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# The Social Benefits and Economic Costs of Taxation

A Comparison of High-  
and Low-Tax Countries

**By Neil Brooks and Thaddeus Hwong**



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# Taxes: Are They Really All Bad?

“I believe all taxes are bad.” Stephen Harper made this remark during the federal election last year in announcing he would reduce the Goods and Services Tax from 7% to 5% if elected Prime Minister.

Taxes are the price citizens of a country pay for the goods and services they collectively provide for themselves and for each other. So it is difficult to know exactly what Harper meant when he said he believes all taxes are bad. Was he saying that all actions taken collectively by citizens through democratically elected institutions are bad?

Although almost everyone — other than Prime Minister Harper — recognizes the need for some taxes, over the past 25 years public policy debates in every Anglo-American country, including Canada, have been dominated by a campaign against taxes.

Tax levels in Canada have always been substantially below those in most other industrialized countries, and they have been significantly reduced over the past few years, yet the crusade against them continues unabated. In 1998, all taxes collected in Canada amounted to 36.7% of the gross domestic product (GDP). Due in part to

tax cuts, this percentage fell almost 3 percentage points to 33.5% by 2004.

Tax levels in the average industrialized country that belongs to the Organization for Economic Cooperation and Development (OECD) was over 2 percentage points higher than in Canada in 2004, 35.9% of GDP, and in the average European country it was almost 5 percentage points higher, 38.3% of GDP. Yet the federal government’s major priority, as reflected in its first budget tabled last spring, and in statements made following the tabling of its Annual Financial Report for the Fiscal Year 2005–06 this fall, in which the government committed a \$13.2 billion surplus to debt reduction, is more tax cuts.

It is often difficult to know precisely what tax-cutters hope to achieve through more tax cuts and what evidence they think supports their claims. Their contention that Canadians would be better off if taxes were reduced is usually asserted as an article of faith. However, one way of attempting to answer the question of whether the Canadian government should be cutting taxes even more is to look across countries and compare the social and economic outcomes in high-taxed countries with the social and economic outcomes in low-

taxed countries. Is it really the case, as assumed by those who think taxes need to be further reduced in Canada, that the quality of life of the average citizen is higher in low-taxed countries than high-taxed countries?

That is the question we undertake to answer in this study. We compare high- and low-tax countries on a wide range of social and economic indicators. As representative of low-tax countries, we study all six Anglo-American countries: the United Kingdom, the United States, Canada, Ireland, Australia, and New Zealand. As representative of high-tax countries, we study the

four Nordic countries: Sweden, Norway, Denmark, and Finland.

If the story about taxes and the welfare state told by tax-cutters has any credibility, the results should be evident in comparisons between industrialized countries with low taxes and those with high taxes. Indeed, if the story is even remotely true, one would expect those countries with even marginally higher tax levels than Canada to be modern-day economic basket cases and to be no better off in terms of social outcomes or of the quality of the lives enjoyed by their citizens.

# Summary

Tax cuts are disastrous for the well-being of a nation's citizens.

Findings from this study show that high-tax countries have been more successful in achieving their social objectives than low-tax countries. Interestingly, they have done so with no economic penalty.

On the majority of social measures we examine, high-tax countries rank significantly above low-tax countries. On a number of the economic indicators we examine, low-tax countries rank above high-tax countries, but the difference is almost never significant.

We examine 50 indicators that are commonly used to measure a country's social progress. On over half of these indicators (29), the outcomes in high-tax Nordic countries are significantly better than those in low-tax Anglo-American countries, and on most of the remaining indicators (13), social outcomes are somewhat better in Nordic countries. In short:

- Nordic countries have significantly lower rates of poverty across almost all social groups;

- as an indicator of how well a country protects the vulnerable, the elderly have significantly higher pension income replacement rates in Nordic countries and the income received by those with disabilities relative to the population is much higher;
- income is distributed significantly more equally in Nordic countries;
- on every measure we examine there is significantly more gender equality in Nordic countries;
- Nordic workers have significantly more economic security;
- in terms of health outcomes, infant mortality rates are significantly lower and life expectancy is longer in Nordic countries;
- in terms of educational outcomes, a greater percentage of the population completed secondary school and university in Nordic countries and 15-year old students score higher on math tests;

- as a measure of personal physical security, homicide rates are lower in Nordic countries;
- as indicators of the degree of community and social solidarity in a country and general happiness and life satisfaction, there is significantly more trust among individuals and for public institutions in Nordic countries;
- there is significantly less drug use in Nordic countries; individuals have significantly more leisure time; individuals have more freedom, according to a widely referred to index of economic freedom; individuals report more life satisfaction; and they are more likely to discuss politics with friends;
- Nordic countries rank much higher on an index of environmental performance, and the Nordic countries give significantly more in foreign aid than Anglo-American countries.

Low-tax Anglo-American countries rank higher than Nordic countries on only seven out of the 50 social indicators. In each case, it is a trivial difference that could be easily due to chance: a slightly higher percentage of the 25–64 age group completed either college or university; 15-year-olds did slightly better on reading and science tests; a slightly greater percentage of people report a greater sense of freedom; there are on average a lower number of suicides; and a slightly greater percentage of individuals report they are very happy.

With respect to the pursuit of economic goals, the indicators we examine suggest high-tax countries have achieved their social success with no economic penalty. Over the past 15 years, the low-taxed Anglo-American countries have experienced slightly greater economic growth than the high-taxed Nordic countries, but it would appear that the Nordic countries have positioned themselves for greater growth

in the future. Of the 33 economic indicators examined, the Nordic countries lead on 19 indicators and the Anglo-American countries on 14. The high-tax Nordic countries have:

- a marginally higher GDP per capita;
- a higher GDP per hour worked;
- significantly lower unit labour costs and significantly lower rates of inflation;
- higher budget and current account surpluses;
- a higher total labour participation rate, and a higher female labour participation rate;
- much higher rates of household saving and net national saving;
- a higher ranking on indexes measuring innovation;
- a higher percentage of GDP spent on research and development and a higher percentage of their workers working as research and development researchers;
- a higher level of network readiness;
- a higher percentage of broadband subscribers;
- a significantly higher ranking on their growth competitiveness by the World Economic Forum; and
- a higher ranking on Richard Florida's global creativity index.

Anglo-American countries have:

- a higher rate of growth in GDP per capita between 1990 and 2004;
- a higher rate of growth in GDP per hour worked from 1995 to 2004;
- a higher rate of growth in multi-factor productivity from 1995 to 2002;
- a lower national debt;
- a significantly higher growth in employment from 1992 to 2002 (this is the



only measure on which Anglo-American countries exceed Nordic countries in a way that is statistically significant);

- a lower rate of general unemployment, a marginally lower rate of long-term unemployment, a marginally higher rate of male labour participation rates;
- a greater change in fixed capital formation; and
- greater inward foreign direct investment and inward foreign direct investment performance.

In making their case for lower taxes, tax-cutters in Canada frequently point to the United States, which has one of the lowest tax levels of the industrialized countries in the world, and suggest that Canadian society should strive to become more like American society. So, in addition to comparing social and economic outcomes broadly between low- and high-tax countries, we highlight the social and economic outcomes in the United States and ask: should Canadians really want their country to become more like the United States? To provide some basis for comparison, we compare the outcomes in the United States with those of another country Canada might wish to emulate: Finland.

Our findings show Americans bear incredibly severe social costs for living in one of the lowest-taxed countries in the world. For a strikingly large number of social indicators, the United States ranks not only near the bottom of the 19 industrialized countries, but it ranks as the most dysfunctional country by a considerable margin:

- Poverty is widespread. A greater percentage of Americans, and in particular children and the elderly, live in poverty in the United States than in any other industrialized country in the world.
- The income of vulnerable citizens, such as the elderly and those with disabilities, is much lower compared to others in

the United States than almost all other industrialized countries.

- Living conditions are shockingly unequal. By any measure, income is distributed more unequally in the United States than in every other industrialized country. In 2004, America's richest 1% held more of the nation's wealth than the bottom 90% (34.7% versus 29.9%).
- Ordinary workers in the United States have less economic security than workers in any other industrialized country (as shown by a comprehensive index of economic security developed by the International Labour Organization).
- As an indication of gender inequality, women in the United States still hold a relatively small percentage of positions in the professions, legislative bodies, and senior civil service.

In contrast to the United States, Finland ranks near the top of the industrialized world on each of the following social indicators:

- The percentage of the population living below the poverty line is very low (for example, only 3.4% of children).
- The elderly and those with disabilities have incomes that are close to those of the rest of the population.
- Income is distributed relatively equally.
- Women hold about 50% of the positions in legislative bodies and senior civil service.
- Workers in Finland enjoy one of the highest levels of economic security among workers in the industrialized world.

It is well known that there are profound problems with the United States' health and education system — where values such as selectivity, diversity, and choice predominate and a large percentage of the spending is done through the pri-

vate sector. The United States spends over twice as much of its GDP on health care than Finland (15% versus 7.4%), and yet U.S. health care outcomes remain far worse — indeed, worse than most other industrialized countries. For example, the percentage of children who die at birth in the United States is the highest among industrialized countries. Finns live longer than Americans, and the rate of infant mortality in Finland is less than one-half the American rate.

The United States spends a greater percentage of its GDP on education than Finland spends, yet the Finnish education system — which is a comprehensive public system based on equity and the professionalism and training of teachers — achieves much better outcomes. American 15-year-olds rank near the bottom of OECD countries when it comes to science and math skills. By contrast, Finnish 15-year-olds rank first in the world in science and math skills. American students also rank relatively low on reading skills, while the Finnish students come first in the world in this area as well.

This pattern, with the United States ranking about the lowest among industrialized countries and Finland near the top, is evident on most of the remaining social indicators we examine — relating to social goals such as personal security, community and social solidarity, self-realization, democratic rights, and environmental governance. We will not review them all here, except to note that, although Canada's Conservatives appear ready to adopt aspects of the United States' justice system, such as mandatory criminal sentencing, the United States is by a wide margin the most violent industrialized country in the world (measured by the murder rate). Americans themselves express the third lowest measure of confidence in their justice system, in a tie with Belgium. Italians and Australians have slightly less confidence in their justice systems.

This brief review of how well industrialized countries have achieved their social goals shows the United States ranks lower than most

countries on a wide range of social indicators, suggesting that the form of social organization used to accommodate contemporary life in the United States has gone profoundly amiss. Some commentators dismiss the miserable social outcomes achieved by the American social contract by noting that it is nevertheless one of the wealthiest countries in the world. GDP per capita is higher in the United States than in most other industrialized countries. The results of this study, however, suggest a trade-off does not have to be made between material prosperity and social equity.

In addition, there are countless problems with using GDP per capita as a measure of economic well-being. It takes no account of how the wealth that is produced in a country is distributed. For example, even though the United States experienced strong economic growth in recent years, between 1998 and 2004 the income of the typical (median) American family fell by 3.8%. Moreover, per capita GDP is high in the United States primarily because Americans work many hours more than citizens of other countries. Low-income Americans often have to work at two or three jobs just to survive.

Recent economic growth in the United States has also come at high long-term economic costs. The federal government budget is on an unsustainable path: the U.S. has the largest deficit in relation to its GDP of any industrialized nation; its trade deficit is the largest in the world, a staggering \$805 billion last year; and, the U.S. also has one of the lowest savings rates of the industrialized countries. Moreover, even with its wealth, flexible economy and low taxes, the United States is not the most competitive country in the world. From 2001 to 2005, in its comprehensive survey of world economies, the business-dominated private World Economic Forum has determined that the most competitive country in the world was Finland. In 2005–06, Finland was ranked as the second most competitive country after Switzerland.

# Ranking Countries by Tax Level

Industrialized countries are divided into four categories in Table 1, based upon their level of taxes: low-tax countries, low-intermediate tax countries, high-intermediate tax countries, and high-tax countries. Tax levels vary at least slightly from year to year; therefore a 12-year average from 1990 to 2002 was used. This period immediately precedes the year or years in which most of the social and economic indicators that we examine apply.

Even taking the average tax level over a 12-year period, there are large differences between countries. Sweden, the highest tax country, collects almost twice as much tax as a percentage of its GDP (50.5%) as the lowest taxed country in the group, Japan (26.8%). The average for the five low-tax countries is about 29%; the average for the five high-tax countries is 47%, almost 60% greater than the low-tax countries.

Given these large differences in tax levels, if high-taxed countries were not achieving their objectives — or if they were doing so at substantial economic cost — this result should be revealed in aggregate data relating to a number of social and economic variables.

Political economists who study welfare state development traditionally divide modern industrialized countries into four categories: 1) “liberal welfare states” exemplified by the Anglo-American countries, in which the emphasis is on individual liberty and markets are the primary form of social organization; 2) “corporatist welfare states” exemplified by most Western European countries, in which the emphasis is on social solidarity and occupational insurance plans play a large role in reducing social risks; 3) “Mediterranean welfare states” such as Portugal, Spain, Greece, and to a limited extent Italy, in which pensions are generous but otherwise state systems of support are less and in which the family and church play a large role in meeting the needs of citizens; and 4) “social democratic welfare states,” basically the Scandinavian countries, in which the emphasis is on equality and state-provided universal programs usurp the role of markets and the family in ensuring that the needs of individuals are met.

Although they rely upon a more sophisticated measure of the welfare state, there is obviously a relatively close correspondence between the categorization of countries based simply on tax

**TABLE 1 Annual Average Tax Revenue as Percent of GDP of High-Income OECD Countries, 1990–2002**

<b>LOW-TAX</b>	
Japan	26.8
United States	28.0
Switzerland	28.0
Australia	29.8
Ireland	32.6
<b>LOW-INTERMEDIATE</b>	
Spain	33.0
Portugal	33.6
New Zealand	35.4
Canada	35.7
Greece	34.0
United Kingdom	35.5
<b>HIGH-INTERMEDIATE</b>	
Germany	36.5
Netherlands	42.2
Norway	41.9
Italy	42.1
Austria	42.3
<b>HIGH-TAX</b>	
France	43.4
Belgium	44.9
Finland	46.2
Denmark	49.0
Sweden	50.5

levels and one based upon notions of the commodification of labour and related concepts used by political economists to classify welfare states. Liberal or Anglo-American countries are clustered in the low-tax column; Mediterranean countries are clustered in the low-intermediate column; continental European countries are clustered in the high-intermediate column; and the Scandinavian countries are clustered in the high-tax column. Therefore, in comparing low- and high-tax countries in this study, we compare the social and economic outcomes in the six Anglo-American countries (United States, Australia, Ireland, New Zealand, Canada, and the United Kingdom) — all of which are relatively low-tax countries — with those in the four Nordic countries (Norway, Finland, Denmark, and Sweden) — all of which are relatively high-tax countries. Social and economic indicators of all countries in the four groups are provided in the appendix.

# Comparing Social and Economic Outcomes in Low- and High-Tax Countries

Our comparison of low- and high-tax countries is straightforward. For each major and widely agreed-upon social and economic objective of modern societies, we use one or more indicators that would suggest how successful a country has been in achieving these goals. We calculate the average score for the Anglo-American countries and compare it with Nordic countries.

## Social Goals

### Relief of Poverty

Relief of poverty is an important goal in every society. A social contract should be struck that minimizes the number of those who are excluded from the life of the community because of a lack of economic resources to purchase necessities. The number of children living in poverty is of particular concern. The Nordic countries have significantly lower rates of poverty across almost all social groups than Anglo-American countries. Four indicators are shown, as illustrated in Table 2. The number in parentheses beside each indicator refers to the column number of the indicator in the Appendix: Comparing So-

cial and Economic Outcomes in Low- and High-Tax Countries.

In low-tax Anglo-American countries, on average, 12.6% of the population lives below 50% of the country's median income; in Nordic countries, less than one-half that percentage (only 5.6%) of the population is living below the poverty line.

On average, in the low-taxed Anglo-American countries, 15.9% of children live in poverty, while in the Nordic countries the percentage of children living in poverty is less than one-quarter of the Anglo-American average, less than 3.3%.

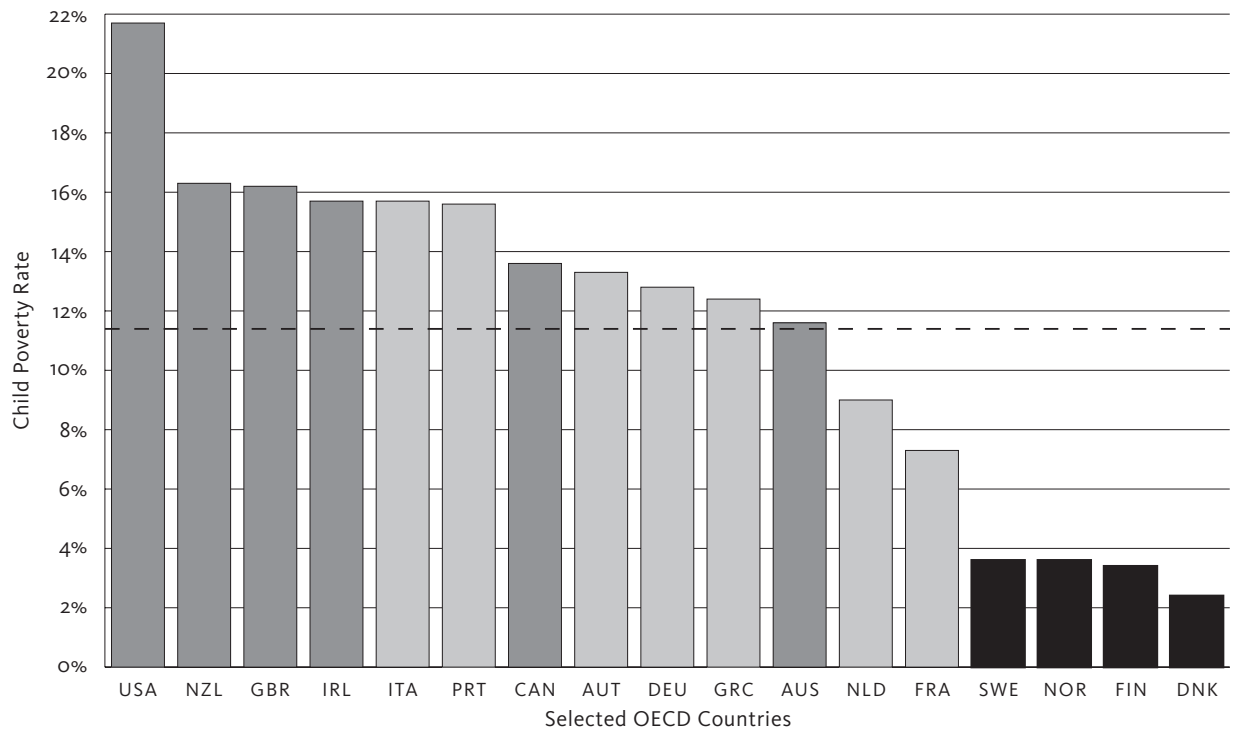
In the average Anglo-American country 45.2% of children in single-parent families live in poverty. In Nordic countries only 9.2% of children in single-parent families live in poverty.

There is no significant difference between low- and high-taxed countries with respect to the percentage of elderly who live in poverty (in large part because the low rate of poverty among the elderly in Canada brings down the average for low-tax countries); nevertheless, a much lower percentage of the elderly live in poverty in Nor-

TABLE 2 Relief from Poverty and Social Exclusion

	ANGLO-AMERICAN	NORDIC	CANADA	U.S.	FINLAND
Relative poverty [7]	12.6	5.6	10.3	17.1	6.4
Child poverty [8]	15.9	3.3	13.6	21.7	3.4
Child poverty — single parent [9]	45.2	9.2	42.1	48.9	10.5
Elderly poverty [10]	13.5	9.2	4.3	24.6	10.6

FIGURE 1 Child Poverty in Selected OECD Countries



SOURCE OECD, *Society at a Glance: OECD Social Indicators*, 2005, p.57. Child poverty data sourced from 1999, 2000, and 2001. Only high-income OECD countries with such data are included. Dashed line refers to the country average.

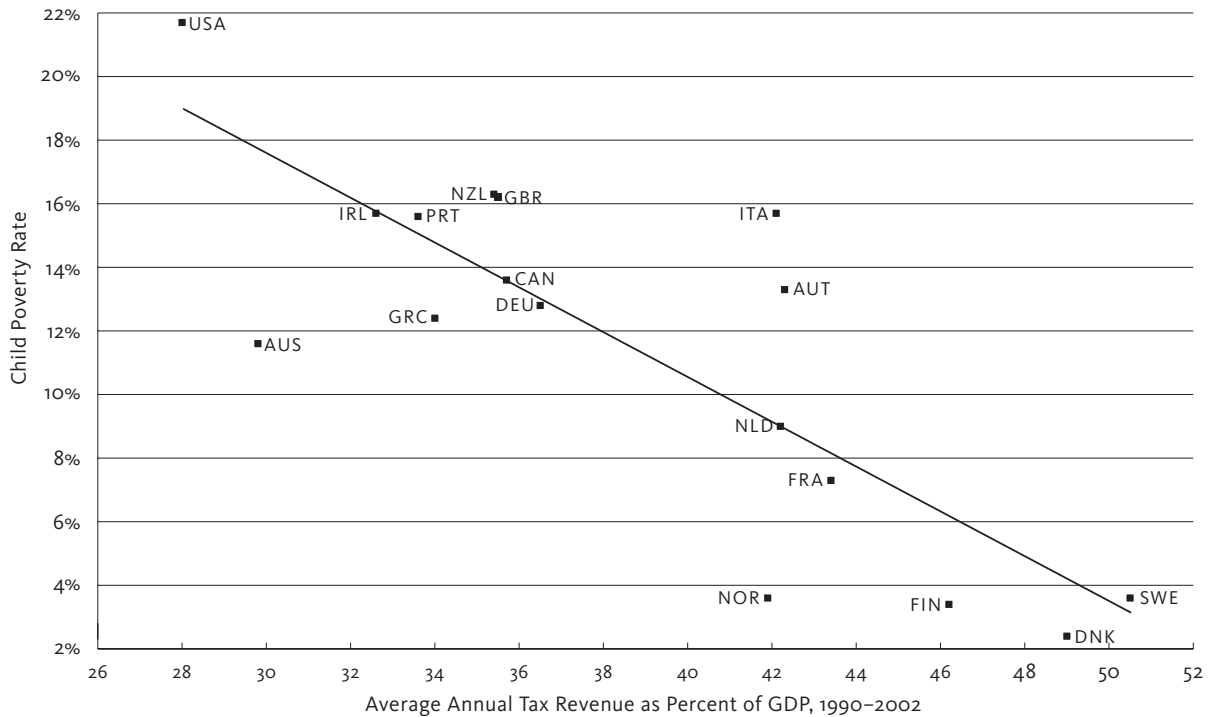
dic countries (9.2%) than in Anglo-American countries (13.5%).

The United States has the highest rates of poverty in the industrialized world. In low-taxed United States, over 17% of individuals live below 50% of the country’s median income; almost 22% of all children live in poverty; a shocking almost 49% of children in single families live in poverty; and over 24% of the elderly live in poverty. In Finland, by contrast, the percentage of people living

in poverty in each of these groups is small: 6.4%, 3.4%, 10.5%, and 10.4%, respectively.

Also, on most of these measures of the incidence of poverty, although Canada ranks far below the Nordic countries, it has a better record than the United States. In particular, while 21.7% of children live in poverty in the United States, in Canada a substantially lower percentage live in poverty: 13.6%. While 24.6% of the elderly live in poverty in the United States, in Canada only 4.3% of the elderly live in poverty. The percentage

FIGURE 2 **Child Poverty v. Tax Revenue of High-Income OECD Countries**



SOURCE Calculation based on OECD Revenue Statistics database. Child poverty data sourced from 1999, 2000, and 2001. Only high-income OECD countries with such data are included.

of elderly living below the poverty line in Canada is, in fact, lower than in any of the Nordic countries. It would appear the Americans have a good deal to learn from Canadians.

One social good that citizens buy with their taxes is a dramatically smaller percentage of their fellow citizens living in poverty.

Although we concentrate in this study solely on a comparison between the low-taxed Anglo-American countries and the high-taxed Nordic countries, for most of the social indicators we examine, the social indicators are closely correlated with tax levels across all industrialized countries. Figures 1 and 2 illustrate this correlation with respect to child poverty. Figure 1 is a bar graph that shows the rates of child poverty across 19 industrialized countries. Figure 2 is a chart that reveals how closely rates of child poverty are related with tax levels. Generally, the

higher a country's tax level, the lower its rate of child poverty.

### Protection of the Vulnerable

Every just society must protect the vulnerable: children, the elderly, and those with disabilities. One measure of whether the elderly are fully integrated into society is the extent to which pensions for the elderly are able to replace the salaries they earned while working.

In the Nordic countries, pensions replace 66.6% of the salaries of pensioners, while in Anglo-American countries the pension replacement rate is only 47.4%. Canada is on the high end of the Anglo-American countries with a replacement rate of 57.1%. In the United States, the pension replacement rate is only 51%, while in Finland it is 78.8%.

One way of measuring how well a society accommodates those with disabilities is to compare



TABLE 3 **Protection of the Vulnerable**

	ANGLO-AMERICAN	NORDIC	CANADA	U.S.	FINLAND
Net old-age pension replacement rate [11]	47.4	66.6	57.1	51	78.8
Relative income of disabled persons [12]	67	86	84.6	58.7	83

TABLE 4 **Economic Equality: Income**

	ANGLO-AMERICAN	NORDIC	CANADA	U.S.	FINLAND
GINI coefficient [13]	32.1	24.7	30.1	35.7	26.1
Income share of richest 10%/poorest 10% [14]	12.4	6.5	10.1	15.9	5.6
90th percentile/10th percentile [15]	4.6	2.9	4	5.5	2.9

the income of persons with disabilities relative to that of the general population. In Anglo-American countries, the income of those with disabilities is 67% of the general population, whereas in Nordic countries the income of those with disabilities is around 86% of the general population. The relative income of those with disabilities in Canada is almost equal to the relative income of those in the Nordic countries at 84.6%. Once again, the United States is at the low end of even the Anglo-American countries. In that country the income of those with disabilities is only 58.7% that of the general population; in Finland it is 83%.

### **Economic Equality**

One of the pressing issues facing every democracy is how economic resources should be distributed. Large economic inequalities hold adverse consequences for the personal well-being of the citizens of a country: Inequalities erode social cohesion; they lead to worse health and personal security outcomes; they lead to the withdrawal of the haves from the life of the community and the exclusion of the have-nots; and, generally, inequality diminishes the richness and flourishing of a society. Moreover, extreme levels of inequality have been shown to have a negative impact on economic growth by distorting the allocation of resources and tal-

ents. Income inequality has also been shown to destabilize political and social values, since disproportionate economic power invariably leads to increased influence over political and other societal decisions.

One of the strongest associations between the variables examined in this study is between tax levels and a more equal distribution of economic resources. In all three indices of inequality reported in Table 4, there are statistically significant differences between the Anglo-American and Nordic countries. For example, in Anglo-American countries, on average the richest 10% receive about 12.4 times the poorest 10%, while in the average Nordic country the richest 10% receive only 6.5 times that of the poorest 10%.

In the United States, where income is distributed more unequally than in any other industrialized country, the richest 10% of families receive almost 16 times as much of national income as the poorest 10%. In Finland, by contrast, the richest 10% receive only 5.6 times as much of the national income as the poorest 10%, about one-third the American multiple. Once again, Canada finds itself on this indicator in between the United States and the Nordic countries. In Canada, the richest 10% receive 10.1 times that of the poorest 10%.

One of the most important social benefits that citizens buy with their taxes is a society in



TABLE 5 **Social Equality: Gender**

	ANGLO-AMERICAN	NORDIC	CANADA	U.S.	FINLAND
Gender gap index [16]	4.65	5.35	4.87	4.4	5.19
Gender empowerment [17]	0.773	0.868	0.807	0.793	0.833
Female labour force participation [18]	68.6	75	73.1	69.2	72.9
Female doctors [19]	31.9	42.5	33.1	23.4	53.2
Female % in parliament [20]	21.4	39.5	24.7	14.8	37.5
Female % in senior civil service [21]	21.8	44.3	23.1	14.3	47.1
% of population who favour men over women over scarce jobs [22]	17	8	15.6	9.8	9

which economic resources are distributed much more equally.

### Gender Equality

Every Western country is committed to equality for women. Although progress has been slow, countries with higher taxes have had much greater success in achieving this social goal. One explanation for this is that a considerable amount of the care-giving work that is borne by women in low-tax Anglo-American societies is paid for and financed by taxes in high-taxed countries. Thus, not only is the cost of these services spread more equitably across the entire population in high-tax countries, but women are also free to take a greater part in market, civil, and political life. On average, the level of gender equality in the Nordic countries is significantly higher than that in the Anglo-American countries, as measured by the indicators in Table 5.

The World Economic Forum, which boasts the world's 1,000 leading companies as its members, measures the extent to which women have achieved full equality with men in economic participation, economic opportunity, political empowerment, educational attainment, and health and well-being, and reports the results as the Gender Gap Index, with a higher index reflecting a narrower gender gap. The Nordic countries score an average of 5.35, which is higher than the average of 4.65 of the Anglo-American countries.

Canada scores 4.87, which is higher than the 4.4 for the U.S. but lower than Finland's 5.19.

In its annual *Human Development Report*, the United Nations Development Program computes a comprehensive index of gender equality: the gender empowerment measure. On this measure, Nordic countries score an average of 0.868 while Anglo-American countries score only an average of 0.773. Canada scores 0.807, which was higher than the United States at 0.793, but lower than Finland at 0.833.

A simple measure of gender equality is the percentage of women who participate in the paid labour force and the percentage of women who hold influential jobs. In Anglo-American countries, 69% of women participate in the labour force: in Nordic countries 75% of women participate in the labour force. In Anglo-American countries, on average, about 32% of doctors are females, 21% of members of Parliament are females, and 22% of senior civil servants are females. By contrast, in Nordic countries, about 43% of doctors are females, 40% of members of Parliament are females, and 44% of senior civil servants are females.

Once again, on all of these measures of gender equality, the Nordic countries are significantly better off than the Anglo-American countries. Once again, on every measure, Canada does better than the United States.

TABLE 6 **Economic Security**

	ANGLO-AMERICAN	NORDIC	CANADA	U.S.	FINLAND
Economic security index [23]	0.70	0.94	0.79	0.61	0.95

Also, as an indication of how these differences affect public attitudes (or are affected by them), in Anglo-American countries 17% of the population reported in a survey that men should have a priority in filling jobs, while in Nordic countries only 8% of the population held this view.

### **Economic Security**

Individuals and families need work-related security in order to make long-range plans, to flourish, and to develop. In 2004, the International Labour Office published a major report on economic security as part of its socio-economic security program, *Economic Security for a Better World*. That program examined how countries organized work and how their organization of work connected to broad social goals.

The ILO identified seven forms of work-related security: 1) labour market security (adequate employment opportunities); 2) employment security (protection against arbitrary dismissal and so on); 3) job security (the possession of a niche in work, allowing some control over the content of a job, what the worker actually does and the opportunity he or she has of building a career); 4) work security (protection against accidents and illness at work); 5) skill reproduction security (widespread opportunities to gain and retain skills); 6) income security (protection of income through minimum wage machinery, wage indexation, and comprehensive social security; and 7) representation security (protection of collective voice in the labour market, etc). It developed an index for each of these forms of security and then combined them into one overall index: an Economic Security Index.

According to the ILO's Economic Security Index, which measures the economic security

provided in a country relative to other countries, the Nordic countries offer significantly more economic security than the Anglo-American countries. A high economic security index indicates that country is providing more security than a country with a lower score. The average score for Anglo-American countries is 0.70; the average score for Nordic countries is 0.94.

The United States ties with New Zealand in providing workers with the lowest level of economic security among industrialized countries: 0.61. Finnish workers have one of the highest levels of economic security: 0.95. Canada's score is above the Anglo-American average at 0.79.

Taxes enable a country to buy services and social insurance programs that provide workers with a higher degree of economic security.

### **Access to Essential Services**

#### *Health*

Generally, people are able to live long and healthy lives in all high-income industrialized countries, certainly relative to poorer countries. Therefore it is hard to find an index that distinguishes between health outcomes in industrialized countries. A common measure is life expectancy at birth. By this measure there is little difference between Nordic and Anglo-American countries: on average, males live 76.2 years in both low- and high-taxed countries; females, on average, live a little longer in high-taxed countries (81.4 years versus 81.2 years). Once again, however, on this index of social progress the United States is below the average of low-tax countries. In fact, among industrialized countries, Americans have one of the lowest life expectancies at birth. The life expectancy of men and women in

TABLE 7 **Access to Services Essential to Human Development: Health**

	ANGLO-AMERICAN	NORDIC	CANADA	U.S.	FINLAND
Life expectancy (males) [26]	76.2	76.2	77.2	74.5	75.1
Life expectancy (females) [27]	81.2	81.4	82.1	79.9	81.8
Infant mortality per 1,000 live births [28]	5.5	3.5	5.4	6.9	3.1
Low birth weight as % of live births [29]	6.5	4.8	5.8	7.9	4.1

TABLE 8 **Access to Services Essential to Human Development: Education**

	ANGLO-AMERICAN	NORDIC	CANADA	U.S.	FINLAND
Completed secondary school [33]	73	81.5	83.6	87.5	75.9
Completed college or university [34]	33	32.3	44	38	33
Completed university [35]	20.6	22.1	22	29.4	16.4
PISA scores — reading [36]	517	512	528	495	543
PISA scores — science [37]	512	503	519	491	548
PISA scores — math [38]	513	516	532	483	544

Canada is almost three years longer than men and women in the U.S.

Another common measure of health outcomes is infant mortality rates. The Nordic countries' infant mortality rate is significantly lower than that of the Anglo-American countries. In the high-tax Nordic countries there is an average of 3.5 deaths per 1,000 live births, while in low-tax Anglo-American countries there is an average of 5.5 deaths per 1,000 live births. On this measure of social progress, as on so many others, the United States has the worst record of all the industrialized countries. Its infant mortality rate is 6.9 deaths per 1,000 births. Canada is about the same as the Anglo-American average, while Finland has only 3.1 infant deaths per 1,000 births, 50% less than the United States.

The health of new-borns is another frequently used measure of progress in the delivery of health care. On average, the percentage of new-borns weighing less than 2,500g in the Nordic countries is significantly lower than that in the Anglo-American countries. In high-tax Nordic countries, the percentage of low-weight births among new-borns is 4.8%, compared to 6.5% in

the low-tax Anglo-American countries. Canada's 5.8% of low-weight births is lower than the 7.9% of the U.S., but higher than the 4.1 of Finland.

Taxes fund health programs that ensure that all citizens have access to this vital service that is essential to human development.

#### *Education*

The Nordic countries spend a greater percentage of their GDP on education than Anglo-American countries (6.4% versus 5.9%), and a much larger share of their expenditures for education is financed with taxes (97% versus 82%).

Although the Nordic countries have a higher percentage of students who complete high-school (81.5% versus 73%) and university (22.1% versus 20.6%), the differences are not significant. Moreover, the average PISA scores of 15-year-old students on reading, science, and math tests are, by and large, statistically indistinguishable between Nordic and Anglo-American countries.

The United States has a larger percentage of students graduating from secondary school and university than any other industrialized country. Canada has the greatest percentage of students

TABLE 9 **Physical Security**

	ANGLO-AMERICAN	NORDIC	CANADA	U.S.	FINLAND
Homicides per 100,000 [40]	2.2	1.4	1.5	7.1	2.5

TABLE 10 **Community and Social Solidarity**

	ANGLO-AMERICAN	NORDIC	CANADA	U.S.	FINLAND
People can be trusted [41]	37.9	63.9	37	36.3	57.4
Confidence in parliament [42]	32.1	52.7	39.6	38	42.3
Confidence in corporation [43]	51	51.5	55.5	53.7	42.9
Confidence in justice system [44]	45.8	68.9	54	36.7	66.7
Union density [45]	23.9	71.5	28.1	12.8	76.2

who completed college or university. Although Finland has a lower percentage of students completing secondary school and university than the United States, its 15-year-old students score much higher than American students on reading, science, and math. Indeed, in all three of these subjects, its students score higher than any other high-income industrialized country. Canadian students also score higher than American students, although not as high as the Finnish students.

### Physical Security

A global index of physical security is difficult to imagine. One statistic frequently referred to in discussions of the physical security of citizens is the number of homicides in a country per population of 100,000. On this index, although it is not statistically significant, there are fewer homicides in Nordic countries (1.4 per 100,000) than Anglo-American countries (2.2 per 100,000).

Almost needless to say, the murder rate in the United States is far above that of every other industrialized country: 7.1 per 100,000. Canada is close to the Nordic average, and Finland is above the Nordic average.

### Community and Social Solidarity

In the late 1990s, the concept of social capital (usually defined as networks together with shared norms, values and understanding that facilitate cooperation within or among groups) gained widespread interest among researchers and policy-makers. The interest developed because of research results that suggested social capital was important, not only in facilitating productive organization and economic development, but also in enriching many aspects of social life and fostering social engagement and democracy. Unfortunately, the concept of social capital is difficult to operationalize, but, from the social indicators we examine, it would appear that citizens of high-tax countries are likely to have higher degrees of trust in one another and more confidence in public institutions. One could say they live in societies with more social capital than those living in low-tax countries.

Since 1981, the World Values Survey has conducted four waves of surveys of people's attitudes toward socio-cultural and political change. In Anglo-American countries, only about 38% of survey respondents agree with the statement that people can be trusted, whereas 64% of survey respondents in Nordic countries agree with that statement. More citizens in Nordic countries have confidence in Parliament (52.7% in Nordic

TABLE 11 **Self-Realization Goals: Freedom**

	ANGLO-AMERICAN	NORDIC	CANADA	U.S.	FINLAND
Index of economic freedom [46]	1.78	1.97	1.85	1.84	1.85
Sense of freedom [47]	84.4	82.7	86.4	89	86.7

countries versus only 32.1% in Anglo-American countries) and in the justice system (68.9% in Nordic countries versus 45.8% in Anglo-American countries). About the same percentage of citizens in both groups of countries report having confidence in the civil service (about 48%) and major companies (about 51%).

Many sociologists investigating the nature of social capital and the role it plays in society have suggested that trade unions are one of the most important organizations in society for the creation of social capital. Unions are organizations where people develop skills essential in a thriving democracy—such as tolerance, willingness to compromise, and respect for other viewpoints. They also stimulate political participation, increase people’s political skills, and promote an appreciation of both the rights and obligations of citizenship. Furthermore, they are organizations that foster collegiality. Not surprisingly, the average union density in Nordic countries is much higher than that of Anglo-American countries. About 24% of the work force, on average, is unionized in Anglo-American countries, whereas over 71% is unionized in Nordic countries. Canada’s union density of about 28% is higher than that of the U.S., where only 13% of the work force is unionized, but much lower than the over 76% union density in Finland.

### Self-Realization Goals

It is difficult to know which indicators might be examined to infer whether people are generally achieving their personal goals and satisfied with their lives; however, we have selected a few commonly used indicators.

### *Personal Freedom and Autonomy*

Since 1995, the Heritage Foundation and the *Wall Street Journal* have jointly produced an index of economic freedom. They claim that “countries with the most economic freedom also have higher rates of long-term economic growth and are more prosperous than are those with less economic freedom.” Somewhat surprisingly, even though high taxes are taken as an indication of the lack of economic freedom in the compilation of the index, the average score of the Nordic countries on the overall economic freedom index is only slightly higher than that of the Anglo-American countries. The average ranking for Anglo-American countries is 1.78; the average ranking for Nordic countries is slightly higher at 1.97. Also, survey evidence suggests that the sense of freedom of citizens in Nordic countries is almost as high as it is in the average Anglo-American country (82.7% versus 84.4%).

### *Drug Use and Rate of Suicides*

The inference to be drawn from the rate of drug use in a society is uncertain: Is drug use indicative of people who are living lives of quiet desperation, or is it indicative of people who are simply less inhibited in the pursuit of happiness? Whatever inference might be drawn from it, on average a significant lower percentage of people in Nordic countries are cannabis users than people in Anglo-American countries. An average of 11.6% of the population between the ages of 15 and 64 report using cannabis in the past year in Anglo-American countries, but two-thirds less, or only 3.8%, report doing so in Nordic countries. Cannabis use is about the same in Canada and the United States, at about 11%, but only about

TABLE 12 **Self-Realization Goals: Drug Use and Suicide Rate**

	ANGLO-AMERICAN	NORDIC	CANADA	U.S.	FINLAND
Drug users (% 15–64) [49]	11.6	3.8	10.8	11	2.9
Suicides [50]	11.1	15.2	11.7	10.4	21

TABLE 13 **Self-Realization Goals: Hours Worked**

	ANGLO-AMERICAN	NORDIC	CANADA	U.S.	FINLAND
Average hours worked per year [48]	1,752	1,550	1,736	1,824	1,737

3% of the population between the ages of 15 to 64 report using cannabis in Finland.

A high rate of suicide might suggest the citizens of a country are dissatisfied with their lives. In Anglo-American countries, the suicide rate is lower than in Nordic countries (11 per 100,000 versus 15 per 100,000), and the difference is statistically significant but there is no strong association between tax level and suicide rates. Japan has the highest rate of suicide, but Finland is among those countries with the highest rates with 21 suicides per 100,000, over twice the American rate.

#### *Leisure*

On the assumption that most people prefer leisure to work, one indirect measure of the quality of life in a country might be the amount of leisure that individuals are able to enjoy. On average, people in the Nordic countries work significantly fewer hours than those in the Anglo-American countries. In Anglo-American countries, the average person works 1,752 hours a year, while in the Nordic countries the average person works only 1,550 hours a year (over 200 hours less than in Anglo-American countries).

Americans enjoy significantly less leisure than citizens of most other countries. On average, they work 1,824 hours a year. This is 274 hours more than the Nordic average and 88 hours a year more than Canadians. Among the Nordic countries, the Finns enjoy less leisure than av-

erage Scandinavians. They work about the same number of hours a year as Canadians.

Of course, whether working fewer hours a year results in a higher degree of welfare for citizens of Nordic countries depends upon what accounts for the increased leisure enjoyed by people in high-tax countries. Does it reflect a lifestyle choice that contributes to the quality of their lives or do high taxes cause them to substitute leisure for work and thus diminish their well-being?

Attempting to determine the reason for the difference between the number of hours worked by Europeans and Americans has generated a good deal of research. Some studies conclude that the higher marginal tax rates in European countries account for the reduced number of hours worked in those countries. If this is the case, the increased leisure enjoyed by citizens in high-tax countries would not indicate that these citizens are better off. Indeed, it would indicate that they are worse off since, in the absence of taxes, or if they faced lower tax rates, they would prefer to work longer hours. Other researchers have found that the differences in hours worked reflects differences in taste. Europeans, they argue, simply value their leisure more than Americans.

One of the most recent studies on this issue found the difference in the number of hours worked between Europeans and Americans is largely explained by European labour market



TABLE 14 **Self-Realization Goals: Happiness**

	ANGLO-AMERICAN	NORDIC	CANADA	U.S.	FINLAND
Happiness [51]	39.5	34.1	45.2	39.5	24.7
Life satisfaction [52]	86.7	88	87.9	87.2	89.9

regulations. After the first oil shock in 1973, European unions pushed hard for a shorter work week and longer vacations. In addition to their collective bargaining efforts, unions also lobbied for the adoption of government-mandated vacation time and a generous number of holidays. If this is the correct explanation for the differences, then the effect on workers' well-being is ambiguous.

If these labour market regulations force workers to take time off when they would prefer to work, then presumably the regulations reduce their well-being. However, the authors of this recent study conclude that, instead of reducing worker well-being, these regulations actually increase worker well-being by helping to solve a collective action problem. Individual workers often work longer hours than they would prefer because their co-workers are working longer hours. In order to keep up with the relative income of their co-workers and to compete for promotions, they must work equally as hard. This gives rise to the equivalence of an arm's race. Each worker works harder and harder, but each would prefer not to. Regulation helps them solve this coordination problem. The authors of this study suggest that this latter explanation is the correct one. They note that "Europeans seem to be happy to work less and less."

#### *Happiness and Life Satisfaction*

Ultimately, at least according to one widely held personal philosophy, what life on the planet is all about is happiness and satisfaction with one's life. As set out so eloquently in the American Declaration of Independence, everyone has an unalienable right to "life, liberty, and the pur-

suit of happiness." Given the enormous diversity of individual preferences and tastes, it is hard to imagine indicators that could measure directly whether individuals are happy and satisfied with their lives. However, the World Values Survey has included questions relating to the respondents' perceived happiness and overall satisfaction with life.

Based upon the most recent survey data, there are no statistically significant differences in reported happiness or life satisfaction between high- and low-tax countries. On average, the percentage of citizens in low-tax Anglo-American countries who report they are very happy is slightly higher than the percentage in high-tax Nordic countries (39.5% versus 34.1%), but the number who report they are satisfied with their lives is slightly lower (86.7% versus 88%). Canadians report they are among the happiest citizens of industrialized countries. Also, on these kinds of surveys the Dutch (Netherlanders) consistently report being the happiest people and the most satisfied with their lives, and yet the Netherlands is, of course, a relatively high-tax country.

#### **Opportunities to Participate in Collective Decision-Making**

Numerous indicators might be used as measures of the vibrancy of democratic institutions in a country. We report on two here. First, citizens are more likely to participate in collective decision-making if they feel their government is honest. Citizens in the Nordic countries, on average, feel that their countries are less corrupt than their counterparts in the Anglo-American countries, and the difference is statistically significant.

TABLE 15 **Opportunities to Participate in Collective Decision-making**

	ANGLO-AMERICAN	NORDIC	CANADA	U.S.	FINLAND
Corruption perceptions index [53]	8.4	9.3	8.4	7.6	9.6
Political discussion with friends [54]	13.3	18.2	11	16.3	6.6

TABLE 16 **Environmental Sustainability**

	ANGLO-AMERICAN	NORDIC	CANADA	U.S.	FINLAND
Environmental performance — ranking [55]	24	13	28	30	17

TABLE 17 **Inter-Nation Equity**

	ANGLO-AMERICAN	NORDIC	CANADA	U.S.	FINLAND
Official development assistance (% GNI) [56]	0.28	0.71	0.27	0.17	0.35
Commitment to development index [57]	5.3	6.1	5.3	5	5.4

Anglo-American countries score an average of 8.4 on a perception of government corruption scale (from 0 [most corrupt] to 10 [least corrupt]), whereas Nordic countries score 9.3.

Second, engaged citizens in a democracy presumably deliberate about political issues with their friends and colleagues. In Anglo-American countries, on average, about 13% of people report they had frequent discussions of politics with friends, while in Nordic countries about 18% report frequent discussions of politics with friends.

### Environmental Sustainability

Constructing composite environmental indicators has become a growth industry, but a country's rank on them is often determined by geography or other characteristics beyond the control of the country's government, by the method used to aggregate individual indicators, by the comparability of the data, and by the purpose of the evaluation.

The composite index in Table 16 is taken from a Canadian study that used OECD data to rank the environmental performance of countries. On

average, the Nordic countries rank significantly higher than the Anglo-American countries: on average, the Nordic countries rank 13th (even though Norway ranks 25th, considerably pulling down the Nordic countries average rank); while the Anglo-American countries rank 24th. The United States ranks lowest among the high-income industrialized countries (in 30th place).

### Inter-Nation Equity

The inequalities between individuals around the world are staggering. The richest 5% of people receive one-third of total global income, more than the poorest 80%. High-income countries should care about the development of low-income countries, for a number of reasons. First, as a matter of their own self-interest, in a globalized world high-income countries cannot insulate themselves from the insecurity, public health crises, violence, and economic volatility that constantly threaten low-income countries. Second, as a matter of basic fairness, no person should be denied the chance to live free of poverty and have access to services such as health and education that are essential to hu-



man development. Third, high-income countries should promote the same social and economic values they pursue in their own nations, such as human dignity and basic levels of material well-being, throughout the world. For these and other reasons, citizens of wealthy countries have recognized a responsibility to assist those in poor countries.

The most straightforward index of a country's development effort is its total foreign aid as a percentage of the donor country's GDP. Countries with higher taxes are presumably better able to provide assistance to low-income countries. One might also suppose that more caring countries domestically are likely to be more caring globally. The evidence bears out these intuitions. On average, high-tax Nordic countries provide more foreign aid than low-tax Anglo-American countries. The Anglo-American countries give on average only 0.28% of their gross national income (GNI) for official development assistance; the Nordic countries give an average 0.71% of their GNI, more than double that of the Anglo-American countries. Of the high-income industrialized countries, the United States gave the least development assistance as a percent of its GNI.

A much more sophisticated measure of a country's commitment to development would take account of its foreign aid as well as the full range of its policies towards low-income countries: including trade, investment, migration, environment, security, and technology. The Centre for Global Development ranks the 21 richest nations for each of these policy areas and then combines the results into a Commitment to Development Index. Even on this index, the Nordic countries score significantly higher than the Anglo-American countries (an average of 6.1 versus an average of 5.2). Canada scores higher than the U.S. and is in line with Finland. On the 2005 index, Denmark tops all countries with a score of 6.7.

## **Economic Goals**

### **Equity versus Efficiency**

One of the fundamental tenets of classical economics is that there is a trade-off between equity and efficiency. The pursuit of social goals must come, to some extent, at the expense of economic goals. Although some studies purport to show that government spending hampers economic growth, in recent years a growing body of literature has concluded that there is no necessary trade-off to be made between economic efficiency and equity.

Policies furthering social justice are likely to contribute to efficiency and growth, for a number of reasons: spending on education and health care contributes to a better educated and healthier work force; the increased economic security of workers enhances their capacity to adjust to change, bear more risk, acquire more specialized skills, and pursue investment opportunities; social justice policies can channel and mitigate industrial conflict in periods of structural adjustment and foster political stability and social cohesion; a smaller range of wage dispersion encourages structural change and thus productivity growth; and a more equal society bears fewer of the costs of social stratification such as increased health costs, crime control costs, and the cost of inner city decay.

The above review of social indicators suggests that high-tax countries have been better able to achieve their social objectives than low-tax countries. The following review of economic indicators suggests that high-tax Nordic countries have not suffered any significant economic costs in the pursuit of a more just and equitable society.

### **High Standard of Material Living**

The most common way of measuring the material well-being of citizens of a country is simply by dividing the country's gross domestic product (GDP) by its population. Countries can then

TABLE 18 **Material Standard of Living**

	ANGLO-AMERICAN	NORDIC	CANADA	U.S.	FINLAND
GDP per capita (US\$) [58]	32,083	32,825	31,500	39,700	30,600

be compared by converting their GDP per capita to U.S. dollars on the basis of their purchasing power parity.

By this measure, Luxembourg is the wealthiest country in the world with an astonishing 2004 GDP per capita of US\$57,500. It is worth noting that the wealthiest country in the world, by far, also has a tax level much higher than the OECD average. Taxes in Luxembourg are about 42% of GDP.

Although the difference is not statistically significant, the high-tax Nordic countries have a higher GDP per capita than the low-tax Anglo-American countries. In the Nordic countries, the GDP per capita is \$32,825; in Anglo-American countries it is slightly less at \$32,083.

Next to Luxembourg, the United States is the wealthiest country in the world; its GDP per capita is \$39,700. Canada's GDP per capita is \$31,500, marginally below the Nordic and even the Anglo-American average. Although the United States is both a low-tax and wealthy country, it is important to note that across the high-income OECD countries there is no association between tax levels and material well-being.

Although GDP per capita is the most frequently used measure of well-being, there are many problems with this measure.

First, GDP measures the market values of activities carried on in the country without regard to whether they contribute to material well-being. In the United States, for example, to the extent its GDP is measuring the value of activities such as the cost of incarcerating prisoners, of police and private security guards, and of inefficiently delivered health care services, it is not necessarily a good measure of the material well-being of Americans.

Second, a country's GDP is a function not only of the productivity of workers, but also of how many hours they work. Workers in Nordic countries have been able to produce goods and services per capita that slightly exceed the value of the goods and services per capita produced by workers in Anglo-American countries, yet this seriously understates how much better off they are since they are able to produce these goods and services while working over 200 hours less a year. As mentioned earlier, on average American workers work 274 more hours a year than workers in Nordic countries.

Third, and most importantly, the simple measure of GDP per capita reveals nothing about how income in the country is distributed, and therefore who is benefiting from the wealth produced in the economy. It is an average figure that is arrived at simply by taking the total wealth of the country and dividing it by the total population. It would remain the same whether all of the wealth in a country was distributed to one person or equally across all persons. Presumably, in judging the economic success of a country, what matters is the material wealth of the typical or median family (a real family), not the average family (a statistical construct). One reason why the average GDP per capita is so high in the U.S. is that the U.S. has a relatively small number of extremely high-income individuals. Thus the U.S. GDP per capita is an unreliable measure of the material well-being of the typical (median) American family.

### High Rates of Economic Growth

Over the past 15 years, the American economy has grown faster than most others (as measured by GDP per capita). Yet it has not been the fastest

TABLE 19 **Rate of Economic and Productivity Growth**

	ANGLO-AMERICAN	NORDIC	CANADA	U.S.	FINLAND
Average growth rate — 1995–2004 [60]	4.1	2.8	3.4	3.4	3.7
GDP per hour worked [62]	38.2	44.1	35.2	46.3	39.2
Growth in GDP per hour worked, 1995–2004 [63]	2.5	2.1	1.7	2.5	2.3
Growth in multi-factor productivity, 1995–2002 [64]	1.7	1.2	1.2	1.4	2.2

growing economy in the world; that honour goes to another Anglo-American country, Ireland.

From 1990 to 2004, the Irish economy has grown at a staggering rate of 6.6% a year. Ireland has always been a relatively low-tax country, but from 1994 to 2003 its tax level declined even further, from about 35% to about 30% of GDP. Ireland's low general tax level, along with its low corporate tax rate of 10% on the manufacturing profits of foreign multinationals, has led tax-cutters in Anglo-American countries to urge their governments to follow the Irish tax model.

However, there is little reason to suppose that tax cuts had much to do with the Irish economic miracle. Ireland reaped the advantages of huge European Union subsidies, particularly in the late 1970s and in the 1980s (reaching 6% of GDP), and even in the early 1990s. Ireland invested those subsidies in infrastructure, including free higher education. It had an English-speaking, well-educated, under-utilized labour force. It aggressively courted foreign investment through industrial development agencies. It was perfectly poised to take advantage of the American boom in information technology at a time when American multinationals were looking for places to invest overseas for export to the European market. Once it had attracted a number of information technology firms, there was a well-known agglomeration effect of industrial concentrations that contributed to spin-off growths and attracted more firms.

Furthermore, Ireland is not really a good exemplar of the Anglo-American model. In the late 1980s and throughout the 1990s, it had high lev-

els of employment protection and a highly coordinated system of wage-setting that kept wages down. It seems reasonably clear that the Irish miracle is due to a unique set of circumstances that cannot be duplicated in other countries simply by trying to imitate its beggar-thy-neighbour corporate tax rate strategy. Even if such a strategy worked, it would only work for a very small number of other countries.

From 1990 to 2004, the average annual growth rate of GDP per capita was 3.6% in Anglo-American countries and only 2.3% in the Nordic countries. This is one of the most frequently referred-to facts in arguing that European countries are going to have to adopt the Anglo-American economic model if they hope to increase the prosperity of their nations. The fact that the U.S. growth rate over this period has been 3.1% and Canada's has only been 2.8% is also frequently referred to in urging that Canada must reduce its tax level to U.S. levels. Yet there is a lack of evidence linking lower taxes in Anglo-American countries to higher rates of economic growth. In fact, there are many reasons why these comparisons do not lead to the conclusion that high-tax countries should follow the example of low-tax countries in order to foster higher rates of economic growth.

First, the difference in economic growth rates over this period between Nordic and Anglo-American countries is not statistically significant: it is likely to be a chance occurrence. In addition, the association between higher economic growth and lower tax levels is weak.

Second, the differences are highly dependent upon what base year is used for the purpose of drawing the comparison. For example, in a more recent period, from 1995 to 2004, the growth rate in GDP per capita in both Canada and the United States was the same: 3.4%. And over this period, high-tax Finland outgrew both countries, with a rate of growth of 3.7%.

Third, the past 50 years have demonstrated that periods of economic growth tend to be highly cyclical. For example, only 20 years ago many economists were predicting that Germany and then Japan should be the economic models to follow.

Finally, almost all of the wealth created in the United States over the past 20 years has benefited the very rich. The real income of the typical worker has hardly changed at all.

### **High Rates of Productivity Growth**

The wealth that a nation produces is determined not only by how many hours workers work, but also by how productive they are when they are working. As noted above, American and Anglo-American workers generally work many more hours than European workers. However, European workers are generally more productive than Anglo-American workers.

The average Nordic country worker is substantially more productive than the average Anglo-American worker, although the difference is not statistically significant. On average, Nordic country workers produce goods and services valued at \$44.1 an hour, while Anglo-American workers only produce goods and services valued at \$38.2 an hour.

American workers tend to be very productive, on average producing goods and services worth \$46.3 per hour. However, it might be noted that they are not nearly as productive as workers in Norway, who produce goods and services worth \$56.6 per hour, or even French workers who produce goods and services worth \$47.7 per hour.

With the strong pick-up in economic growth in the United States, particularly since the mid-1990s, after 50 years of catching up to the United States, European countries now find themselves falling behind. In the United States, from 1995 to 2004, the average annual growth in GDP per hour worked was 2.5%. Indeed, this was the average of the Anglo-American countries. Over the same period, the annual average growth in GDP per hour worked in Continental European countries was only 1.5%. Clearly, if this difference persists over a number of years, it will make a large difference in living standards. However, it is odd to attribute the lack of productivity growth in Europe to high tax levels, as many business commentators do. For one thing, Sweden, the country with the highest tax levels in the world, experienced productivity growth over this period at almost the same level as the United States (an annual rate of 2.4% versus 2.5%). Moreover, although the average growth in GDP per hour worked from 1995 to 2004 was lower in the Nordic countries than in the average Anglo-American countries (2.5% versus 2.1%), the difference is not statistically significant; it could have been due to chance.

### **Price Stability**

There are good reasons for believing that higher taxes might enhance economic stability. First, the higher levels of government spending that result from higher taxation tend to act as an automatic stabilizer, reducing the impact on production and employment of fluctuations in other elements of demand. Second, if the tax system is progressive, this might act to dampen fluctuations. Finally, it may be expected that, if the distribution of personal income is more equal because of high taxes and a generous transfer system, personal consumption will fluctuate less over the business cycle. Lower-income families are more likely to consistently spend their income, and thus contribute to stable aggregate demand, than higher-income families who might veer between bouts

TABLE 20 **Stable Prices**

	ANGLO-AMERICAN	NORDIC	CANADA	U.S.	FINLAND
Inflation, 2003–04 [66]	2.8	0.8	2.1	3.3	0.4

TABLE 21 **Budget Surplus or Deficit**

	ANGLO-AMERICAN	NORDIC	CANADA	U.S.	FINLAND
Surplus or deficit as percent of GDP [67]	0.1	4.1	0.7	-4.7	1.9
Debt as percent of GDP [68]	42.8	54.8	72.2	64	52.5

TABLE 22 **Balance of Payments**

	ANGLO-AMERICAN	NORDIC	CANADA	U.S.	FINLAND
Surplus or deficit as percent of GDP [69]	-3.2	7.4	2.3	-5.7	5.1

of cautionary savings and credit-financed consumption binges.

Although not a particularly good measure of economic stability, it is noteworthy that, in the most recent year for which there are comparable data, the inflation rate in the average Anglo-American country was 2.8%, while it was only 0.8% in Nordic countries. The inflation rate was 3.3% in the United States in this period, and only 0.4% in Finland. The difference is statistically significant. In addition, the association between lower inflation and higher tax level is strong.

### Sustainable Debt Levels

On average, Anglo-American countries had a surplus of 0.1% of GDP in 2004, but the Nordic countries had a much larger average surplus of 4.1% of GDP. The higher Nordic percentage is partly attributed to the 11.4% surplus of Norway. Still, other Nordic countries also outperformed most of the Anglo-American countries, as Finland had a surplus of 1.9% of GDP, Denmark had a surplus of 1.7% of GDP, and Sweden had a surplus of 1.4% of GDP. Among the Anglo-American countries, New Zealand, Ireland, Australia, and Canada were the countries in the black,

with a surplus of 5.5%, 1.4%, 1% and 0.7% of GDP, respectively. But the U.S. and the U.K. were in the red, with a deficit of 4.7% and 3.2% of GDP, respectively.

Although the Nordic countries, on average, carry a higher debt level than the Anglo-American countries, Finland carries a lower debt level than the U.S. and Canada. The data show that Australia, New Zealand, and Ireland each has a much smaller national debt than Canada, the U.S. and the U.K., with Australia's accounting for about 18% of 2004 GDP and the other two countries totalling 29% each. In contrast, the Nordic countries' debt levels are more even.

### Viable International Balance of Payments

Current account balance reflects a country's transactions with other countries. On average, the Nordic countries had a current account surplus of 7.4% of GDP in 2004, compared to the 3.2% deficit of Anglo-American countries. The difference is statistically significant. The association between current account surplus and tax level is moderate. Canada had a surplus of 2.3% of GDP in 2004, compared to a 5.7% deficit of the U.S. and a 5.1% surplus of Finland.

TABLE 23 **Employment Growth**

	ANGLO-AMERICAN	NORDIC	CANADA	U.S.	FINLAND
Growth [70]	2.5	0.9	1.4	1.8	1.5

TABLE 24 **Unemployment Rate**

	ANGLO-AMERICAN	NORDIC	CANADA	U.S.	FINLAND
Unemployment rate [71]	5.0	6.2	6.8	5.1	8.5
Long-term rate [72]	17.5	19.8	9.6	11.8	24.9

TABLE 25 **Labour Force Participation Rate**

	ANGLO-AMERICAN	NORDIC	CANADA	U.S.	FINLAND
Total participation rates [73]	75.4	77.8	77.8	75.4	74.3
Male participation rates [74]	82.4	80.6	82.5	81.8	75.7
Female participation rates [75]	68.6	75.0	73.1	69.2	72.9

TABLE 26 **Rates of Saving**

	ANGLO-AMERICAN	NORDIC	CANADA	U.S.	FINLAND
Household saving [76]	2.9	6.1	1.4	1.8	2.7
Net national saving [77]	5.9	11.6	8.7	1.3	8.4

### High and Stable Rates of Employment Growth

The one economic measure on which the Anglo-American countries have significantly outperformed the Nordic countries is employment growth. In 2004–2005, they had an employment growth rate of 2.5%, compared to the Nordic countries where the employment growth rate was only 0.9%.

The unemployment rate in Anglo-American countries in 2004 was lower than that of the Nordic countries (5.2% versus 6.4%), but not significantly lower. Among the unemployed, on average, about 18%–20% are unemployed for a year or more in the Nordic and Anglo-American countries.

The labour force participation rate in Nordic countries was higher than in Anglo-American countries (77.8% versus 75.4%). The labour par-

ticipation rate of men was marginally higher in Anglo-American countries (82.4% versus 80.6%), but the labour participation rate of women was significantly higher in Nordic countries (75.9% versus 68.6%).

### High Rates of Savings and Investment

The rate of household saving in the Nordic countries is higher than that in the Anglo-American countries. In Nordic countries, households save on average 6.1% of their disposable income, while in Anglo-American countries they save only 2.9% of their disposable income. Net national savings rates are also higher in Nordic countries than in Anglo-American countries (11.6% versus 5.9%). In addition, the fact that the Nordic countries, on average, have a higher national savings rate



TABLE 27 **Investment**

	ANGLO-AMERICAN	NORDIC	CANADA	U.S.	FINLAND
Annual change in fixed capital formation [78]	8.2	5.6	6.6	8.4	4.8

TABLE 28 **Foreign Direct Investment**

	ANGLO-AMERICAN	NORDIC	CANADA	U.S.	FINLAND
Inward foreign direct investment [79]	3.7	0.9	0.6	0.9	2.5
Inward FDI performance [80]	2.3	0.8	0.7	0.4	1.8

TABLE 29 **Innovation**

	ANGLO-AMERICAN	NORDIC	CANADA	U.S.	FINLAND
UNCTAD innovation capability index [81]	0.892	0.951	0.907	0.927	0.977

than the Anglo-American countries is statistically significant.

The percentage change in real total gross fixed capital formation is higher in Anglo-American countries than in Nordic countries (8.2% versus 5.6%).

Anglo-American countries have been able to attract a greater amount of foreign investment than Nordic countries. Foreign investment was 3.7% of 2004 GDP in Anglo-American countries, but only 0.9% in Nordic countries. Although Canada's inward foreign direct investment accounted for only 0.6% of GDP in 2004 and is lower than the 0.9% of the U.S., Finland's 2.5% is sharply higher than that of the U.S. Measured by the inward FDI performance index, of which over 1 means that a country attracts more inflow of investment than its size warrants, Anglo-American countries on average attract more investment than Nordic countries. Their average score was 2.3 compared to only 0.8 for the Nordic countries. Canada's score is higher than that of the U.S., but lower than that of Finland.

### **Innovation**

Innovation is a main driving force of long-term economic growth. As indicated in Table 29, as innovators the high-tax Nordic countries outperformed the low-tax Anglo-American countries.

The UNCTAD Innovation Capability Index consists of the unweighted averages of two indexes. One is the Technological Activity Index, which is made up of research and development personnel per million people, U.S. patents granted per million people, and scientific publications per million people. Another is the Human Capital Index, which is made up of the literacy rate as a percent of population, secondary school enrolment as percent of age group, and tertiary enrolment as percent of age group. On average, the Nordic countries scored 0.951, higher than the 0.892 of the Anglo-American countries. The difference is statistically significant. The association between the index and tax level is modest. Canada scored lower than the U.S., but Finland scored higher than the U.S.

TABLE 30 **Research and Development**

	ANGLO-AMERICAN	NORDIC	CANADA	U.S.	FINLAND
R&D as % of GDP [83]	1.7	3.4	2	2.7	3.4
R&D researchers per 10,000 [84]	7.3	11.6	7.2	9.3	17.7

TABLE 31 **Information Technology Development**

	ANGLO-AMERICAN	NORDIC	CANADA	U.S.	FINLAND
Network readiness index [85]	1.43	1.61	1.54	2.02	1.72
Broadband subscribers [86]	9.5	15.8	17.8	13	15

TABLE 32 **Competitiveness Indexes**

	ANGLO-AMERICAN	NORDIC	CANADA	U.S.	FINLAND
Growth competitiveness index [87]	5.35	5.66	5.37	5.61	5.76
World competitiveness scoreboard [88]	82.738	79.398	82.628	100	82.627

### Research and Development

High-tax countries appear well placed to capitalize on opportunities for future economic growth and productivity. The average Nordic country spends significantly more than the average Anglo-American country on research and development (3.4% of GDP versus 1.7%), and has significantly more researchers per 10,000 of workers (11.6% versus 7.3%).

### Utilization of Information Technology

The level of ability to make good use of information technology is another proxy for future economic growth and productivity. On average, the Nordic countries appear to be more prepared for the Information Age than the Anglo-American countries, as measured by both the Network Readiness Index and broadband subscription.

Developed by the World Economic Forum, the Network Readiness Index measures the degree of preparation of a nation or community to participate in and benefit from information and communication technology developments. The index is composed of three component indexes

that assess the environment for information and communication technology offered by a given country or community, the readiness of the community's individuals, business and governments, and the usage of information and communication technology among these stakeholders.

The Nordic countries rate higher than the Anglo-American countries on both the Network Readiness Index (1.61 vs 1.43), and have significantly more broadband subscribers per 100 inhabitants (15.8 vs 9.5). The U.S. appears to be more network ready than Finland and Canada, as shown in the latest Network Readiness Index, but Canada had more broadband subscribers per 100 inhabitants in 2004 than Finland and the U.S.

### Competitive Economy

The business press routinely bemoans the alleged lack of competitiveness of the Canadian economy, again usually by comparison to the United States economy. It is unclear whether the concept of competitiveness has any sensible meaning when applied to national economies; certainly



TABLE 33 Global Creativity Index

	ANGLO-AMERICAN	NORDIC	CANADA	U.S.	FINLAND
Index [89]	0.565	0.675	0.548	0.666	0.684

countries are not competing with one another in the same way that private firms compete; nevertheless, a cottage industry has sprung up measuring the competitiveness of national economies. Basically, what is usually being measured is the extent to which a country is implementing policies that are likely to encourage economic growth. There is, of course, a vast literature and considerable disagreement over what causes economic growth; therefore, these measures necessarily embody contested ideas about what makes countries prosperous. To a great extent they likely reflect economic policies that the constructors of the index favour. Nevertheless, they are routinely referred to in debates over whether Canada is achieving its economic goals.

Every fall, the World Economic Forum, a business-dominated, Geneva-based, private organization, releases its *Global Competitiveness Report*. The report contains a comprehensive index that measures the competitiveness of countries based upon around 150 variables, including each country's macroeconomic performance, the quality of its public institutions, and the level of its technological readiness. On its index of growth competitiveness, the high-tax Nordic countries are significantly more competitive than the low-tax Anglo-American countries (an average score of 5.66 versus 5.35). Consistent with the claim made in this paper, the World Economic Forum concluded that "There is no evidence that relatively high tax rates are preventing these countries [the Nordic countries] from competing effectively in world markets, or from delivering to their respective populations some of the highest standards of living in the world."

The low-tax United States ranks as the sixth most competitive economy in the world, but the

high-tax Finland was the second most competitive country in the world. In addition to Finland, two other Nordic countries also rank in the top five most competitive countries in the world, with Sweden as third and Denmark as fourth. Norway was ranked 12th, and Canada does not rank among the top ten most competitive countries in the world (with its ranking of 16th in 2005–06).

Among the "global competition" entrepreneurs, Richard Florida has been one of the most successful one. His books, including *The Flight of the Creative Class: The New Global Competition for Talent* (2005), have been bestsellers. His basic point is that the success of countries in the global economy will be determined by whether or not they are able to attract knowledge workers and innovators who constitute the creative class such as scientists, engineers, managers, professionals, and artists. His research shows a clear correlation between creativity and competitiveness. He claims that, "wherever talent goes, innovation, creativity, and economic growth are sure to follow." In order to determine which countries are likely to be most successful at attracting and nurturing the creative class, he developed a Global Creativity Index, which rates countries along three axes: talent, technology, and tolerance.

Based on this index, over the next few years Nordic countries are more likely to attract and nurture the innovators that drive development than Anglo-American countries. The average Nordic country scores 0.675 on the Global Creativity Index, while the average Anglo-American country scores 0.565. All four Nordic countries rank in the top 10 countries, while among the Anglo-American countries only the United

TABLE 34 **Human Development Index**

	ANGLO-AMERICAN	NORDIC	CANADA	U.S.	FINLAND
Index for 2004 [90]	0.948	0.952	0.950	0.948	0.947

States — which ranks 4th behind Sweden and Finland — ranks in the top 10. Canada ranks 11th.

### Comprehensive Measure of Well-Being

Over the years, several comprehensive indexes that combine social and economic indicators have been developed and used to compare human development across countries. We conclude this review of social and economic indicators with a reference to the comprehensive index that has achieved the most notoriety in Canada over the past decade: the United Nation's Human Development Index (HDI). This index, which has been published since 1990 by the United Nations Development Program in its annual report, is well known in Canada since it ranked Canada as having reached the highest human development of any country in the world for seven consecutive years, from 1994 to 2000 inclusive.

The HDI measures the average achievements in a country in three basic dimensions of human development, all of which are assumed to be essential in order to expand people's choices: a long and healthy life, as measured by life expectancy at birth; knowledge, as measured by adult literacy rate (with two-thirds weight) and the combined primary, secondary and tertiary school gross en-

rolment ratio (with one-third weight); and a decent standard of living, as measured by GDP per capita at purchasing power parity in \$US.

The UN index has been critiqued from every angle: conceptual issues, choice of dimensions, choice of indicators, data measurement and error, aggregation issues, and its use in analysis. However, most significantly for our purposes, the index does not discriminate much between the human developments achieved in industrialized countries. For example, almost all of the top 20 industrialized countries are ranked as having adult literacy rates of 99%.

The HDI value for each country indicates how far the country has to go to attain certain defined goals: an average life span of 85 years, access to education for all, and a decent level of income. The closer a country's HDI is to 1, the less the remaining distance a country has to travel. Only 0.029 separates the first 20 countries. Nevertheless, it remains a frequently cited benchmark of human development around the world.

Norway is now ranked first on the HDI, Canada is ranked 5th, and the United States is ranked 10th. The average HDI value of Nordic countries is slightly higher than the HDI value of Anglo-American countries (0.952 versus 0.948).

# To What Kind of Country Do Canadians Aspire?

In their attack on taxes, neoliberals argue that the programs taxes finance are ineffective in achieving their objectives, and that taxes have huge economic costs. This comparison between high- and low-tax countries would suggest the opposite. Not only do government social programs appear effective in achieving their objectives but also taxes appear to have little, if any, economic costs.

It does appear from this data that the social contract struck by the citizens of Nordic coun-

tries — and the mix of markets, families, civil society, firms, and government used in the pursuit of their social and economic objectives — has been dramatically more successful than that struck by citizens of Anglo-American countries.

A very famous U.S. jurist, Justice Oliver Wendell Holmes, once remarked, “Taxes are what we pay for civilized society.” The comparisons made in this paper between high- and low-tax countries suggest that he was probably right.



APPENDIX 1 **Comparing Social and Economic Outcomes in Low- and High-Tax Countries**  
Data Columns 1–6

<i>General</i>						
	Tax as % of GDP, 2004	Average tax as % of GDP, 1990–2002	Total government revenue, 2004 (% of GDP)	Total government spending, 2004 (% of GDP)	Ratio of surplus (+) or deficit (-) to nominal GDP, 2004	Public social expenditure, 2001 (% of GDP)
	[1]	[2]	[3]	[4]	[5]	[6]
<b>ANGLO-AMERICAN</b>						
Australia	31.2	29.8	36.6	36.2	1.0	18.0
Canada	33.5	35.7	41.7	41.1	0.7	17.8
Ireland	30.1	32.6	35.6	34.2	1.4	13.8
New Zealand	35.6	35.4	41.2	37.0	5.5	18.5
United Kingdom	36.0	35.5	40.8	43.9	-3.2	21.8
United States	25.5	28.0	31.9	36.5	-4.7	14.7
<b>MEDITERRANEAN</b>						
Greece	35.0	34.0	46.0	52.0	-6.5	24.3
Italy	41.1	42.1	45.4	48.5	-3.3	24.4
Portugal	34.5	33.6	45.4	48.4	-3.9	21.1
Spain	34.8	33.0	38.4	38.6	-0.2	19.6
<b>CONTINENTAL EUROPEAN</b>						
Austria	42.6	42.3	49.3	50.6	-1.1	26.0
Belgium	45.0	44.9	49.3	49.3	-0.0	24.7
France	43.4	43.4	49.8	53.4	-3.6	28.5
Germany	34.7	36.5	43.2	46.8	-3.7	27.4
Netherlands	37.5	42.2	46.2	48.6	-2.1	21.8
<b>NORDIC</b>						
Denmark	48.8	49.0	58.9	56.3	1.7	29.2
Finland	44.2	46.2	52.5	50.7	1.9	24.8
Norway	44.0	41.9	57.9	46.4	11.4	23.9
Sweden	50.4	50.5	58.3	57.3	1.4	29.8
<b>GROUP AVERAGES</b>						
Anglo-American	32.0	32.9	38.0	38.1	0.1	17.4
Mediterranean	36.3	35.7	43.8	46.9	-3.5	22.4
Continental European	40.6	41.9	47.6	49.7	-2.1	25.7
Nordic	46.9	46.9	56.9	52.7	4.1	26.9
<b>OECD</b>	<b>35.9</b>	<b>36.1</b>	<b>43.9</b>	<b>45.1</b>	<b>-3.6</b>	<b>20.8</b>

APPENDIX 1 **Comparing Social and Economic Outcomes in Low- and High-Tax Countries**  
Data Columns 7–15

	<i>Relief of poverty</i>				<i>Services for the elderly</i>	<i>Services for disabled</i>	<i>Income inequality</i>		
	Relative poverty, 2000 (%)	Child poverty rate, 2000 (%)	Child poverty in single-parent household, 2000 (%)	Poverty rate of elderly of 65 and over, 2000 (%)	Net old-age pension replacement rate, 2005	Relative income of disabled persons, late 1990s (%)	Gini coefficient, 2000	Income share of richest 10% to poorest 10%, 1990s	Ratio of incomes at 90th percentile to those at 10th percentile, 1990s
	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]
<b>ANGLO-AMERICAN</b>									
Australia	11.2	11.6	38.4	23.6	52.4	43.9	30.5	12.5	4.3
Canada	10.3	13.6	42.1	4.3	57.1	84.6	30.1	10.1	4.0
Ireland	15.4	15.7	53.9	..	36.6	69.6	30.4	9.7	4.6
New Zealand	10.4	16.3	47.5	0.4	39.5	..	33.7	12.5	..
United Kingdom	11.4	16.2	40.7	14.4	47.6	78.0	32.6	13.8	4.6
United States	17.1	21.7	48.9	24.6	51.0	58.7	35.7	15.9	5.5
<b>MEDITERRANEAN</b>									
Greece	13.5	12.4	19.8	24.3	99.9	66.2	34.5	10.0	4.8
Italy	12.9	15.7	24.9	15.3	88.8	79.7	34.7	11.6	4.5
Portugal	13.7	15.6	32.5	29.2	79.8	59.0	35.6	15.0	..
Spain	..	..	..	..	88.3	70.6	..	9.0	4.8
<b>CONTINENTAL EUROPEAN</b>									
Austria	9.3	13.3	30.0	9.2	93.2	86.3	25.2	7.6	3.2
Belgium	..	..	..	..	63.1	82.3	..	7.8	3.3
France	7.0	7.3	26.6	10.5	68.8	79.9	27.3	9.1	3.5
Germany	9.8	12.8	31.4	8.5	71.8	93.0	27.7	6.9	3.3
Netherlands	6.0	9.0	30.3	1.6	84.1	87.6	25.1	9.2	3.0
<b>NORDIC</b>									
Denmark	4.3	2.4	7.2	6.1	54.1	86.0	22.5	8.1	2.9
Finland	6.4	3.4	10.5	10.4	78.8	83.0	26.1	5.6	2.9
Norway	6.3	3.6	9.9	12.4	65.1	79.4	26.1	6.1	2.8
Sweden	5.3	3.6	9.3	7.8	68.2	95.6	24.3	6.2	3.0
<b>GROUP AVERAGES</b>									
Anglo-American	12.6	15.9	45.2	13.5	47.4	67.0	32.1	12.4	4.6
Mediterranean	13.4	14.6	25.7	22.9	89.2	68.9	34.9	11.4	4.7
Continental European	8.0	10.6	29.6	7.5	76.2	85.8	26.3	8.1	3.3
Nordic	5.6	3.3	9.2	9.2	66.5	86.0	24.7	6.5	2.9
<b>OECD</b>	<b>10.2</b>	<b>12.1</b>	<b>32.5</b>	<b>13.3</b>	<b>68.7</b>	<b>77.8</b>	<b>30.8</b>	<b>10.5</b>	<b>3.9</b>

APPENDIX 1 **Comparing Social and Economic Outcomes in Low- and High-Tax Countries**  
Data Columns 16–22

<i>Gender</i>							
	Gender Gap Index, 2006	Gender empowerment measure, 2005	Female labour force participation rate as % of population, 2005	Female doctors as % of total number of doctors, 2003	Percent of women in parliament, 2005	Women in government at ministerial level (% of total), 2005	Percentage of population agreed that when jobs are scarce, men should have more right to a job than women, late 1990s
	[16]	[17]	[18]	[19]	[20]	[21]	[22]
<b>ANGLO-AMERICAN</b>							
Australia	4.61	0.826	68.4	31.5	28.3	20.0	26.2
Canada	4.87	0.807	73.1	33.1	24.7	23.1	15.6
Ireland	4.40	0.724	60.3	36.8	14.2	21.4	16.4
New Zealand	4.89	0.769	70.8	34.5	28.3	23.1	13.1
United Kingdom	4.75	0.716	69.7	..	17.9	28.6	21.0
United States	4.40	0.793	69.2	23.4	14.8	14.3	9.8
<b>MEDITERRANEAN</b>							
Greece	3.41	0.594	54.6	34.6	14.0	5.6	19.9
Italy	3.50	0.589	50.4	..	10.4	8.3	27.0
Portugal	4.21	0.656	67.9	46.3	20.0	16.7	27.2
Spain	4.13	0.745	59.1	..	30.5	50.0	16.9
<b>CONTINENTAL EUROPEAN</b>							
Austria	4.13	0.779	65.6	35.3	32.2	35.3	28.6
Belgium	4.30	0.828	59.5	..	35.7	21.4	25.0
France	4.49	..	63.8	37.2	13.9	17.6	21.7
Germany	4.61	0.813	66.9	37.1	31.3	46.2	26.6
Netherlands	4.48	0.814	68.5	36.8	34.2	36.0	12.5
<b>NORDIC</b>							
Denmark	5.27	0.860	75.1	41.4	36.9	33.3	6.2
Finland	5.19	0.833	72.9	53.2	37.5	47.1	9.0
Norway	5.39	0.928	75.4	34.6	38.2	44.4	14.4
Sweden	5.53	0.852	76.6	40.7	45.3	52.4	2.3
<b>GROUP AVERAGES</b>							
Anglo-American	4.65	0.773	68.6	31.9	21.4	21.8	17.0
Mediterranean	3.81	0.646	58.0	40.5	18.7	20.1	22.8
Continental European	4.40	0.809	64.9	36.6	29.5	31.3	22.9
Nordic	5.35	0.868	75.0	42.5	39.5	44.3	8.0
<b>OECD</b>	<b>4.33</b>	<b>0.706</b>	<b>60.4</b>	<b>37.4</b>	<b>23.3</b>	<b>22.2</b>	<b>22.0</b>

APPENDIX 1 **Comparing Social and Economic Outcomes in Low- and High-Tax Countries**  
Data Columns 23–29

	<i>Economic security</i>		<i>Health</i>				
	Economic Security Index	Total public and private expenditures on health as % of GDP, 2003	Public expenditure on health as % of GDP, 2003	Life expectancy at birth, 2003 (years)		Infant mortality, per 1,000 live births, 2003	Low birth weight as % of live births, 2004
				Male	Female		
	[23]	[24]	[25]	[26]	[27]	[28]	[29]
<b>ANGLO-AMERICAN</b>							
Australia	0.72	9.30	6.28	77.8	82.8	4.8	6.4
Canada	0.79	9.90	6.92	77.2	82.1	5.4	5.8
Ireland	0.74	7.30	5.49	75.2	80.3	5.1	4.9
New Zealand	0.61	8.10	6.37	76.3	81.1	5.6	6.1
United Kingdom	0.74	7.70	6.42	76.2	80.7	5.3	7.6
United States	0.61	15.00	6.66	74.5	79.9	6.9	7.9
<b>MEDITERRANEAN</b>							
Greece	0.78	9.90	5.08	75.4	80.7	4.8	8.3
Italy	0.68	8.40	6.31	76.9	82.9	4.3	6.5
Portugal	0.74	9.60	6.69	74.0	80.6	4.1	7.4
Spain	0.76	7.70	5.48	77.2	83.7	4.1	6.8
<b>CONTINENTAL EUROPEAN</b>							
Austria	0.78	7.60	5.31	75.6	81.6	4.5	7.1
Belgium	0.83	9.60	6.43	75.1	81.1	4.3	..
France	0.83	10.10	7.71	75.8	82.9	3.9	6.6
Germany	0.79	11.10	8.68	75.5	81.3	4.2	6.8
Netherlands	0.87	9.80	6.12	76.2	80.9	4.8	5.4
<b>NORDIC</b>							
Denmark	0.91	9.00	7.47	74.9	79.5	4.4	5.5
Finland	0.95	7.40	5.66	75.1	81.8	3.1	4.1
Norway	0.93	10.30	8.62	77.0	81.9	3.4	4.9
Sweden	0.98	9.20	7.85	77.9	82.4	3.1	4.5
<b>GROUP AVERAGES</b>							
Anglo-American	0.70	9.55	6.36	76.2	81.1	5.5	6.5
Mediterranean	0.74	8.90	5.89	75.9	82.0	4.3	7.3
Continental European	0.82	9.64	6.85	75.6	81.6	4.3	6.5
Nordic	0.94	8.98	7.40	76.2	81.4	3.5	4.8
<b>OECD</b>	<b>0.76</b>	<b>8.62</b>	<b>6.13</b>	<b>74.9</b>	<b>80.7</b>	<b>6.1</b>	<b>6.5</b>



APPENDIX 1 **Comparing Social and Economic Outcomes in Low- and High-Tax Countries**  
Data Columns 30–39

	Education									
	Total public and private expenditures on education as % of GDP, 2001	Public expenditure on education as % of GDP, 2001	Expenditure on pre-primary education for children 3 and older as % of GDP, 2002	Percentage of population in the 25–64 age group who had completed			PISA 2003 score of 15-year-old students			Difference of PISA 2003 math scores attributed to occupational status of either parent
				upper secondary education, 2003	university or college education, 2003	university education, 2003	Reading	Science	Math	
[30]	[31]	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	
<b>ANGLO-AMERICAN</b>										
Australia	6.0	4.5	0.1	62.5	31.0	20.5	525	525	524	77
Canada	6.1	4.9	..	83.6	44.0	22.0	528	519	532	63
Ireland	4.5	4.1	..	61.6	26.0	16.3	515	505	503	70
New Zealand	..	5.5	0.3	77.5	31.0	16.1	522	521	523	80
United Kingdom	5.5	4.7	0.5	65.1	28.0	19.3	..	..	..	..
United States	7.3	5.1	0.5	87.5	38.0	29.4	495	491	483	82
<b>MEDITERRANEAN</b>										
Greece	4.1	3.8	..	51.1	18.0	12.6	472	481	445	84
Italy	5.3	4.9	0.4	44.4	10.0	10.4	476	486	466	72
Portugal	5.9	5.8	0.3	22.6	11.0	8.4	478	468	466	80
Spain	4.9	4.3	0.5	42.8	25.0	17.9	481	487	485	65
<b>CONTINENTAL EUROPEAN</b>										
Austria	5.8	5.6	0.5	78.6	15.0	7.3	491	491	506	81
Belgium	6.4	6.0	0.6	62.0	29.0	13.0	507	509	529	108
France	6.0	5.6	0.7	64.9	23.0	14.2	496	511	511	87
Germany	5.3	4.3	0.5	83.4	24.0	14.1	491	502	503	102
Netherlands	4.9	4.5	0.4	66.5	24.0	21.9	513	524	538	83
<b>NORDIC</b>										
Denmark	7.1	6.8	0.8	80.5	32.0	25.0	492	475	514	73
Finland	5.8	5.7	0.4	75.9	33.0	16.4	543	548	544	61
Norway	6.4	6.1	1.0	87.4	31.0	28.5	500	484	495	72
Sweden	6.5	6.3	0.5	82.2	33.0	18.5	514	506	509	74
<b>GROUP AVERAGES</b>										
Anglo-American	5.9	4.8	0.3	73.0	33.0	20.6	517	512	513	74
Mediterranean	5.0	4.7	0.4	40.2	16.0	12.3	477	481	466	75
Continental European	5.7	5.2	0.5	71.1	23.0	14.1	500	508	517	92
Nordic	6.4	6.2	0.7	81.5	32.3	22.1	512	503	516	70
<b>OECD</b>	<b>5.6</b>	<b>5.0</b>	<b>0.5</b>	<b>65.6</b>	<b>23.0</b>	<b>15.4</b>	<b>494</b>	<b>500</b>	<b>500</b>	<b>77</b>

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Data Columns 40–49

	<i>Personal security</i>	<i>Community and social solidarity</i>					<i>Self-realization goals</i>			
	Homicides, per population of 100,000, 2002	Percent of population agreeing that people can be trusted, 2001	<i>Percentage of population having confidence in social institutions, 2001</i>			Union density, 2000	Index of Economic Freedom, 2006	Sense of freedom, 2001	Average annual number of hours worked, 2004	<i>Drug use</i>
			Parliament	Major companies	Justice system					Percent of 15–64 population used cannabis, late 1990s
	[40]	[41]	[42]	[43]	[44]	[45]	[46]	[47]	[48]	[49]
<b>ANGLO-AMERICAN</b>										
Australia	1.5	40.0	30.5	58.5	34.7	24.5	1.84	84.3	1816	15.0
Canada	1.5	37.0	39.6	55.5	54.0	28.1	1.85	86.4	1736	10.8
Ireland	1.0	36.0	33.0	52.4	55.6	..	1.58	80.0	1642	9.0
New Zealand	1.4	49.1	15.1	45.6	46.7	22.7	1.84	86.8	1826	13.4
United Kingdom	0.9	28.9	36.2	40.2	47.1	31.2	1.74	79.7	1668	10.6
United States	7.1	36.3	38.0	53.7	36.7	12.8	1.84	89.0	1824	11.0
<b>MEDITERRANEAN</b>										
Greece	0.7	23.7	24.3	19.9	43.7	..	2.80	78.6	1925	4.4
Italy	0.9	32.6	34.1	49.6	31.5	34.9	2.50	64.8	1585	6.2
Portugal	1.6	12.3	50.5	55.1	42.3	24.3	2.29	76.3	1983	3.3
Spain	1.0	34.0	49.6	44.2	42.3	14.9	2.33	73.9	1744	9.7
<b>CONTINENTAL EUROPEAN</b>										
Austria	0.9	33.4	40.2	39.2	68.1	36.5	1.95	79.8	1550	5.6
Belgium	..	29.2	39.1	50.3	36.7	55.6	2.11	69.3	1522	6.1
France	0.8	21.3	40.4	47.9	46.3	9.7	2.51	64.9	1520	9.8
Germany	0.7	37.5	37.2	39.8	57.3	25.0	1.96	83.9	1443	6.0
Netherlands	1.2	60.1	54.3	47.8	47.5	23.2	1.90	79.0	1357	6.1
<b>NORDIC</b>										
Denmark	1.2	66.5	48.6	38.0	78.4	74.4	1.78	81.1	1517	6.9
Finland	2.5	57.4	42.3	42.9	66.7	76.2	1.85	86.7	1737	2.9
Norway	0.9	65.3	69.4	60.3	69.5	54.3	2.29	80.1	1364	4.5
Sweden	0.9	66.3	50.6	64.9	60.8	81.1	1.96	83.0	1585	1.0
<b>GROUP AVERAGES</b>										
Anglo-American	2.2	37.9	32.1	51.0	45.8	23.9	1.8	84.4	1752	11.6
Mediterranean	1.1	25.6	39.6	42.2	40.0	24.7	2.5	73.4	1809	5.9
Continental European	0.9	36.3	42.2	45.0	51.2	30.0	2.1	75.4	1478	6.7
Nordic	1.4	63.9	52.7	51.5	68.9	71.5	2.0	82.7	1550	3.8
<b>OECD</b>	<b>1.5</b>	<b>35.3</b>	<b>39.1</b>	<b>44.4</b>	<b>51.7</b>	<b>32.4</b>	<b>2.2</b>	<b>75.9</b>	<b>1715</b>	<b>6.0</b>

APPENDIX 1 **Comparing Social and Economic Outcomes in Low- and High-Tax Countries**  
Data Columns 50–57

	<i>Self-realization goals (contd)</i>			<i>Democratic rights</i>		<i>Quality of environmental governance</i>	<i>Inter-nation equity</i>	
	<i>Subjective well-being and happiness</i>			Corruption perceptions index 2005	Percent of population having frequent political discussions with friends, 2001	Ranking of environmental performance of OECD countries, 2005	Official development assistance as % of GNI, 2004	Commitment to Development Index, 2005
	Suicides per 100,000 people, 2003	Happiness, 2001	Life satisfaction, 2001					
	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]
<b>ANGLO-AMERICAN</b>								
Australia	12.7	43.3	84.6	8.8	16.0	25	0.25	6.00
Canada	11.7	45.2	87.9	8.4	11.0	28	0.27	5.30
Ireland	12.2	42.4	92.1	7.4	13.5	27	0.39	4.50
New Zealand	11.9	33.1	84.4	9.6	14.1	14	0.23	5.80
United Kingdom	7.5	33.2	84.0	8.6	9.1	18	0.36	5.30
United States	10.4	39.5	87.2	7.6	16.3	30	0.17	5.00
<b>MEDITERRANEAN</b>								
Greece	3.6	18.9	73.0	4.3	21.3	20	0.23	4.20
Italy	7.1	18.4	81.5	5.0	12.9	9	0.15	4.50
Portugal	5.1	17.1	79.3	6.5	14.4	11	0.63	4.90
Spain	8.4	20.1	78.9	7.0	12.1	21	0.24	4.70
<b>CONTINENTAL EUROPEAN</b>								
Austria	19.3	36.6	88.8	8.7	20.2	7	0.23	5.40
Belgium	21.1	41.2	83.2	7.4	14.7	29	0.41	4.80
France	17.5	33.0	77.9	7.5	11.4	18	0.41	4.80
Germany	13.5	18.5	84.2	8.2	24.0	6	0.28	5.40
Netherlands	9.4	45.8	94.9	8.6	16.0	10	0.73	6.60
<b>NORDIC</b>								
Denmark	14.3	45.1	90.1	9.5	24.9	3	0.85	6.70
Finland	21.0	24.7	89.9	9.6	6.6	17	0.35	5.40
Norway	12.1	30.0	85.8	8.9	21.0	25	0.87	5.80
Sweden	13.4	36.6	86.0	9.2	20.2	8	0.78	6.40
<b>GROUP AVERAGES</b>								
Anglo-American	11.1	39.4	86.7	8.4	13.3	23.7	0.28	5.32
Mediterranean	6.1	18.6	78.2	5.7	15.2	15.3	0.31	4.58
Continental European	16.2	35.0	85.8	8.1	17.3	14.0	0.41	5.40
Nordic	15.2	34.1	88.0	9.3	18.2	13.3	0.71	6.08
<b>OECD</b>	<b>13.9</b>	<b>30.7</b>	<b>79.8</b>	<b>7.2</b>	<b>15.5</b>	<b>n/a</b>	<b>0.42</b>	<b>5.20</b>

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Data Columns 58–64

	<i>Material standard of living and economic growth</i>				<i>Productivity</i>		
	GDP per capita in USD PPP, 2004	Annual average growth rate of GDP per capita			GDP per hour worked in US\$, 2004	Annual average growth in GDP per hour worked in 1995–2004 (%)	Multi-factor productivity growth in 1995–2002 (%)
		1990–1995	1995–2004	1990–2004			
	[58]	[59]	[60]	[61]			
<b>ANGLO-AMERICAN</b>							
Australia	30200	3.3	3.7	3.5	34.7	2.4	1.5
Canada	31500	1.7	3.4	2.8	35.2	1.7	1.2
Ireland	35800	4.7	7.7	6.6	47.1	4.5	4.4
New Zealand	23900	3.1	3.2	3.2	26.4	1.4	0.8
United Kingdom	31400	1.7	2.8	2.4	39.6	2.2	1.2
United States	39700	2.5	3.4	3.1	46.3	2.5	1.4
<b>MEDITERRANEAN</b>							
Greece	21500	1.3	3.8	2.9	28.6	3.0	2.0
Italy	27700	1.3	1.5	1.4	36.3	0.5	-0.2
Portugal	19400	1.7	2.4	2.1	23.9	1.7	1.2
Spain	25600	1.5	3.5	2.8	36.5	0.9	0.1
<b>CONTINENTAL EUROPEAN</b>							
Austria	31700	2.2	2.2	2.2	38.4	1.7	0.6
Belgium	30900	1.6	2.2	2.0	50.8	1.4	0.5
France	29600	1.3	2.3	2.0	47.7	2.0	1.5
Germany	28500	2.2	1.4	1.7	42.1	1.7	0.9
Netherlands	31100	2.1	2.4	2.3	44.2	0.7	0.4
<b>NORDIC</b>							
Denmark	31600	2.0	2.0	2.0	40.9	1.3	-0.0
Finland	30600	-0.8	3.7	2.1	39.2	2.3	2.2
Norway	38700	3.9	2.8	3.2	56.6	2.2	..
Sweden	30400	0.8	2.7	2.0	39.9	2.4	1.3
<b>GROUP AVERAGES</b>							
Anglo-American	32083	2.8	4.1	3.6	38.2	2.5	1.7
Mediterranean	23550	1.4	2.8	2.3	31.3	1.5	0.8
Continental European	30360	1.9	2.1	2.0	44.7	1.5	0.8
Nordic	32825	1.5	2.8	2.3	44.1	2.1	1.2
<b>OECD</b>	<b>27437</b>	<b>2.1</b>	<b>3.2</b>	<b>2.8</b>	<b>34.7</b>	<b>2.2</b>	<b>1.1</b>

**APPENDIX 1 Comparing Social and Economic Outcomes in Low- and High-Tax Countries**

Data Columns 65–75

	<i>Unit labour cost</i>	<i>Inflation</i>	<i>Government</i>			<i>Jobs</i>			<i>Labour force participation rate as % of population, 2005</i>		
	Percentage change in 2003–2004	Change in consumer prices in 2003–2004 (%)	Surplus/deficit as % of GDP, 2004	Debt as % of GDP, 2004	Current account as % of GDP, 2004	Annual employment growth, 2005 (%)	<i>Unemployment, 2005</i>		Total	Male	Female
	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]
<b>ANGLO-AMERICAN</b>											
Australia	3.0	2.6	1.0	17.8	-6.2	3.5	5.2	17.7	75.5	82.7	68.4
Canada	1.3	2.1	0.7	72.2	2.3	1.4	6.8	9.6	77.8	82.5	73.1
Ireland	2.3	2.6	1.4	29.4	-0.8	4.7	4.3	34.3	70.2	79.9	60.3
New Zealand	2.7	2.7	5.5	29.0	-6.5	2.8	3.8	9.4	77.5	84.4	70.8
United Kingdom	1.9	3.5	-3.2	44.2	-2.0	1.0	4.6	22.4	76.1	82.8	69.7
United States	1.5	3.3	-4.7	64.0	-5.7	1.8	5.1	11.8	75.4	81.8	69.2
<b>MEDITERRANEAN</b>											
Greece	7.8	3.1	-6.5	109.3	-6.4	1.3	9.8	53.7	66.8	79.2	54.6
Italy	2.5	2.0	-3.3	123.0	-0.9	0.7	7.8	52.2	62.4	74.4	50.4
Portugal	3.8	2.5	-3.0	69.5	-7.8	0.1	8.1	48.6	73.4	79.0	67.9
Spain	2.9	3.2	-0.2	52.0	-5.3	4.8	9.2	32.6	70.8	82.2	59.1
<b>CONTINENTAL EUROPEAN</b>											
Austria	-0.1	2.9	-1.1	69.0	0.2	0.3	5.2	25.3	72.4	79.3	65.6
Belgium	0.5	2.3	-0.0	98.7	3.4	0.9	8.1	51.6	66.4	73.1	59.5
France	0.8	2.1	-3.7	74.7	-0.4	0.4	9.9	42.5	69.1	74.5	63.8
Germany	-0.8	2.1	-3.7	67.9	3.8	-0.2	11.3	54.0	73.8	80.6	66.9
Netherlands	-0.2	1.2	-2.1	62.3	9.4	-0.6	5.0	40.1	75.8	83.0	68.5
<b>NORDIC</b>											
Denmark	1.5	1.2	1.7	52.8	2.3	0.6	4.9	25.9	79.4	83.6	75.1
Finland	1.0	0.4	1.9	52.5	5.1	1.5	8.5	24.9	74.3	75.7	72.9
Norway	1.6	1.1	11.4	51.2	13.7	0.6	4.7	9.5	78.9	82.3	75.4
Sweden	-0.2	0.3	1.4	62.5	8.3	1.0	6.6	18.9	78.7	80.7	76.6
<b>GROUP AVERAGES</b>											
Anglo-American	2.1	2.8	0.1	42.8	-3.2	2.5	5.0	17.5	75.4	82.4	68.6
Mediterranean	4.3	2.7	-3.3	88.5	-5.1	1.8	8.7	46.8	68.3	78.7	58.0
Continental European	0.0	2.1	-2.1	74.5	3.3	0.2	7.9	42.7	71.5	78.1	64.9
Nordic	1.0	0.8	4.1	54.8	7.4	0.9	6.2	19.8	77.8	80.6	75.0
<b>OECD</b>	<b>1.8</b>	<b>2.8</b>	<b>-1.1</b>	<b>60.3</b>	<b>0.1</b>	<b>1.3</b>	<b>7.2</b>	<b>31.2</b>	<b>71.1</b>	<b>79.5</b>	<b>62.8</b>

APPENDIX 1 **Comparing Social and Economic Outcomes in Low- and High-Tax Countries**  
Data Columns 76–80

	<i>Rates of saving</i>		<i>Investment</i>	<i>Foreign direct investment</i>	
	Household saving rate as % of household disposable income, 2004	Net national saving as % of GDP, 2004	Percentage change in real total gross fixed capital formation in 2003–2004	Inward foreign direct investment as % of GDP, 2004	Inward FDI performance index 2002–2004
	[76]	[77]	[78]	[79]	[80]
<b>ANGLO-AMERICAN</b>					
Australia	-3.0	4.1	7.8	6.6	2.3
Canada	1.4	8.7	6.6	0.6	0.7
Ireland	9.9	11.1	8.0	7.7	7.9
New Zealand	..	5.6	13.2	2.6	1.4
United Kingdom	4.4	4.3	5.1	3.7	1.2
United States	1.8	1.3	8.4	0.9	0.4
<b>MEDITERRANEAN</b>					
Greece	..	9.0	5.7	0.7	0.2
Italy	11.5	5.6	1.9	1.0	0.6
Portugal	11.8	-2.6	0.9	0.7	1.2
Spain	7.2	8.8	4.9	0.9	2.0
<b>CONTINENTAL EUROPEAN</b>					
Austria	8.3	9.6	1.9	1.7	0.9
Belgium	10.7	7.7	4.4	22.2	19.7
France	11.8	6.4	2.1	1.2	1.2
Germany	10.5	5.7	-1.5	..	0.3
Netherlands	7.3	7.5	2.9	..	1.5
<b>NORDIC</b>					
Denmark	2.9	7.3	4.5	..	-0.1
Finland	2.7	8.4	4.8	2.5	1.8
Norway	10.2	19.0	8.1	0.9	0.6
Sweden	8.6	11.7	5.1	-0.5	0.8
<b>GROUP AVERAGES</b>					
Anglo-American	2.9	5.8	8.2	3.7	2.3
Mediterranean	10.2	5.2	3.3	0.8	1.0
Continental European	9.7	7.4	2.0	8.3	4.7
Nordic	6.1	11.6	5.6	0.9	0.8
<b>OECD</b>	<b>7.0</b>	<b>7.5</b>	<b>6.5</b>	<b>2.9</b>	<b>2.0</b>

APPENDIX 1 **Comparing Social and Economic Outcomes in Low- and High-Tax Countries**  
Data Columns 81–86

	<i>Innovation</i>		<i>Research and Development</i>		<i>Information technology</i>	
	UNCTAD Innovation Capacity Index, 2001	Australian Innovative Capacity, 2000	R&D as % of GDP, 2002	R&D researchers per 10,000, 2002	Network Readiness Index	Broadband subscribers per 100 inhabitants, 2004
	[81]	[82]	[83]	[84]	[85]	[86]
<b>ANGLO-AMERICAN</b>						
Australia	0.920	50.9	1.6	7.6	1.28	7.7
Canada	0.907	81.4	2.0	7.2	1.54	17.8
Ireland	0.814	62.3	1.1	5.3	1.15	3.4
New Zealand	0.879	14.9	1.2	9.1	1.14	4.8
United Kingdom	0.906	79.4	1.9	5.5	1.44	10.5
United States	0.927	214.4	2.7	9.3	2.02	13.0
<b>MEDITERRANEAN</b>						
Greece	0.737	12.0	0.6	3.7	0.08	0.4
Italy	0.746	19.7	1.1	3.0	0.16	8.1
Portugal	0.746	11.1	0.9	3.5	0.56	8.2
Spain	0.819	17.3	1.0	5.6	0.47	8.4
<b>CONTINENTAL EUROPEAN</b>						
Austria	0.852	52.4	2.1	5.8	1.18	10.2
Belgium	0.894	75.1	2.2	8.4	0.87	15.6
France	0.863	77.6	2.3	7.5	1.11	10.6
Germany	0.850	109.5	2.5	6.9	1.18	8.4
Netherlands	0.888	68.7	1.8	5.2	1.39	19.0
<b>NORDIC</b>						
Denmark	0.926	116.3	2.5	9.2	1.89	18.8
Finland	0.977	173.1	3.4	17.7	1.72	15.0
Norway	0.923	75.1	..	9.1	1.33	14.9
Sweden	0.979	184.9	4.1	10.6	1.49	14.5
<b>GROUP AVERAGES</b>						
Anglo-American	0.892	83.9	1.7	7.3	1.43	9.5
Mediterranean	0.762	15.0	0.9	3.9	0.32	6.3
Continental European	0.869	76.7	2.2	6.8	1.15	12.8
Nordic	0.951	137.3	3.4	11.6	1.61	15.8
<b>OECD</b>	<b>0.817</b>	<b>69.7</b>	<b>2.1</b>	<b>6.8</b>	<b>0.97</b>	<b>10.2</b>

APPENDIX 1 **Comparing Social and Economic Outcomes in Low- and High-Tax Countries**  
Data Columns 87–90

	<i>Competitiveness</i>		<i>Global Creativity Index 2002</i>	<i>Comprehensive measures of well-being</i>
	Growth Competitiveness Index 2006	World Competitiveness Scoreboard, 2005		Human Development Index for 2004
	[87]	[88]	[89]	[90]
<b>ANGLO-AMERICAN</b>				
Australia	5.21	91.975	0.528	0.957
Canada	5.37	82.628	0.548	0.950
Ireland	5.21	77.846	..	0.956
New Zealand	5.15	75.459	..	0.936
United Kingdom	5.54	68.518	0.517	0.940
United States	5.61	100.000	0.666	0.948
<b>MEDITERRANEAN</b>				
Greece	4.33	50.332	..	0.921
Italy	4.46	45.819	..	0.940
Portugal	4.60	52.426	..	0.904
Spain	4.77	59.430	..	0.938
<b>CONTINENTAL EUROPEAN</b>				
Austria	5.32	74.328	0.526	0.944
Belgium	5.27	67.456	..	0.945
France	5.31	64.203	..	0.942
Germany	5.58	67.842	0.577	0.932
Netherlands	5.56	77.400	0.611	0.947
<b>NORDIC</b>				
Denmark	5.70	82.545	0.613	0.943
Finland	5.76	82.627	0.684	0.947
Norway	5.42	76.157	0.595	0.965
Sweden	5.74	76.261	0.808	0.951
<b>GROUP AVERAGES</b>				
Anglo-American	5.35	82.738	0.565	0.948
Mediterranean	4.54	52.002	..	0.926
Continental European	5.41	70.246	0.571	0.942
Nordic	5.66	79.398	0.675	0.952
<b>OECD</b>	<b>5.12</b>	<b>n/a</b>	<b>0.610</b>	<b>0.922</b>



## Notes for Columns 1–90

[1] *OECD Revenue Statistics 1965–2005*, p.19.

[2] Calculation based on data on *OECD Revenue Statistics 1965–2005*, p.68.

[3] *OECD in Figures, 2005*, p.36–37.

[4] *OECD in Figures, 2005*, p.36–37.

[5] *OECD Economic Outlook 78, 2005*, annex table 27.

[6] *OECD Factbook 2006*.

[7] Percentage of population with income below 50% of the country's median income. Data refer to the year 2000 in all countries except 1999 for Australia, Austria and Greece; 2001 for Germany and New Zealand. *Society at a Glance: OECD Social Indicators, 2005*, p.53. On average, the Nordic countries have lower levels of poverty as shown in the social indicators in the table, and such differences between the Nordic countries and the Anglo-American countries are statistically significant. The one-sided t-test results between the Anglo-American countries and the Nordic countries of each of the four indicators in columns 7, 8, 9 and 10 respectively are significant at a 5% level. In addition, the associations between low poverty rate and high tax level are very strong. As the sample size of 10 countries (6 Anglo-American and 4 Nordic) is very small, OLS is used throughout this paper only as a tool to index the strength of the relationship between an indicator and tax level. The associations are classified as very strong based on an R-squared of about 0.80 in two-variable OLS regressions with the average of tax as percent as GDP in 1990–2002 as the independent variable and each of the indicators in turn as the dependent variable. The tax variable is statistically significant at a 5% level in one-sided test in each case.

[8] Data refer to the year 2000 in all countries except 1999 for Australia, Austria and Greece; 2001 for Germany and New Zealand. Share of children 17 years and under living in households with equalized disposable income less than 50% of median income; *Society at a Glance: OECD Social Indicators, 2005*, p.57.

[9] Data refer to the year 2000 in all countries except 1999 for Australia, Austria and Greece; 2001 for Germany and New Zealand. *Society at a Glance: OECD Social Indicators, 2005*, p.57.

[10] Data refer to the year 2000 in all countries except 1999 for Australia, Austria and Greece; 2001 for Germany and New Zealand. *Society at a Glance: OECD Social Indicators, 2005*, p.59.

[11] Of pre-retirement earnings at 100% APW, men. *Pensions at a Glance: Public Policies across OECD Countries, 2005*, p.52. On average, the Nordic countries provide higher income replacement for the elderly, and such differences between the Nordic countries and the Anglo-American countries are statistically significant. The one-sided t-test results between the Anglo-American countries and the Nordic countries of the indicator is significant at a 5% level. In addition, the associations between low income replacement rate and high tax level is classified as moderate based on an R-squared of about 0.42 in a two-variable OLS regression, with the average of tax as percent as GDP in 1990–2002 as the independent variable and elderly poverty rate as the dependent variable. The tax variable is statistically significant at a 5% level in a one-sided test.

[12] Personal income of disabled persons age 20–64 relative to that of non-disabled persons in most recent surveyed year in late 1990s. *Society at a Glance: OECD Social Indicators, 2002*, p.47. Disabled people had higher relative income in Nordic countries than those in Anglo-American countries, and such difference is statistically significant at a 5% level in one-sided test. Regressing the indicator as dependent variable against average tax level in 1990–2002 as independent variable in OLS finds very strong association, with a R-squared of about 0.69 and the tax variable significant at a 5% level.

[13] Data refer to the year 2000 in all countries except 1999 for Australia, Austria and Greece; 2001 for Germany and New Zealand. *Society at a Glance: OECD Social Indicators, 2005*, p.55. In general, income in the Nordic countries is more equally distributed than that in the Anglo-American countries and such difference is statistically significant. The one-sided t-test results between the Anglo-American countries and the Nordic countries of each of the three indicators in columns 13, 14 and 15, respectively, are significant at a 5% level. In addition, the associations between higher level of economic equality and higher tax level vary from strong to very strong. The R-squared in an OLS regression with Gini coefficient as the dependent variable and the average of tax as percent of GDP in 1990–2002 as independent variable is 0.81. The R-squared in an OLS regression, with income share ratio as the dependent variable and the average of tax as percent of GDP in 1990–2002 as the independent variable, is 0.70. The R-squared in an OLS regression, with income-level ratio as the dependent variable and the average of tax as percent of GDP in 1990–2002 as the independent variable, is 0.81. Tax level is statistically significant at a 5% level in one-sided test in each case.

[14] Data from the year survey was done in 1990–2002. United Nations Development Program, *Human Development Report 2005*, p.270–273.

[15] In most recent surveyed year in 1994–2000. Luxembourg Income Study, Income Inequality Measures at <http://www.lisproject.org/keyfigures/ineqtable.htm>.

[16] *Women's Empowerment: Measuring the Global Gender Gap*, World Economic Forum, p.8–9. In general, Nordic countries had more gender equity than Anglo-American countries, with the one-sided t-test results between the Anglo-American countries and the Nordic countries of each of the seven indicators in columns 16, 17, 18, 19, 20, 21 and 22, respectively, significant at a 5% level. In addition, the association between narrower gender gap and higher tax level is very strong, while the associations between more women in Parliament and ministerial level and higher tax level are strong, respectively. The R-squared of OLS regression, with the Gender Gap Index as the dependent variable and the average of tax as percent of GDP in 1990–2002 as the independent variable, is 0.82, while that of OLS regressions, with each of percent of women in Parliament and ministerial level as the dependent variable in turn and tax level as the independent variable, is 0.74 and 0.79. Tax level is statistically significant at a 5% level in one-sided test in each case.

[17] United Nations Development Program, *Human Development Report 2005*, p.303–304.

[18] 2004 data for Netherlands and Sweden. Women aged 15–64. *OECD Employment Outlook 2006*, p.250.

[19] *Health at a Glance: OECD Indicators, 2005*, p.39.

[20] United Nations Development Program, *Human Development Report 2005*, p.303–304.

[21] United Nations Development Program, *Human Development Report 2005*, p.316–319.

[22] In most recent surveyed year in 1995–2001. World Values Survey at <http://www.worldvaluessurvey.org/>. The survey says it covers 80% of the world's population. Data from all four waves of the Values Surveys, carried out in 1981, 1990–1991, 1995–1996 and 1999–2001, can be obtained from the ICPSR survey data archive at the University of Michigan at <http://www.icpsr.umich.edu/>.

[23] ILO, *Economic Security for a better world*, p.425–427. People in Nordic countries enjoyed more economic security than those in Anglo-American countries, with the one-sided t-test result between the Anglo-American countries and the Nordic countries of the index significant at a 5% level.

In addition, the association between more economic security and a higher tax level is quite strong. The R-squared of an OLS regression, with the index as the dependent variable and the average of tax as percent of GDP in 1990–2002 as the independent variable, is 0.79. The tax variable is statistically significant at 5% level in a one-sided test.

[24] *OECD in Figures, 2005*, p.8–9. All data are either actual or estimates for 2002 or 2003.

[25] *OECD in Figures, 2005*, p.10–11. All data are either actual or estimates for 2002 or 2003.

[26] Data in either 2002 or 2003. *Health at a Glance: OECD Indicators, 2005*, p.19.

[27] Data in either 2002 or 2003. *Health at a Glance: OECD Indicators, 2005*, p.19.

[28] In most recent surveyed year in 1999–2003. *Health at a Glance: OECD Indicators, 2005*, p.31. Nordic countries had lower average infant mortality rate than that of Anglo-American countries, with the one-sided t-test result between the Anglo-American countries and the Nordic countries of the indicator significant at a 5% level. In addition, the association between lower infant mortality and higher tax level is strong. The R-squared of an OLS regression, with infant mortality as the dependent variable and the average of tax as percent of GDP in 1990–2002 as the independent variable, is 0.67. Tax level is statistically significant at 5% level in one-sided test.

[29] Percentage of newborns weighing less than 2,500 g. *Health at a Glance: OECD Indicators, 2005*, p.33. Nordic countries on average had fewer low-weight births than Anglo-American countries, with the one-sided t-test result between the Anglo-American countries and the Nordic countries of the indicator significant at a 5% level.

[30] *OECD in Figures, 2005*, p.66–67.

[31] *OECD in Figures, 2005*, p.66–67.

[32] *Education at a Glance: OECD Indicators, 2005*, p.186.

[33] *Education at a Glance: OECD Indicators, 2005*, p.36.

[34] *Education at a Glance: OECD Indicators, 2005*, p.35.

[35] *Education at a Glance: OECD Indicators, 2005*, p.37.

[36] *Learning from Tomorrow's World: First Results from PISA 2003*, p.444. The PISA reading literacy scale is anchored on a mean of 500 and a standard deviation of 100. But, as the Slovak Republic and Turkey joined the PISA survey in 2003, the mean is actually 494.

[37] *Learning from Tomorrow's World: First Results from PISA 2003*, p.448. The PISA science scores have a mean of 500 and a standard deviation of 100.

[38] *Learning from Tomorrow's World: First Results from PISA 2003*, p.356. The PISA mathematics scale is anchored on a mean of 500 and a standard deviation of 100. The anchoring is done on a combination of four scales: space and shape scale, change and relationship scale, quantity scale, and uncertainty scale. That means a mean of 500 reflects a mean of all OECD countries' contributions to the four scales as a combination.

[39] Difference between PISA 2003 mathematics scores of 15-year-old students in the first and fourth socio-economic quantile based on higher occupational status of either parent. *Learning from Tomorrow's World: First Results from PISA 2003*, p.386.

[40] Age-standardized death rates per 100,000 population in most recent surveyed year in 2000–2002. *Health at a Glance: OECD Indicators 2005*, p.117.

[41] In most recent surveyed year in 1995–2001. World Values Survey at <http://www.worldvaluessurvey.org/>. The differences between the Nordic countries and Anglo-American countries in indicators on whether they trust others and have confidence in legislative bodies and the justice system in columns 41, 42 and 44, respectively, are significant at a 5% level in one-sided t-tests.

[42] In most recent surveyed year in 1990–2001. World Values Survey at <http://www.worldvaluessurvey.org/>.

[43] In most recent surveyed year in 1990–2001. World Values Survey at <http://www.worldvaluessurvey.org/>.

[44] In most recent surveyed year in 1990–2001. World Values Survey at <http://www.worldvaluessurvey.org/>.

[45] Union density data in 2000. See *OECD Employment Outlook, 2004*, p.146. For data, see [www.oecd.org/document/9/0,2340,en\\_2649\\_34495\\_31781132\\_1\\_1\\_1\\_1,00.html](http://www.oecd.org/document/9/0,2340,en_2649_34495_31781132_1_1_1_1,00.html). Nordic countries had higher average union density than Anglo-American countries, with the one-sided t-test result between the Anglo-American countries and the Nordic countries of the indicator significant at a 5% level. In addition, the association between higher union density and higher tax level is very strong. The R-squared of an OLS regression, with union density as the dependent variable and the average of tax as percent of GDP in 1990–2002 as the independent variable, is 0.94. Tax level is statistically significant at 5% level in one-sided test.

[46] The lower the score, the higher the level of economic freedom. The Heritage Foundation/*Wall Street Journal*, 2006.

[47] Percentage of population having some sense of freedom. The population percentage represents those who reported 6 points or above on a 10-point scale. In terms of freedom feeling, 1 is “Not at all,” while 10 is “Great deal.” Data from most recent surveyed year in 1995–2001. World Values Survey at <http://www.worldvaluessurvey.org/>.

[48] OECD Productivity Database, 2005. People in Nordic countries worked less on average than those in Anglo-American countries, with the one-sided t-test result between the Anglo-American countries and the Nordic countries of the indicator significant at a 5% level.

[49] Data from most surveyed year since late 1990s. *Society at a Glance: OECD Social Indicators, 2005*, p.89. People in Nordic countries on average had higher level of drug use, with the one-sided t-test result between the Anglo-American countries and the Nordic countries of the indicator significant at a 5% level. In addition, the association between lower cannabis use and higher tax level is strong. The R-squared of an OLS regression, with cannabis use as the dependent variable and the average of tax as percent of GDP in 1990–2002 as the independent variable, is 0.71. Tax level is statistically significant at 5% level in one-sided test.

[50] In most recent surveyed year in 1997–2003. *Society at a Glance: OECD Social Indicators, 2005*, p.91. OECD attributed suicides to an array of factors, ranging from stress to lack of daylight. It reported that men are four times more likely to commit suicide than women, that countries are working on finding a solution, but no simple solution exists. See “Suicide Battle,” *OECD Observer* No. 252/253, November 2005 at [http://www.oecdobserver.org/news/fullstory.php/aid/1791/Suicide\\_battle.html](http://www.oecdobserver.org/news/fullstory.php/aid/1791/Suicide_battle.html).

[51] Percentage of population being “Very happy” among five choices: “Very happy,” “Quite happy,” “Not very happy,” “Not at all happy,” and “Don't know.” Data from most recent surveyed year in 1995–2001. Data from most recent surveyed year in 1995–2001. World Values Survey at <http://www.worldvaluessurvey.org/>.

[52] Percentage of population rated own life satisfaction 6 and higher out of a 10-point scale, with 10 being satisfied. Data from most recent surveyed year in 1995–2001. World Values Survey at <http://www.worldvaluessurvey.org/>.

[53] Scored out of 10, the top clean score. Visit the web site of Transparency International at <http://www.transparency.org/publications/gcr>. Nordic countries scored higher on

corruption perception, with the one-sided t-test result between the Anglo-American countries and the Nordic countries of the indicator significant at a 5% level.

[54] Data from most recent surveyed year in 1995–2001. World Values Survey at <http://www.worldvaluessurvey.org/>.

[55] Sustainable Planning Research Group, School Of Research And Environmental Management, Simon Fraser University, “The Maple Leaf In The OECD: Comparing Progress Toward Sustainability,” 2005, p.5. Nordic countries ranked higher than Anglo-American countries, with the one-sided t-test result between the Anglo-American countries and the Nordic countries of the indicator significant at a 5% level. In addition, there is a statistically significant positive relationship between a country’s tax level and its ranking on the environmental performance scale: the higher the tax levels, the higher the ranking. The R-squared of an OLS regression, with environmental ranking as the dependent variable and the average of tax as percent of GDP in 1990–2002 as the independent variable, is 0.63. Tax level is statistically significant at 5% level in one-sided test.

[56] OECD, *Statistical Annex of the 2005 Development Cooperation Report*, Table 1 at [http://www.oecd.org/document/9/0,2340,en\\_2649\\_34485\\_1893129\\_1\\_1\\_1\\_1,00.html](http://www.oecd.org/document/9/0,2340,en_2649_34485_1893129_1_1_1_1,00.html). Nordic countries provided more foreign aid and had more commitment to development than Anglo-American countries, with the one-sided t-test results between the Anglo-American countries and the Nordic countries of the indicator in columns 56 and 57, respectively, significant at a 5% level. In addition, the association between more foreign aid and higher tax level is strong. The R-squared of an OLS regression, with foreign aid as the dependent variable and the average of tax as percent of GDP in 1990–2002 as the independent variable, is 0.62. Tax level is statistically significant at 5% level in one-sided test.

[57] Center for Global Development at [http://www.cgdev.org/section/initiatives/\\_active/cdi](http://www.cgdev.org/section/initiatives/_active/cdi). The one-sided t-test result between the Anglo-American countries and the Nordic countries of the indicator is significant at a 5% level.

[58] OECD *in Figures*, 2005, p. 12–13.

[59] OECD Productivity Database, 2005.

[60] OECD Productivity Database, 2005. The R-squared of an OLS regression, with annual average GDP per capita growth in 1995–2004 as the dependent variable and the average of tax as percent of GDP in 1990–2002 as the independent variable, is 0.19. Tax level is not statistically significant at 5% level in one-sided test.

[61] OECD Productivity Database, 2005.

[62] OECD Productivity Database, 2005.

[63] OECD Productivity Database, 2005.

[64] Based on “harmonized” price indices for ICT capital goods. OECD Productivity Database, 2005.

[65] OECD *Economic Outlook 2006*, p.186. Nordic countries had lower average labor cost than Anglo-American countries, with the one-sided test result significant at a 5% level. The association is strong, as indicated in an R-squared of about 0.50 in an OLS with the indicator as the dependent variable and the average tax level 1990–2002 as the independent variable. The tax variable is significant at a 5% level.

[66] OECD *in Figures*, 2005, p.52–53. On average Nordic countries had lower inflation than Anglo-American countries, with the one-sided t-test result between the Anglo-American countries and the Nordic countries of the indicator is significant at a 5% level. The R-squared of an OLS regression, with inflation as the dependent variable and the average of tax as percent of GDP in 1990–2002 as the independent variable, is 0.78. Tax level is statistically significant at 5% level in one-sided test.

[67] Data for 2004. OECD *Factbook 2006*.

[68] Data for 2004. OECD *Factbook 2006*.

[69] The current account includes all the transactions (other than those in financial items) that involve economic values and occur between resident and non-resident entities. Data for 2004. OECD *Factbook 2006*. The one-sided t-test result between the Anglo-American countries and the Nordic countries of current account balance is significant at a 5% level. The R-squared of an OLS regression, with inflation as the dependent variable and the average of tax as percent of GDP in 1990–2002 as the independent variable, is 0.53. Tax level is statistically significant at 5% level in one-sided test.

[70] OECD *Employment Outlook 2006*, p.19. On average Anglo-American countries had higher employment growth than Nordic countries, with the one-sided t-test result between the Anglo-American countries and the Nordic countries of employment growth is significant at a 5% level. The association between higher employment growth and lower tax level is modest. The R-squared of an OLS regression, with employment growth as the dependent variable and the average of tax as percent of GDP in 1990–2002 as the independent variable, is 0.38. Tax level is statistically significant at 5% level in one-sided test.

[71] 2004 data for Netherlands and Sweden. OECD *Employment Outlook 2006*, p.248.

- [72] 2004 data for Sweden. *OECD Employment Outlook 2006*, p.267.
- [73] 2004 data for Netherlands and Sweden. Persons aged 15–64. *OECD Employment Outlook 2006*, p.248.
- [74] 2004 data for Netherlands and Sweden. Men aged 15–64. *OECD Employment Outlook 2006*, p.249.
- [75] 2004 data for Netherlands and Sweden. Women aged 15–64. *OECD Employment Outlook 2006*, p.249. On average Nordic countries had higher female participation rate than Anglo-American countries, with the one-sided t-test result between the Anglo-American countries and the Nordic countries of female labour participation rate significant at a 5% level. The association between higher female labour participation rate and higher tax level is moderate. The R-squared of an OLS regression, with female labour participation rate as the dependent variable and the average of tax as percent of GDP in 1990–2002 as the independent variable, is 0.51. Tax level is statistically significant at 5% level in one-sided test.
- [76] The household saving rates for Belgium, Denmark, Portugal, Spain, and United Kingdom are gross rather than net rates. *OECD Economic Outlook 2005*, Annex Table 23.
- [77] Data from the most recent surveyed year in 2002–2004. *OECD in Figures 2005*, p.14–15. On average Nordic countries saved more than Anglo-American countries, with the one-sided t-test result between the Anglo-American countries and the Nordic countries of the indicator significant at a 5% level.
- [78] *OECD Economic Outlook 2006*, Annex Table 5. The one-sided t-test result between the Anglo-American countries and the Nordic countries of the indicator is not significant at a 5% level.
- [79] Belgium/Luxembourg is one entity in terms of foreign direct investment. *OECD in Figures 2005*, p.56–57.
- [80] Belgium/Luxembourg is one entity in terms of foreign direct investment. A higher index means the country is ranked higher in terms of attracting foreign direct investment. The index covers the three-year period 2002 through 2004. The Inward FDI Performance Index ranks countries by the FDI they receive relative to their economic size. It is the ratio of a country's share in global FDI inflows to its share in global GDP. A value greater than one indicates that the country receives more FDI than its relative economic size, a value below one that it receives less (a negative value means that foreign investors disinvest in that period). United Nations Conference on Trade and Development at [www.unctad.org](http://www.unctad.org).
- [81] For 2001. United Nations Conference on Trade and Development, *World Investment Report 2005*, p.114. On average Nordic countries scored higher on the innovation index, with the one-sided t-test result between the Anglo-American countries and the Nordic countries of the indicator significant at a 5% level. The R-squared of an OLS regression, with UNCTAD Innovation Index as the dependent variable and the average of tax as percent of GDP in 1990–2002 as the independent variable, is 0.34. Tax level is statistically significant at 5% level in one-sided test.
- [82] For 2000. Joshua Gans and Scott Stern. June 2003. *Assessing Australia's Innovative Capacity in the 21st Century*, p.31.
- [83] *OECD Science, Technology and Industry Scoreboard 2005*, p.15. On average Nordic countries invested more on R & D than Anglo-American countries, with the one-sided t-test result between the Anglo-American countries and the Nordic countries of each of the two indicators significant at a 5% level.
- [84] Data from most recent surveyed year in 1998–2002. *OECD Science, Technology and Industry Scoreboard 2005*, p.21; *Main Science and Technology Indicators 2005*, p.21.
- [85] Network Readiness Index 2005, World Economic Forum, *Global Technology Report 2005–2006*.
- [86] OECD Broadband Statistics, December 2004. *OECD Broadband Statistics*, December 2004. On average Nordic countries had more broadband subscribers than Anglo-American countries, with the one-sided t-test result between the Anglo-American countries and the Nordic countries of the broadband subscription significant at a 5% level.
- [87] 2006 index. Scored from 1 to 7, where 7 represents the highest level of global competitiveness. World Economic Forum. On average Nordic countries scored higher on growth competitiveness, with the one-sided t-test result between the Anglo-American countries and the Nordic countries of growth competitiveness index significant at a 5% level.
- [88] 2005 scores. USA is 100, and other countries are scored in comparison to the U.S. See IMD at <http://www01.imd.ch/wcc/ranking/>.
- [89] Richard Florida, *The Flight of the Creative Class* (New York: HarperBusiness, 2005), p.275.
- [90] United Nations Development Program, *Human Development Report 2006*, p.219–225.





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