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An Assessment of Cross-National Regulatory Burden Comparisons

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AN ASSESSMENT OF CROSS-NATIONAL REGULATORY BURDEN COMPARISONS

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Governments everywhere engage in activities that impose burdens on individuals and businesses. These activities are undertaken in order to generate benefits of many types. Some of these burdens and benefits are readily measurable, particularly those taking the form of financial transactions, such as taxes and fees collected. Such payments are routinely and closely monitored, in ways permitting comparisons among countries. National rankings have been available for many years that are based on government revenues in the aggregate and relative to population, Gross Domestic Product (GDP), and other metrics.

While payments by individuals and business to their governments are the most visible and generally largest form of governmental burden, mandated behavior catalogued in regulations also imposes a burden by requiring a substantial expenditure of time and resources.[1] Any portrayal of governmental burden that ignores regulatory compliance costs is misleading, particularly since governments are, to a considerable degree, able to achieve objectives through varying mixes of fiscal and regulatory measures. A government, for example, can construct a water filtration plant using tax revenues, or require businesses to use their own funds to construct it.[2]

Traditionally, far more public attention has been focused on fiscal burden than on regulatory burden, largely due to the transparency of

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1. *See infra* notes 5-11, 28-94 and accompanying text (detailing the burden of regulatory compliance throughout the world).

2. For example, the Environmental Protection Agency's (EPA's) National Pollutant Discharge Elimination: System B Regulations for Revision of the Water Pollution Control Program Addressing Storm Water Discharge, promulgated in 1999, "expands the existing National Pollutant Discharge Elimination System program for storm water control." U.S. OFFICE OF MGMT. & BUDGET, OFFICE OF INFO. AND REGUL. AFFAIRS, VALIDATING REGULATORY ANALYSIS: 2005 REPORT TO CONGRESS ON THE COSTS AND BENEFITS OF FEDERAL REGULATIONS AND UNFUNDED MANDATES ON STATE, LOCAL, AND TRIBAL ENTITIES 145 (2005). The EPA estimates that this rule will impose a "total cost . . . on Federal and State levels of government, and on the private sector, [of] $803.1 million annually." *Id.*

budgetary transactions. This is not surprising given the fragmented nature of regulation, which arises independently in dozens of separate governmental agencies and units. The importance of rectifying this imbalance, and making the public more fully aware of regulatory burden, has been underscored by a Canadian finding that "recent research, particularly from the OECD, and better data on regulations, point to strong and almost always negative links between the economic restrictiveness or burden of the regulations and economic performance."[3] Similarly, a World Bank working paper from 2005 concludes that "a heavier regulatory burden reduces growth and increases [macroeconomic] volatility."[4]

Of course, any portrayal of governmental activity that ignores whatever benefits it may produce is incomplete, whether the action is a spending program or a regulatory program. Unfortunately, sufficient characterizations of such benefits exist neither for fiscal actions nor for regulatory actions. The fundamental question of whether the net effect of particular governmental activities enhances societal well-being is rarely answered adequately, either prospectively or retrospectively.

As for spending programs, an implicit reckoning exists, in that government must finance its spending, putting in place a political and financial constraint, the effectiveness of which varies over time and across jurisdictions.[5] No such inherent constraint exists, however, for regulatory programs, which explains the rise in many countries of alternative oversight mechanisms such as benefit-cost analytical requirements.[6] Such oversight mechanisms are used with varying success to supplement whatever legislative review procedures may apply to both particular spending and regulatory programs.[7] The United States has made more

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3. Fidele Ndayisenga & Andre Downs, *Economic Impacts of Regulatory Convergence Between Canada and the United States* 3 (Gov't of Can., Working Paper Series 008, 2005).

4. Norman V. Loayza et al., *Regulation and Macroeconomic Performance* 1 (World Bank, Working Paper No. 3469, 2004); *see id.* at Part 18.

5. *See* W. MARK CRAIN, U.S. SMALL BUS. ADMIN., THE IMPACT OF REGULATORY COSTS ON SMALL FIRMS 1-4 (2005).

6. *See generally* U.S. OFFICE OF MGMT. AND BUDGET, *supra* note 2 (providing the costs and benefits of Federal regulations and recommendations for regulatory reforms); *see also* AUSTRALIAN CHAMBER OF COMMERCE & INDUS., HOLDING BACK THE RED TAPE AVALANCHE: A REGULATORY REFORM AGENDA FOR AUSTRALIA 7 (2005). The Australian Chamber of Commerce and Industry (ACCI), an organization whose membership includes federal business organizations as well as major national industry associations in Australia, proposed, as one of its suggested improvements of regulation cost, a regulatory budgeting system whereby "[e]ach year the Prime Minister will present a regulatory budget that is a compendium of the cost and benefit analysis of regulations enacted by government and departments in the previous year." *Id.* The ACCI also recognized that "[r]igorous cost/benefit analysis of regulation is a fundamental component of the . . . process." *Id.*

7. *See* CRAIN, *supra* note 5, at 2-3 (discussing limiting characteristics of using cost-

headway than other nations in bringing benefit-cost principles to bear on regulatory decision making, thanks to efforts of units within the Executive Office of the President that have continued for over three decades.[8] The lead role on that front is now being taken by the Office of Management and Budget (OMB), as detailed in its December 2005 report.[9]

Some estimates of overall regulatory compliance cost do exist for a few countries, but they are less widely available and considerably less standardized than are estimates of taxes and fees.[10] Regulatory cost estimates have been generated for the United States Government,[11] and to a much lesser extent for the governments of other countries. Estimates are essentially non-existent for regulatory costs generated by units of government other than at the national level. Countries vary substantially in the mix of responsibilities carried out by the central government, as distinct from regional units such as states and provincial governments. Thus, comparing compliance cost estimates across nations is replete with challenges—comprehensive data simply do not exist, and such data as can be assembled lack comparability due to varying patterns of federalism.

In recent years, various comparisons across countries that are based on a mix of "hard" statistics on narrowly-defined elements of regulation, coupled with qualitative judgments, have become available.[12] This Article reviews such comparisons as proxies for regulatory burden measures. The several rankings differ in scope and features, so it may be useful to precede their review with some discussion of just what it is that regulation encompasses.

Traditionally, the term "regulation" has generally been used to refer to three clusters of governmental influence over the conduct of individuals and businesses: antitrust policy, economic controls (constraints on business entry/exit from markets and on product prices and quantities sold), and health/safety/environmental safeguards (often termed "social" regulation).[13] This three-part categorization, for example, is the organizing

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benefit analysis for assessing regulatory policy).

8. *See* U.S. OFFICE OF MGMT. AND BUDGET, *supra* note 2, at 19-34.

9. *Id.*

10. *See id.* at 1, 3-34 (summarizing cost-benefit analytical review of eighty-eight "major" Federal regulations); *see also* AUSTRALIAN CHAMBER OF COMMERCE & INDUS., *supra* note 6, at 15 (providing overall regulatory costs for Australia during the 2004 fiscal year); MARC A. MILES ET AL., 2006 INDEX OF ECONOMIC FREEDOM (2006) (providing a statistical analysis for regulatory schemes in 161 countries over twelve years); Ndayisenga & Downs, *supra* note 3 (reviewing regulatory reform in Canada).

11. The most recent such estimates are those found in CRAIN, *supra* note 5, at 1 (estimating the total cost of federal regulation at between $34 billion and $39 billion).

12. See infra notes 28-95 and accompanying text.

13. *See*, *e.g.*, W. KIP VISCUSI ET AL., ECONOMICS OF REGULATION AND ANTITRUST (4th

framework of major textbooks such as that of Viscusi, Harrington and Vernon.[14] Their text identifies two mechanisms—price incentives (primarily taxes) and direct controls on behavior—used by both the federal and state governments within the United States to achieve objectives in each of the three regulatory areas.[15] In effect, this calls for a twelve-cell matrix of regulation (three types, two enforcers, and two tools), and on at least one dimension, that of the enforcer, numerous agencies populate the "economic" and "social" cells of the matrix.[16] Chart 1 illustrates what such a framework entails; total regulatory burden would be the sum of the heights of the twelve columns (heights shown here are purely hypothetical).[17] As will become clear in reviewing existing burden measures, few studies attempt to encompass all twelve, and most confine their reach to merely two—direct controls by the federal government in "economic" and "social" areas.[18]

CHART 1: TYPES OF REGULATION—A CONCEPTUAL VIEW.

THE HEIGHT OF A COLUMN WOULD REPRESENT THE TOTAL BURDEN ASSOCIATED WITH A PARTICULAR TYPE OF REGULATION.

If one wanted to work with a conceptualization that captures *total* government burden, the fiscal dimension would need to be incorporated, covering revenues raised in ways unrelated to the price incentive mechanism identified by the Viscusi text.[19] Then it would be important to include both the actual revenues generated and the compliance burden associated with their generation. That modification would add another four columns. The compliance burden of federal taxation, in the form of the time taxpayers devote to preparing tax forms, has been included in some estimates.[20]

It is probably fair to say that the typology of regulation is in flux. The approach taken by Crain organizes regulation into four clusters: economic, workplace, environmental, and tax compliance, while excluding antitrust.[21]

ed. 2005).

14. *Id.*

15. *See id*. at 3.

16. *See* Chart 1, *infra* p. __.

17. *Id.*

18. *See infra* notes 28-93 and accompanying text.

19. *See* VISCUSI ET AL., *supra* note 13.

20. *See, e.g.*, CRAIN, supra note 5, at 27-28.

21. *Id.* at 5.

Crain finds that these clusters account for, respectively, roughly fifty-three, ten, twenty and eighteen percent of total federal regulatory burden in the United States[22]

An alternative framework that is becoming increasingly common, with encouragement from the OMB and the Organization for Economic Co-operation and Development (OECD) among others, distinguishes product market regulation from labor market regulation, with mixed practice as to whether antitrust is treated as part of the former (as in OECD reports) or simply excluded from consideration (as in OMB reports).[23] A similar possibility is to apportion all regulation into clusters of "fiscal, labor and output market, where the latter encompasses the regulation of entry, trade, financial markets, bankruptcy and contract enforcement."[24] One pragmatic appeal of this latter approach is that particular national ranking indices falling within each cluster do appear to be more closely correlated with one another than with those in the other two clusters.[25]

Were a tax compliance cluster to be included, it should reckon with those government rules put in place for the purpose of implementing government spending and revenue programs, occasioning real resource transfers from or to targeted individuals and businesses over and above the actual budgetary transaction itself. OMB's 2005 report identifies a variety of such regulations that implement federal budgetary programs, which it terms "transfer rules," and it excludes the costs of these regulations from its overall calculations.[26] OMB makes a "distinction between rules that impose costs primarily through the imposition of taxes, and rules that impose costs primarily through mandates on the private sector," and OMB estimates only cover the latter type of regulation.[27]

PROMINENT CURRENT RANKINGS OF NATIONAL REGULATORY BURDEN

Five independent organizations have recently published country burden rankings using data drawn from 2003 to 2005. The array of countries covered by each study ranges from 30 to 161. While each study prominently features regulation, the five rankings vary with respect to how a regulatory burden is assessed and in the extent to which factors other than

22. *Id.* at 29.
23. *See* U.S. OFFICE OF MGMT. & BUDGET, *supra* note 2, at 34.
24. NORMAN V. LOAYZA ET AL., WORLD BANK, REGULATION AND MACROECONOMIC PERFORMANCE 19, 29 (2004).
25. *Id.* at 10.
26. *See* U.S. OFFICE OF MGMT. & BUDGET, *supra* note 2, at 16.
27. *Id.* at 16-17.

regulation are incorporated. Each of the five ranking systems is discussed in turn.

1) OECD: Product Market Regulation Indicator[28]

The focus of the OECD indicator is on product market regulation as assessed by governmental officials in each of the thirty OECD member nations, using an OECD questionnaire.[29] The OECD administered one questionnaire in 1998 and a second at the end of 2003.[30] (The other four rankings reviewed in this paper are updated annually.) The 2003 questionnaire collected approximately 800 data points ranging across nearly 140 economy-wide or industry-specific regulatory areas, which were converted into sixteen numerical indicators.[31] These were then aggregated into three clusters—extent of state control (weighted .29), barriers to entrepreneurship (.30), and barriers to trade and investment (.41)—and then to a single indicator of each country's overall product market regulatory burden.[32] Antitrust was taken into account along with all economic regulation. While "administrative regulation" was included, it would appear that little of the burden from health/safety/environmental (social, labor market) regulation was covered.[33]

According to the OECD findings for 2003, the countries with the least burdensome regulatory systems are the United Kingdom, Australia, the United States, New Zealand, Canada, Iceland, and Denmark.[34] The most burdensome systems are in Poland, Turkey, Mexico, Hungary, Greece, Italy, Czech Republic, and France.[35] The indices, scaled from zero to four, however, vary only slightly across most countries; all but five of the thirty countries have indices in the range 1.0 to 2.0. [36] The OECD pointed out that the differences across half the countries lack statistical significance.[37]

OECD further noted that: (a) product market regulatory burden declined in all OECD member countries from 1998 to 2003,[38] (b) most regulatory

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28. Paul Conway et al., *Product Market Regulation in OECD Countries: 1998 to 2003*, 3 (Org. for Econ. Coop. and Dev., Working Paper No. 419, ECO/WKP, 2005), *available at* www.oecd.org/eco.

29. *See id.* at 3.

30. *See id.*

31. *See id.* at 5-7.

32. *See id.* at 8.

33. *Id.* at 59.

34. *Id.* at 23 fig.10.

35. *Id.*

36. *Id.*

37. *Id.*

38. *Id.* at 32 ("Regulatory impediments to product market competition have declined in

regimes became more homogeneous across countries,[39] and (c) country rankings changed little during the five-year period.[40] Finally, in OECD's view, available evidence on labor market regulation suggests that similar patterns probably exist in both these classes of regulation.[41] The declining burden pattern from 1998 to 2003 noted by OECD stands in sharp contrast to Crain's finding that the United States federal regulatory burden, expressed on a per household basis, rose significantly from 1995 to 2004, from $8,437 to $10,172.[42]

2) World Bank: Ease of Doing Business Indicator[43]

The World Bank collected data for January 2005 from some 150 countries on ten specific regulatory factors that bear on the ease of doing business.[44] This was the third annual such World Bank survey, each of which was somewhat broader than its predecessor.[45] The process entailed consultation with over 3,500 individuals drawn from within and outside governments.[46] The World Bank concluded that "a high ranking on the ease of doing business does mean that the government has created a regulatory environment conducive to business operations."[47] Each country's ranking is a simple average of its percentile rankings on each of the ten components, weighted equally. The ten components are the strength of investor protection and the ease of: (1) starting a business, (2) hiring and firing, (3) licensing, (4) registering property, (5) getting credit, (6) paying taxes, (7) trading across borders, (8) enforcing contracts, and (9) closing a business.[48]

These components relate primarily to the nature of economic regulation, but they also incorporate some elements to encompass investor protection and tax compliance simplicity. The rankings are not strictly based on regulation; they represent informed opinion on particular indicators, distinct from any estimation of overall regulatory costs.[49] What the World Bank rankings lose in comprehensiveness they gain in comparability across

the OECD area.").

39. *Id.*
40. *See id.*
41. *Id.* at 26.
42. *See* CRAIN, *supra* note 5, at 48.
43. WORLD BANK, DOING BUSINESS IN 2006: CREATING JOBS (2006).
44. *See id.* at 77 (2006).
45. *Id.*
46. *Id.*
47. *Id.* at 92.
48. *Id.* at 93.
49. *Id.* at 91.

countries.

The World Bank concluded that the greatest ease of doing business can be found in New Zealand, Singapore, the United States, Canada and Norway.[50] At the other end of the spectrum, conditions are least conducive to business in five African countries.[51]

3) World Economic Forum: Global Competitiveness Index[52]

The intent of the annual Global Competitiveness Report set of rankings is to highlight competitiveness characteristics of countries, combining basic socioeconomic statistics with results of opinion surveys.[53] The latest edition, providing data as of mid-2005, covers 117 countries.[54] In all, 139 different indicators are presented, grouped into nine broad classes. These are aggregated into a single Global Competitiveness Index for each country. [55]

Burden of government regulation is one of the 139 indicators, but more than a dozen other indicators also address regulatory burden.[56] The rankings for all but two of the regulation-related indicators are wholly driven by the opinion survey, as distinct from hard statistics.[57] Approximately 10,000 senior business executives worldwide, on average ninety-four per country, completed a 150-item questionnaire during the spring of 2005.[58] In each country, a partner organization saw to the implementation of the survey; in the United States, this organization was the Council on Competitiveness.[59] The burden of government regulation ranking reflects responses to the following: "Complying with administrative requirements (permits, regulations, reporting) issued by the government in your country is (1=burdensome, 7=not burdensome)."[60] By that measure, the five least regulation-burdened countries (whose scores were in the 4.5 to 5.4 range of the scale) were Singapore, Hong Kong SAR,

50. *Id.*

51. *Id.* at 92. The five African nations are Sudan, Chad, Central African Republic, Burkina Fasa, and Congo Democratic Republic.

52. AUGUSTO LOPEZ-CLAROS ET AL., WORLD ECON. FORUM, THE GLOBAL COMPETITIVENESS REPORT 2005-2006 (2005).

53. *Id.* at 5.

54. *Id.* at 28-29.

55. *Id.* at 469-72.

56. *Id.* at 471-72.

57. *Id.* at 213-25.

58. *Id.* at 213-15. One hundred and fifty-eight U.S. business executives completed the survey. *Id.*

59. *Id.* at ix, 215.

60. *Id.* at 556, tbl.6.07.

Malaysia, Taiwan, and Finland.[61] The U.S. ranked twentieth with a 3.6 score; Canada ranked twenty-ninth with 3.4. The five most regulation-burdened countries (whose scores were in the 2.0-2.1 range) were Italy, Peru, Brazil, Serbia & Montenegro, and Bosnia & Herzegovina.[62]

The World Economic Forum report sheds additional light on regulatory burden, as each of the following indicators suggests.[63] (Ranks are shown only for the U.S. and Canada.)

TABLE 1: WORLD ECONOMIC FORUM RANKINGS AMONG 117 NATIONS[64]
[1 IS MOST FAVORABLE]

EXCEPT WHERE NOTED, ALL RANKINGS ARE SURVEY-BASED.	U.S.	CANADA
Prevalence of trade barriers	28	25
Impact of rules on FDI	10	42
Agricultural policy costs	52	50
Ease of hiring foreign labor	64	67
Efficiency of legal framework	17	20
Property rights	2	18
Intellectual property protection	1	16
Favoritism in decisions of government officials	33	45
Extent of bureaucratic red tape	35	24
Effectiveness of national lawmaking bodies	9	14
Effectiveness of antitrust policy	6	12
Demanding regulatory standards (other than environmental)	5	15
Number of procedures required to start a business—World Bank report	10	1
Time required to start a business—World Bank report	4	2
Foreign ownership restrictions	14	25
Strength of auditing and accounting standards	2	16
Stringency of environmental regulations	19	16
Clarity and stability of environmental regulations	17	14
Extent of government-mandated environmental reporting	9	14
Effects of environmental compliance on business	11	19
Effects of privatization on competition and the environment	11	14

It is difficult to discern a meaningful pattern in these results, which may

61. *Id.*
62. *Id.*
63. *Id.* at 486-89, 528, 551-59, 579, 611-12, 616-20.
64. The author compiled this data from the World Economic Forum report.

mean that regulatory structures vary sharply, at least as they are perceived across countries.

The survey instrument also provided an opportunity for respondents in each country to select, from a list of fourteen, the five most "problematic factors for doing business."[65] In the United States, three regulatory matters are among the most troublesome five: tax regulations, inefficient government bureaucracy, and restrictive labor regulations.[66]

At the most aggregate level of the indices, the "Global Competitiveness Index," the highest ranked five countries are the United States, Finland, Denmark, Switzerland and Singapore.[67] The worst rankings are assigned to Chad, Ethiopia, Mali, Malawi and East Timor. Canada's rank is number thirteen.[68]

The World Economic Forum's approach has the virtue of exploring many different facets of the business setting in a large array of countries, attempting to rely upon comparable constructs in each. It demonstrates how difficult it is to distinguish regulatory concerns from other concerns; regulatory benefits and burdens are in some instances construed on a net benefit (or net burden) basis, and in others just the burden is referenced. While the survey approach has much merit, it is not clear that tracking the views of 158 U.S. business executives (and generally fewer in other countries) about diverse regulatory issues yields reliable results, particularly when individual perceptions can be colored by unique cultural and historical factors.

4) *Heritage/Wall Street Journal*: Index of Economic Freedom[69]

The Index of Economic Freedom is an annual assessment of how 161 countries compare on fifty indicators that are grouped into ten "factors" of economic freedom.[70] One of the ten factors is regulation, but at least two others also encompass aspects of regulation as the concept is construed in this paper; namely, trade policy, wages and prices (i.e., wage-price controls), and possibly government intervention in the economy (although this is interpreted as degree of government ownership, which is not a regulatory matter).[71] The rankings rely on data from late 2004 to early

65. *See id.* at 214.
66. *Id.* at 456.
67. *Id.* at 28.
68. *Id.* at 29.
69. *See generally* MILES ET AL., *supra* note 10.
70. *See id.* at 56.
71. *See id.*

2005.[72]

The approach taken entails no surveys; rather, the authors assign numerical scores (from one to five) to each of the ten factors, and a simple average is computed as the overall score for the rankings.[73] For each of the factors, a set of criteria is specified to guide the scoring process, and the data used are identified.[74] The process is a mix of judgmental and data-determined considerations, depending on the indicator. For example, the most favorable score achievable for the regulation factor is "1," which indicates that, "[e]xisting regulations straightforward and applied uniformly to all businesses; regulations not much of a burden for business; corruption nearly nonexistent."[75] By contrast, a score of "5" indicates "[g]overnment-set production quotas and some state planning; government regulations virtually impede creation of new businesses; corruption widespread; regulations applied randomly."[76]

Only three countries received scores of "1" on regulation: Hong Kong, Singapore, and Denmark.[77] Sixteen countries scored "5."[78] The United States' score was "2," as was Canada's.[79] As for trade policy and for wages and prices, both the United States and Canada scored "2."[80]

The overall rankings, incorporating all ten factors, place the following countries in the top five: Hong Kong, Singapore, Ireland, Luxembourg, and Iceland.[81] At the bottom of the rankings are North Korea, Iran, Burma, Zimbabwe, and Venezuela.[82] The United States ranked ninth and Canada ranked twelfth (although the two countries have virtually the same numerical score of 1.84 and 1.85, respectively).[83]

The Index of Economic Freedom has the appealing feature of covering a large number of countries with clear criteria applied by a single set of analysts, as distinct from an opinion survey from business executives across the globe. But it remains heavily judgmental and at a level of

72. *See id.* at 57.
73. *Id.* at 56-57.
74. *Id.* at 58-74.
75. *Id.* at 72.
76. *Id.*
77. *Id.* at 412-14.
78. *Id.* at 414. These countries were Bosnia & Herzegovina, Guinea-Bissau, Togo, Sierra Leone, Bangladesh, Vietnam, the Republic of Congo, Haiti, Turkmenistan, Laos, Cuba, Libya, Zimbabwe, Burma, Iran, and North Korea. *Id.*
79. *Id.*
80. *Id.*
81. *Id.*
82. *Id.*
83. *Id.* at 412.

abstraction that makes it difficult to discern particular obstacles or opportunities for government improvement. Its greatest value is probably in drawing fairly clear lines between countries that have sharply differing burdens, as distinct from clarifying whether countries scoring a two or a three, for example, on any factor are actually and substantially dissimilar.

5) Fraser Institute: Economic Freedom of the World Index[84]

The Economic Freedom of the World Index, published by the Fraser Institute, is an annual series that ranks 127 countries on "the degree to which the policies and institutions of countries are supportive of economic freedom."[85] The most recent ranking, issued in September 2005, reports on conditions prevailing in 2003.[86] The report relies on thirty-eight indicators (fewer for some countries due to missing data) in constructing ratings for five areas:

(1) "Size of Government Expenditures, Taxes, and Enterprises" (five "hard data" components)[87]

(2) "Legal Structure and Security of Property Rights" (five judgmental components)[88]

(3) "Access to Sound Money" (four "hard data" components) [89]

(4) "Freedom to Trade Internationally" (three of the nine components are regulatory indicators drawn from the *Global Competitiveness Report's* survey)[90]

(5) "Regulation of Credit, Labor, and Business" (fifteen components, nine of which are survey-based indicators drawn from the *Global Competitiveness Report*)[91]

The top five rankings in the most recent index went to Hong Kong, Singapore, New Zealand, Switzerland, and the United States. Canada ranked seventh, with a score barely below that of the United States (8.0 and 8.2, respectively, out of ten points).[92] The bottom four included Myanmar,

84. JAMES GWARTNEY ET AL., FRASER INST., ECONOMIC FREEDOM OF THE WORLD: 2005 ANNUAL REPORT (2005).
85. *Id.* at 3.
86. *Id.*
87. *Id.* at 6-8.
88. *Id.*
89. *Id.*
90. *Id.*
91. *Id.*
92. *Id.* at 12.

Zimbabwe, Venezuela, and the Democratic Republic of the Congo, with Guinea-Bissau and Burundi tied for fifth-from-the-bottom rank.[93] Table 2 provides sub-rankings for Canada and the United States.

TABLE 2: FRASER INSTITUTE RANKINGS AMONG 127 NATIONS[94]

CATEGORY	U.S.	CANADA
Freedom to trade internationally	32	26
Credit market regulations	9	19
Labor market regulations	10	25
Business regulations	12	15

The regulatory burden components of the Fraser and World Economic Forum rankings overlap considerably. The Fraser approach categorizes areas in ways that are more consistent with the regulatory structure outlined at the start of this paper, and it draws on a mix of hard statistical data and judgments about conditions. There is a year greater delay in producing the annual Fraser rankings than in the other three annual series' here reviewed.

RANKINGS COMPARISON

To aid in exploring similarities and differences among these ranking systems, Table 3 standardizes them by excluding those countries not ranked by all five studies. The smallest array is that of the OECD (thirty countries), but one of the OECD countries, Luxembourg, is excluded from one of the larger studies. Thus, Table 3 contains the rankings of twenty-nine countries. In other words, to promote comparability across rankings, if country X actually was ranked sixtieth in one of the larger studies, Table 3 shows what happens to country X's ranking in that study once all non-OECD members and Luxembourg are deleted, pushing its rank up to, say, twenty-fifth out of the twenty-nine.

93. *Id.*

94. Data for the United States and Canada can be found at GWARTNEY ET. AL, *supra* note 84, at 14-16. One is the most favorable ranking.

TABLE 3: COUNTRIES RANKED FROM LEAST (1) TO MOST (29) BURDENED[95]

	OECD	WORLD BANK	WORLD ECONOMIC FORUM	HERITAGE/WSJ	FRASER INSTITUTE
Australia	1.5	19	14.5	6	7
Austria	14	5	12.5	12	9.5
Belgium	14	14	17	16	14.5
Canada	8.5	3	10	8.5	5
Czech Rep.	22	21	21	15	24
Denmark	6	6	2.5	4	9.5
Finland	10.5	11	2.5	8.5	12
France	22	23	10	25	22.5
Germany	14	15	5	13.5	13
Greece	24	28	27	27	22.5
Hungary	26	24	23	22	14.5
Iceland	3.5	10	12.5	2.5	9.5
Ireland	6	9	18.5	1	6
Italy	25	26	25	24	25.5
Japan	10.5	8	8	17	18.5
Korea	17.5	17	16	26	21
Mexico	27	27	28	28	27
Netherlands	14	16	10	11	9.5
New Zealand	6	1	18.5	6	2
Norway	17.5	4	14.5	18.5	16.5
Poland	29	25	26	23	28
Portugal	19.5	22	22	18.5	20
Slovak Rep.	14	20	24	21	25.5
Spain	19.5	18	20	20	18.5
Sweden	8.5	12	6	13.5	16.5
Switzerland	22	13	4	10	2
Turkey	28	29	29	29	29
U.K.	1.5	7	7	2.5	4
U.S.	3.5	2	1	6	2

Note, in particular, from Table 3, the consistency among the top and

95. The author compiled this data based on the above-referenced reports. *See* GWARTNEY ET. AL, *supra* note 84, at 14-16; LOPEZ-CLAROS ET AL., *supra* note 52, at 28-29; MILES ET AL., *supra* note 10, at 412-14; WORLD BANK, *supra* note 43, at 91-92; Conway et al., *supra* note 28, at 23.

bottom rankings. For example, four countries—the United States, the United Kingdom, Denmark, and Canada—rank among the *least* burdened ten in all five studies. At the other extreme, five countries—Italy, Greece, Poland, Mexico and Turkey—rank among the *most* burdened ten in all five studies. Two countries—Mexico and Turkey—received virtually identical rankings in all five studies. By contrast, the rankings of three countries—New Zealand, Ireland and Australia—varied by as much as 17.5 ranks across the studies, showing substantial differences in their assessments.

Table 4 shows overall how closely correlated the five ranking systems turn out to be statistically. The World Economic Forum rankings are somewhat more unique than are those of the other four studies. The rankings of Heritage and Fraser are highly inter-correlated, as are those of OECD and Heritage.

TABLE 4: CORRELATIONS AMONG THE FIVE RANKING SYSTEMS[96]

	OECD	WORLD BANK	WORLD ECONOMIC	HERITAGE
WORLD BANK	0.778			
WORLD ECONOMIC	0.650	0.709		
HERITAGE	0.867	0.772	0.660	
FRASER	0.758	0.792	0.686	0.877

CONCLUSIONS

All of the country ranking systems reviewed in this paper are most useful in differentiating those countries in the least burdened group, for example, those in the twentieth or thirty-fifth percentile, from those at the other extreme, the most burdened countries. Their ability to make finer distinctions among those in the middle group is limited by the narrowness of the differences in the scoring each relies upon.

While each of the five ranking systems has its own unique appeal, there is greater commonality than distinction among them. This finding is in accord with a review by Nicoletti and Pryor of three earlier (1997-98)

[96] The author compiled these correlations. Each correlation in Table 4 is statistically significant at the .001 level; that is, the odds of achieving these correlations by chance are less than one in a thousand.

rankings for OECD member countries, distinguishing those that primarily are driven by hard data from those that primarily rest on opinion surveys; Nicoletti and Pryor concluded that results of the three rankings were largely consistent: "overall perceptions of government regulations by business leaders and experts and the objective assessment of formal regulations appear to be relatively well aligned."[97]

The five ranking systems offer neither truly comprehensive pictures nor cost estimates of regulatory burden, but each taps much of what burdens private commerce. Country-specific studies undertaken in the United States, Canada, and Australia that do attempt to estimate total regulatory costs generally put them in the neighborhood of ten percent of GDP. For example, a report issued by the Government of Canada in October 2005 cites studies suggesting that regulatory compliance costs approximately eight percent of GDP in the United States and twelve percent of GDP in Canada.[98] A 2005 Australian study puts its regulatory burden at ten percent of GDP.[99]

When such findings are considered in the context of multi-country rankings, it seems plausible to conclude that regulatory burdens in most of the rest of the world must absorb well over ten percent of GDP, given that the United States, Canada, and Australia consistently rank among the less-burdened countries. This in turn suggests that efforts to lessen regulatory burdens could have dramatic payback in improved economic performance worldwide. Certainly, although varying in relative magnitude, regulatory compliance costs are large in most of the world. The rankings surveyed in this paper suggest which parts of the world might be the most promising areas for regulatory burden reduction initiatives.

97. Giuseppe Nicoletti & Frederic Pryor, *Subjective and Objective Measures of the Extent of Government Regulation*, J. ECON. BEHAV. & ORG. (forthcoming 2006).

98. Ndayisenga & Downs, *supra* note 3, at 9.

99. AUSTRALIAN CHAMBER OF COMMERCE & INDUS., *supra* note 6, at 14.