



*Centre for the  
Study of Living Standards  
Centre d'étude des  
niveaux de vie*

# Competition, Regulation, and Productivity in Canada: An Overview

**Andrew Sharpe**

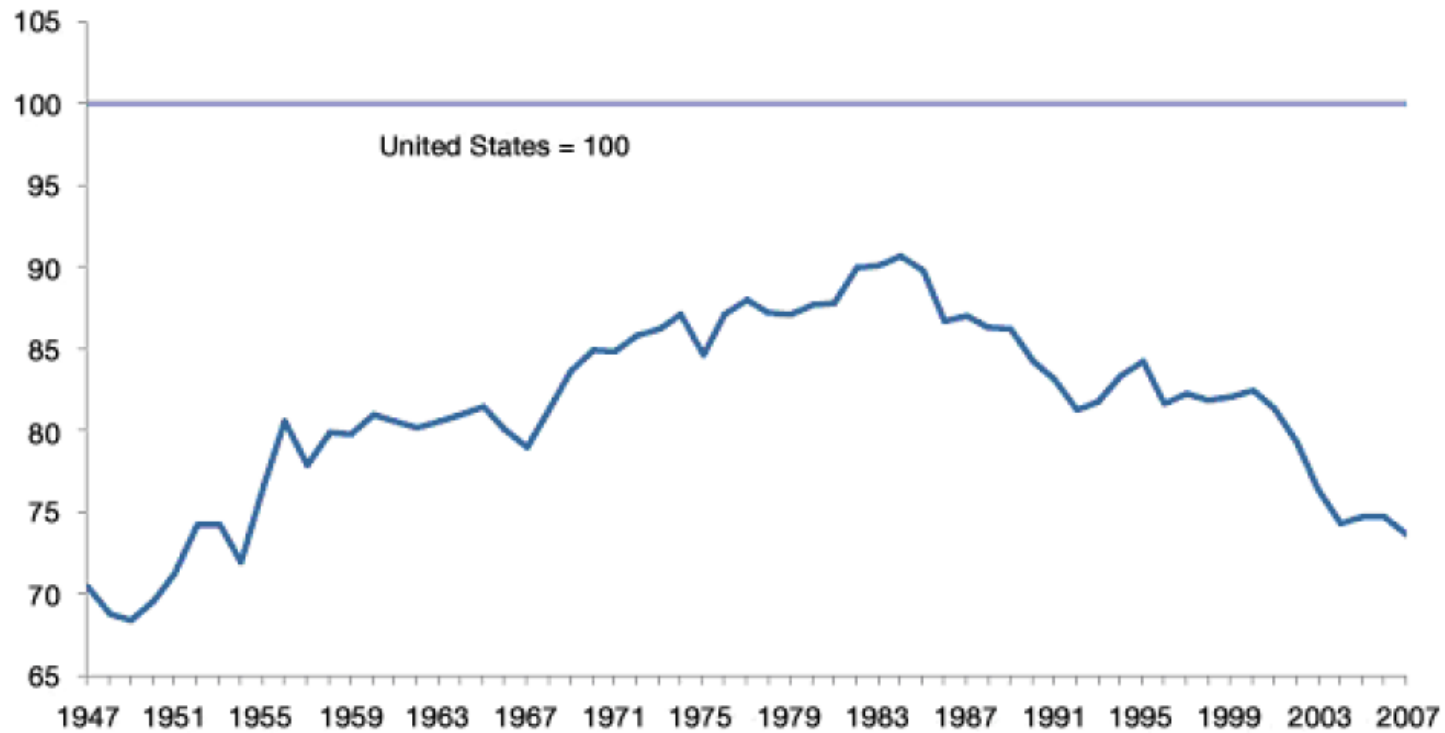
Executive Director, Centre for the Study of Living Standards

CAPE 3<sup>rd</sup> Annual Engineering Knowledge Conference

Wednesday, November 25, 2009

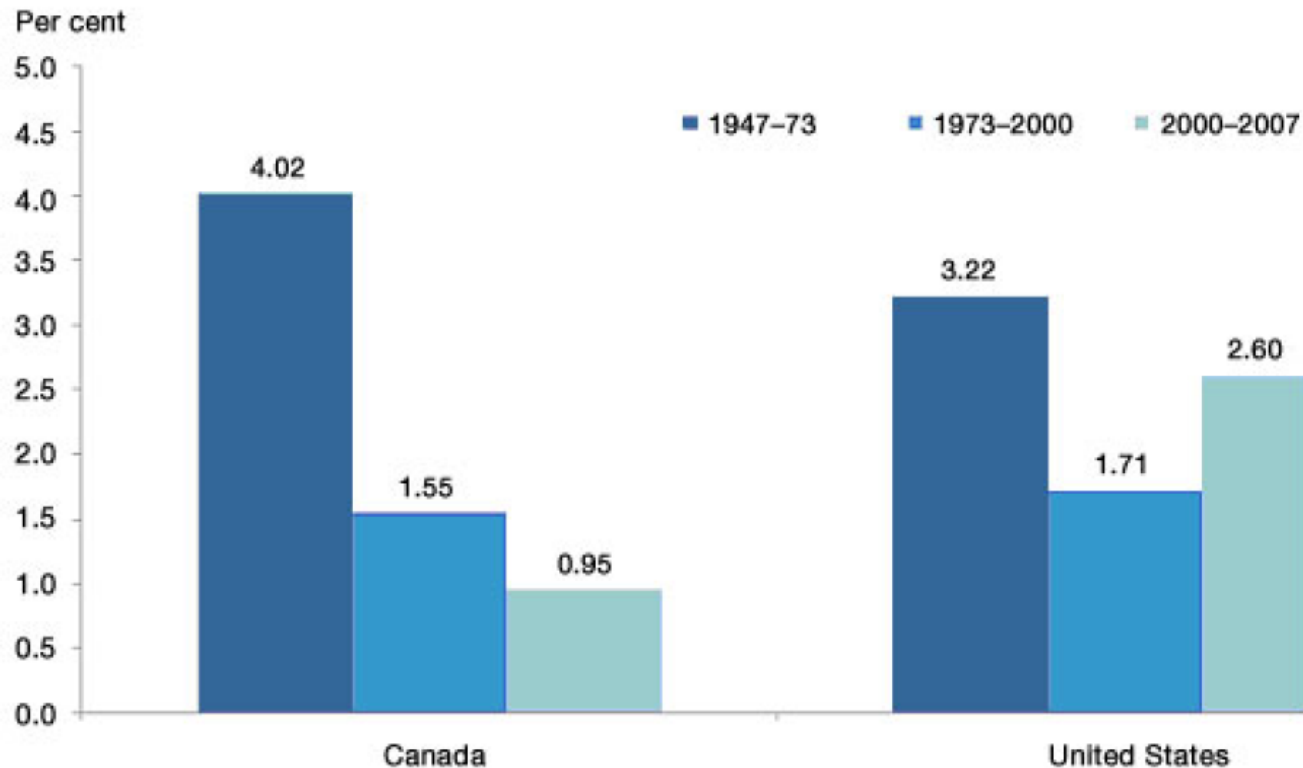
Hyatt Regency Toronto, 370 King Street West, Toronto,  
Canada

## Real output per hour worked, business sector, Canada as a percentage of the U.S. level, 1947-2007



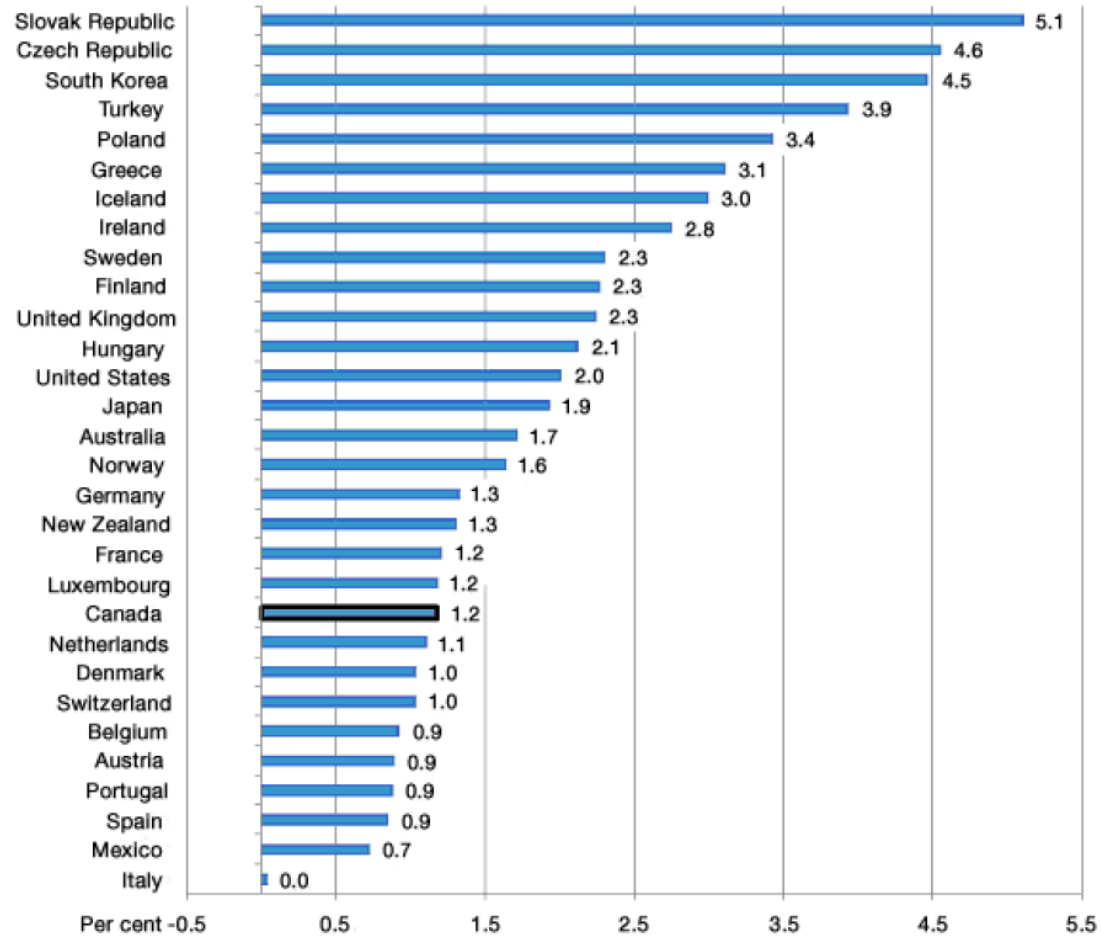
Sources: CSLS Aggregate Income and Productivity Database <<http://www.csls.ca/data/ipt1.asp>>, Table 7a

## Real output per hour growth, business sector, Canada and the United States, average annual rates, percentage, 1947-2007



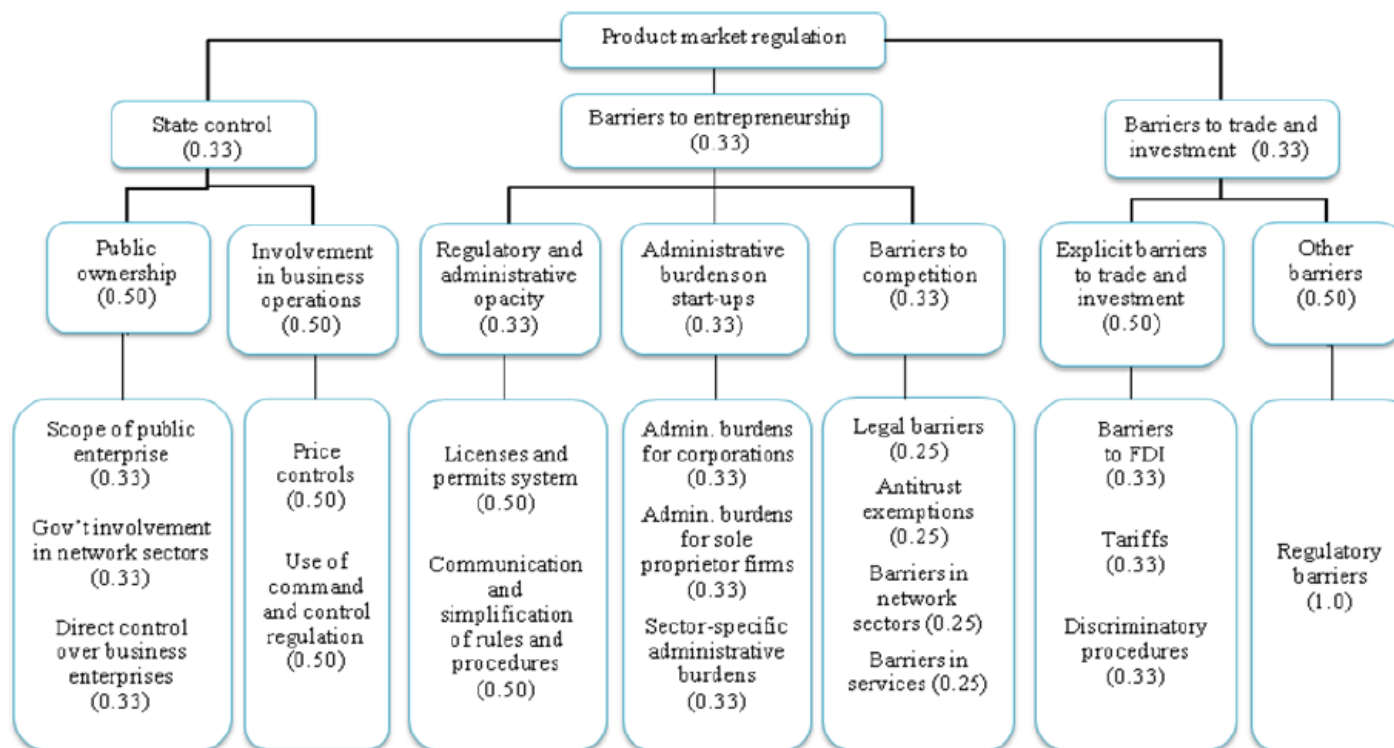
Sources: GDP in chained dollars and total hours worked from the Productivity and Costs program of the Bureau of Labor Statistics for the United States, and annual averages of quarterly estimates from the productivity program database of Statistics Canada for Canada

### Growth of GDP per hour worked in OECD countries, 2000-07 (compound annual rate of growth)



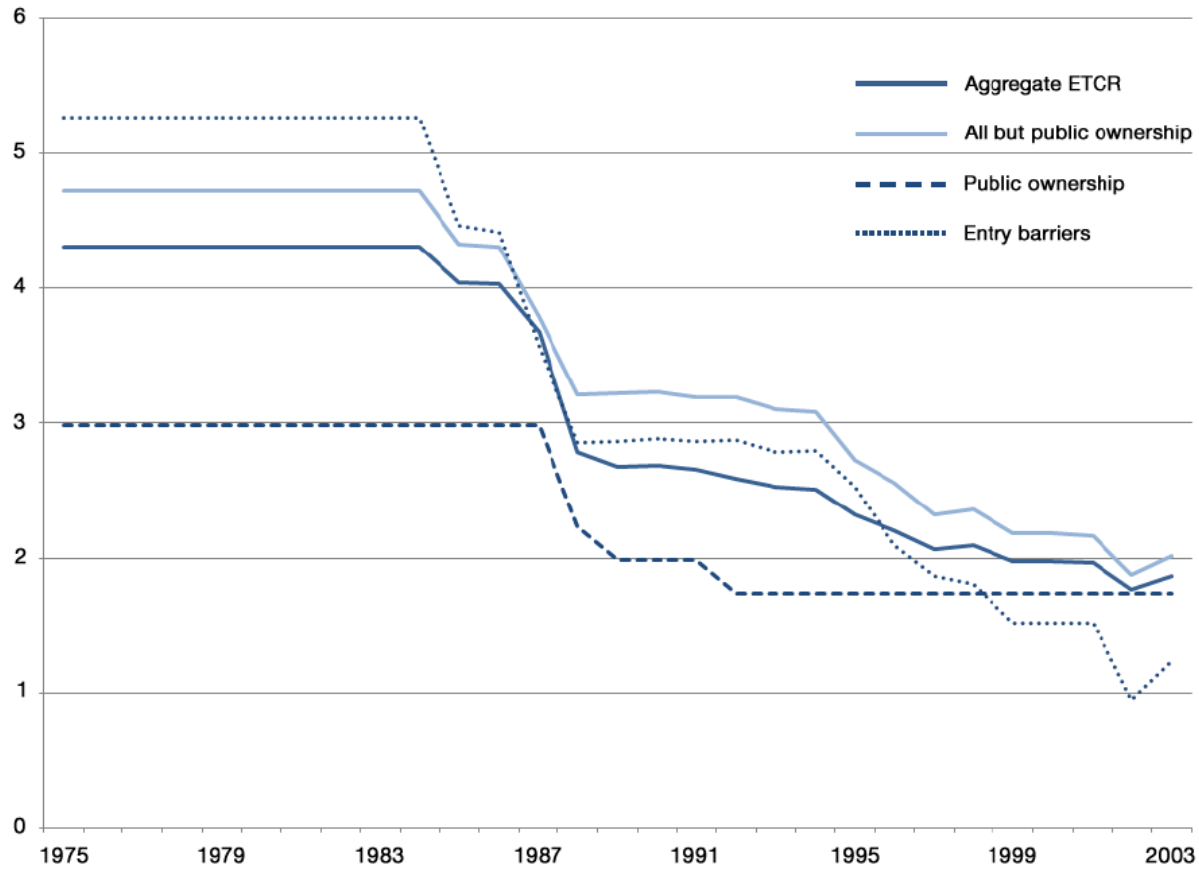
Source: Groningen Growth and Development Centre: <[www.ggdc.net](http://www.ggdc.net)>

# The tree structure of the integrated PMR indicator



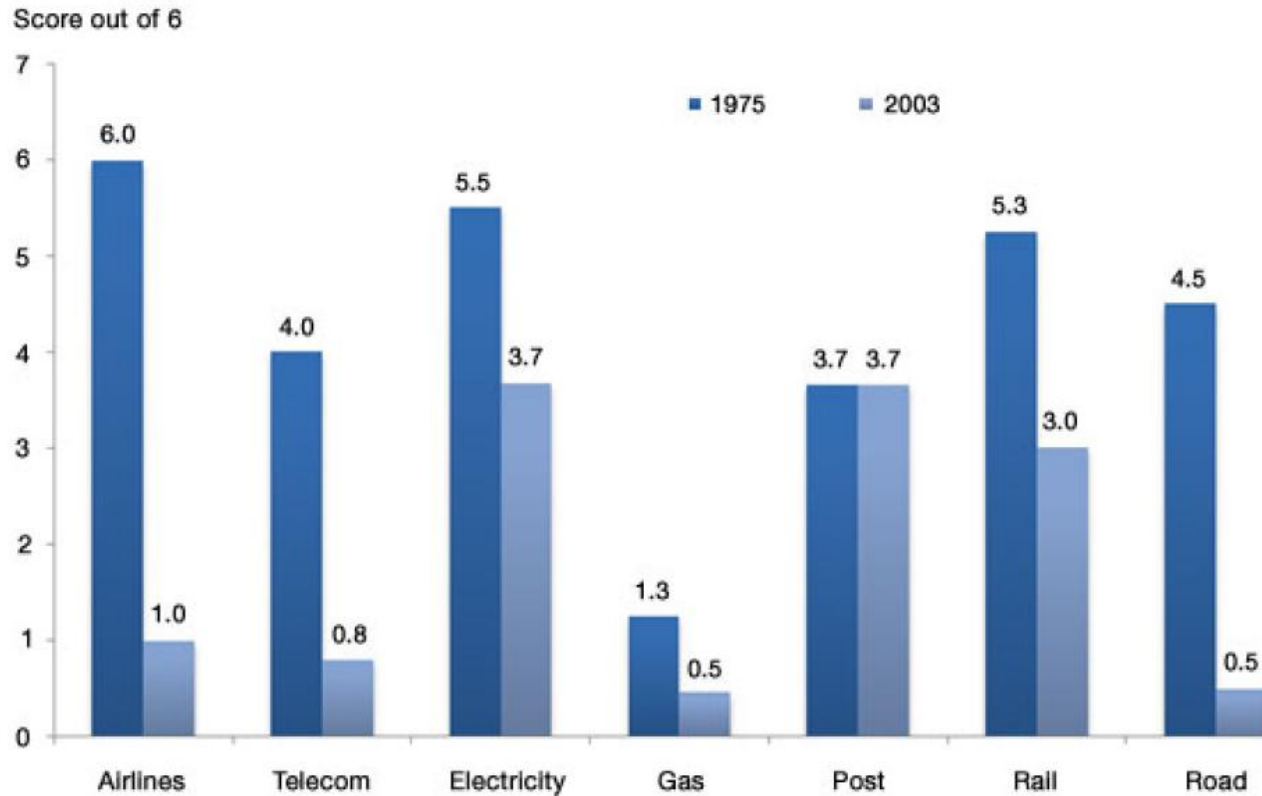
Source: OECD, Product Market Regulation Database.

## Indicators of regulation in energy, transport, and communications, Canada, 1975-2003



Source: Originally from P. Conway and G. Nicoletti (2006; Table 3a of this paper)

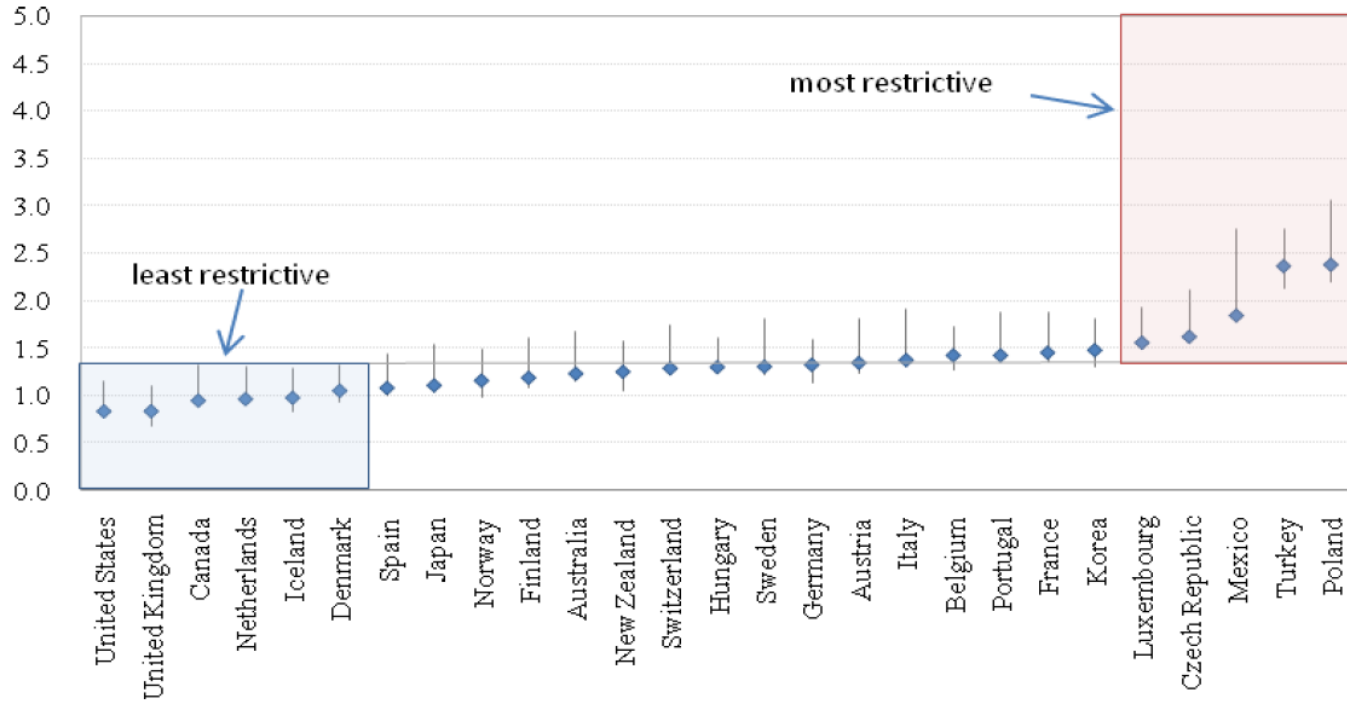
## Market regulation, Canada, 1975 and 2003



Source: Originally from P. Conway and G. Nicoletti (2006; Table 3b of this paper)

# Aggregate PMR Scores, 2008

Index scale of 0-6 from least to most restrictive



1. Countries are ranked according to the indicator score on aggregate or domain. Diamonds represent the indicator scores, lines represent 90 % confidence intervals derived from the Random Weights approach (see Box 3).

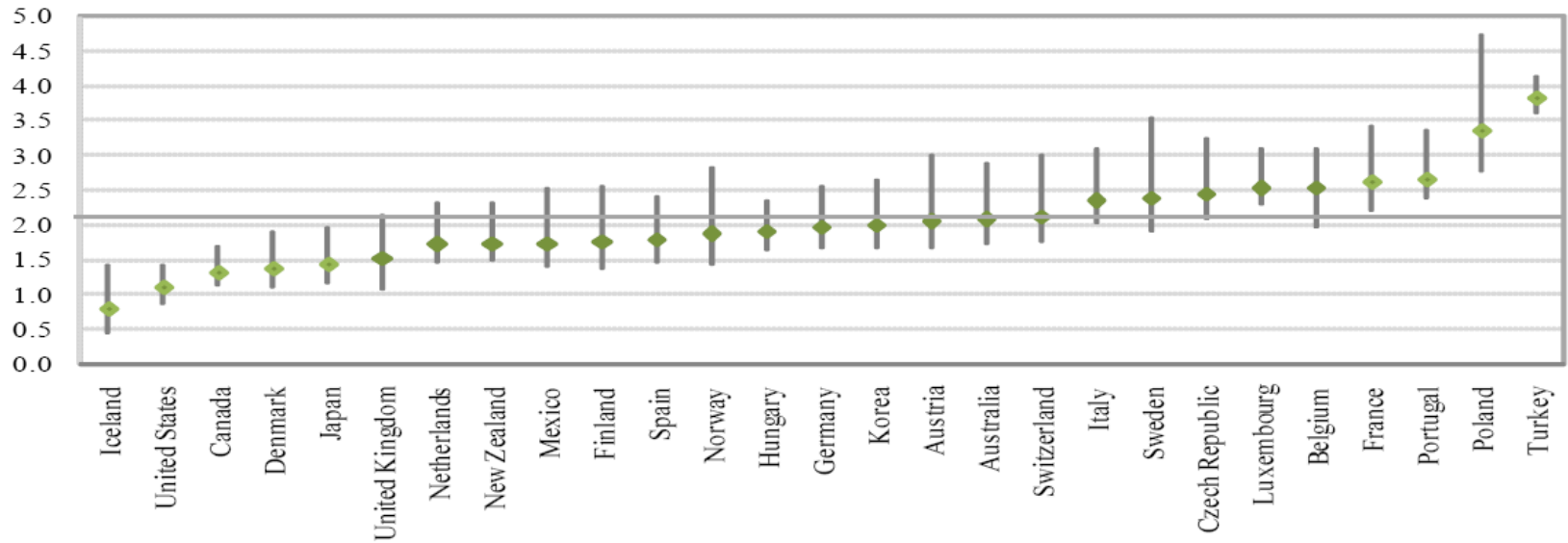
Source: OECD, Product Market Regulation Database.



# PMR scores by domain, 2008

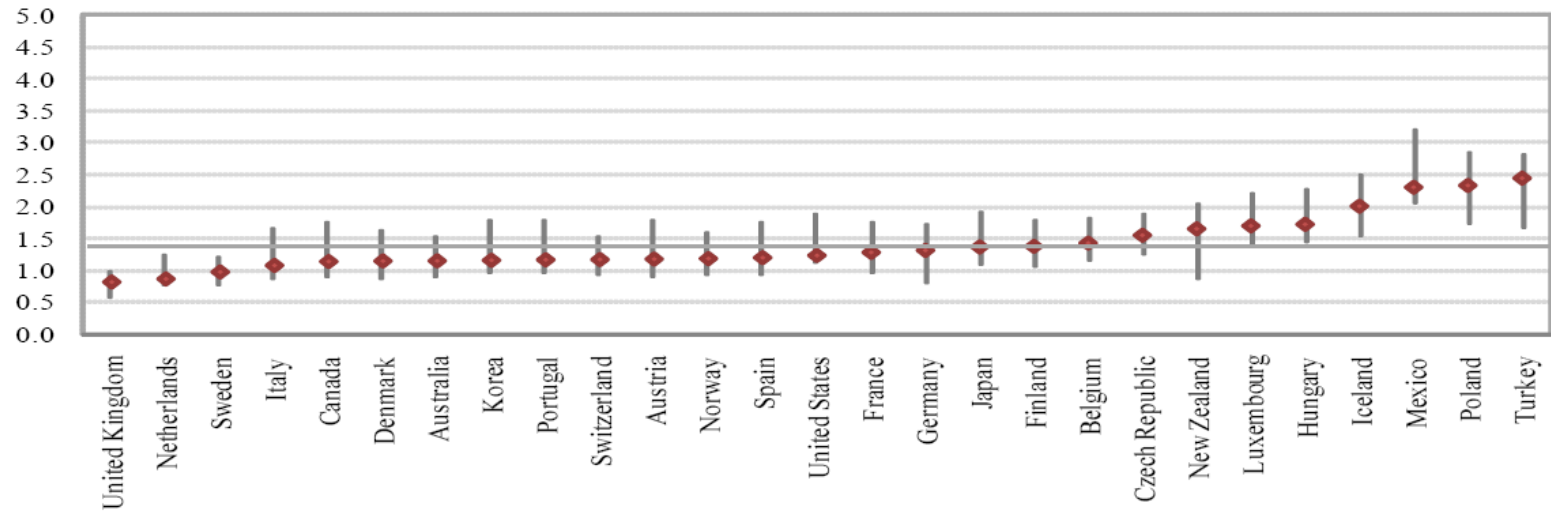
Index scale of 0-6 from least to most restrictive

## A. State control

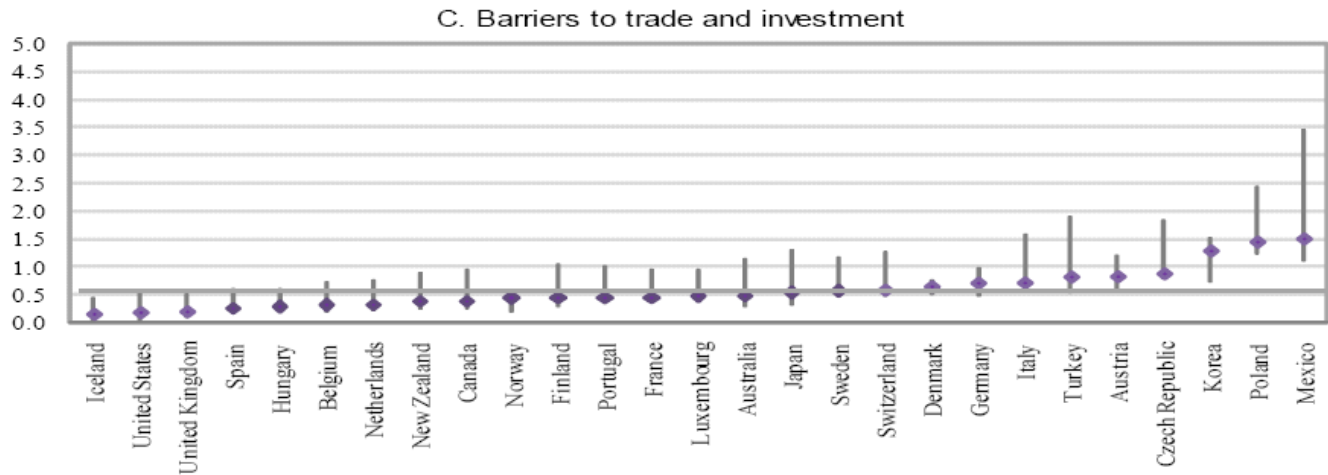


# PMR scores by domain, 2008, cont.

## B. Barriers to entrepreneurship



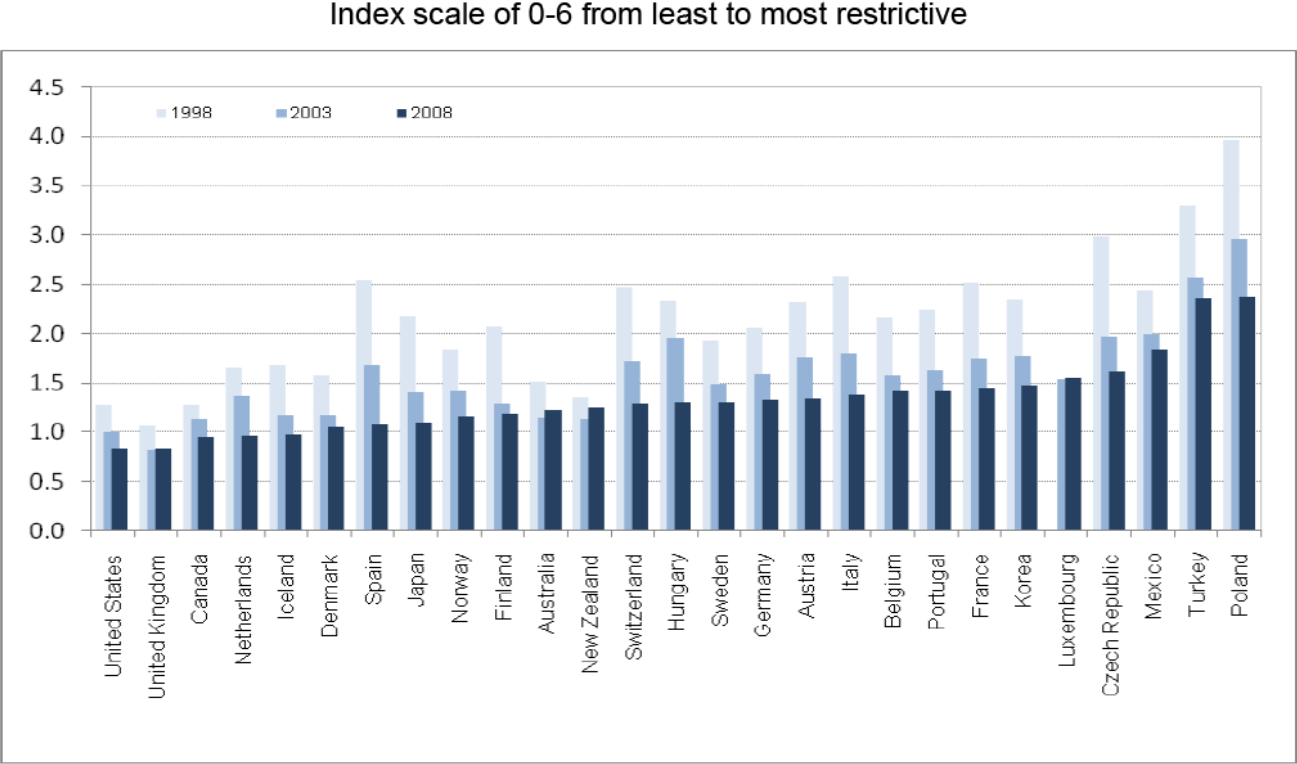
# PMR scores by domain, 2008, cont.



2. Countries are ranked according to the indicator score by domain. Diamonds represent the indicator scores, lines represent 90 % confidence intervals derived from the Random Weights approach (see Box 3).

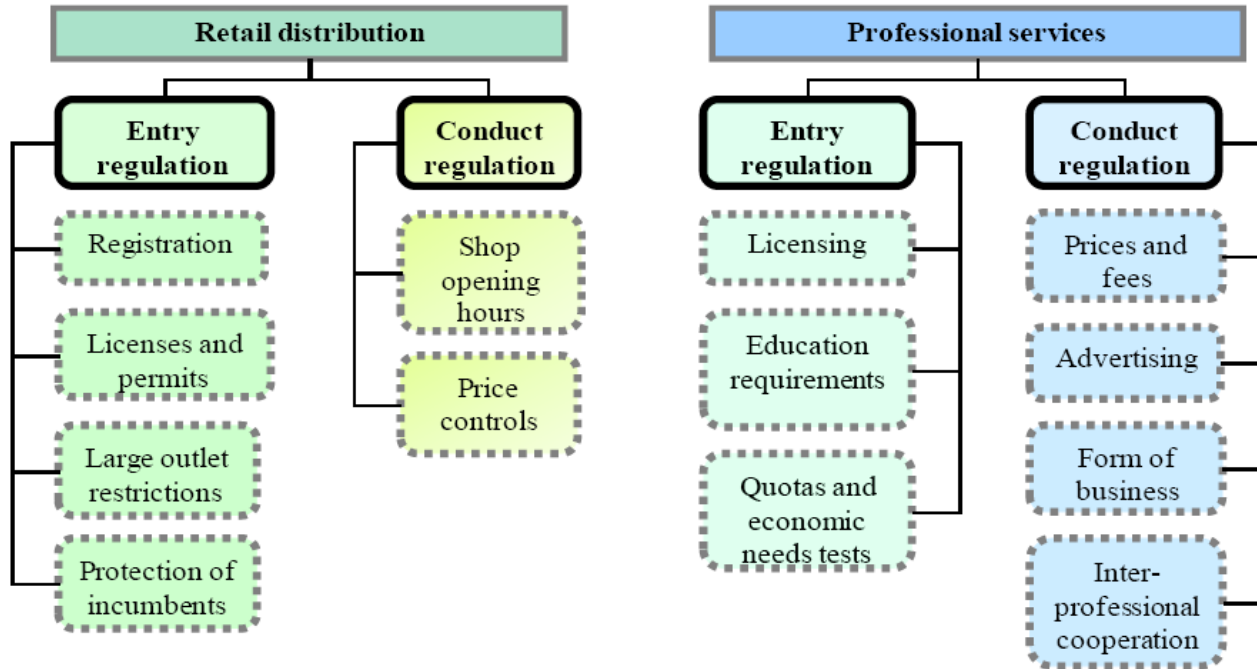
Source: OECD, *Product Market Regulation Database*.

# Development of aggregate product market regulation since 1998



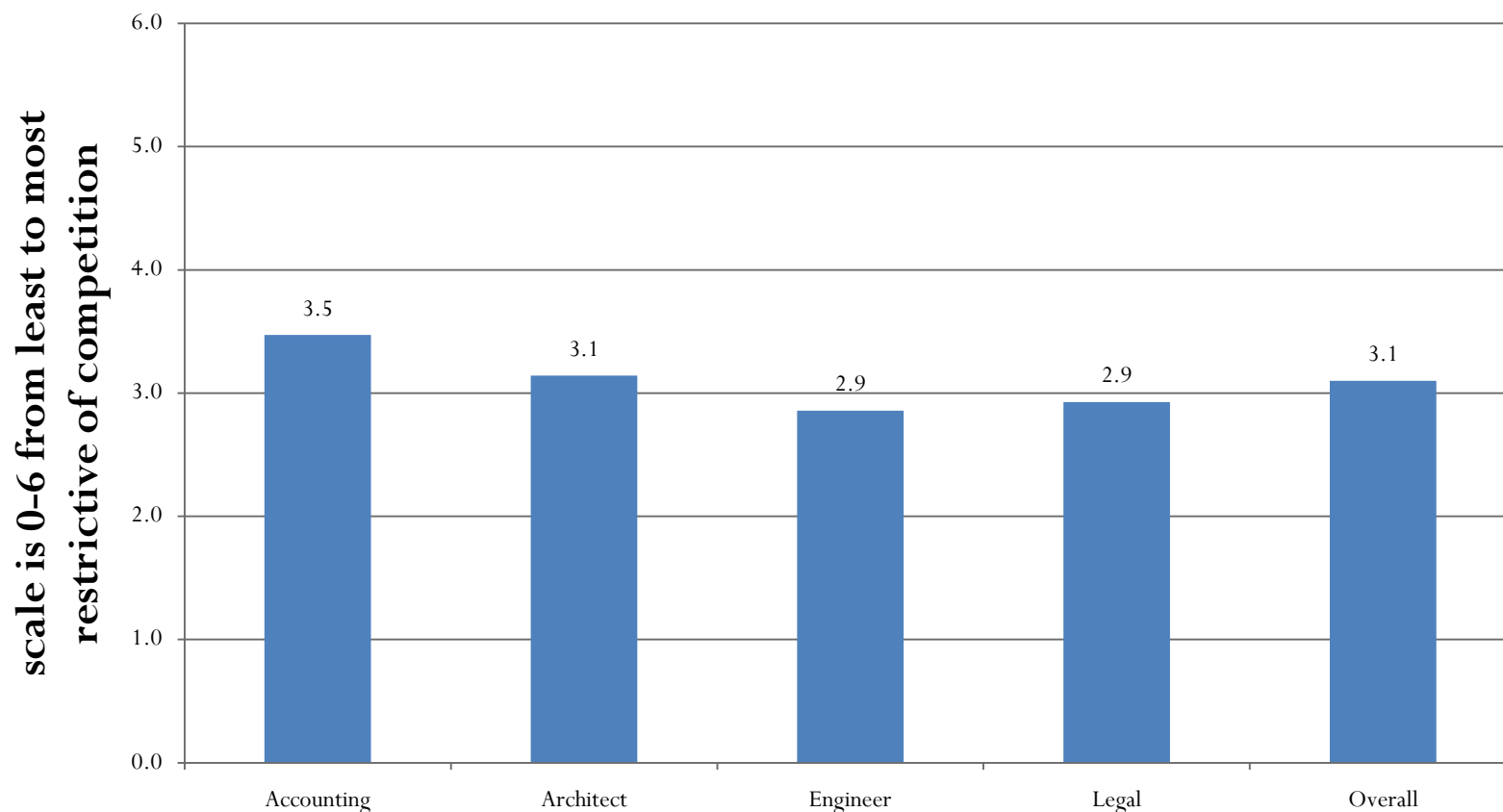
Source: OECD, Product Market Regulation Database.

Panel B: The indicators for regulation in retail trade and professional services



Source: OECD Regulatory Database

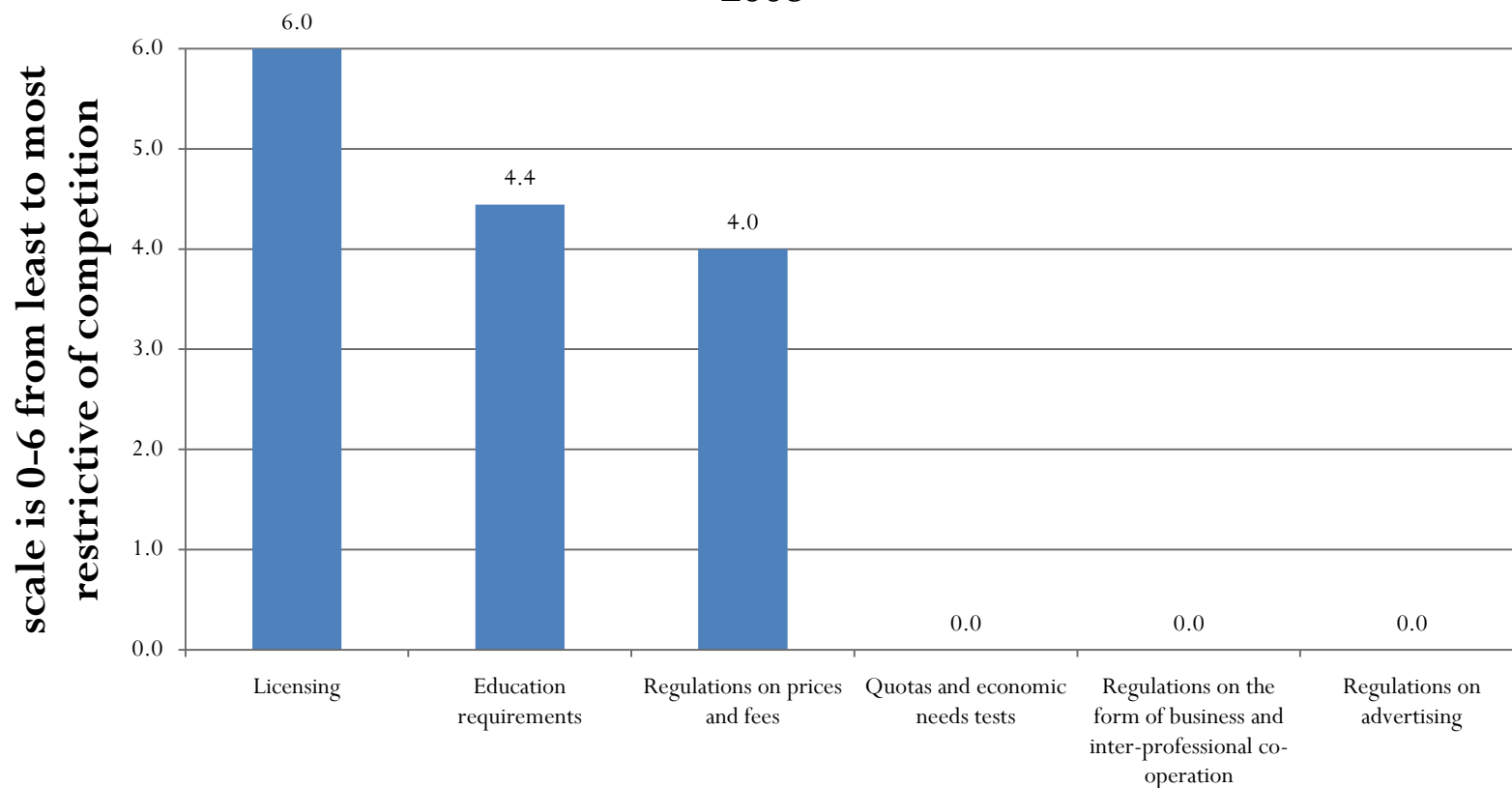
## Regulatory Indicators of Professional Services in Canada, 2008



Source: Conway, P. and G. Nicoletti (2006), "Product market regulation in non-manufacturing sectors: measurement and highlights", *OECD Economics Department Working Paper*

[http://www.oecd.org/document/24/0,3343,en\\_2649\\_34323\\_35858776\\_1\\_1\\_1\\_1,00.html](http://www.oecd.org/document/24/0,3343,en_2649_34323_35858776_1_1_1_1,00.html)

## Regulatory Indicators of the Engineering Profession in Canada, 2008



Source: Conway, P. and G. Nicoletti (2006), "Product market regulation in non-manufacturing sectors: measurement and highlights", *OECD Economics Department Working Paper*

[http://www.oecd.org/document/24/0,3343,en\\_2649\\_34323\\_35858776\\_1\\_1\\_1\\_1,00.html](http://www.oecd.org/document/24/0,3343,en_2649_34323_35858776_1_1_1_1,00.html)