173	-0.0129	0.0115**
	Diff.	-0.035	0.035	-0.057*	-0.013	0.003
Supervision indep. index	Incumbents	0.0133	-0.00994	0.02	0.0000354	0.00470*
	Entrants	0.0213	0.0143	-0.0229	0.0157*	0.00289
	Diff.	0.008	0.024	-0.043	0.016	-0.002



Regressions results with financial input intensity – three-year period

		(1)	(2)	(3)	(4)	(5)
Policy / Var. dep.		Net job contribution	Average size	No. of units	Employment growth	Survival share
Resolving insolvency time	Incumbents	0.0464***	0.0391***	0.00833	-0.00565**	0.00516**
	Entrants	-0.0384	-0.0113	-0.0209	-0.0172*	0.00523
	Diff.	-0.085***	-0.050*	-0.029	-0.012	0.000
Enforcing contracts time	Incumbents	0.00498	-0.0154	0.021	-0.00598**	0.00344
	Entrants	-0.0500**	-0.0737***	0.0312	-0.0190**	0.00628
	Diff.	-0.055*	-0.058**	0.010	-0.013	0.003
Specialized tribunals	Incumbents	0.00196	0.0202	-0.0382**	0.00526*	0.00431
	Entrants	0.0364	0.0506**	-0.0122	0.0155	-0.00087
	Diff.	0.034	0.030	0.026	0.010	-0.005
Finance policy tax-based	Incumbents	0.0326*	0.0629***	-0.0272	0.00144	-0.00557**
	Entrants	0.0321	0.0292	-0.0207	0.0204*	-0.00451
	Diff.	-0.001	-0.034	0.007	0.019*	0.001
Finance policy equity-based	Incumbents	0.00535	0.0288	-0.0295	0.00881**	-0.00107
	Entrants	0.0557*	0.0749***	-0.0573**	0.0460***	-0.00417
	Diff.	0.050	0.046	-0.028	0.037***	-0.003
VC availability	Incumbents	-0.00375	-0.0132	0.00885	0.00844***	-0.00444*
	Entrants	0.0468*	0.0404*	-0.0000289	0.0181*	-0.003
	Diff.	0.051	0.054**	-0.009	0.010	0.001
Access to loans	Incumbents	-0.000795	-0.00409	0.00375	0.00821***	-0.00427*
	Entrants	0.0423	0.0458**	-0.0113	0.0183*	-0.00279
	Diff.	0.043	0.050*	-0.015	0.010	0.001
% of gov. controlled banks	Incumbents	0.0434**	0.0716***	-0.0291	-0.00558**	0.00423
	Entrants	-0.0514*	-0.00927	-0.0550**	-0.00201	0.00425
	Diff.	-0.095***	-0.081***	-0.026	0.004	0.000
Foreign banks	Incumbents	0.0148	0.0361**	-0.019	0.00208	0.000296
	Entrants	0.0573**	0.0694***	-0.00808	0.0108	-0.00503
	Diff.	0.043	0.033	0.011	0.009	-0.005
Supervision indep. index	Incumbents	-0.00383	0.0147	-0.0164	0.00538**	-0.00352
	Entrants	0.0494**	0.0546***	-0.0252	0.0240***	-0.00474
	Diff.	0.053*	0.040	-0.009	0.019*	-0.001



Regressions results with financial input intensity – three-year period

		(1)	(2)	(3)	(4)	(5)
Policy / Var. dep.		Net job contribution	Average size	No. of units	Employment growth	Survival share
Resolving insolvency time	Incumbents	0.0464***	0.0391***	0.00833	-0.00565**	0.00516**
	Entrants	-0.0384	-0.0113	-0.0209	-0.0172*	0.00523
	Diff.	-0.085***	-0.050*	-0.029	-0.012	0.000
Enforcing contracts time	Incumbents	0.00498	-0.0154	0.021	-0.00598**	0.00344
	Entrants	-0.0500**	-0.0737***	0.0312	-0.0190**	0.00628
	Diff.	-0.055*	-0.058**	0.010	-0.013	0.003
Specialized tribunals	Incumbents	0.00196	0.0202	-0.0382**	0.00526*	0.00431
	Entrants	0.0364	0.0506**	-0.0122	0.0155	-0.00087
	Diff.	0.034	0.030	0.026	0.010	-0.005
Finance policy tax-based	Incumbents	0.0326*	0.0629***	-0.0272	0.00144	-0.00557**
	Entrants	0.0321	0.0292	-0.0207	0.0204*	-0.00451
	Diff.	-0.001	-0.034	0.007	0.019*	0.001
Finance policy equity-based	Incumbents	0.00535	0.0288	-0.0295	0.00881**	-0.00107
	Entrants	0.0557*	0.0749***	-0.0573**	0.0460***	-0.00417
	Diff.	0.050	0.046	-0.028	0.037***	-0.003
VC availability	Incumbents	-0.00375	-0.0132	0.00885	0.00844***	-0.00444*
	Entrants	0.0468*	0.0404*	-0.0000289	0.0181*	-0.003
	Diff.	0.051	0.054**	-0.009	0.010	0.001
Access to loans	Incumbents	-0.000795	-0.00409	0.00375	0.00821***	-0.00427*
	Entrants	0.0423	0.0458**	-0.0113	0.0183*	-0.00279
	Diff.	0.043	0.050*	-0.015	0.010	0.001
% of gov. controlled banks	Incumbents	0.0434**	0.0716***	-0.0291	-0.00558**	0.00423
	Entrants	-0.0514*	-0.00927	-0.0550**	-0.00201	0.00425
	Diff.	-0.095***	-0.081***	-0.026	0.004	0.000
Foreign banks	Incumbents	0.0148	0.0361**	-0.019	0.00208	0.000296
	Entrants	0.0573**	0.0694***	-0.00808	0.0108	-0.00503
	Diff.	0.043	0.033	0.011	0.009	-0.005
Supervision indep. index	Incumbents	-0.00383	0.0147	-0.0164	0.00538**	-0.00352
	Entrants	0.0494**	0.0546***	-0.0252	0.0240***	-0.00474
	Diff.	0.053*	0.040	-0.009	0.019*	-0.001



Resolving insolvency in financially dependent sectors

Policy / Dep. var.		Net job contrib.	Average size	No. of units	Empl. growth	Survival share
Resolving insolvency time	Incumbents	0.0464***	0.0391***	0.00833	-0.00565**	0.00516**
	Entrants	-0.0384	-0.0113	-0.0209	-0.0172*	0.00523
	Diff.	-0.085***	-0.050*	-0.029	-0.012	0.000

- In most financially dependent sectors, longer bankruptcy procedures are positively related to the survival share of incumbents
- Negative employment growth and higher average size yield an overall positive effect on incumbents



Policy variables (i) – Bankruptcy (1)

- The efficiency and effectiveness of corporate bankruptcy law are measured with a variable taken from the World Bank Doing Business database (“resolving insolvency” section), measuring the **time needed to solve an insolvency case**.
- The variable relates to an identical insolvency case (a limited liability company running a hotel) to be dealt with in different countries. Information is collected from a questionnaire filled in by local insolvency practitioners and verified through a study of laws and regulations as well as public information on bankruptcy systems. The time needed to solve the insolvency case negatively correlates with the general level of efficiency and effectiveness of the bankruptcy regulation in a country. The variables refer to the period 2001-11.



Policy variables (ii) – Contract enforcement (2)

- The first variable is a measure of the **time needed to solve a dispute**, the idea behind the use of this proxy being that the longer it takes to resolve a dispute over a contract the less effective is the enforcement of that contract. Indeed, the timely resolution of disputes is just one of the dimensions on which the performance of a judicial system, hence its ability to ensure contract enforcement, can be measured (other dimensions include fairness and predictability of judicial decisions). The variable is sourced from the World Bank Doing Business database and refers to the period 2001-11.
- The second proxy is an indicator of the **overall degree of court specialisation**. In an increasingly complex business environment, specialisation is an important performance-enhancing factor, as it enables judges to acquire detailed knowledge of a given area of law and to familiarize with the related technical issues. The indicator is sourced from a new OECD dataset described in Palumbo et al. (2013). This variable is not available for Brazil and is only available for the 2010-11 time period.



Policy variables (iii) – Access to finance (7)

- To measure the extent of policy intervention in a country, two variables taken from Wilson and Silva (2013) are used. The first measures the **number of seed and early stage policies** introduced in a given country that are “tax-based.
- The second one corresponds to the **number that are “equity based”**.
- The third finance variable is a measure of the **availability of venture capital (VC)**. The indicator is collected by the World Economic Forum (WEF) through a questionnaire filled in by economic operators in each country. The answers are classified on a scale from 1 to 6; the higher the ranking, the more VC is perceived to be available in that particular country.
- The fourth variable is also collected by the WEF with the same methodology and measures the **easiness of accessing bank loans**. Both variables refer to the period 2006-08.



Policy variables (iv) – Access to finance (7)

- The three remaining variables are sourced from the World Bank surveys of bank regulation and supervision.
 - One variable measures the **fraction of the banking system's assets that is in banks that are 50% or more government owned**. La Porta et al. (2002) show that government ownership of banks has a negative impact on financial development and growth, and the indicator is also used by Aghion, Fally and Scarpetta (2007) in their assessment of the role of financial development for post-entry growth.
 - A second variable measures the **share of assets in the banking system that are foreign owned**, and it is meant to proxy the openness and the degree of competition in the banking sector.
 - The last variable taken from the WB database is an **index of supervision independence**, measuring the degree to which the supervisory authority is independent from the government and legally protected from the banking industry.
- The three variables are taken from four rounds of the survey (years 2001, 2003, 2007, 2012) and are linearly interpolated in order to obtain yearly indicators for the period 2000-11.