OECD EXPERTS MEETING ON BUSINESS SERVICES



TOWARDS A SERVICES TRADE RESTRICTIVENESS INDEX (STRI)

OECD Headquarters PARIS, 24 June 2008

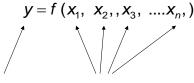
Iain Paterson



Model based analysis



- Want: Findings based on evidence (Quantitative)
- Generic form of Model:



Output Variable Explanatory factors

 all variables/factors are measurable on quantitative scales



What are Indices good for? 1

Typical variables of interest:

GDP [m€]

Productivity [Value Added (€) / Hours worked]

of Employees

Years of Schooling

Participation Rate = Active workforce = (# empl. + # unempl.) / population)

etc.

BUT, what about Rules, Regulations => Institutional Factors ...?

These are an integral part of socio-economic system, and vary a lot between countries



What are Indices good for? 2

Institutional Factors are ...

- · many and varied
- complex, containing subfactors, conditionalities, exceptions, ...

However, We may be able to separate out factors covering:

- 1) Fields = broad named areas, of interest
- Identify (sub-) factors, conditions that are associated with more/less intensity of field in question
- 3) Group related fields together, based on relative "importance" into a measure => Index!



Example: Liberal Professions

- Subset of Professional Services:
 - Accountants&Auditors, Lawyers&Notaries, Architects&Engineers, Retail Pharmacists
- Special Characteristic: Self-regulation by Prof. Bodies ("Kammern", etc.)
- BASIC IDEA OF SCALE:
 highly restrictive → "middling" → relatively open / liberal
- Two broad categories of regulation
 - 1) Market Entry
- 2) Market Conduct
- Note: IHS study doesn't focus on trade issues!
- Trade: "barriers behind the borders"

Example: Market Entry - Fields and Coding



		Category/Variables	Coding	Scale	Weighting1	Weighting2
	ER	Entry regulation (general)	ERLC*0.40+ ERED*0.40+ ERQT*0.20	0 to 6		
			1			
	ERLC	Number of exclusive and shared exclusive tasks	00 = 0 1 = 1.5 2 = 3 3 = 4.5 4 or more = 6	0 to 6		40%
<	ERED	Requirements in education/does only apply in cases of licensing; if no	ERED1*0.30+ ERED2*0.40+ ERED3*0.20+	0to6		40%
		licensing: "0"	ERED4*0.10			
>	ERED1	Duration of special education/university or other higher degree	0 to ? 6 years	0 to 6	30%	
	ERED2	Duration compulsory practising	0 to ? 6 years	0 to 6	40%	
-	ERED3	Number of professional exams	(0 to ? 3)*2	0 to 6	20%	
•	ERED4	Number of entry routes to profession (inv. scale)	(0 = 4 or more routes; 1=3 routes; 2=2 routes; 3=1 route)*2	0 to 6	10%	
			•		•	
	ERQT	Quotas/economic needs test	0=no 6=yes	0 or 6		20%

Relevant for Pharamcists, Notaries... somewhere (Cf. Overall Index Values Slide)



Market Conduct Regulation(s)

- regulation of <u>prices and fees</u> (fixed prices, minimum and/or maximum prices etc.),
- regulation of <u>advertising</u> and marketing,
- regulation of <u>location</u> and diversification (geographical restrictions on offering services, restrictions on establishing branch offices),
- restrictions on interprofessional co-operation,
- restrictions on <u>forms of business</u> (e.g. whether incorporation is allowed and under what preconditions),
- other regulations (regulations on <u>continuing education</u>, rules on <u>specialisation</u> or a certain kind of <u>indemnity insurance</u> etc.).

Tree Diagram : Coding, Weighting



Subfield N1

(Weight_N1)

Judgement: Subjective! 3 kinds:

- 1) Selection of relevant Fields
- Assigning values on Scales (Coding)

 Judging Importance of factors (Weighting)

ALSO:

- Sensitivity,
- Random weights
- ("optimal" weights)

Scale of 0-6 is used throughout; also for each subfield

Field_N

Subfield N1

(Weight_N1)

Subfield N1

(Weight_N1)

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MCIC2

MCIC2

Regulations

Market Conduct





Example of Coding judgement

0 = no regulations

case)
2 = partnership allowed, incorporation only allowed in specific cases (regulations on ownership etc.)
5 = incorporation forbidden in any case
6 = partnership and incorporation forbidden in any case; only sole practitioners etc. allowed 0 = all forms allowed

3= with all professions but no incorporation; or only with comparable professions in all forms allowed 4.5 = only with comparable professions and no

6=generally forbidden

0 to 6

50%

0 to 6

Scale

always

used

here

25%

Weight

chosen by

considered

judgement

MCPR Regulations on prices and Non-binding reference prices may lead to some restriction on competition (Insiders know, but are consumers as informed?)

1 = non binding reference prices on some services

2 = non binding reference prices on all 3 = maximum prices on some services

4 = maximum prices on all services

5 = minimum prices on some services 6 = minimum prices on all services

Minimum prices is most restrictive regime

> Competition on price is limited the most

 Maximum price setting is more restrictive than non-binding reference prices, but can also serve consumer protection interests (thus less restrictive than Minimum Price setting)

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Country.	Profession	Statutory audit	Non- statutory audit	Audit of mergers and contributio ns in kind	Public sector audit	Accounting and- bookkeepin g	insolvency practise	Tax advice	Tax represen- tation	Manage- ment consul- tancy	invest- ment sdvice	Legal advice and repres- entation	Expert withess in accounting
Austria	Beeideter Wirtschaftsprüfer	xx	x	XX	XX	XX	х	XX	XX	x	x	XX	X
	Beeideter Steuerberater		x			xx		xx	xx	x	x	xx	x
Belgium	Reviseur d'Èntreprise	xx	xx	xx	xx	xx	x	x	x	x	x	x	xx
Denmark	State Authorised Public Accountant	xx	x	х	x	x	x	x	x	x	x		x
	Registered Public Accountant	xx	x	х		x	x	x	x	x	x		x
Finland	кнт	XX	x	xx	x			x		x	x		x
	нтм	xx	x	xx	x			x		x	x		x
France	Expert Comptable (Chartered Accountant)		x	XX		xx		xx	xx	x	x	XX	x
	Commissaire aux comptes (Statutory Auditor)	xx		XX	xx								
Germany	Wirtschaftsprüfer (Business Controler)	xx	x	XX	xx	x	x	xx	xx	x	x	XX	xx
	Vereidigter Buchprüfer (Sworn Auditor)	xx	x	XX		x	x	xx	xx	x	x	XX	xx
	Steuerberater (Tax Adviser)		x			х	x	xx	xx	x	x	xx	xx
Greece	Orkoton Elekton (Certified Public Accountant)	xx	x	XX		x	x	x		x	x		XX (?)
Italy	Dottore Commercialista (Certified Public Accountant)	xx	x	х	xx	x	x	x	xx				x
	Regioniere Peritp Commerciale (Accountant)	xx	x	х	xx	x	x	x	xx				x
Netherlands	Register Accountant (Public Accountant)	xx	x	xx	xx	x		x		x	x		x
	Accountant Administrative Consultant (Public Accountant)	xx	x	xx	xx	x		x		x	x		x
	Administrateur (Bokkkeeper)					x		x					
	Belasting-advusir (Tax adviser)					x		x			x		
Portugal	Statutory Auditor	xx	x	xx				x		x	x		x
Spain	Audotires da cueantas (Accounting Auditor)	x	xx	х	x	x	x	x	x	x	x	x	x
Sweden	Auktorisened revisor (Authorised Public Accountant)	xx	x	xx	x			x	x	x	x		x
	Godkänd revisor (Approved Public Accountant)	xx	x	xx	x			x	x	x	x		x
	Revisor (Accountant)		x		x	x		x	x	x	x		x
United	Chartered Accountant		x		x	x		x	x	x	x		x
Kingdom	Certified Accountant		x		x	x		x	x	x	x		x
-	Registered Auditor	xx	x	xx	x	x		x	x	x	x		x
	Management Accountant		x			x		x	x	x	x		x
	Insolvency Practitioner						xx						
Luxembourg	Expert Comptable (Tax adviser)		x			X(X)	x	x	X(X)	x		xx	X?
	Réviseur d'Enterprises	xx	x	xx	X?	X(X)	x	x	X(X)	x	l	xx	X?
Ireland	Chartered Accountant	xx	x	xx	x	x ´	x	x	x	x	x	x	x
	Certified Accountant	xx	x	xx	x	x	x	x	x	x	x	x	x
	Tax Consultant/Taxation Practitioner		1	1		×	1	x	×	×	v	1	1

ountry	Prořession	University/Higher education degree (years):	Practise (years)	Professional exam	Number of "entrance roads" profession
ustria	Beeideter Wirtschaftsprüfer	U 4	5	Y (2)	2
	Beeideter Steuerberater	U 4	3	Y (1)	2
lelgium	Reviseur dÉnterprise	U 4	3	Y (2)	n.a.
enmark	State Authorised Public Accountant	U 5	3	Y (2)	1
	Registered Public Accountant	U 4	2	N	1
nland	KHT Approved Auditor	U 4-5	3	Y (1)	2
	HTM Approved Auditor	U 3	3	Y (1)	2
ance	Expert Comptable (Chartered Accountant)	U 7	3	Y (1)	1
	commissaire aux comptes (Statutory Auditor)	U7	3	Y (1)	1
ermany	Wirtschaftsprüfer (Business Controler)	(U 4)	min. 3	Y (1)	3
	Vereidigter Buchprüfer (Sworn Auditor)	(U 4)	min. 5	Y (1)	2
	Steuerberater (Tax Adviser)	(U4)	min. 3	Y (1)	3
ireece	Orkoton Elekton (Certified Public Accountant)	U 4	8	Y (1) (?)	1
aly	Dottore Commercialista (Certified Public Accountant)	U4	3	Y (3)	1
	Regioniere Peritp Commerciale (Accountant)	Umin3	3	Y (1)	1
etherlands	Register Accountant (Public Accountant)	U 4+3	3	Y (1)	1
	Accountant Administrative Consultant (Public Accountant)	HE +6	2	Y (2)	2
	Administrateur (Bokkkeeper)	(U4)	o	N	2
	Belasting-advusir (Tax adviser)	(U4)	o	N	2
ortugal	Statutory Auditor	U 5	3	Y (1)	1
pain	Audotires da cueantas (Accounting Auditor)	U 3	3 or 8 (no U)	Y (2)	2
weden	Auktorisened revisor (Authorised Public Accountant)	U 4	5	Y (1)	1
	Godkänd revisor (Approved Public Accountant)	U 3	3	Y (1)	1
	Revisor (Accountant)	U 3 – 4	o	N	1
nited Kingdom	Chartered Accountant	(U 3 - 4)	3 or 4	Y (2)	3
	Certified Accountant	(U 3 - 4)	3	Y (1-3)	4
	Registered Auditor	Cha A/Ce A	CH A+2/Ce A+2	N (but Cha A/Ce A)	7
	Public Finance Accountant		Y	Y	
	Management Accountant		3	Y (1: 3 parts)	1
	Insolvency Practitioner	(U 3- 4)	CH A+3/Ce A+3	Y (1 Special)	several
xembourg	Expert Comptable (Tax adviser)	U (3)	3	N	1
	Réviseur d'Enterprises	U (4), HE	3 or more (HE)	Y (2)	2
eland	Chartered Accountant	U (3-4), others	3,5 (with U.)	Y (min 2) + 2 (RA)	4
	Certified Accountant	U (3-4), others	3	Y (1-3) + 2 (RA)	4
	Tax Consultant/Tax Practitioner	HE. several	0	Y (3 parts)	several

Accountancy Services Data: Conduct Regulations summarised



buntry.	Profession.	Regulatio	n of prices		Advertisis	og:farlaidd	ea?	Reg. on lecation	Reg. on diversi- lication	incorp. fot- bidden	knterprof.	ca-operati	on:farlaidd	en?	Comp. indemn. insur- ance?	Comp: cont.ec cation?
		miti price	Miso: price	reference price	All .	most	sjorne	1			atry.	incorp. gen.	with non lib. prof;	intopep. W. Inde lib; prof.	ancez	
Austria	Beeideter Wirtschaftsprüfer	N	N	Υ	N	N?	Υ		(N)	N	N	N	Υ			
	Beeideter Steuerberater	N	N	Y	N	N?	Υ		(N)	N	N	N	Υ			
Belgium	Chartered Accountant, reviseur d' enterprises	N	N	N	N?	Υ?		N?	N?	N?	N	Y?				
Denmark	State Authorised Public Accountant	N	N	(N)	N	N	N	N	(Y)	N	N	N	N	N	Y	N
	Registered Public Accountant	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
inland	KHT	N	N	N	N	N	Υ?	N?	N?	N	N	(N)	N	(N)	Y	
	нтм	N	N	N	N	N	Y?		N?	N	N	(N)	N	(N)	Υ	
rance	Expert Comptable (Chartered Accountant)	N	N	(N)	N	Y?		N?	(N)?	(N)	N	(N)	(N)	(N)	Υ	N
	Commissaire aux comptes (Statutory Auditor)	N	N	(Y)	N	Y?			(N)?	(N)	N	(N)	(N)	(N)	Y	N
Sermany	Wirtschaftsprüfer (Business Controler)	(N)	(N)	(N)	N	Υ		N	N	N	N	(N)	N	Υ		
	Vereidigter Buchprüfer (Sworn Auditor)	(N)	(N)	(N)	N	Υ		N	N	N	N	(N)	N	Υ		
	Steuerberater (Tax Adviser)	Y		N	N	N	Υ	N	m	N	N	N	N	Υ		
Sreece	Orkoton Elekton (Certified Public Accountant)	(Y)	N	N	N	N	N	N	N	N	N	N	N	N	Y	N
taly	Dottore Commercialista (Certified Public Accountant)	N	N	Y	N	N	Υ	N	N	Υ	N	Υ				
	Regioniere Peritp Commerciale (Accountant)	N	N	Y	N	N	Υ	N	N	Υ	N	Υ				
Vether-	Register Accountant (Public Accountant)	N	N	(Y)	N	N	(Y)	N	N	N	N	(N)	N	Υ	N	Y
ands	Accountant Administrative Consultant (Public Accountant)	N	N	(Y)	N	N	(Y)	N	N	N	N	(N)	N	Υ	N	Y
	Administrateur (Bokkkeeper)	N		(Y)	N	N	N	N	N	N	N	N	N	N	n.a.	Y
	Belasting-adviseur (Tax adviser)	N		(Y)	N	N	N	N	N	N	N	N	Y		n.a.	Y
Portugal	Statutory Auditor; Revisor Oficiais de Contas	(Y)	(Y)	(N)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Spain	Audotires da cueantas (Accounting Auditor)	N	N	Y	N	Υ		N	N	N	N?	(N)?	N?	(N)?	Y	(Y)
weden	Auktorisened revisor (Authorised Public Accountant)	N	N	N	N	N	N?	N	N	N	N	(N)	N	(N)	Υ	
	Godkänd revisor (Approved Public Accountant)	N	N	N	N	N	N?	N	N	N	N	(N)	N	(N)	Υ	
Inited	Chartered Accountant	N	N	(Y)	N	N	(Y)	N	N	N	N	N	N	N	Y	(Y)
Gingdom	Certified Accountant	N	N	(Y)	N	N	(Y)	N	N	N	N	N	N	N	Y	
	Registered Auditor	N	N	Υ	N	N	(Y)	N	N	N	N	N	N	N	Y	
	Management Accountant	N	N	N	N	N	(Y)	N	N	N	N	N	N	N	Y	N
	Insolvency Practitioner	N	N	N	N	N	(Y)	N	N	N	N	N	N	(Y)		
uxem-	Expert Comptable (Tax adviser)	N	N	N	N	Υ?	Y?	N	N	N	N	N	N	(Y)	n.a.	n.a.
ourg	Réviseur d'Enterprises	N	N	N	N	Y?		N	N	N	N	N	N	N	N	N
reland	Chartered Accountant/Certified Accountant/RA	N	N	N	N	N	(Y)	N	N	N	N	N	N	N	Υ	Y
	Tax Consultant / Taxation Practitioner	N	N	N	N	N	N?	N	N	N	N	N	N	N	N?	N?

Composition of Regulation Indices - Accountants



		Market entry						Market conduct									
Accountants	ER	ERLC	ERED	ERED 1	ERED 2	ERED 3	ERED 4	ERQT	MCR	MCPR	MCAD	MCLOC	MCDIV	MCIC	MCIC 1	MCIC 2	Total
Austria	4.2	6.0	4.4	4.0	5.0	4.0	4.0	0.0	2.0	2.0	2.0	0.0	3.0	2.5	2.0	3.0	6.2
Belgium	3.9	6.0	3.8	4.0	3.0	4.0	6.0	0.0	2.4	0.0	4.0	0.0	3.0	4.8	5.0	4.5	6.3
Denmark	2.2	1.5	4.1	5.0	3.0	4.0	6.0	0.0	0.6	0.0	0.0	0.0	3.0	0.0	0.0	0.0	2.8
Finland	2.6	3.0	3.6	4.0	3.0	4.0	4.0	0.0	0.9	0.0	2.0	0.0	0.0	2.5	2.0	3.0	3.5
France	4.0	6.0	4.0	6.0	3.0	2.0	6.0	0.0	1.8	0.0	4.0	0.0	3.0	2.5	2.0	3.0	5.8
Germany	3.6	6.0	3.0	4.0	3.0	2.0	2.0	0.0	2.5	5.0	4.0	0.0	0.0	2.5	2.0	3.0	6.1
Greece	3.6	4.5	4.6	4.0	6.0	2.0	6.0	0.0	1.5	5.0	0.0	0.0	0.0	1.0	2.0	0.0	5.1
Ireland	2.7	3.0	3.7	3.0	5.0	4.0	0.0	0.0	0.3	0.0	2.0	0.0	0.0	0.0	0.0	0.0	3.0
Italy	3.2	4.5	3.4	4.0	3.0	2.0	6.0	0.0	1.9	2.0	2.0	0.0	0.0	4.5	6.0	3.0	5.1
Luxembourg	3.8	6.0	3.6	4.0	3.0	4.0	4.0	0.0	1.2	0.0	4.0	0.0	0.0	2.5	2.0	3.0	5.0
Netherlands	3.1	4.5	3.2	4.0	3.0	2.0	4.0	0.0	1.4	2.0	2.0	0.0	0.0	2.5	2.0	3.0	4.5
Portugal	2.7	3.0	3.7	5.0	3.0	2.0	6.0	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Spain	1.9	1.5	3.3	3.0	3.0	4.0	4.0	0.0	1.5	1.0	4.0	0.0	0.0	2.5	2.0	3.0	3.4
Sweden	2.4	2.0	4.0	4.0	5.0	1.0	6.0	0.0	0.9	0.0	2.0	0.0	0.0	2.5	2.0	3.0	3.3
United Kingdom	2.7	3.0	3.7	3.0	5.0	4.0	0.0	0.0	0.3	0.0	2.0	0.0	0.0	0.0	0.0	0.0	3.0

Source: IHS questionnaires 2002 and other sources

ER: Entry regulation ERLC: Entry regulation - Licensing

ERED: Entry regulation - Requirements in education

ERED 3: Entry regulation - Number of professional exams ERED 4: Entry regulation - Number of entry routes to profession

ERQT: Entry regulation - Quotas/Economic needs test

MCPR: Market conduct regulation - Regulation on prices and fees MCAD: Market conduct regulation - Regulation on advertising

MCLOC: Market conduct regulation - Regulations on location

ERED 1: Entry regulation - Duration of special education: University or other higher degr MCDIV: Market conduct regulation - Regulations on diversification

MCIC: Market conduct regulation - Regulations on form of business and inter-professional co-operatio MCIC 1: Market conduct regulation - Regulations on form of business

Accountants (Auditors): IHS regulation indices



Scale [0-6] + Scale [0-6] = Scale [0-12]

Most regulated

	Market Entry	Conduct	Total	Raḥk /
. Belgium	3.9	2.4	6.3	1 🖟
Austria	4.2	2.0	6.2	2
Germany	3.6	2.5	6.1	3
France	4.0	1.8	5.8	4
. '. Greece'. '.	3.6	1.5	5.1	5
italy	3.2	1.9	5.1	5
Luxembourg	3.8	1.2	5.0	6
. Netherlands	3.1	1.4	4.5	7
. Finland	2.6	0.9	3.5	8
Spain	1.9	1.5	3.4	9
Sweden	2.4	0.9	3.3	10
· · · !re and · · · ·	2.7	0.3	3.0	11
UĶ·	2.7	0.3	3.0	11
Denmark	2.2	0.6	2.8	12
Portugal	2.7	n.a.	n.a.	n.a.

Least Regulated

Trade-off Considerations

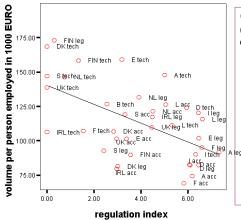


- An index encapsulates essential information, BUT..
- some information is lost => REDUCTIVE
- Benefit: makes systems COMPARABLE
- Trade-off between:
 - manageability and accuracy
- Aim: Index captures maximum possible valid content on a quantitative scale to enable cross-comparison between countries/systems

What are Indices good for? 3

IHS Liberal Professions Study

Productivity vs. Regulation index (legal+accountancy+technical)



- Higher Volume per employed person ('Productivity') associated with lower degrees of regulation (index)
 - Conjecture: decrease in regulation in a highly regulated profession can lead to increase in branch volume of business
 - -i.e. cet. paribus to a rise in productivity
 - Example: Spain after 1997

BROAD INDICATION..... (<u>Excessive</u>)
Regulation stifles Development