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OECD's FDI Regulatory Restrictiveness Index: Revision And Extension To More Economies

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OECD's FDI Regulatory Restrictiveness Index

REVISION AND EXTENSION TO MORE ECONOMIES

Takeshi Koyama, Stephen S. Golub

JEL Classification: F21, F23

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OECD's FDI REGULATORY RESTRICTIVENESS INDEX: REVISION AND EXTENSION TO MORE ECONOMIES

December 2006

This paper provides a revised measure of regulatory restrictions on inward foreign direct investment (FDI) for OECD countries and extends the approach to 13 non-member countries. The methodology is largely similar to that adopted in the previous version of the OECD indicator and covers three broad categories of restrictions: limitations on foreign ownership, screening or notification procedures, and management and operational restrictions.

This paper was prepared by Takeshi Koyama and Stephen Golub. It is also available as Economics Department Working Paper No. 525 [ECO/WKP(2006)53].

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Abstract

OECD's FDI regulatory restrictiveness index: revision and extension to more economies

This paper provides a revised measure of regulatory restrictions on inward foreign direct investment (FDI) for OECD countries and extends the approach to 13 non-member countries. The methodology is largely similar to that adopted in the previous version of the OECD indicator and covers three broad categories of restrictions: limitations on foreign ownership, screening or notification procedures, and management and operational restrictions. The FDI restrictiveness indicator captures statutory deviations from "national treatment", *i.e.* discrimination against foreign investment. When combined with other factors having an influence on foreign investment decisions, it has proven to be a good predictor of countries' inward FDI performance.

JEL classification: F23, F21
Keywords: Foreign direct investment, FDI restrictions, foreign ownership

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L'indice OCDE des restrictions réglementaires sur les investissements en provenance de l'étranger: Révisions et extension à plus de pays.

Ce document présente une mesure révisée des restrictions réglementaires envers les influx des investissements directs étrangers (IDE) pour les pays de l'OCDE et étend la mesure à 13 pays non-membres. L'approche est dans son ensemble similaire à celle adoptée lors de la version antérieure de l'indicateur de l'OCDE, et couvre essentiellement trois catégories de restrictions: les limites sur la part de firmes domestiques pouvant être détenues par le capital étranger, les procédures d'examen sélectif et de notification, et les restrictions concernant la gestion et les opérations des entreprises. L'indicateur de restrictions réglementaires mesure les déviations par rapport au "traitement national" c'est-à-dire les discriminations à l'encontre des investissements étrangers. Combiné à d'autres facteurs ayant une influence sur les décisions d'investissement à l'étranger, cet indicateur contribue à expliquer la performance des pays en matière d'influx des IDE.

Classification JEL: F23, F21
Mots-clefs: Investissement direct étranger, restrictions sur l'IDE, contrôle étranger

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OECD'S FDI REGULATORY RESTRICTIVENESS INDEX: REVISION AND EXTENSION TO MORE ECONOMIES

Takeshi Koyama and Stephen Golub[1]

Introduction

1. This document provides revised measures of the OECD's Foreign Direct Investment (FDI) Regulatory Restrictiveness Index for 29 OECD countries,[2] and extends the approach to nine non-member countries adhering to the OECD Declaration on International Investment and Multinational Enterprises (Argentina, Brazil, Chile, Estonia, Israel, Latvia, Lithuania, Romania and Slovenia) and four other major non-OECD countries (China, India, Russia and South Africa).

2. The methodology is largely similar to that adopted in the previous versions of the indicators (see Annex 1). The analysis is based primarily on information generated by the OECD – in particular through the work of the Investment Committee in the context of the implementation of the Code of Liberalisation of Capital Movements (OECD, 2004a) and the National Treatment Instrument for Foreign Controlled Enterprises (OECD, 2005c), OECD reports on international investor participation in telecommunications and infrastructure sectors, the OECD Investment Policy Reviews of Russia and China (OECD, 2003b; OECD, 2004b), and OECD Investment Dialogue with India.[3] As in the previous version of the indicators used for the Index, GATS schedules of commitments – dating back to 2000 – were additional sources of information for certain services sectors and for certain countries.[4] National sources were also consulted, especially for non-member countries, such as China, India, Russia and South Africa. It was beyond the scope and resources of the present exercise, however, to systematically review national sources for all countries.

3. The validity of the results is therefore primarily dependent on the accuracy of the information available to the OECD. To avoid that information is incorrect or out of date, the thirty-nine OECD and non-member countries adhering to the National Treatment Instrument (NTI) assisted in obtaining more

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1. The authors are Takeshi Koyama, who was principal administrator in the OECD Investment Division when this paper was prepared, and Stephen Golub, who is a consultant in the Economics Department and Professor of Economics at Swarthmore College, USA (email: sgolub1@swarthmore.edu). They would like to thank Alain de Serres in the OECD Economics Department and Blanka Kalinova in the OECD Investment Division for their help in preparing the paper.

2. The previous OECD estimates are reported in Golub (2003), and were also published in OECD (2003a) and in *OECD Economic Surveys* for several countries. The previous OECD indicators covered 28 member countries. The Slovak Republic has now been added.

3. The information used is based on regulatory developments as of April 2006 and does not take into account further liberalisation measures announced but not entered into force by that time.

4. GATS-based information was only used in the instances where it covered country and sector specific regulatory aspects not fully documented in country positions under OECD instruments.

accurate information. The Index will be improved and updated in light of new development and additional information.

Explanatory note and results

4. The indicators aim primarily to measure deviations from "national treatment", *i.e.* discrimination against foreign investment, rather than the institutional environment more generally. Regulations of labour and product markets and other policies that apply equally to foreign and domestic investors are not considered here, with the exception of state monopolies. Restrictions on national treatment can be classified into entry and post-entry operational restrictions. The indicators take into consideration discriminatory barriers to entry in the form of limitations on foreign ownership, special screening procedures which only apply to foreign investors, as well as post-entry management and other operational restrictions. FDI regulatory restrictions can either be across-the-board, applying to all sectors, or sector-specific. The limitations on foreign equity levels are usually specified on an industry-by-industry basis, whereas discriminatory authorisation requirements are often across-the-board.[5]

5. Restrictiveness is measured on a 0-to-1 scale, with 0 representing full openness and 1 a prohibition of FDI. Given their evident importance, ownership restrictions receive a substantial weight. Restrictiveness is calculated at the industry level and then a weighted OECD national average is obtained using the weights, based on the sectoral composition of overall FDI and trade flows of OECD countries.

6. The Index covers only 9 sectors and 11 sub-sectors. Because opportunities for investment in energy, such as oil and gas, vary considerably across countries depending on their natural endowments, energy other than electricity is not covered by the Index. The exclusion of other primary sectors, such as mining, may distort countries' relative restrictiveness indicators. Future developments of the Index will consider extension to more sectors. The share of primary sectors, though, is modest in the OECD area, and the impact of such an extension on the overall country ranking under the Index is unlikely to be large. Annex 1 provides more details of the methodology and the weighting system.

7. There are a number of important qualifications regarding the reported FDI regulatory restrictiveness scores. The measures are limited to overt regulatory restrictions on FDI, ignoring non-policy institutional or informal restrictions, such as the nature of corporate governance, as well as policies that indirectly impinge on FDI, notably economic and social regulation. Also, the extent of actual enforcement of statutory restrictions is difficult to determine and was not factored into the calculations. The stringency implied by screening requirements could be particularly variable across countries. Moreover, some countries may be more forthcoming than others in self-reporting their restrictions. It could then be that more transparent countries receive higher scores, not because their regulations are in fact more restrictive, but because they are more complete in their reporting of regulatory restrictions. In some federal countries, certain sectoral regulations on composition of companies' boards of directors fall under sub-national government jurisdiction. Variations across countries in the extent to which nationality requirements are imposed may not be reflected in scorings based primarily on federal laws. Finally, reported regulatory restrictions are not standardised and there

5. The OECD Code of Liberalisation of Capital Movements defines a foreign direct investment as an "investment for the purpose of establishing lasting economic relations with an undertaking such as, in particular, investment which give the possibility of exercising an effective influence on the management". Accordingly, mechanisms which allow foreign acquisitions of non-voting shares and other forms of portfolio investment (as opposed to FDI), for example in air transport, have not been factored in measuring FDI restrictiveness levels.

are difficulties in evaluating idiosyncratic restrictions in individual countries and putting them into context.

8. The Index used in isolation is not an adequate predictor of countries' FDI attractiveness. However, when used in combination with other factors, it can contribute to explaining variations among countries in attracting FDI.[6] Despite their limitations, these measures have proved useful both for policymakers and researchers interested in assessing policies towards FDI.

9. Table 1 shows the summary results by sector for 29 OECD member countries and 13 non-member countries. Figure 1 shows the results, breaking the aggregate regulatory restrictiveness score into ownership, screening, and operational components.

10. Among OECD countries, the most open countries tend to be in Europe. Since the late 1980s, intra-European Union (EU) FDI flows are almost completely unrestricted, and the European Economic Area (EEA) has also liberalised intra-bloc investment to some extent.[7] In addition, a number of European countries have minimal overt restrictions on inflows from non-EU and non-EEA countries. Although the EU is still not a completely unified bloc in terms of policies towards inward FDI, substantial harmonisation and intra-EU liberalisation have occurred. The OECD countries with the highest levels of overall regulatory restrictiveness are Iceland, Mexico, Australia, Austria and Canada, with overall regulatory restrictiveness scores above 0.20.

11. There is greater variation in the regulatory restrictiveness of the non-member countries. Some of the non-members, notably most of those in Eastern Europe as well as Chile and Argentina have rather low regulatory restrictiveness scores. Others, in particular China, India and Russia have relatively high scores. On average, the non-OECD countries are a little more restrictive than the OECD countries, as shown by the last few columns in Table 1.

12. The pattern of restrictions by industry is broadly similar across countries. The most restricted sectors are electricity, transport, telecommunications and finance. Manufacturing, tourism, construction and distribution are generally less restricted. There are some differences between the OECD and non-OECD countries, however. In particular, transport and tourism are relatively less restricted in non-OECD countries, while electricity, distribution and finance are relatively highly restricted in non-OECD countries.

13. The new results should not be compared directly with the results published for the first time in 2003 for the purpose of assessing liberalisation trends. Indeed, many changes in the reported scores do not result from revisions in policies, but from changes in the sources of information.[8] The new index also uses a slightly modified methodology (see Annex 1). Annex 2 presents estimates of changes in policies between 1998-2000 and 2005, after controlling for these alterations in information and methods.

6. See, for example, Golub (2003) and Nicoletti, *et al.* (2003).

7. European scores are scaled down in cases when intra-European preferences are in effect.

8. In particular, reports by the European Commission, the US Trade Representative and Japan's Ministry of Economy and Trade on the practice of other countries have no longer been used, and more systematic use of country positions under OECD investment instruments has been made.

Table 1. FDI Regulatory Restrictiveness Scores by Country and Sector (1 = closed, 0 = open)

	Australia	Austria	Belgium	Canada	Czech Republic	Denmark	Finland	France	Germany	Greece	Hungary	Iceland	Ireland	Italy
Business service														
Legal	0.250	0.348	0.022	0.200	0.125	1.000	0.550	0.233	0.022	0.462	0.100	0.266	0.022	0.022
Accounting	0.250	0.348	0.022	0.200	0.375	0.562	0.550	0.033	0.022	0.506	0.100	0.266	0.022	0.022
Architecture	0.200	0.348	0.022	0.150	0.050	0.022	0.110	0.033	0.022	0.462	0.100	0.266	0.022	0.022
Engineering	0.200	0.348	0.022	0.150	0.050	0.022	0.110	0.033	0.022	0.462	0.100	0.266	0.022	0.022
Total	0.225	0.348	0.022	0.175	0.150	0.432	0.330	0.083	0.022	0.473	0.100	0.266	0.022	0.022
Telecoms														
Fixed	0.700	0.172	0.072	0.525	0.050	0.072	0.110	0.072	0.122	0.122	0.200	0.266	0.122	0.072
Mobile	0.200	0.172	0.072	0.525	0.050	0.072	0.110	0.072	0.122	0.122	0.100	0.266	0.122	0.072
Total	0.575	0.172	0.072	0.525	0.050	0.072	0.110	0.072	0.122	0.122	0.175	0.266	0.122	0.072
Construction	0.200	0.172	0.022	0.150	0.100	0.022	0.110	0.022	0.022	0.022	0.100	0.266	0.022	0.022
Distribution	0.200	0.172	0.022	0.150	0.050	0.022	0.110	0.022	0.022	0.022	0.100	0.266	0.022	0.022
Finance														
Insurance	0.200	0.272	0.044	0.200	0.150	0.044	0.110	0.138	0.116	0.088	0.150	0.266	0.088	0.088
Banking	0.300	0.172	0.044	0.225	0.150	0.022	0.160	0.094	0.072	0.088	0.100	0.442	0.044	0.144
Total	0.277	0.195	0.044	0.219	0.150	0.027	0.149	0.104	0.082	0.088	0.112	0.401	0.054	0.131
Hotels & Restaurants	0.200	0.172	0.022	0.150	0.050	0.022	0.110	0.022	0.022	0.022	0.100	0.266	0.022	0.022
Transport														
Air	0.650	0.322	0.122	0.675	0.450	0.422	0.310	0.198	0.248	0.522	0.500	0.398	0.466	0.494
Maritime	0.500	0.472	0.248	0.300	0.100	0.022	0.210	0.198	0.198	0.254	0.400	0.266	0.066	0.066
Road	0.200	0.222	0.072	0.250	0.100	0.122	0.154	0.072	0.022	0.022	0.150	0.266	0.022	0.022
Total	0.486	0.369	0.169	0.413	0.217	0.176	0.232	0.171	0.177	0.294	0.380	0.310	0.190	0.199
Electricity	0.200	0.172	0.022	0.350	0.450	0.122	0.210	0.322	0.122	1.000	0.200	1.000	1.000	0.122
Manufacturing	0.200	0.172	0.022	0.150	0.050	0.022	0.110	0.072	0.022	0.022	0.100	0.266	0.022	0.022
TOTAL	0.280	0.242	0.052	0.228	0.122	0.131	0.180	0.094	0.063	0.187	0.153	0.309	0.078	0.073

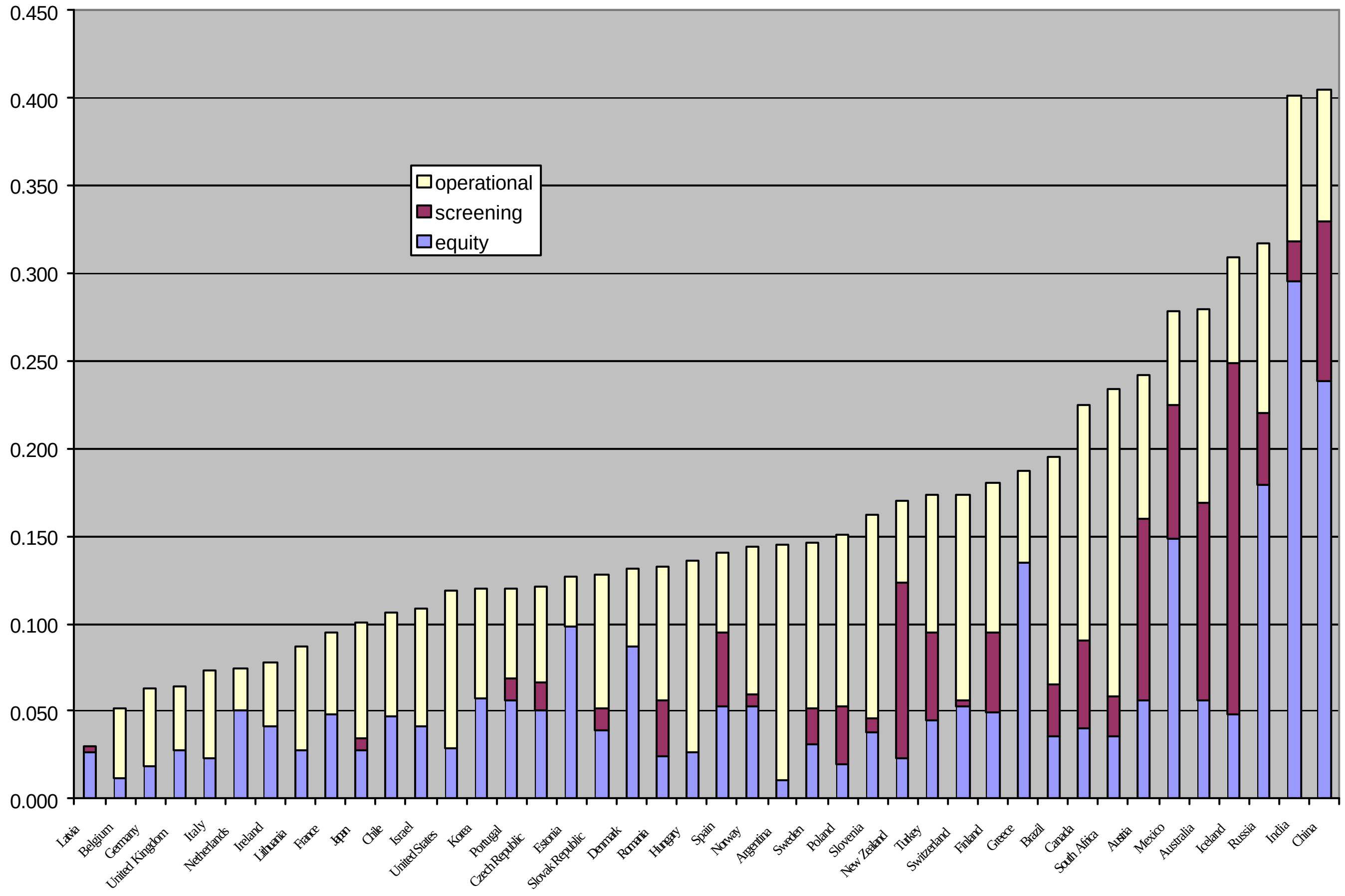
Table 1 (*cont'd*) FDI Regulatory Restrictiveness Scores by Country and Sector (1 = closed, 0 = open)

	Japan	Korea	Mexico	Netherlands	New Zealand	Norway	Poland	Portugal	Slovak Republic	Spain	Sweden	Switzerland	Turkey	United Kingdom	United States
Business services															
Legal	0.100	0.075	0.150	0.011	0.125	0.405	0.225	0.022	0.075	0.512	0.556	0.175	0.250	0.017	0.075
Accounting	0.100	0.075	0.425	0.011	0.125	0.405	0.175	0.066	0.375	0.066	0.292	0.100	0.150	0.017	0.025
Architecture	0.025	0.050	0.125	0.011	0.125	0.055	0.075	0.022	0.075	0.022	0.066	0.100	0.100	0.017	0.025
Engineering	0.025	0.050	0.125	0.011	0.125	0.055	0.075	0.022	0.075	0.022	0.066	0.100	0.100	0.017	0.025
Total	0.063	0.063	0.206	0.011	0.125	0.230	0.138	0.033	0.150	0.156	0.245	0.119	0.150	0.017	0.038
Telecoms															
Fixed	0.286	0.400	0.425	0.011	0.480	0.055	0.375	0.122	0.072	0.322	0.166	0.200	0.100	0.017	0.025
Mobile	0.025	0.400	0.150	0.011	0.125	0.055	0.375	0.122	0.072	0.322	0.166	0.100	0.100	0.017	0.025
Total	0.221	0.400	0.356	0.011	0.391	0.055	0.375	0.122	0.072	0.322	0.166	0.175	0.100	0.017	0.025
Construction	0.025	0.050	0.125	0.011	0.125	0.055	0.075	0.022	0.072	0.022	0.066	0.100	0.100	0.017	0.025
Distribution	0.025	0.050	0.125	0.011	0.125	0.055	0.075	0.022	0.072	0.022	0.066	0.100	0.100	0.017	0.025
Finance															
Insurance	0.025	0.050	0.425	0.055	0.125	0.105	0.075	0.116	0.172	0.226	0.116	0.100	0.100	0.083	0.175
Banking	0.075	0.050	0.525	0.033	0.125	0.105	0.325	0.172	0.172	0.182	0.116	0.110	0.150	0.067	0.275
Total	0.064	0.050	0.502	0.038	0.125	0.105	0.268	0.159	0.172	0.192	0.116	0.108	0.150	0.070	0.252
Hotels & Rest.	0.025	0.050	0.125	0.011	0.125	0.055	0.075	0.022	0.072	0.022	0.066	0.100	0.100	0.017	0.025
Transport															
Air	0.675	0.350	0.625	0.411	0.574	0.155	0.375	1.000	0.372	0.304	0.316	0.500	0.500	0.267	0.650
Maritime	0.275	0.450	0.425	0.355	0.225	0.455	0.075	0.122	0.122	0.316	0.266	0.594	0.500	0.361	0.275
Road	0.025	0.050	0.125	0.011	0.125	0.355	0.125	0.022	0.072	0.022	0.166	0.150	0.100	0.017	0.025
Total	0.356	0.333	0.428	0.301	0.320	0.334	0.185	0.434	0.194	0.250	0.262	0.469	0.416	0.256	0.346
Electricity	0.025	0.400	1.000	0.611	0.225	0.155	0.175	0.122	0.322	0.022	0.166	0.400	0.400	0.017	0.125
Manufacturing	0.025	0.050	0.125	0.011	0.125	0.055	0.075	0.022	0.072	0.072	0.066	0.100	0.100	0.017	0.025
TOTAL	0.101	0.120	0.278	0.074	0.170	0.144	0.151	0.120	0.128	0.140	0.147	0.174	0.173	0.065	0.119

Table 1 *(cont'd)* FDI Regulatory Restrictiveness Scores by Country and Sector (1 = closed, 0 = open)

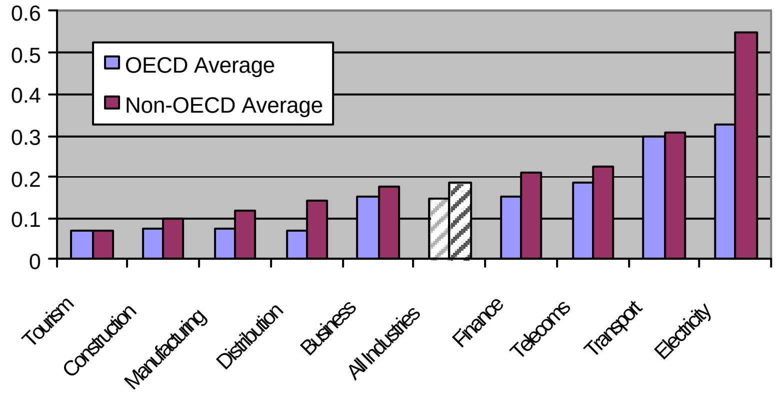
	Argentina	Brazil	Chile	Israel	Estonia	Latvia	Lithuania	Romania	Slovenia	China	India	Russia	South Africa	OECD Average	Non-OECD Average	All Average
Business services																
Legal	0.125	0.100	0.125	0.150	1.000	0.000	0.050	0.250	0.125	0.300	1.000	0.175	0.125	0.221	0.271	0.239
Accounting	0.125	0.100	0.025	0.050	0.022	0.000	0.050	0.050	0.125	0.425	1.000	0.175	0.125	0.196	0.175	0.191
Architecture	0.125	0.100	0.025	0.050	0.022	0.000	0.050	0.050	0.100	0.100	1.000	0.175	0.125	0.094	0.148	0.110
Engineering	0.125	0.100	0.025	0.050	0.022	0.000	0.050	0.050	0.100	0.100	0.050	0.175	0.125	0.094	0.075	0.087
Total	0.125	0.100	0.050	0.075	0.272	0.000	0.050	0.100	0.113	0.231	0.863	0.175	0.125	0.152	0.175	0.160
Telecoms																
Fixed	0.125	0.200	0.025	0.250	0.022	0.000	0.050	0.150	0.200	0.550	0.350	0.400	0.650	0.198	0.229	0.196
Mobile	0.125	0.200	0.025	0.250	0.022	0.000	0.050	0.150	0.100	0.450	0.350	0.350	0.600	0.143	0.206	0.152
Total	0.125	0.200	0.025	0.250	0.022	0.000	0.050	0.150	0.175	0.525	0.350	0.388	0.638	0.184	0.223	0.185
Construction	0.125	0.100	0.025	0.050	0.022	0.000	0.050	0.050	0.100	0.150	0.250	0.200	0.150	0.074	0.098	0.080
Distribution	0.125	0.100	0.025	0.050	0.022	0.000	0.050	0.050	0.100	0.450	0.600	0.100	0.150	0.072	0.140	0.092
Finance																
Insurance	0.125	0.150	0.025	0.050	0.122	0.000	0.050	0.050	0.100	0.350	0.450	0.850	0.350	0.135	0.206	0.152
Banking	0.175	0.400	0.025	0.050	0.022	0.000	0.100	0.175	0.100	0.550	0.350	0.550	0.250	0.157	0.211	0.172
Total	0.164	0.343	0.025	0.050	0.045	0.000	0.089	0.146	0.100	0.504	0.373	0.619	0.273	0.152	0.210	0.167
Hotels & Restaurants	0.125	0.100	0.025	0.050	0.022	0.000	0.050	0.050	0.100	0.150	0.050	0.100	0.100	0.072	0.071	0.071
Transport																
Air	0.125	0.600	0.475	0.550	0.322	0.132	0.350	0.750	0.740	0.550	0.550	0.600	0.250	0.443	0.461	0.454
Maritime	0.175	0.200	0.575	0.150	0.366	0.000	0.094	0.150	0.244	0.550	0.050	0.400	0.250	0.280	0.246	0.270
Road	0.425	0.600	0.345	0.050	0.022	0.100	0.050	0.050	0.100	0.150	0.050	0.200	0.300	0.106	0.188	0.128
Total	0.211	0.416	0.494	0.261	0.279	0.065	0.169	0.327	0.377	0.466	0.215	0.424	0.261	0.299	0.305	0.302
Electricity	0.125	0.100	0.025	0.650	0.622	1.000	0.650	0.450	0.700	0.750	0.150	0.750	1.000	0.326	0.536	0.376
Manufacturing	0.125	0.100	0.025	0.050	0.022	0.000	0.050	0.050	0.100	0.400	0.200	0.230	0.200	0.076	0.119	0.086
TOTAL	0.145	0.195	0.107	0.109	0.127	0.030	0.087	0.132	0.162	0.405	0.401	0.318	0.234	0.148	0.189	0.159

Figure 1. Nine-sector FDI Regulatory Restrictiveness by Type of Restriction*



*This aggregated Index covers the following sectors and sub-sectors: Business (legal, accounting, architectural, and engineering services), Telecommunications (fixed line telephony and mobile telephony), Construction, Distribution, Finance (insurance and banking), Tourism, Transport (air transport, maritime transport and road transport), Electricity and Manufacturing.

Figure 2. Regulatory Restrictiveness by Industry, OECD and Non-OECD Average



ANNEX 1
OECD'S METHODOLOGY FOR COMPUTING FDI REGULATORY RESTRICTIVENESS[9]

The Index covers the following sectors and sub-sectors: Business (legal, accounting, architectural, and engineering services), Telecommunications (fixed line telephony and mobile telephony), Construction, Distribution, Finance (insurance and banking), Tourism, Transport (air transport, maritime transport and road transport), Electricity and Manufacturing.

Regulatory restrictions on foreign ownership are the most obvious barriers to inward FDI. They typically take the form of limiting the share of companies' equity capital in a target sector that non-residents are allowed to hold, *e.g.* to less than 50%, or even prohibit any foreign ownership. Obligatory screening and other discriminatory approval procedures can also be used to limit FDI though their actual constraining effects depend on the implementation of such practices. Stipulations that foreign investors must show economic benefits can increase the cost of entry and therefore may discourage the inflow of foreign capital. Prior approval of FDI, such as mandated for all FDI projects in a few OECD countries, could also limit foreign capital inflow if it is taken as a sign of an ambivalent attitude towards free FDI, even though it may not be vigorously enforced.

Other formal regulatory restrictions that can discourage FDI inflows include constraints on the ability of foreign nationals either to manage or to work in affiliates of foreign companies and other operational controls on these businesses. Stipulations that nationals or residents must form a majority of the board of directors may undermine foreign owners' control over their holdings and hence make them more hesitant to invest under such circumstances. Similarly, if regulations restrict the employment of foreign nationals, investors may judge that they cannot make use of the necessary expertise to make their investment worthwhile. Also, operational requirements, such as the restrictions *vis-à-vis* non-members on cabotage in air, road, or maritime transport may limit profits of foreign-owned corporations, and hence the amounts of funds foreign investors are willing to commit.

Table A1 presents the scoring system used to calculate the overall regulatory restrictiveness indicators for each industry and country based on regulations in each of the three areas: equity, screening and other restrictions. The total score ranges between 0 and 1, with 0 being completely open and 1 being completely closed.

The ownership restrictions are weighted highly in view of the fact that foreign ownership is a necessary and essential condition for FDI. In the case of a ban on foreign ownership, other restrictions become irrelevant.[10] The ownership scores in Table A1 are constructed so as to capture non-linearities in ownership restrictions as well as the inverse relationship between permissible foreign equity share and restrictiveness. Screening and limitations on management are generally less important. Also, non-linearities are built into the scoring system to reflect the conjecture that a total ban on foreign ownership is significantly more restrictive than allowing a small foreign equity stake. Restrictiveness is

9. For more details and discussion see Golub (2003) and Hardin and Holmes (1997, 2002).

10. The Index is capped at 1. As may be inferred from Table A1, it is possible that the component restriction scores could sum to up to more than 1 even if foreign equity is not banned, without the cap.

calculated at the industry level and then a weighted national average is obtained using FDI and trade weights (see Table A2). The same set of sector weights is used for all countries. While these weights may not precisely reflect the composition of FDI or output in some countries, a uniform set of weights establishes a common basis for comparing countries' overall scores. OECD and non-OECD average restrictions are simple averages of country scores.

As noted earlier, the focus is on departures from national treatment rather than regulatory barriers hampering market access for both domestic and foreign firms. However, an exception is made for state ownership, including state monopoly or near-monopoly, as government monopoly is in effect a *de facto* ban on FDI. Industries reserved for the government are scored as though ownership is banned. Where government ownership was determined to be greater than 50% in key industries, such as telecommunications, electricity and transport, a partial ownership restriction was imputed.[11]

Where restrictions on intra-European investments are waived, European restrictions are weighted by 0.44, reflecting the fact that 56% of FDI inflows into European countries were intra-European in 1998, though not all EU countries have the same share of intra-European FDI. This could overstate the effect of the waiver to the extent that this waiver endogenously raises the share of intra-European FDI.

The methodology used in computing this new Index differs slightly from the one used in the previous study. *Ex post* notification requirements for foreign investments for statistical and commonly accepted purposes are no longer considered a regulatory restriction. Also, the weight on partial state ownership has been lowered.

The sources of information used also differ from the ones used in the previous study. In particular reports by the European Commission, the US Trade Representative and Japan's Ministry of Economy and Trade on the practice of other countries and private consulting firm reports have no longer been used, and more systematic use of country positions under OECD investment instruments has been made. This change in sources has affected significantly the position of Japan, United States and Korea in particular.

Country files will be made available on the OECD website (www.oecd.org/eco/pmr).

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11. Data availability on state ownership is limited for most sectors. For other industries, notably air transport, telecoms and especially electricity, where more data on state ownership are available, the restriction score was calculated as follows:

State ownership share	score
State monopoly	1.0
Privatisation under way	0.6
90% or more	0.4
75-90%	0.2
Majority	0.1

These scores are based on the consideration that partial state ownership by itself is not necessarily a major impediment to increasing foreign investment whereas state monopoly by its very nature precludes foreign investment.

Table A1. Coefficients on FDI restrictions (maximum 1.0)

	Scores
Foreign Direct Equity Investment Limits	
No foreign equity allowed	1
1 to 19 % foreign equity allowed	0.6
20-34% foreign equity allowed	0.4
35-49 % foreign equity allowed	0.3
50-74% foreign equity allowed	0.2
75-99% foreign equity allowed	0.1
Screening and Approval	
Investor must show economic benefits	0.2
Approval unless contrary to national interest	0.1
Notification	0.05
Other Restrictions	
Board of directors/Managers	
majority must be nationals or residents	0.1
at least 1 must be national or resident	0.05
must be locally licensed	0.025
Movement of people	
no entry	0.1
less than one year	0.075
one to two years	0.05
three to four years	0.025
Input and Operational Restrictions	
domestic content must be more than 50%	0.1
other	0.05
Total*	Between 0 and 1

* If foreign equity is banned, then the other criteria become irrelevant, so that the Index is at 1.0. It is possible that various scores sum to slightly more than 1.0 even if foreign equity is not banned, and in such cases, the Index is also capped at 1.0.

Table A2. Sector weights

Sectors	**FDI/trade weights**
Business	0.192
Telecommunications	0.041
Construction	0.021
Distribution	0.094
Finance	0.163
Tourism	0.004
Transport	0.164
Electricity	0.019
Manufacturing	0.302
Total	1.000

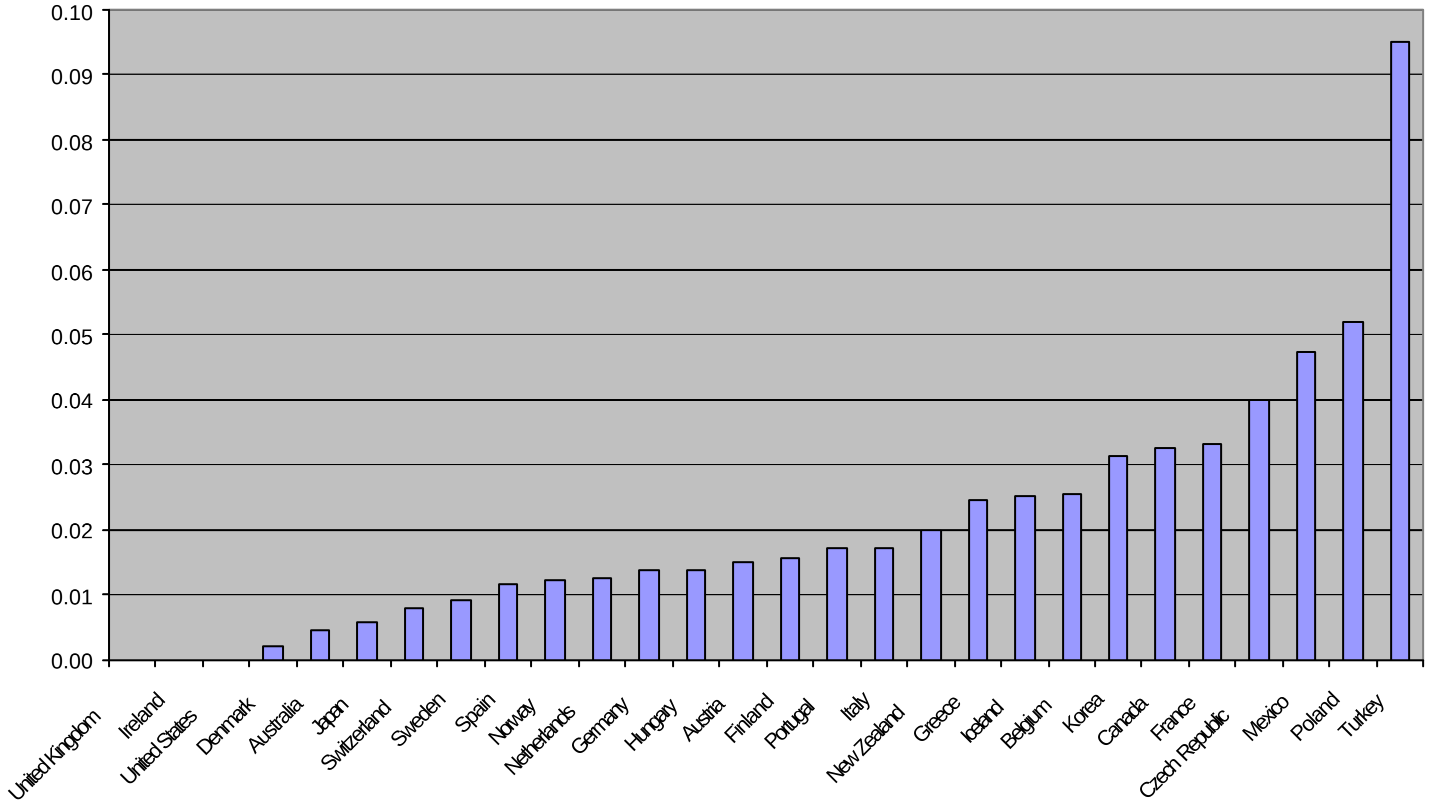
Note: Using FDI weights raises a problem of endogeneity: Highly restricted sectors may experience less FDI and hence receive a too low weight. To deal with this problem, for the service sectors, an average of FDI and trade weights was employed. Aggregating sectoral FDI restrictions by using FDI weights rather than value-added weights tends to slightly lower most countries' restrictions scores.

Source: Golub, 2003.

ANNEX 2
CHANGES IN POLICIES 1998/2000-2006

Figure A1 shows changes in policies in OECD member countries from 1998-2000 to 2006 as measured by reductions in foreign equity ownership ceilings. Consistent with the standstill obligation undertaken by members under the OECD instruments, there have not been any cases identified where such ceilings have been raised over the period considered. The majority of OECD countries have experienced relatively minor changes in policies towards FDI as shown by the small changes in regulatory restriction scores. Turkey undertook the most significant liberalisation of equity restrictions, leading to a decline of its regulatory restrictiveness score of close to 0.1. Poland, Mexico, the Czech Republic, France and Canada experienced moderate reductions in their respective scores of 0.05 to 0.03. A number of other countries also liberalised their ownership restrictions slightly.

Figure A1. Reductions in the FDI Restrictiveness Indices due to decreases in foreign equity ownership restrictions, 1998/2000-2006



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