



■ Working Paper 2013-05

A Study on the Relationship between the Level of Social Expenditure and National Burden and the Economic Competitiveness

Gun-Chun Ryu · Tae-Eun Kim

A Study on the Relationship between the
Level of Social Expenditure and National
Burden and the Economic
Competitiveness

Gun-Chun, Ryu, Research Fellow,
Future Strategies Research
Department

© 2013

Korea Institute for Health and Social Affairs

All rights reserved. No Part of this book may
be reproduced in any form without permission
in writing from the publisher

Korea Institute for Health and Social Affairs
Jinhungro 235, Eunpyeong-gu, Seoul 122-705,
Korea

<http://www.kihasa.re.kr>

ISBN: 978-89-6827-118-2 93330

Contents

CHAPTER 1

Introduction 5

1. Issues at hand and the need for this study 7
2. Purpose 9
3. Content 9

CHAPTER 2

Previous Studies and Theoretical Background 11

1. Literature Review 13
2. Theoretical Background 15

CHAPTER 3

Data Source and Analysis Methodology 23

1. Data Source 25
2. Analysis Methodology 27

CHAPTER 4

Analysis Outcome 33

1. Categorization of 'Low-burden, Low benefit' and
'High-burden, High-benefit' 35
2. Enablers and Economic Status and Competitiveness 42

CHAPTER 5

Conclusion and Policy Implications 95

References 99

List of Tables

〈Table 1〉 Summary of Analysis Data and Indices	26
〈Table 2〉 Mapping of Indices to the Content of the Study and the Basis for Assessment	30
〈Table 3〉 OECD Total Tax Revenue for Major OECD Countries (1970~2010) ·	38
〈Table 4〉 OECD National Burden among Major OECD Countries by Period (1970~2010)	39
〈Table 5〉 Public Social Spending for Main OECD Countries (1980~2007) ·	40
〈Table 6〉 Public Social Expenditure among Main OECD Countries by Period ·	41
〈Table 7〉 Enablers, and Economic Status and Competitive Indicators under the Northern Europe Model	54
〈Table 8〉 Enablers, and Economic Status and Competitiveness Indicators under the Continental Europe Model	65
〈Table 9〉 Enablers, and Economic Status and Competitiveness Indicators under the Anglo-Saxon Model	77
〈Table 10〉 Enablers, and Economic Status and Competitiveness Indicators under the Southern Europe Model	84
〈Table 11〉 Enablers, and Economic Status and Competitiveness Indicators for Japan and Korea	90
〈Table 12〉 IMD International Competitiveness Ranking	93

List of Figures

[Figure 1] Public Social Expenditure and Total Tax Revenue (1980s) ·	36
[Figure 2] Public Social Expenditure and Total Tax Revenue (1990s) ·	36
[Figure 3] Public Social Expenditure and Total Tax Revenue (2000s) ·	37
[Figure 4] Public Social Expenditure and Total Tax Revenue (2007) ·	37



Chapter 1

Introduction



1

Introduction <<

1. Issues at hand and the need for this study

The current financial crisis in Southern Europe is not only posing a threat to the valuation of the euro but also raising concern over the sustainability of the European welfare model. Bolstered by continuous economic growth in the wake of World War II, European states have managed to develop a high-burden/high-benefit welfare model. However, amid aging society driven by low birth rates and an extended life expectancy as well as the recent sluggish economic growth, high spending and dwindling incomes inevitably followed, triggering government deficits to surge. Consequently, European countries including the financially vulnerable Greece, Spain, Portugal and Italy have introduced and are still implementing a range of restructuring measures such as a cut in pension/healthcare benefits, lifting of the eligible age for retirement, etc. in an effort to tackle the budget crisis facing them. As a result, skeptical views on the sustainability of their high-burden/high-benefit model have ensued.

One of motivations behind this study is our recognition that such assessment can be too facile. It is true that of Europe's

typical high-burden, High-benefit platforms, the ones employed by some Southern European countries are currently under scrutiny, yet the welfare models prevailing in Northern Europe are positively reviewed by global comparison, thus casting little doubt over their sustainability for now. Even for the welfare model of continental European countries, a mixture of views are present. Specifically, little concern is raised about Germany as it has successfully taken proactive actions for welfare reform as opposed to France. Having said that, we believe it is not fair to criticize the whole European welfare system just because the welfare models adopted by southern European countries are struggling with the matter of sustainability.

The key to the present issue is not only the size of tax burden and welfare spending but the relation between welfare-enabling economic fundamentals and the level of social issues deemed tolerable. Any welfare model adopted by a country can be viewed appropriate, regardless of high-burden, High-benefit or low-burden/low-benefit, as long as it is selected by people through a political process and managed at a level that withstands social issues while forming a virtuous cycle with the underlying economy. Another factor considered significant for maintaining welfare at a sustainable level is whether the relevant country has the capacity to properly respond when the dynamically selected welfare model encounters any problems.

In this respect, it appears unreasonable to simply regard the latest welfare reform triggered by fiscal deficits in Europe as the discarding of European welfare framework. For a prudent judgment, an overall analysis should be conducted for any selections made in the process of politics, a virtuous cycle forged between the underlying economy and healthcare/welfare, degrees of social issues managed by the welfare system, government's response to problems, etc. In this study, we'd like to proceed with our discussion based on the recognition that a virtuous cycle of welfare and economy is most crucial. To this end, it is important to identify regular patterns between the level of welfare spending and tax burden, and the economic competitiveness.

2. Purpose

The purpose of the study is to categorize the type of welfare states based on social expenditure and tax burden while defining enablers and indices to measure competitiveness in order to find any regularities between them, thus offering some implications for the virtuous circle linking welfare and economy.

3. Content

Section 2 examines previous studies that provide a theoret-

10 A Study on the Relationship between the Level of Social Expenditure and National Burden and the Economic Competitiveness

ical background for this study. Section 3 illustrates the data source and analysis methodology used, whereas Section 4 presents any findings identified after utilizing the analysis method and data discussed in the preceding section. Finally, Section 5 describes the conclusion of analysis and its implications for Korea.



Chapter 2

Previous Studies and Theoretical Background



2

Previous Studies and Theoretical Background

1. Literature Review

Previously, more surveys were conducted to find a link between social expenditure and economic growth rather than looking directly into how the level of welfare spending and tax burden relate to economic competitiveness. Subsequently, various conclusions have been drawn as shown below, failing to reach a consistent outcome:

First, some studies have claimed that social expenditure has a negative impact on economic growth (Murray, 1984; Landau, 1985; Marlow, 1986; Arjona, Ladique, and Pearson, 2001).

Second, there have been studies indicating that social expenditure positively affects economic growth (Friedland and Sanders, 1985; Barro and Lee, 1993; Kenworthy, 1995; Aghion and Bolton, 1997).

Third, there has been no relevance found between welfare spending and economic growth (Lindert, 2005).

Fourth, as opposed to the overall relationship between social expenditure and economic growth, a specific welfare spending may have a positive effect on GDP despite its negative implications on tax (Lindert, 2004).

These inconsistent results have caused a discrepancy in countries and periods analyzed with different variables used by the surveys (Lee Myung-Jin, Yang Jae-Jin, 2011). It is believed that such limitation can't be attributed to statistical analysis itself but to the underlying theory fundamentally backing such a relationship, as a more complete theory would be able to handle any variances in theoretical outcome caused by a gap in target country, period or variable. So, our study will be carried out on the premise that several theoretical approaches should be explored with regard to the relationship between the level of welfare and tax burden and the competitiveness under the current circumstances. We believe that it is set apart from other studies in that it is a meaningful attempt to move toward a highly complete theory and is therefore configured in a comprehensive way to achieve such an aim.

Outlined below are the publications released in Korea to examine the ties between economy and welfare.

Ko Young-Seon (2005) features positive views of the effect of the distribution structure on economic growth and vice versa, discussions in the previous publications with a positive approach, and their empirical evaluations. Also, it elaborates on the existing discussions about the relationship of distribution policies and economic growth and the empirical outcome thereof, while devising policy measures to strike a balance between growth and distribution. Ko Young-Seon (2007), mean-

while, outlines and supplements what was discussed in 2005 by detailing the implications of re-distribution policies for economic growth. The positive aspects include: ① contributing to fixing capital market failures; ② serving as an insurance policy not supplied in the market; ③ laying the groundwork for facilitating economic reforms; ④ achieving social unity, thereby ensuring political stability vital to economic growth. The negative implications of redistribution policies for economic growth are: ① a fall in economic efficiency derived from imposing a tax (deadweight loss); ② increasing reliance on welfare due to high welfare benefits; ③ declining private investment. After weighing pros and cons, it is concluded that re-distribution policies are being enforced, independent of economic gains because the equitable distribution of income and wealth is deemed desirable, yet the considerations for economic growth determines how aggressively they are pursued.

However, the above discussions are considered limited as they have failed to put together multiple variables in a consistent way. In this study, we will try to define a chain of causes and effects in an effort to overcome such restrictions.

2. Theoretical Background

One thing that needs to be mentioned first is that identifying a virtuous cycle of welfare and economy involves assessing the

impact of welfare on the economic competitiveness of a country. However, there exist other significant factors affecting the national competitiveness. In particular, the knowledge relating to science and technology and moral values for the efficient resolution of social conflicts are considered the most fundamental component in determining the competitiveness of a state (Yu Geun-Chun, 2008). The premise of the study herein is that the fundamental determinants of national competitiveness other than welfare always remain constant.

For starters, a study of economy-welfare relationship necessitates classifying welfare types. In this study, high or low level of public burden and social expenditure was selected as a category in relation to economy. As such, two sets of welfare modes, 'high-burden, High-benefit' and 'low-burden, Low benefit', have been defined as a primary form.

Categorizing the 'mid-burden, mid-welfare' model separately is also allowed (i.e. Japan). This can be considered a mix of two basic types, rather than being viewed as the emergence of a new welfare platform or bearing any relation to economy. The 'low-burden, High-benefit' model, meanwhile, is a transitional form with no economic sustainability, while the 'high-burden, Low benefit' mode is deemed economically sustainable yet appears limited in social sustainability, thus warranting no independent analysis in our study.

For the two primary types mentioned earlier, we will discuss

typical success and failure paradigms respectively to provide a barometer for assessment, and to our regret, this is where our limitations lie. The optimal solution is to find a link between welfare and economy with a comprehensive yet specific quantitative approach. However, this appears unattainable at this point. As such, we've conducted an analysis for the welfare and economy relationship based on the typically-observed success and failure examples derived from the successful factors of monetary economy under the regime of conventional capitalism. Other than being a useful path toward the optimal solution, this approach looks limited. However it is still considered an acceptable limit as it offers sufficient ground to make actual assessment of success and failure.

A. High-burden/High-benefit model

(1) Success Mechanism

The below sequential relationship represents a successful deployment of the 'high-burden/high-benefit' model. This model actually exists in reality and is known as the 'Golden Triangle of Denmark'.

High-burden, High-benefit → Ensure a flexible labor market and develop human resources based on an active labor market

18 A Study on the Relationship between the Level of Social Expenditure and National Burden and the Economic Competitiveness

policy and training (Improve productivity gains with high employment rate) → Enhanced national competitiveness and high growth → Maintain and expand economic capacity of underlying 'high-burden, High-benefit' structure (presence of retained earnings) amid the falling social burden → Sustainability of high-burden, High-benefit mode → ...

The flexibility in labor market enabled by 'high-burden, High-benefit' mode and the development of skilled workers through active adoption of labor market policies and training programs have a bearing on the successful conditions of capitalism as they allow companies to continuously maintain and expand profitable investment opportunities.¹⁾ Specifically, for the government, this means that it can continue to keep or increase the funding for public spending; from households' standpoint, it represents job creation for the earning of labor income, thereby leading to a successful capitalist economic cycle.

(2) Failure Mechanism

The 'high-burden/high-benefit' model fails when its weak-

1) A study has found that the impact on economy may differ based on the type of social expenditure. Yang Jae-Jin ("A strategy to develop Korea as a welfare state," 2012) suggests that the spendings on family, employment and welfare may have a positive implication on national competitiveness and fiscal soundness.

nesses, including heavy reliance on welfare, under-motivated workers, moral hazard, capital outflow, underground economy, etc., are dominantly present and the government falls short of properly tackling them. The relevant sequence of events can be described as follows:

High-burden, High-benefit → Dependency on welfare, loss of the desire to work, moral hazard, capital outflow, underground economy → Weakening national competitiveness and low growth → Deteriorating economic capacity to prop up 'high-burden, High-benefit' system, followed by the soaring social burden → Issues arising concerning the sustainability of high-burden, High-benefit mode (i.e. fiscal deficits due to the rising spending and declining revenue) → Inadequate responses → Advent of crisis as it is impossible to maintain and manage the high-burden, High-benefit regime.

A case in point is what has happened to southern European countries. The launch of high-burden, High-benefit policies have led to heavy reliance on welfare, weakening motivation to work, moral hazard, capital flight, flourishing underground economy, etc., undercutting profitable investment opportunities for firms, thereby weakening their business activities. This implies that securing the financing for public spending is in trouble for the government, and creating jobs for households

to earn disposable income is at risk, putting a damper on the successful economic cycle of capitalism.

B. Low-burden/Low-benefit model

(1) Success Mechanism

The success of the 'low-burden, Low benefit' model can be characterized by the chain reactions as shown below:

Low-burden, Low benefit → Price competitiveness boosted by low cost, and a surge in savings and investment → Enhanced national competitiveness and high growth → Job creation underpinned by the 'low-burden, Low benefit' platform and subsequent income gains (Resolution of social issues through the market and potential tax cut) → Sustainability of low-burden, Low benefit mode → ...

The sequential relationship above can be seen as part of supply-side economic policies, the main task of which is to ensure economic growth backed by savings and investment. This can be achieved if the price competitiveness driven by lower costs is secured on the back of a low-burden, Low benefit system, pushing business investment opportunities upward, thereby contributing to forming a successful capitalist economic cycle.

This type of model is believed to have successfully taken hold during the previous economic boom of the US and Japan. However, it hasn't fared well in the current economic situations where financial capitals mostly flock to speculative investment. In other words, higher savings spurred by low-burden, Low benefit policy are more likely to flow into speculative financial vehicles rather than productive investment, endangering the likelihood of a successful economic cycle of capitalism.

(2) Failure Mechanism

The 'low-burden, low welfare' mode fails when its weaknesses such as the intensifying social conflicts triggered by unbalanced distribution and the creation of idle money amid the flagging savings and investment prevail and the government falls short of properly handling them. It becomes apparent in a sequence of events listed below:

Low-burden, low benefit → Aggravating social issues due to unequal distribution, creation of idle money amid sluggish savings and investment → Undermined national competitiveness and low growth → Failure of the market-based resolution of social issues and reduced capacity for tax cut → Issues arising concerning the sustainability of the low-burden/low benefit model (i.e. financial deficits amid the rising social conflicts and

22 A Study on the Relationship between the Level of Social Expenditure and National Burden and the Economic Competitiveness

dwindling tax income) → Inadequate responses → Emergence of crisis as it is impossible to maintain and manage a low-burden, Low benefit regime.

One of good examples includes southern European states that fail to join the advanced countries due to the severity of social conflicts. The worsening social issues prompted by inequitable distribution and the rising amount of speculative money have weakened business investment opportunities, impeding a successful cycle of capitalism.



Chapter 3

Data Source and Analysis Methodology



3

Data Source and Analysis Methodology <<

1. Data Source

The information used for the study herein was extracted from the OECD.

- a. Information on tax burden: Tax to GDP ratio, total tax revenue
- b. Information on social expenditure: Public welfare spending
- c. Enablers of competitiveness: ① Savings ratio, investment ratio ② Employment Protection Legislation (EPL), ③ Active labor market policies (ALMP), family, unemployment
- d. Economic status and competitiveness: Real GDP growth, nominal GDP growth, unemployment rate, CPI growth, government debt, fiscal balance, balance of current account, IMD-led global competitiveness ranking (not part of OECD data)

The above can be summarized as described below:

26 A Study on the Relationship between the Level of Social Expenditure and National Burden and the Economic Competitiveness

<Table 1> Summary of Analysis Data and Indices

Country: 19 OECD member nations, Period: 1970~2010

Classification	Type	Measuring Unit	Source
Tax to GDP ratio (Ratio amount of taxes)	by country by year	ratio of GDP	OECD Revenue Statistics
National burden (Total tax revenue)	by country by year	ratio of GDP	OECD Revenue Statistics
Public welfare spending (Social Expenditure: Public)	by country by year by branch	ratio of GDP	OECD Social and Welfare Statistics
Savings ratio (Household net saving rates)	by country by year	ratio of GDP	OECD Statistics / Factbook
Investment ratio (Gross fixed capital formation)	by country by year	ratio of GDP	OECD Statistics / Factbook
EPL (Employment Protection Legislation)	by country	index	OECD Strictness of employment protection
Real GDP growth (Real GDP growth)	by country by year	Percentage change from previous period	OECD Economic Outlook
Nominal GDP growth (Gross domestic product growth)	by country by year	Percentage change from previous period	OECD Economic Outlook
Unemployment (Unemployment rate)	by country by year	Unemployment / economically active population	OECD Labor Force Statistics
CPI growth (Consumer price index growth)	by country by year	Percentage change from previous period	OECD Statistics / Factbook
Government debt (General government financial liabilities) gross	by country by year	ratio of GDP	OECD Statistics / Factbook
Fiscal balance (General government net lending)	by country by year	ratio of GDP	OECD Statistics / Factbook
Balance of current account (Current account)	by country by year	ratio of GDP	OECD Statistics / Factbook
IMD-led global competitiveness ranking (Overall ranking and competitiveness factors)	by country by year	ranking	IMD world competitiveness yearbook

Note: 2008 for EPL, 1980~2007 for public social expenditure

2. Analysis Methodology: Basis for Assessment and Content of the Study

A. Basis for Assessment

First of all, defining the type of welfare requires some criteria to assess the level of burden and welfare. High or low level of welfare will be determined through cross-country comparison on public social expenditure available in OECD SOCX. Above OECD average is considered 'High-benefit'; below average refers to 'Low benefit'. The level of tax burden meanwhile will be decided via global comparison regarding national burden among the OECD countries. Likewise, above average is perceived as 'high-burden' and below it is 'low-burden'.

Second, the following indicators will be employed to make judgement on the elements deemed impacting the success or failure of the economy-welfare relationship. Specifically, savings ratio, investment ratio, flexibility in labor market (EPL), productive welfare spending (active labor policy, family, unemployment), etc. will be used as criteria for assessment. Three potential options will then be proposed in relation to the competitiveness of the existing economy with its enablers being defined subsequently: ① Building savings and making investment are critical factors for competitiveness in the case of the 'low-burden, Low benefit' regime ② Competitiveness can

be strengthened via a more flexible labor market (EPL) ③ Competitiveness can be reinforced through investment-focused social spending (active labor market policy, family, unemployment).

Third, economic strength underpinning the burden of welfare will be assessed based on real GDP growth, nominal GDP growth, unemployment rate, CPI growth, national debt, fiscal balance, current account balance, IMD competitiveness ranking, etc. Of the indices measuring sovereign competitiveness, the current account is considered 'competitive' if it stays in a positive territory. Current surplus can be attained if the goods (services included) of a country are globally competitive. Trade surplus in turn expedites overseas investment and credit facility. In contrast, in the event of a current deficit, overall national competitiveness is weakened.

〈Table 2〉 provides the grounds for judgment by mapping metrics to the content of the study. As we've seen in the success and failure mechanisms earlier, generally and particularly under the low-burden, Low benefit regime, high savings and investment ratio appear to serve as important links connecting welfare with economy in a virtuous cycle. Similarly, as said earlier, productive and investment-oriented social spending in association with family and employment (i.e. ALMP, unemployment) is considered a driver behind forming a virtuous cycle of welfare and economy in general circumstances as well as under

the high-burden, High-benefit regime (i.e. golden triangle model) in particular. In addition, lower EPL indicates more flexibility in the labor market. Generally and particularly under the high-burden, High-benefit regime, it is assumed that better flexibility in the labor market likely leads to a more sound economic status and competitiveness.

Economic health and national competitiveness will be graded 'excellent' if the current account records a surplus; GDP grows higher; unemployment is lowered; CPI rises only slightly; and the government has less debt with more sound fiscal balance.

30 A Study on the Relationship between the Level of Social Expenditure and National Burden and the Economic Competitiveness

〈Table 2〉 Mapping of Indices to the Content of the Study and the Basis for Assessment

Metrics /Content	Level of burden & welfare	Enablers impacting economy & competitiveness	Economic status & competitiveness
Indicator type	Tax to GDP ratio Total tax revenue Public social expenditure	Savings ratio Investment ratio EPL Active labor policy Family Unemployment	Real GDP growth Nominal GDP growth Unemployment rate CPI growth National debt Fiscal balance Current account IMD global competitiveness ranking
Basis for assessment	- 'High-burden' if total tax revenue is higher than OECD average; 'low-burden' if lower. 'High-benefit' if public social spending is higher than OECD average; 'Low benefit' if lower.	-Competitiveness boosted by high savings and investment ratio (Enablers under the low-burden, low-benefit model) -Competitiveness bolstered by flexible labor market: lower EPL -Competitiveness driven by investment-focused social spending: labor market policy, family, unemployment Determine which category it fits into by comparing each respective indicator against overall OECD average, average by welfare state type, or average of any individual country belonged	Economic status and national competitiveness should be rated 'excellent' under the following circumstances: current account surplus, higher GDP growth, lower unemployment, lower CPI, less government debt, better fiscal balance Make judgment by comparing each index against overall OECD average, average by welfare state type, or average of any individual country belonged

B. Content of the Study

As you can see below, a number of countries are categorized and grouped together based on the existing welfare state type:

- Northern Europe model: Sweden, Finland, Norway, Denmark
- Continental Europe model: Germany, France, Belgium, Holland
- Anglo-Saxon model: the UK, the US, Canada, Australia
- Southern Europe model: Spain, Italy, Portugal, Greece
- Japan, which maintains close ties to Korea
- Korea, deemed un-classifiable according to the existing welfare state categorization

The countries subject to analysis will be broken down into 'high-burden, High-benefit' and 'low-burden, Low benefit' categories. Set the OECD average as a baseline. If a given variable is found higher, it falls into 'high' category; if not, it belongs to 'low' category.

The level of burden and welfare of a target country will connect with national competitiveness by way of enablers. The success and failure of 'high-level/high benefit' or 'low-level/low-benefit' model will be analyzed for each target nation, providing a basis for verification as to whether the relevant welfare model helps forge a virtuous circle with economy (sustainability).

To sum up, we will divide the existing OECD nations by category, and find out what regularities are observed between each respective type and the level of burden and welfare, while

32 A Study on the Relationship between the Level of Social Expenditure and National Burden and the Economic Competitiveness

determining any regular patterns detected around the enablers of competitiveness. Also, a time-series analysis (1970-2010) will be performed to run a comparison between the parameters indicative of economic health and competitiveness and any regularities drawn earlier so as to define the relationship between the level of welfare spending and burden and competitiveness.



Chapter 4

Analysis Outcome



4

Analysis Outcome <<

1. Categorization of 'Low-burden, Low benefit' and 'High-burden, High-benefit'

High or low level of burden and benefit shall be determined depending on the average of 19 target countries. Above average would mean 'high-burden' or 'High-benefit'; 'low-burden', 'low-welfare' in the opposite case. There exist some exceptions in terms of period, yet overall northern, continental, and Italy fall under the category of 'high-burden, High-benefit', whereas Anglo-Saxon, southern Europe excluding Italy, Japan, and Korea are classified as 'low-burden, Low benefit'.

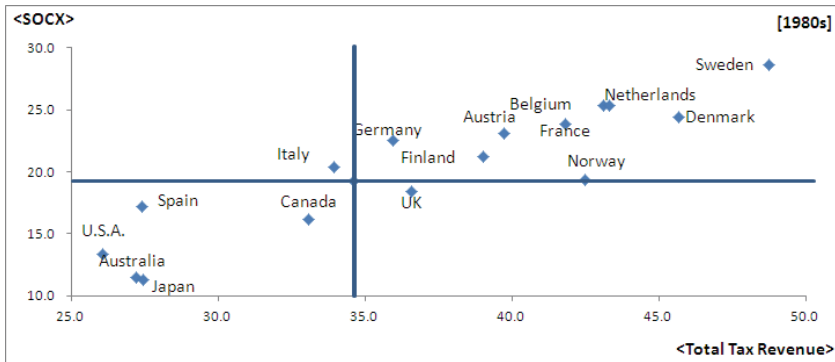
The diagrams below feature period-based exceptions. To start, let's take a look at Germany, a component of the continental model. It seems that the country remains in the 'High-benefit' domain with total tax revenue moving modestly below average in the recent 2000s. Holland, on the other hand, stays in the 'high-burden' domain while sending welfare slightly below average during the same period. In the meantime, southern European countries appear to be moving toward the 'high-burden/high-benefit' model. Specifically, welfare and burden are going hand in hand for Spain. As for Greece and

36 A Study on the Relationship between the Level of Social Expenditure and National Burden and the Economic Competitiveness

Portugal, however, their economic sustainability will likely suffer as they hold on to the 'low-burden' policy while pushing 'High-benefit' forward.

[Figure 1] Public Social Expenditure and Total Tax Revenue (1980s)

(Unit : % of GDP)

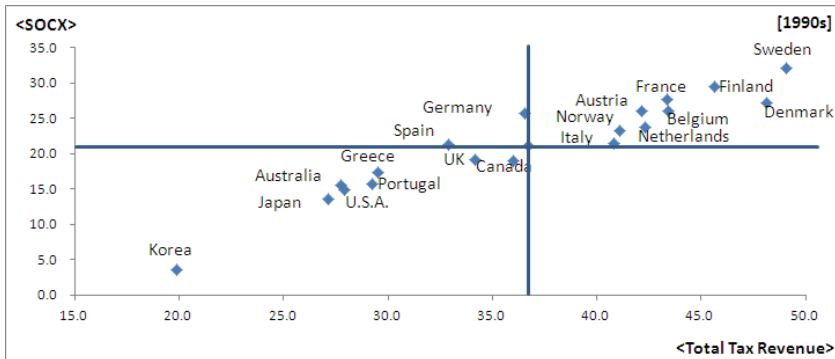


Note: The straight lines above represent the overall average; 19.3 for public social spending and 34.6 for total tax revenue.

Source : OECD Stat

[Figure 2] Public Social Expenditure and Total Tax Revenue (1990s)

(Unit : % of GDP)

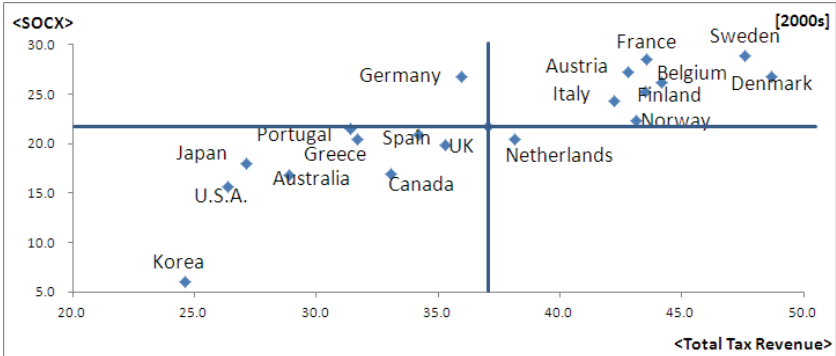


Note: The straight lines above represent the overall average; 21.2 for public social spending and 36.7 for total tax revenue.

Source : OECD Stat

[Figure 3] Public Social Expenditure and Total Tax Revenue (2000s)

(Unit : % of GDP)

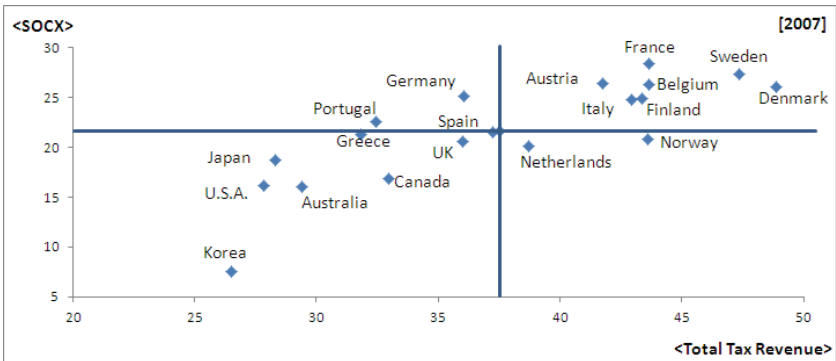


Note: The straight lines above represent the overall average; 21.7 for public social spending and 37.1 for total tax revenue.

Source : OECD Stat

[Figure 4] Public Social Expenditure and Total Tax Revenue (2007)

(Unit : % of GDP)



Note: The straight lines above represent the overall average; 21.7 for public social spending and 37.5 for total tax revenue.

Source : OECD Stat

38 A Study on the Relationship between the Level of Social Expenditure and National Burden and the Economic Competitiveness

For specific numbers concerning national burden, please refer to the table below:

<Table 3> OECD Total Tax Revenue for Major OECD Countries (1970~2010)

(Unit : % of GDP)

	1970	1975	1980	1985	1990	1995	2000	2005	2010
Sweden	37.8	41.3	46.4	47.4	52.3	47.5	51.4	48.9	45.8
Finland	31.6	36.6	35.8	39.8	43.7	45.7	47.2	43.9	42.1
Norway	34.5	39.2	42.4	42.6	41.0	40.9	42.6	43.5	42.8
Denmark	38.4	38.4	43.0	46.1	46.5	48.8	49.4	50.8	48.2
Germany	31.5	34.3	36.4	36.1	34.8	37.2	37.5	35.0	36.3
France	34.2	35.5	40.2	42.8	42.0	42.9	44.4	44.1	42.9
Belgium	33.9	39.5	41.3	44.3	42.0	43.5	44.7	44.6	43.8
Austria	33.8	36.6	38.9	40.8	39.7	41.4	43.0	42.1	42.0
Holland	35.6	40.7	42.9	42.4	42.9	41.5	39.6	38.4	38.2 ¹⁾
The UK	36.7	34.9	34.8	37.0	35.5	34.0	36.3	35.7	35.0
The US	27.0	25.6	26.4	25.6	27.4	27.8	29.5	27.1	24.8
Canada	30.9	32.0	31.0	32.5	35.9	35.6	35.6	33.4	31.0
Australia	20.9	25.1	25.9	27.5	27.8	28.1	30.3	29.8	25.9 ¹⁾
Spain	15.9	18.4	22.6	27.6	32.5	32.1	34.2	35.7	31.7
Italy	25.7	25.4	29.7	33.6	37.8	40.1	42.2	40.8	43.0
Portugal	17.8	19.1	22.2	24.5	26.9	29.3	30.9	31.2	31.3
Greece	20.0	19.4	21.6	25.5	26.2	28.9	34.0	31.9	30.9
Japan	19.5	20.7	25.1	27.1	29.0	26.8	27.0	27.4	26.9 ¹⁾
Korea		14.9	17.1	16.1	19.5	20.0	22.6	24.0	25.1
Average (19 countries)	29.2	30.4	32.8	34.7	36.0	36.4	38.0	37.3	36.2

Note: 2009 figures were used for the national burden of Holland, Australia and Japan for 2010.

Source: OECD Stat

<Table 4> OECD National Burden among Major OECD Countries by Period
(1970~2010)

(Unit : % of GDP)

	'70s average	'80s average	'90s average	2000s average
Sweden	42.4	48.8	49.1	47.6
Finland	35.6	39.0	45.6	43.5
Norway	39.2	42.5	41.1	43.1
Denmark	40.4	45.7	48.1	48.7
Germany	34.6	35.9	36.6	35.9
France	35.6	41.8	43.4	43.5
Belgium	38.3	43.1	43.5	44.2
Austria	36.2	39.8	42.2	42.8
Holland	39.8	43.3	42.3	38.1
The UK	33.8	36.6	34.2	35.3
The US	25.8	26.1	27.9	26.4
Canada	31.0	33.1	36.0	33.1
Australia	23.5	27.2	27.8	28.9
Spain	18.5	27.4	32.9	34.2
Italy	25.9	34.0	40.9	42.2
Portugal	18.9	24.8	29.3	31.4
Greece	20.2	24.6	29.5	31.7
Japan	21.7	27.4	27.2	27.2
Korea	14.8	16.5	19.9	24.6
Average (19 countries)	30.5	34.6	36.7	37.1

Source: OECD Stat

40 A Study on the Relationship between the Level of Social Expenditure and National Burden and the Economic Competitiveness

For specific numbers concerning public social expenditure, please see the table below:

<Table 5> Public Social Spending for Main OECD Countries (1980~2007)

(Unit : % of GDP)

Country	1980	1985	1990	1995	2000	2005	2007
Sweden	27.2	29.5	30.2	32.0	28.4	29.1	27.3
Finland	18.1	22.4	24.1	30.7	24.2	26.0	24.8
Norway	16.9	17.8	22.3	23.3	21.3	21.7	20.8
Denmark	24.8	23.2	25.1	28.9	25.7	27.2	26.1
Germany	22.1	22.5	21.7	26.8	26.6	27.2	25.2
France	20.8	26.0	24.9	28.5	27.7	29.0	28.4
Belgium	23.5	26.0	24.9	26.3	25.4	26.4	26.3
Austria	22.4	23.7	23.8	26.6	26.7	27.4	26.4
Holland	24.8	25.3	25.6	23.8	19.8	20.7	20.1
The UK	16.5	19.4	16.8	19.9	18.6	20.6	20.5
The US	13.2	13.1	13.5	15.4	14.5	15.8	16.2
Canada	13.7	17.0	18.1	18.9	16.5	17.0	16.9
Australia	10.3	12.1	13.1	16.2	17.3	16.5	16.0
Spain	15.5	17.8	19.9	21.4	20.4	21.4	21.6
Italy	18.0	20.8	20.0	19.9	23.3	25.0	24.9
Portugal	9.9	10.1	12.5	16.5	18.9	22.9	22.5
Greece	10.2	16.0	16.5	17.3	19.2	21.0	21.3
Japan	10.4	11.2	11.3	14.3	16.5	18.6	18.7
Korea			2.8	3.2	4.8	6.4	7.6
Average (19 countries)	17.7	19.7	19.3	21.6	20.8	22.1	21.7

Source: OECD Stat

〈Table 6〉 Public Social Expenditure among Main OECD Countries by Period

(Unit: % of GDP)

Country	'80s average	'90s average	2000s average
Sweden	28.7	32.1	28.9
Finland	21.2	29.4	25.2
Norway	19.4	23.3	22.3
Denmark	24.4	27.2	26.7
Germany	22.5	25.8	26.8
France	23.9	27.6	28.5
Belgium	25.3	26.0	26.2
Austria	23.0	25.9	27.2
Holland	25.4	23.8	20.4
The UK	18.4	19.1	19.9
The US	13.3	14.8	15.7
Canada	16.1	18.9	17.0
Australia	11.4	15.5	16.8
Spain	17.2	21.2	20.9
Italy	20.3	21.4	24.3
Portugal	10.4	15.7	21.4
Greece	14.5	17.3	20.4
Japan	11.2	13.6	18.0
Korea		3.6	6.0
Average (19 countries)	19.3	21.2	21.7

Source: OECD Stat

2. Enablers and Economic Status and Competitiveness

A. Northern Europe Model: High-burden, High-benefit²⁾

(1) Relative to the overall average, the average of northern European states features the following characteristics:

① Assessment on Enablers

The household net savings rate was found lower than the overall average during the period between the '70s and 2000s, which is a foreseeable outcome given the 'high-burden' model.

The investment ratio involving fixed capital formation, however, was observed above average during '80s and 2000s whereas it was below average during the '70s and '90s. This indicates that northern European nations were hit hard by severe economic hardship in the '70s and '90s, relative to other countries.

Employment Protection Legislation (EPL) meanwhile was equal to the overall average during the 2000s. The EPL for

2) It must be noted that Norway has become an oil-producing country since 1975 when analyzing the northern Europe model. As such, this should be taken into consideration during the assessment of enablers or economic status and competitiveness. Specifically, we should be mindful of the possibility that being an oil-producer could overwhelm other factors, causing the numbers to come out too big or too small. For instance, excessive current surplus can be explained by being an oil-producer.

Denmark and Sweden was lower than average, pointing to better flexibility in the labor market. In the case of Finland and Norway, it hovers above average, indicative of a less flexible labor market.

In terms of whether social expenditure was spent for productive investment or not, active labor policy, family, and unemployment all outperformed the average for northern European nations, underscoring high welfare spending in the area.

If the overall enablers of the northern Europe model are to be measured in relation to economic health and competitiveness, we will likely find that social expenditure seems to have been used far more productively, certainly setting itself apart from others. Northern Europe also yields the same EPL as the overall average from the perspective of labor market flexibility. The presence of the successful 'golden triangle model' favorably reflects in economic status and competitiveness. The savings ratio, however, works to the disadvantage thereof. As far as the investment ratio, an index considered relevant yet more crucial, is concerned, the outcome remains divided; it came lower than the average in the '70s and '90s but higher in the '80s and 2000s. With that said, it is safe to say that northern Europe has a good social spending structure in place to allow the overall economic status and competitiveness to outperform in relative terms with possible variances in the degree of superiority depending on the investment ratio.

② Assessment on Economic Status and Competitiveness

This study recognizes the balance of current account as the key indicator of competitiveness. The concerned index places the average of northern Europe above the overall one for both the '90s and 2000s in which such data has been made available.

Northern Europe was rated excellent by marking above average across all periods in terms of government debt, fiscal balance, CPI growth, and unemployment rate.

For real GDP growth, meanwhile, the region's average was slightly lower than the overall value. However, the gap seems to have narrowed recently at less than 0.3%. In this regard, it can be said that it appears similar to the overall average in terms of economic growth rate.

In conclusion, northern European states, despite their relatively poor net savings ratio characterized by a 'high-burden' regime, are considered excellent with above-average economic strength and competitiveness propelled by not-so-bad investment ratios and productive social spending. We believe that this agrees with our interim prediction.

(2) The information below exhibits each individual country compared to other countries, the northern European average, and the overall average:

① Assessment on Enablers

With regards to household net savings rate, both Sweden and Norway outpaced northern Europe during the '90s and 2000s, as opposed to Finland and Denmark, which were below average. In particular, negative values were observed with Denmark. It appears that the whole northern region has a savings ratio lower than the total average amid the 'high-burden' structure, as stated earlier.

For the investment ratio as in fixed capital formation, Norway managed to yield an investment ratio higher than the northern average in all periods except for the '80s. This is largely due to its unique position as an oil-producer. Sweden fell short of the northern average in the '70s and '90s, yet managed to come in higher in the '80s and 2000s, which implies that the difficulties of the preceding decade were successfully addressed and overcome, bringing positive effects to the decade that followed. Finland, on the other hand, displayed the below-average investment ratio for the entire period except for the '80s, particularly with negative values in the '90s. The index still came in low during the 2000s, yet with a difference of merely 0.4. As for Denmark, it boasted an outstanding investment ratio in the '80s and '90s but fell far short in the recent 2000s. This may be suggestive of the latest troubles experienced by the country. Another finding is that when the invest-

ment ratio of each country came in higher than that of northern Europe, it also outperformed the overall average. In a nutshell, except in the specific case of Norway, Sweden can be rated 'excellent' as it has delivered good results recently while managing to overcome difficulties over and over again. As for Finland and Denmark, we think that their capacity will be gauged based on whether or not the latest sluggish investment in the 2000s can be fixed for the next 10 years going forward.

For the employment legislation index, Denmark and Sweden exhibit high flexibility in the labor market with a below average EPL. On the contrary, Finland and Norway have a less flexible labor market as their EPL outpaced northern Europe. Comparing to the overall average wouldn't make a difference as it is equal to the northern average. That said, it can be claimed that Sweden meets all criteria to join the ranks of successful 'golden triangle model' countries as in the case of Denmark.

By social expenditure, Norway came in lower-than-average. Sweden has above-average social spending in areas of 'active labor market' and 'family', but it lags behind in the 'unemployment' segment. This is interpreted as an indication of unemployment receiving less attention amid the successful operation of the 'golden triangle model'. Meanwhile, Denmark witnessed its unemployment hovering above average, while ALMP and family remained low across all periods except for the re-

cent surge in the 2000s. Denmark's relatively high unemployment doesn't necessarily imply that its jobless rate is actually more serious than other countries. It simply means that its unemployment benefits are more generous than others. Yet, having 'ALMP' and 'family' marked below average is a disadvantage from the standpoint of social expenditure, which is viewed as a critical barometer in this study. Given that it is still higher than the total average, it is reasonable to conclude that, overall, Denmark engages in productive social spending. Nevertheless, Denmark relatively falls behind Sweden in terms of welfare spending if we are to line up northern European states for ranking. Denmark's latest efforts to raise productive spending above average in the 2000s are a testament to its healthy response to the challenge. The country's unemployment remains still higher than the northern average, yet with a decrease in gap. We think that, going forward, Denmark, like Sweden, will likely push toward lowering unemployment while keeping active labor policy and family above average, but nobody knows for sure how it will play out in the future. Finland, meanwhile, appears similar to old Denmark as it fell below average for 'active labor market' and 'family' with the outperforming unemployment in the '90s and 2000s. With that said, we think Sweden and Denmark, of all nations, exhibit the most distinctive features of the northern Europe model. In comparison to the overall average, all northern European states

came in higher than the total average for 'active labor market' and 'family', inherently underlying productive social spending³⁾, implying that these countries are all involved in productive welfare spending. With regards to 'unemployment', Denmark consistently stayed above the total average while Norway always came in below. Sweden, meanwhile, watched it going down and up before becoming equivalent to the total average. Finland also witnessed the index on the increase after remaining low. This shows that 'unemployment' is trending up across the region. Considering their below-average unemployment rate, it is believed that the latest developments are not necessarily due to the worsening economic conditions but because of their generous jobless benefits.

Consequently, although Norway is part of the northern Europe model, given its unique position as an oil-producing country, however, other factors should be taken into consideration when linking enablers to economic status and competitiveness. Let's take a look at Sweden and Denmark, which exhibit different behaviors of social spending for comparison. It appears that Sweden is slightly in a better position in the category of 'economic status and competitiveness' as it primarily emphasizes productive social spending amid a high savings ratio, with investment ratio and EPL similarly

3) There is only one exception found for 'active labor market policies': Norway in the 1980s.

rated. On the other hand, Finland seems to trail behind in this category as it has weaker social spending compared to its neighbors with modest savings, investment, and labor market flexibility.

② Assessment on Economic Status and Competitiveness

With the balance of the current account of each individual country analyzed against the northern average, both Sweden and Norway are found 'excellent' with a surplus during the '90s and 2000s, followed by Finland and Denmark with relatively less impressive below-average performance. By comparison to the overall average, all northern European countries seem to have performed well with the surplus surpassing the total average. With the exclusion of Norway for its unique position, Sweden looks most competent in the segment of 'economic status and national competitiveness'.

In terms of fiscal balance, Denmark fared poorly across all periods with below average performance. Sweden witnessed its fiscal balance remaining below average for 30 years except in the '70s. Finland also struggled in the recent '90s and 2000s. In contrast, Norway, except in the '70s, boasted excellent fiscal balance over the last 30 years. Yet, their fiscal balance is all better than the overall average. Considering that, aside from Norway, Denmark and Sweden compel the government to play

a relatively big role, their weaker position in this category is understandable. Given Sweden's track records of fiscal surplus across all 10-year time spans, however, Sweden appears in better shape than Denmark which suffered a fiscal deficit for two time spans.

With respect to national debt, Sweden came in higher than average across all periods, putting itself in a negative light. In contrast, Finland and Norway marked below average for the same period (except in the '70s for Norway), working to their favor. Denmark lingered above average in the preceding decades before falling slightly below during the 2000s. Relative to the overall average, Finland and Norway have managed their national debt to remain low in all periods, while Sweden and Denmark have seen it on the decline for the recent 30 years as opposed to the preceding 20 years when it soared higher than average. With the above taken into account, the national debt of northern Europe stands strong relative to the entire countries studied, especially during the recent 2000s when they all recorded lower than the overall average. Among the northern European states, if Norway is taken out of the equation for its unique position, Finland would come in first, followed by Denmark and lastly Sweden. However, since the size of government debt is on downward trends and the absolute gap with its rivals isn't so big, we can't say that Sweden is in a very bad condition relative to others.

For real GDP growth, Denmark was always outpaced by the northern average, and Sweden also stayed low except for the recent 2000s. Other than during the 2000s, Norway hovered above average for the preceding 30 years. With the exclusion of oil-producing Norway, Finland achieved an outstanding performance for the past 30 years, excluding the '90s, with an above-average real GDP growth. Compared to the whole average, northern European countries are overall lagging behind in terms of real GDP growth with the small exception of Finland and Norway. Obviously, this should be interpreted not as a sign of their economic health deteriorating but as an indication of their entry into the low-growth maturity stage in terms of economic evolution.

Regarding consumer price index (CPI), with the exception of Finland whose CPI outperformed the average for the three 10-year spans, the remaining 3 nations have their CPI rated below average for two of the four time spans with no specific patterns observed in time-period distribution. In comparison to the overall average, CPI came in lower for all northern European states, though with a minimal exception, indicative of relative price stability in the region.

As for unemployment, Norway displayed below-average scores across all periods, with Finland completely in the opposite. Denmark hit above average during the '80s, before winding down and staying below for the following 20 years.

Sweden kept unemployment below average for the 30 years prior to the 2000s. Not surprisingly, all northern European countries have unemployment marked lower than the overall average.

In summary, as discussed in the earlier section, it is concluded that setting aside the oil-producing Norway, Sweden stands out as it stays ahead of other countries in key metrics such as current account and unemployment with real GDP growth improving in recent years. Finland follows for having good real GDP growth. When compared against Denmark, however, it is hard to determine which country is better, considering that Denmark has recently made progress in unemployment, another core indicator.

Overall, it seems that northern European countries are faced with no big challenges relating to general economic status and competitiveness as they have solid investment in place despite a relatively flagging savings ratio. Additionally, they fared relatively well in terms of 'productive social spending' and 'labor market flexibility', two major enablers that could impact the success or failure of the 'high-burden, High-benefit' model, which under the assumption of our study boosts the prospect of good economic health and competitiveness compared to the overall average. In fact, it was found that all related indicators were excellent except for the real GDP growth, which came in slightly lower than average yet with the narrowing gap. In this

respect, we can conclude that these countries employing the 'high-burden/high-benefit' model are successful in a virtuous cycle of welfare and economy. Of the countries surveyed, Sweden is expected to have the upper hand relative to others in terms of economic status and competitiveness as it was graded better particularly in social spending on top of enablers and investment ratio. In actuality, it outperformed other countries in the two key indicators, that is, current account and unemployment, amid the improving growth in real GDP recently, thereby backing up our previous estimation. The outcome certainly consists with our assumption derived from the successful mechanism of the 'high-burden, High-benefit' model. The same applies to Denmark and Finland, although they are a bit behind Sweden.

54 A Study on the Relationship between the Level of Social Expenditure and National Burden and the Economic Competitiveness

〈Table 7〉 Enablers, and Economic Status and Competitive Indicators under the Northern Europe Model

	Savings ratio	Investment ratio	EPL	Social expenditure			Real GDP growth	Nominal GDP growth	Unemployment rate	CPI growth	Government debt	Fiscal balance	Current account
				ALLMP	Family	Unemployment							
〈Sweden〉													
'70s		0.6				2.4	11.6	2.1	8.6	29.8	3.2		
'80s		4.3		1.8	4.0	2.3	10.4	2.8	7.9	61.6	-1.9		
'90s	3.7	0.6		2.3	4.0	1.8	5.0	7.4	3.3	73.9	-3.6	2.7	
2000s	6.6	2.9	2.1	1.4	3.2	2.4	4.1	6.5	1.4	55.7	1.0	6.5	
〈Finland〉													
'70s		1.5				3.6	15.4	3.7	10.3	10.9	5.0	-2.0	
'80s		5.6		0.8	2.4	3.6	11.5	4.9	7.2	17.3	3.8	-1.9	
'90s	2.1	-0.3		1.3	3.7	1.7	3.8	11.8	2.2	51.7	-2.4	0.8	
2000s	1.1	1.6	2.3	0.9	2.9	2.1	3.6	8.3	1.7	48.8	2.8	4.8	
〈Norway〉													
'70s	3.9	5.1				4.7	12.6	1.7	8.4	39.8	2.9		
'80s	1.6	0.4		0.5	2.2	2.8	10.2	2.7	8.3	31.5	4.9	0.4	
'90s	4.4	3.5		1.0	3.4	3.6	6.0	4.8	2.4	31.4	2.6	3.8	
2000s	5.2	2.6	2.7	0.7	3.0	1.7	6.9	3.6	2.1	48.7	13.4	14.3	
〈Denmark〉													
'70s		1.8				2.5	12.7		9.3		0.8		
'80s		3.5		0.8	2.8	1.9	8.3	7.6	6.9	72.1	-2.9		
'90s	-1.9	3.6		1.4	3.5	2.4	4.2	7.5	2.1	77.6	-1.9	1.2	
2000s	-1.2	0.7	1.9	1.7	3.4	0.9	3.5	4.9	2.1	49.9	1.6	3.0	

(Unit: % of GDP, %)

Table 7 > Enablers, and Economic Status and Competitive Indicators under the Northern Europe Model (cont.)

(Unit: % of GDP, %)

	Savings ratio	Investment ratio	EPL	Social expenditure			Real GDP growth	Nominal GDP growth	Unemployment rate	CPI growth	Government debt	Fiscal balance	Current account
				ALMP	Family	Unemployment							
<Northern average>													
'70s	3.9	2.3					3.3	13.1	2.5	9.1	26.8	3.0	-2.0
'80s	1.6	3.4		1.0	2.9	1.7	2.6	10.1	4.5	7.6	45.6	1.0	-0.7
'90s	2.1	1.9		1.5	3.7	2.6	2.4	4.8	7.9	2.5	58.6	-1.3	2.1
2000s	2.9	2.0	2.2	1.2	3.1	1.6	1.8	4.5	5.8	1.8	50.8	4.7	7.1
<Overall average>													
'70s	12.1	3.8					4.1	15.1	3.9	9.9	41.8	-1.1	-0.5
'80s	10.9	3.3		0.6	1.7	1.4	2.9	10.5	7.7	7.9	55.7	-3.1	-0.6
'90s	8.7	3.0		0.8	1.9	1.6	2.6	5.7	8.0	3.4	72.1	-3.3	0.3
2000s	4.9	1.4	2.2	0.7	2.0	1.1	1.9	4.2	6.6	2.1	71.6	-1.1	0.6

Note: 1) ALMP refer to Active Labor Market Policies.

2) EPL represents the Employment Protection Legislation index. The above is based on 2008 figures. (Version 3)

Source: OECD Stat

B. Continental Model: High-burden, High-benefit

(1) For a starter, we will try to compare the average of continental countries under the 'high-burden, High-benefit' regime to the average of total nations surveyed.

① Assessment on Enablers

In terms of the household net savings rate, the continental average was always higher than the total average across all periods, having a positive effect.

However, the continent's investment ratio hovered below average for the same period, which in general has negative implications.

As far as EPL is concerned, the continent came in higher than average, indicative of a less flexible labor market.

As for public social expenditure, continental Europe outpaced the total average across all periods in terms of ALMP, family and unemployment. This is perceived as a positive development given that they comprise productive social spending.

To sum up, the 'high-burden/high-benefit' continental model has led to a higher savings ratio and social spending, thus likely increasing the outlook for economic status and

competitiveness. On the contrary, it may generate a negative effect with the sagging investment ratio and labor market flexibility. Since setting a priority for these indices is challenging, making an accurate estimation of 'economic status and competitiveness' is deemed unlikely.

② Assessment on Economic Status and Competitiveness

A look at the balance of current account reveals that the continental average exceeded the overall one across all periods, indicative of outstanding performance.

By contrast, fiscal balance and government debt appear in trouble as the continent fell behind the total average for the entire period.

As for consumer price index, the continental countries favorably showed more stable CPI than the whole average in all periods.

In terms of real GDP growth, the continental nations trailed behind the overall average across all periods yet with a small difference of less than 0.5%.

Unemployment rate appears almost identical, although it has increased by 0.1% in the recent 2000s. Given that two of the three 10-year periods produced below-average unemployment, the continent looks relatively strong in this

segment.

In comparison with the total average, the high-burden, High-benefit continental states are graded excellent in current account, one of key indicators, amid the diminishing gap in real GDP growth. On top of an impressive CPI, unemployment rate is also considered remarkable in relative terms, entailing a positive review of the overall economic status and competitiveness. However, it should be noted going forward that both national debt and fiscal balance are relatively lagging behind.

(2) We will have each individual member of the continental Europe compared against the overall average to discuss the successes and failures of each nation. Continental average will not be used for analysis.

① Assessment on Enablers

All continental countries have higher savings ratios than the total average.

By investment ratio, Germany and Holland under-performed compared to the average across all periods. Austria hit above average in the '70s before falling down and staying low afterwards. France and Belgium hovered below

average before soaring in the recent 2000s.

Other than Holland with its EPL identical to the average, all continental nations have seen their EPL rising above average in the 2000s, indicative of a less flexible labor market.

As far as social expenditure is concerned, Germany, France and Belgium were rated above average across all periods in the area of active labor market policy (ALMP) and family. For unemployment, Belgium marked above average during the same period, while Germany and France began to rise recently. Austria and Holland run contrary to each other. Holland has ALMP surpassing average in all periods, whereas Austria is moving in the opposite direction. For the same period, family was measured above average for Austria but on the decline for Holland especially during the recent years. Holland watched unemployment floating above average across all periods, with Austria observing the opposite.

In summary, all continental countries have their savings ratios exceeding the overall average, with their investment ratios falling short except in the case of the 2000s for France and Belgium and in the '70s for Austria. In terms of labor market flexibility, all came in higher except for Holland. From the standpoint of productive social spend-

ing, Germany, France and Belgium marked above average in all periods under the category of ALMP and family corresponding to the definition of 'productive', while for the same period Holland and Austria managed to exceed the average in ALMP and family, respectively. Unemployment was above average for both Belgium and Holland in all periods with the same index recently increasing or equal to average for others. Against this backdrop, it is hard to find any specific tendency in investment ratio, but in terms of social spending, all relevant countries fared better than average, facilitating the creation of a virtuous cycle of welfare and economy under the 'high-burden, High-benefit' framework. In particular, Holland stands a good chance of becoming a success story of the golden triangle model with moderate flexibility in labor market. Meanwhile, Austria will likely come in last in terms of productive social expenditure.

② Assessment on Economic Status and Competitiveness

As far as current account is concerned, Holland has outperformed the average for the last 30 years in which related information was made available. Germany follows with an index that surpassed the average in all periods ex-

cept in the '90s when it suffered a deficit. Given the consideration of an external factor caused by the unification of East and West Germany during that time, the nation also looks strong in this segment. Belgium also keeps a good track record as it has outpaced the average for the past 20 years when such information has been made available. As for France and Austria, of the 20 years in which relevant data became available, the two countries witnessed, for once, the index exceeding the average; but France experienced a deficit in the recent 2000s while Austria suffered in the '90s.

Real GDP growth came in lower than average with a few exceptions. Yet, considering that the gap is less than 0.7% at most and their economy has entered the maturity stage characterized by low-growth, it seems to have no big influence on economic status and competitiveness. Particularly, as you can see below, their prices remain stable, thus serving as a positive force even in the face of low real GDP growth.

As for the unemployment rate, France and Belgium are cast in a negative light as they scored higher than average in all periods for which the related data became available. Meanwhile, Austria, Holland and Germany all boast of below-average unemployment rates. Yet, special attention

needs to be paid to Germany as it experienced the index rising above average in 2000s.

All continental nations have their CPI kept below average for the entire period, which testifies to their economic stability.

Regarding fiscal balance, the countries display an overall tendency of above-average deficits. By nation, Belgium surpassed the average across all periods; Germany and Austria observed the opposite. France continued to stay below until it soared above the average in the recent 2000s. In contrast, it wasn't only until the 2000s when Holland witnessed it falling below average.

In terms of current account, unemployment rate, and government debt, which are considered most imperative to the high-burden, High-benefit continental model, if we are to overlook fiscal balance and real GDP growth rated weaker than the overall average while setting aside price stability in which overall continental countries outperformed, it is believed that Germany, Holland, and Austria have been or are recently exhibiting a strength in economic status and competitiveness. On the contrary, France, despite overall good performance in unemployment rate, has seen its current account and national debt worsen in the recent 2000s, allowing the last 10 years to be

viewed as a failure. Belgium is in no better position, too. Although its current account has been graded excellent for the past 20 years, unemployment and national debt have overall weakened, making a positive review highly unlikely.

In a nutshell, it can be argued that the continental model, on average, ensures excellent economic status and competitiveness compared with overall average. This demonstrates that social spending, one of our successful factors set forth for the high-burden/high-benefit model, is fulfilling its role although investment ratio, one of general criteria, is under-performing. By country, Germany, Holland and Austria have been, continuously or recently, gaining ground in economic health and competitiveness. We believe this is mainly driven by 'productive social spending' as identified by the study herein as one of successful requirements. In particular, we can think of applying the golden triangle model to Holland, as it unlike other countries has a highly flexible labor market in place. For Austria, although it has outperformed in the area of family only which is part of social spending, the size of the gap is overwhelmingly big, such that we simply cannot afford to rule out any possibility of success in this category. Meanwhile, aggravated economic health and competitiveness over the past 10 years has forced France to be ren-

64 A Study on the Relationship between the Level of Social Expenditure and National Burden and the Economic Competitiveness

dered as a failure of the high-burden, High-benefit regime. The same is true of Belgium. We can hardly consider the country successful when its unemployment rate and government debt are in dismal conditions in spite of current surplus.

〈Table 8〉 Enablers, and Economic Status and Competitiveness Indicators under the Continental Europe Model

(Unit: % of GDP, %)

	Savings ratio	Investment ratio	EPL	Social expenditure			Real GDP growth	Nominal GDP growth	Unemployment rate	CPI growth	Government debt	Fiscal balance account	Current account
				ALMP	Family	Unemployment							
〈Germany〉													
'70s		1.7				3.1		2.4	4.9				0.9
'80s		1.4		0.8	1.7	0.9	2.0	6.1	2.9				1.8
'90s	10.4	2.7		1.2	2.1	1.5	2.2	7.8	2.6		52.2	-3.3	-0.6
2000s	10.6	0.1	2.6	1.1	2.0	1.6	1.2	8.7	1.5		69.5	-2.2	3.9
〈France〉													
'70s	16.4	3.1				4.2	13.7		8.8		32.6	-0.9	
'80s	10.9	2.3		0.7	2.6	1.0	2.3	9.8	7.4		35.3	-2.3	
'90s	11.3	1.6		1.1	2.8	1.7	1.9	11.4	1.9		56.8	-3.9	2.1
2000s	11.8	1.7	3.0	1.0	3.0	1.6	1.4	8.8	1.7		75.7	-3.6	-0.1
〈Belgium〉													
'70s		2.0				3.3	11.0		7.1		60.2	-5.9	
'80s		3.0		1.2	2.7	3.1	6.6	10.8	4.9		108.4	-10.6	
'90s	14.0	2.0		1.1	2.4	3.1	2.2	8.4	2.1		130.8	-4.7	5.2
2000s	11.8	1.6	2.6	1.1	2.6	3.1	1.6	7.7	2.1		99.3	-1.4	2.1
〈Austria〉													
'70s		4.2				3.8	10.5		6.1		23.0	-0.7	
'80s		1.8		0.3	3.0	0.7	2.0		3.8		48.0	-3.3	
'90s	9.8	2.7		0.4	2.8	1.1	2.8	3.9	2.4		64.6	-3.4	-1.7
2000s	9.6	0.4	2.4	0.6	2.8	1.1	1.7	4.3	2.0		70.6	-2.1	2.2

〈Table 8〉 Enablers, and Economic Status and Competitiveness Indicators under the Continental Europe Model (cont.)
(Unit: % of GDP, %)

	Savings ratio	Investment ratio	EPL	Social expenditure			Real GDP growth	Nominal GDP growth	Unemployment rate	CPI growth	Government debt	Fiscal balance	Current account
				ALMP	Family	Unemployment							
〈Holland〉													
'70s		1.2				3.4	11.2	3.2	7.0	56.1	-1.9		
'80s		2.6		1.0	2.1	2.2	4.4	10.1	2.9	79.1	-4.9	2.8	
'90s	13.9	4.5		1.4	1.4	3.2	5.3	5.9	2.4	86.3	-3.1	4.2	
2000s	6.8	-0.4	2.2	1.4	1.7	1.6	3.9	3.8	2.0	61.3	-1.4	5.5	
〈Continental average〉													
'70s	16.4	2.4				3.6	11.6	2.8	6.8	43.0	-2.3	0.9	
'80s	10.9	2.2		0.8	2.4	2.1	6.6	9.2	4.4	67.7	-5.3	2.3	
'90s	11.9	2.7		1.1	2.3	2.4	4.2	7.5	2.3	78.1	-3.7	1.8	
2000s	10.1	0.6	2.6	1.0	2.4	1.5	3.2	6.7	1.9	75.3	-2.1	2.7	
〈Overall average〉													
'70s	12.1	3.8				4.1	15.1	3.9	9.9	41.8	-1.1	-0.5	
'80s	10.9	3.3		0.6	1.7	2.9	10.5	7.7	7.9	55.7	-3.1	-0.6	
'90s	8.7	3.0		0.8	1.9	2.6	5.7	8.0	3.4	72.1	-3.3	0.3	
2000s	4.9	1.4	2.2	0.7	2.0	1.9	4.2	6.6	2.1	71.6	-1.1	0.6	

Source: OECD Stat

C. Anglo-Saxon Model: Low-burden, Low benefit

Before going any further into analysis, it should be mentioned that the US's unique position of its national currency being circulated as a reference currency around the world, must be taken into consideration. It is similar to Norway of the Northern European model in that its specific position as an oil-producer has played a determining role in the assessment.

(1) In comparison with the overall average, the low-burden, low-benefit Anglo-Saxon model displays the following characteristics:

① Assessment on Enablers

To begin with, the savings ratio was nothing but outstanding in the '70s and '80s before falling below average in the '90s and 2000s, suggesting that some of the key indicators of the success of the low-burden, Low benefit regime have lately deteriorated.

In terms of investment ratio, the Anglo-Saxon average outstripped the total average across all periods. This is one of the distinctive features of the present model as opposed

to the previous high-burden, High-benefit one, demonstrating that it meets one of the fundamental requirements for the success of the low-burden, Low benefit regime.

EPL was lower than average for all Anglo-Saxon countries. It certainly sets them apart from high-burden, High-benefit states, except for a few countries with flexibility and stability oriented policies in place, possibly making a positive contribution to a flexible labor market.

For productive social spending, the Anglo-Saxon model has under-performed the average, which is in stark contrast with the high-burden, High-benefit model.

A comprehensive analysis of the above enablers presents that investment ratio and labor market flexibility meet the criteria for the success of the low-burden/low-benefit model, provided, however, that the flagging savings ratio over the past 20 years is a downside, compounded by social spending with no positive implications.

② Assessment on Economic Status and Competitiveness

As far as real GDP growth is concerned, the Anglo-Saxon model is considered excellent as it has surpassed the average over the last 30 years. It should be however noted that, similar to northern Europe and continental countries under

the 'high-burden, High-benefit' regime, which both came in below average with a small and dwindling gap, the Anglo-Saxon model outstripped the average yet with a modest difference. With that said, it seems that neither holds a relative advantage in real GDP growth. We can also argue that other success factors are considered more significant.

CPI stayed below average for the whole period except in the recent 2000s.

Moreover, all the Anglo-Saxon nations recorded a fiscal deficit, surpassing the overall average. This puts them on a par with the continental model but contrary to northern Europe with a surplus.

In terms of national debt, both northern Europe and the continental model incurred more government debt than average, whereas the low-burden, Low benefit Anglo-Saxon regime outperformed the average in all periods except in the '70s.

Unemployment rate was reviewed excellent by remaining below average for the entire period except in the '80s.

As for current account, however, it stayed below average for the whole period except in the '70s with a considerable deficit.

To sum up, producing a uniform assessment is deemed

difficult as the '70s and '80s contain a mix of good and bad indices. However, if we are to make an assessment based on the balance of current account by embracing it as a key determinant of economic health and competitiveness, it is found that the Anglo-Saxon countries have been showing signs of deterioration since the 1970s amid worsening economic conditions, thus triggering the latest negative opinions. Judging from the fact that securing the currency purchasing power is considered the most important element of capitalist monetary economy, having a current deficit means that they lack in competitiveness in this area.

This appears more prominent when we consider that both northern Europe and continental models, on average, have delivered successful achievement with their current account surpassing the average. Another concern is that over the past 20 years, savings ratio, a critical component of the 'high savings, high investment' mechanism primarily underpinning the success of the 'low-burden, 'Low benefit' regime, has been pushed down below average, accompanied by a fiscal deficit. There exist some positive aspects, as well. For example, unemployment rate outperformed the average in the 2000s, and the real GDP growth increased, though by a small increment, above overall average. Meanwhile, consumer price surged above

average in the 2000s, revealing a negative aspect as a result. Against this backdrop, it can be concluded that the economic status and competitiveness indices of the low-burden, Low benefit Anglo-Saxon model have been on the defensive since the '70s when compared to the overall average, and recently this trend is gaining ground. In this respect, it appears that of the success and failure mechanisms defined for the 'low-burden, Low benefit' model, the failure factors seem to be taking hold lately, amid the growing concern over a potential glitch in the link between high savings and high investment.⁴⁾

(2) The successes and failures of each Anglo-Saxon country will be discussed by comparing against the overall average.

① Assessment on Enablers

By savings ratio, the US and the UK came in lower than average in all periods. Canada and Australia also witnessed their savings ratio falling below average recently. Other

4) It is believed that one of main contributors to this trend is that the current financial market has failed to fulfill its inherent role to link the money saved to productive investments as it is eagerly pushing toward gaining profits by way of speculative investments.

than the 2000s, Canada's savings rate outpaced the overall average.

In terms of investment ratio, coming up with a generalized view is deemed difficult as it contains a mix of good and bad results. If we choose to focus on the latest developments, however, it is found that Australia has continued to maintain its investment ratio above average for the past 30 years, while the UK and Canada have experienced a surge in the ratio during the 2000s as opposed to the '90s. Meanwhile, the US watched it declining in the 2000s in contrast to the '90s. Particularly, given the sluggish savings ratio that stands below average, the US appears at a disadvantage. As for Canada, it boasts above-average investment ratios in all periods except in the '90s.

As far as EPL is concerned, all Anglo-Saxon countries came in lower than the overall average. Specifically, the US boasts the most flexible labor market with 0.9, followed by Canada, the UK, and Australia.

Social expenditure, meanwhile, marked below average in all segments and periods except in the cases of the UK with the ALMP rated not less than the average and family above average, as well as Australia with family outperforming the average for the past 20 years. It is believed that such an outcome is consistent with the characteristics of the

low-burden, Low benefit Anglo-Saxon model. Furthermore, we think that social spending, a key indicator to the success or failure of the high-burden, High-benefit framework, doesn't carry a big significance in this model.

In conclusion, Australia seems to best fit the successful mechanism of the low-burden, Low benefit model as it boasts a high investment ratio despite the recent drop in savings rate. In contrast, the sluggish savings and investment ratio of the US likely brings a negative effect on its economic conditions; provided, however, that given its outstanding performance in labor market flexibility, it sounds reasonable to take such strength into consideration when assessing economic status and competitiveness. As for the UK and Canada, their investment ratios have outstripped the average in the 2000s in spite of the recent fall in savings rate, thus fulfilling the successful criteria for the model.

② Assessment on Economic Status and Competitiveness

In terms of real GDP growth, Australia has outpaced the average for the last 30 years, matching our estimation in the preceding section. The UK and Canada have also managed to meet our expectations with above-average growth

in the 2000s. The US, on the other hand, has under-performed over the past 20 years.

By unemployment rate, Canada performed the worst with the index hovering above average in all periods. The US and Australia are in better positions as they scored below the average for the entire period, excluding the '70s and '90s, respectively. The UK also shows signs of improvement as the index climbed above average in the '80s before turning around and falling below the average in the 2000s.

With regard to CPI, Canada is rendered stable by earning below average across all periods. The same is true of the UK as the index was maintained below average except in the '70s. The US continued to remain stable before soaring in the 2000s. Finally, Australia kept moving up and down before hitting above average in the 2000s.

When it comes to fiscal balance, all countries suffered a deficit, but Australia saw the size of its deficit smaller than the overall average for the whole period. In the case of the UK, the US and Canada, their deficits were larger than the average across all periods except for one 10-year time span each. Notably, Canada had its fiscal deficits lowered below average during the 2000s.

Government debt, in the meantime, was rated below average for Australia, the UK, and the US for the past 30

years. Such an outcome seems to match the low-burden features of the Anglo-Saxon model. Canada, on the other hand, looks distinctive as it has national debt exceeding the average for the whole 40 years.

For the balance of current account stressed by the study herein, all Anglo-Saxon countries recorded a current deficit with the index scoring below the average for the entire period except in the '70s for the UK and the US, and the 2000s for Canada. In terms of competitiveness, this puts them at a disadvantage relative to the northern European and continental countries.

To sum up, Australia has recently exhibited an excellent investment ratio, which is the primary characteristic of the 'low-burden/low-benefit' model, with equally impressive real GDP growth. Additionally, it has certainly performed well in the area of government debt and fiscal balance. Unemployment rate has outstripped the average in the 2000s, too. Having said that, despite the weakening current account and increasing CPI in the 2000s, it can be perceived as a successful instance of the low-burden/low-benefit model at least for the 2000s. Meanwhile, the US, with the size or capacity of its economy set aside, has seen its savings and investment ratio, real GDP growth, CPI, fiscal and current account balance outpaced by the

average at least for the 2000s. Although unemployment and government debt have outperformed the average in the 2000s, we think that, overall, the failure mechanism of the model is gaining momentum in the recent 2000s. As for the UK and Canada, they reveal a basic pattern of the successful low-burden Low benefit regime as defined earlier, as their investment ratio and real GDP growth marked above average amid the recent flagging savings rate. Specifically, Canada has unemployment and national debt slightly surpassing the overall average in the 2000s. Nevertheless, our assessment of the 2000s isn't so bad, as the country has outperformed the average in terms of fiscal and current account balance. The UK came in above average in unemployment, CPI, and national debt during the 2000s, but fiscal and current account balance are a different story. With that said, it would be hard for the UK to receive a good review for the 2000s.

In a nutshell, the low-burden, Low benefit Anglo-Saxon model seems to be riddled with more failures than successes recently. By nation, Australia is enjoying a recent success, while the US is suffering a setback. As for Canada and the UK, drawing a clear conclusion is a daunting task. Maybe we can just say that the former isn't that bad and the latter isn't that good.

〈Table 9〉 Enablers, and Economic Status and Competitiveness Indicators under the Anglo-Saxon Model

(Unit: % of GDP, %)

	Savings ratio	Investment ratio	EPL	Social expenditure			Real GDP growth	Nominal GDP growth	Unemployment rate	CPI growth	Government debt	Fiscal balance	Current account
				ALMP	Family	Unemployment							
〈The UK〉													
'70s		1.8				2.4	16.2		12.6		58.3	-2.9	-0.4
'80s		4.4		0.7	2.2	2.5	10.2	1.6	7.1	10.2	47.1	-2.8	-0.8
'90s	5.4	2.9		0.4	2.3	2.5	5.9	0.8	3.3	8.0	45.4	-3.8	-1.3
2000s	-0.3	1.6	1.1	0.3	3.0	2.0	4.3	0.3	2.0	5.5	51.8	-3.6	-2.1
〈The US〉													
'70s	9.8	5.3				3.7	10.6		7.1	6.2	44.0	-2.1	0.0
'80s	8.9	2.7		0.3	0.6	3.0	7.9	0.6	5.6	7.3	52.6	-4.2	-1.7
'90s	5.7	5.7		0.2	0.6	3.2	5.5	0.4	3.0	5.8	67.7	-3.0	-1.6
2000s	3.6	-0.2	0.9	0.1	0.7	1.8	4.1	0.4	2.5	5.9	66.6	-4.5	-4.5
〈Canada〉													
'70s	12.3	5.3				4.3	13.4		7.4	7.8	48.4	-1.9	
'80s	15.6	4.0		0.5	0.7	3.0	9.0	1.7	6.5	9.4	61.8	-6.0	-2.1
'90s	9.2	2.1		0.5	0.7	2.4	4.1	1.5	2.2	9.5	92.8	-4.5	-1.9
2000s	3.8	3.9	1.0	0.3	1.0	2.2	4.7	0.7	2.1	7.1	76.0	-0.2	0.8
〈Australia〉													
'70s	16.0	3.0				3.0	14.3		9.8	3.7			-1.1
'80s	11.8	5.1		0.3	1.1	3.4	11.8	1.0	8.4	7.6	22.8	-1.1	-4.1
'90s	5.5	4.3		0.5	2.3	3.3	5.1	1.3	2.5	8.8	31.8	-2.8	-4.0
2000s	2.5	5.6	1.4	0.3	2.8	3.0	7.1	0.7	3.1	5.5	18.0	-0.4	-4.5

〈Table 9〉 Enablers, and Economic Status and Competitiveness Indicators under the Anglo-Saxon Model (cont.)

(Unit: % of GDP, %)

	Savings ratio	Investment ratio	EPL	Social expenditure			Real GDP growth	Nominal GDP growth	Unemployment rate	CPI growth	Government debt	Fiscal balance	Current account
				ALMP	Family	Unemployment							
〈Anglo-Saxon average〉													
'70s	12.7	3.8				3.3	13.6	5.9	9.2	50.2	-2.3	-0.5	
'80s	12.1	4.0		0.4	1.2	3.0	9.7	8.6	6.9	46.1	-3.5	-2.2	
'90s	6.5	3.7		0.4	1.0	2.9	5.1	8.0	2.8	59.4	-3.5	-2.2	
2000s	2.4	2.7	1.1	0.3	1.9	2.2	5.1	6.0	2.4	53.1	-2.2	-2.6	
〈Overall average〉													
'70s	12.1	3.8				4.1	15.1	3.9	9.9	41.8	-1.1	-0.5	
'80s	10.9	3.3		0.6	1.7	2.9	10.5	7.7	7.9	55.7	-3.1	-0.6	
'90s	8.7	3.0		0.8	1.9	2.6	5.7	8.0	3.4	72.1	-3.3	0.3	
2000s	4.9	1.4	2.2	0.7	2.0	1.9	4.2	6.6	2.1	71.6	-1.1	0.6	

Source: OECD Stat

D. Southern Europe Model: High-burden, High-benefit for Italy Only

(1) The following describes the southern Europe average compared against total average:

① Assessment on Enablers

Savings and investment ratio stood above average in the '90s before sliding down in the 2000s. EPL, indicative of labor market flexibility, also came in higher, suggesting a less flexible labor market. In terms of social spending, the countries all stayed below average since the '80s when the relevant data first became available.

In short, the southern Europe model has failed at both indicators that potentially represent a virtuous cycle of economy and welfare; the savings and investment ratio under 'low-burden, Low benefit' regime on one hand and the productive social spending under 'high-burden, High-benefit' on the other.

② Assessment on Economic Status and Competitiveness

Economic status and competitiveness is considered 'not

excellent', as not only the current account of the latest 20 years but also the real GDP growth, unemployment rate, CPI, government debt, and fiscal balance of the past 40 years have under-performed relative to the average, except in the '70s for real GDP growth, which is consistent with our estimation in an earlier section.

(2) The successes and failures of each individual country in southern Europe will be discussed in comparison with the overall average.

① Assessment on Enablers

Italy, characterized by the 'high-burden/high-benefit' model, has managed to keep its savings ratio above average for the past 20 years, as opposed to investment ratio, EPL, and social spending, which all hovered below the average. This demonstrates that the country struggles not only in generic success factors but also in the model-specific indices (i.e. social spending).

Now, let's move on to the other three southern European nations that fall under the definition of the 'low-burden, Low benefit' framework. Spain has a savings ratio exceeding the average in the 2000s with an above-average invest-

ment ratio for the past 30 years. EPL also came in higher. Meanwhile, social spending, in particular unemployment, is found to have stayed above average in all periods. Both active labor market policies (ALMP) and family marked below the average except in the 2000s when ALMP was on a par with the average. Portugal and Greece have social spending outpaced by the average, with EPL rated above average. Both witnessed their savings ratio plummeting, especially with Greece yielding a negative savings rate in the 2000s. Portugal watched its investment ratio outperforming the average for the past 20 years before slipping into negative territory in the recent 2000s. Greece recorded a negative investment rate in the '80s before turning around and staying above average for the last 20 years.

② Assessment on Economic Status and Competitiveness

According to our analysis, 'high-burden, High-benefit' Italy has under-performed relative to the average in indices such as real GDP growth, unemployment rate, CPI, national debt, and fiscal balance. For current account, it soared above average in the '90s before taking a downturn in the 2000s with a below-average deficit. Overall, its economic status and competitiveness can be portrayed in a negative

light, matching our earlier forecasts.

Next, we'd like to take a look at the other three southern European countries characterized by the 'low-burden/low-benefit' model. For Spain, there exist some positive aspects, including outperforming the average real GDP growth for the past 20 years and exhibiting below-average national debt. However, given the fact that all other indicators such as unemployment rate, CPI, fiscal and current account balance came in low, assigning a good rating for economic status and competitiveness is unlikely. By comparison, Portugal and Greece watched their real GDP growth surpassing the average for one 10-year span only. As their national debt has been deteriorating recently, the overall assessment of their economic status and competitiveness isn't favorable.

To summarize, the southern Europe model didn't fare well in both enablers and economic status and competitiveness related indices when compared against the overall average. By nation, 'high-burden, High-benefit' Italy has failed in almost every aspect--that is, enablers and other measures of economic status and competitiveness--earning itself the disgrace of becoming an unsuccessful example of the high-burden, High-benefit model. The neighboring low-burden, Low benefit countries

are in a similar position, too. Only Spain has narrowly escaped a negative review for the 2000s. Portugal and Greece have delivered a disappointing outcome for economic status and competitiveness in the '90s and 2000s, coming under attack as being failures of the model. Upon categorizing burden and welfare, we've detected a difference in the way these three countries are moving toward the 'high-burden, High-benefit' regime. Specifically, Spain has made sure that tax burden moves in sync with welfare. However, Portugal and Greece have exhibited an imbalance by pushing their welfare toward 'High-benefit' while forcing public burden to remain in the 'low-burden' domain. We believe this is one of reasons why their economic status and competitiveness performed poorly.

84 A Study on the Relationship between the Level of Social Expenditure and National Burden and the Economic Competitiveness

(Table 10) Enablers, and Economic Status and Competitiveness Indicators under the Southern Europe Model

(Unit: % of GDP, %)

	Savings ratio	Investment ratio	EPL	Social expenditure		Real GDP growth	Nominal GDP growth	Unemployment rate	CPI growth	Government debt	Fiscal balance	Current account
				ALMP	Family							
<Spain>												
'70s		1.9				3.8	19.7	4.5	14.4		-0.6	
'80s		4.9		0.4	0.3	2.8	13.0	17.4	10.2	41.6	-4.8	
'90s		3.4		0.6	0.5	2.7	7.3	19.6	4.2	64.4	-4.6	-0.9
2000s	6.4	1.4	3.1	0.7	1.1	2.3	5.6	12.1	2.9	54.5	-2.0	-5.9
<Italy>												
'70s		2.3				3.9	18.5	4.5	12.3	75.2	-6.9	
'80s		2.5			1.0	2.6	14.7	10.1	11.2	90.8	-10.8	
'90s	17.1	1.2		0.3	0.7	1.4	5.9	11.3	4.2	118.3	-7.4	0.7
2000s	9.0	0.6	2.6	0.6	1.3	0.7	2.9	8.1	2.2	119.4	-3.3	-1.7
<Portugal>												
'70s		3.6				4.8	21.3	5.3	18.3		-4.4	
'80s		3.6		0.2	0.7	3.4	22.1	7.1	17.6		-5.4	
'90s	4.3	5.7		0.5	0.8	3.0	9.8	5.6	6.0	64.5	-5.0	-6.4
2000s	2.2	-1.6	3.1	0.6	1.2	0.9	3.5	7.0	2.5	76.5	-4.8	-9.8
<Greece>												
'70s		5.3				5.5			12.3			
'80s		-2.6		0.2	0.3	0.8		7.6	19.5			
'90s		3.9		0.3	0.9	1.9	9.0	9.1	11.1	100.7	-5.7	
2000s	-4.9	1.6	3.0	0.2	1.1	2.4	5.6	9.9	3.3	120.7	-7.3	-9.3

(Table 10) Enablers, and Economic Status and Competitiveness Indicators under the Southern Europe Model (cont.)
(Unit: % of GDP, %)

	Savings ratio	Investment ratio	EPL	Social expenditure			Real GDP growth	Nominal GDP growth	Unemployment rate	CPI growth	Government debt	Fiscal balance	Current account
				ALMP	Family	Unemployment							
<Southern Europe average>													
'70s		3.3				4.5	19.8	4.8	14.3		75.2	-4.0	
'80s		2.1		0.3	0.6	1.0	16.6	10.6	14.6		66.2	-7.0	
'90s	10.7	3.5		0.4	0.7	1.2	8.0	11.4	6.4		87.0	-5.7	-2.2
2000s	3.2	0.5	2.9	0.5	1.2	1.0	4.4	9.3	2.7		92.8	-4.3	-6.7
<Overall average>													
'70s	12.1	3.8					4.1	3.9	9.9		41.8	-1.1	-0.5
'80s	10.9	3.3		0.6	1.7	1.4	2.9	7.7	7.9		55.7	-3.1	-0.6
'90s	8.7	3.0		0.8	1.9	1.6	2.6	8.0	3.4		72.1	-3.3	0.3
2000s	4.9	1.4	2.2	0.7	2.0	1.1	1.9	6.6	2.1		71.6	-1.1	0.6

Source: OECD Stat

E. Japan and Korea: Low-burden, Low benefit

(1) Japan and Korea exhibit the following characteristics in comparison with the overall average:

① Assessment on Enablers

It appears that both savings and investment ratio have recently weakened as they hovered above average before decreasing in the 2000s. EPL is below average, indicating that the flexibility in labor market exceeds the overall average. In terms of productive social spending, it came in low across all periods observed.

In this respect, it can be claimed that Japan and Korea represent the low-burden, Low benefit relationship of welfare and economy. And, our estimation is that they will likely prove successful except in the recent 2000s.

② Assessment on Economic Status and Competitiveness

Both countries have outperformed the average in the area of current account, real GDP growth, unemployment rate, and CPI (excluding the '90s when it was 0.1% higher than the total average). Fiscal balance also has been im-

pressive except in the recent 2000s. Yet, their national debt has stayed above average for the past 30 years.

As such, it can be concluded that Japan and Korea enjoy a relative advantage in economic status and competitiveness related indices compared to other countries overall, with some signs of weakening in the recent 2000s.

(2) The below elaborates on the comparison of Japan and Korea against overall average:

① Assessment on Enablers

Japan's savings and investment ratio are experiencing deterioration lately by scoring above average for the entire period, except in the recent 2000s for savings ratio and the past 20 years for investment ratio. EPL meanwhile came in low, suggestive of a labor market that is more flexible than the average. Social spending was rated below average across all periods. Given the recent worsening conditions, it is estimated that Japan will likely join the recent failures of the low-burden, Low benefit regime.

Korea, on the other hand, has savings and investment ratio surpassing the average for the whole period. In light of below-average EPL and social spending, we can project it to

become a successful example of the low-burden/low-benefit model.

② Assessment on Economic Status and Competitiveness

Japan has witnessed its real GDP growth hovering below average for the last 20 years. Unemployment rate, CPI growth and current account have been graded excellent recently, with both government debt and fiscal balance sliding below average. Although Japan still has managed to achieve a current surplus, the real GDP, national debt, and fiscal balance, however, have dropped to below average for the past 20 years. In particular, government debt and fiscal balance were significantly hurt during the 2000s. With that said, Japan appears to be gradually going down a path toward failure, especially during the 2000s, as opposed to being praised as a success of the low-burden/low-benefit model in the past.

Korea, in the meantime, outperformed the average in all aspects including real GDP growth, unemployment rate, government debt, fiscal and current account balance, with an exception of CPI growth, thus emerging as a successful case of the low-burden, Low benefit regime.

Consequently, both Japan and Korea can be placed un-

der the category of the low-burden/low-benefit model. Japan, once acclaimed as a successful model, is recently at the risk of becoming a failed case. Korea, however, is still cited as a successful manifestation of the welfare-economy relationship under the low-burden, Low benefit regime.

〈Table 11〉 Enablers, and Economic Status and Competitiveness Indicators for Japan and Korea

(Unit : % of GDP, %)

	Savings ratio	Investment ratio	EPL	Social expenditure			Real GDP growth	Nominal GDP growth	Unemployment rate	CPI growth	Government debt	Fiscal balance	Current account
				ALMP	Family	Unemployment							
〈Japan〉													
'70s		4.1				4.7	13.2	1.7	9.0	23.5	-1.8		
'70s		5.0			0.4	4.4	6.3	2.5	2.5	65.1	-2.1		
'70s	11.1	0.2		0.3	0.5	1.5	2.0	3.0	1.2	86.8	-3.4	2.4	
2000s	2.7	-1.6	1.7	0.3	0.8	0.9	-0.4	4.7	-0.3	170.2	-6.0	3.3	
〈Korea〉													
'70s	13.9	17.9				10.3	31.4		15.2		0.5		
'80s	16.5	9.1				8.6	17.4	3.8	8.4		1.2	0.2	
'90s	21.1	6.7		0.1	0.1	6.7	13.4	3.3	5.7		2.3	0.7	
2000s	5.1	3.5	2.1	0.2	0.3	4.6	7.2	3.6	3.1	26.4	2.9	2.3	
〈Average of two countries〉													
'70s	13.9	11.0				7.5	22.3	1.7	12.1	23.5	-0.7		
'80s	16.5	7.0			0.4	6.5	11.8	3.1	5.5	65.1	-0.4	0.2	
'90s	16.1	3.4		0.2	0.3	4.1	7.7	3.2	3.5	86.8	-0.6	1.5	
2000s	3.9	0.9	1.9	0.2	0.5	2.8	3.4	4.2	1.4	98.3	-1.5	2.8	
〈Overall average〉													
'70s	12.1	3.8				4.1	15.1	3.9	9.9	41.8	-1.1	-0.5	
'80s	10.9	3.3		0.6	1.7	2.9	10.5	7.7	7.9	55.7	-3.1	-0.6	
'90s	8.7	3.0		0.8	1.9	2.6	5.7	8.0	3.4	72.1	-3.3	0.3	
2000s	4.9	1.4	2.2	0.7	2.0	1.9	4.2	6.6	2.1	71.6	-1.1	0.6	

Source: OECD Stat

The below illustrates the latest results on the level of national competitiveness published annually by the International Institute for Management Development (IMD) in Switzerland. In terms of overall performance, economic performance, and government efficiency inclusive of welfare related social aspects, the high-burden, High-benefit northern Europe maintains a competitive edge across the board, with Sweden outpacing the others. Of continental countries, Germany, Holland, and Austria appear more competent than France and Belgium. Meanwhile, southern Europe, overall, is lagging behind. As far as Japan and Korea are concerned, Korea seems to have performed better recently in relative terms. As for Anglo-Saxon countries, the US, Australia, and Canada exhibit sound competitiveness with the UK trailing behind.

Since IMD measures national competitiveness mainly based on the level of capabilities accumulated, it bears some difference to our study, which gauged performance by period. In particular, the IMD assessment of Anglo-Saxon countries conflicts with our findings. With that taken into account, however, running a comparison is deemed viable in terms of the components of competitiveness or their relative position, and change in trends by period.

92 A Study on the Relationship between the Level of Social Expenditure and National Burden and the Economic Competitiveness

In conclusion, as our assessment of competitiveness and the IMD's national competitiveness share a lot in common, we think it can be leveraged to support the outcome of our study.

<Table 12> IMD International Competitiveness Ranking

	Overall			Economic performance			Government efficiency			Corporate efficiency			Infrastructure												
	'08	'09	'10	'11	'12	'08	'09	'10	'11	'12	'08	'09	'10	'11	'12										
Sweden	9	6	6	4	5	22	20	15	11	17	11	10	13	5	8	8	6	9	4	5	5	2	2	2	3
Finland	15	9	19	15	17	36	40	44	37	40	13	6	15	14	12	17	5	16	15	16	12	3	6	6	5
Norway	11	11	9	13	8	10	19	19	26	16	15	11	7	11	6	13	10	8	12	8	10	10	7	8	9
Denmark	6	5	13	12	13	26	23	30	40	31	4	4	11	13	11	5	2	11	6	15	7	6	5	3	4
Germany	16	13	16	10	9	6	6	9	6	5	26	27	28	24	19	28	19	25	16	17	6	9	8	7	7
France	25	28	24	29	29	13	17	17	22	22	45	46	42	44	47	35	42	35	47	45	11	14	14	18	14
Belgium	24	22	25	23	25	19	10	13	23	18	42	37	43	39	41	23	23	30	23	29	15	15	19	19	21
Austria	14	16	14	18	21	17	18	18	24	20	20	24	27	27	33	15	12	12	20	20	13	13	10	13	16
Holland	10	10	12	14	11	7	7	14	19	8	17	14	17	18	15	12	8	15	13	14	9	11	12	12	11
The UK	21	21	22	20	18	16	11	23	14	19	24	30	29	26	23	19	28	26	28	22	20	16	15	17	15
The US	1	1	3	1	2	1	1	1	1	1	18	20	22	19	22	3	16	13	10	11	1	1	1	1	1
Canada	8	8	7	7	6	11	16	12	12	12	8	9	10	9	9	11	9	10	8	9	8	7	4	5	6
Australia	7	7	5	9	15	15	15	7	13	23	5	8	4	7	14	6	7	5	7	13	16	12	18	14	19
Spain	33	39	36	35	39	30	46	41	47	51	34	43	45	38	40	40	45	44	38	46	30	31	28	26	27
Italy	46	50	40	42	40	45	47	33	38	39	53	54	49	51	49	46	48	48	48	44	33	34	32	30	28
Portugal	37	34	37	40	41	44	42	38	50	53	27	29	44	48	46	43	43	50	44	47	28	24	29	25	25
Greece	42	52	46	56	58	48	52	48	58	58	46	53	54	56	58	42	49	45	53	56	35	35	33	32	34
Japan	22	17	27	26	27	29	24	39	27	24	39	40	37	50	48	24	18	23	27	33	4	5	13	11	17
Korea	31	27	23	22	22	47	45	21	25	27	37	36	26	22	25	36	29	27	26	25	21	20	20	20	20

Source: IMD(2012). Over Ranking and Competitiveness Factors



Chapter 5

Conclusion and Policy Implications

5

Conclusion and Policy Implications <<

The most significant implication is that we can't simply agree with some critics who, on the heels of the financial crisis in southern Europe, have claimed to put an end to the high-burden, High-benefit Europe model, citing it as a failure, because in reality, successes and failures are simultaneously present in both high-burden, High-benefit and low-burden, low-benefit models from the perspective of economic gains.

Of 'high-burden, High-benefit' European countries, Sweden and Germany boast excellent national competitiveness, proving successful, whereas Italy, run by the same model, has yielded negative results. Greece, Portugal and Spain which appear to be shifting toward the 'high-burden, High-benefit' regime have also produced a disappointing outcome.

Meanwhile, of those countries categorized as 'low-burden, Low benefit', Japan was successful in the '70s and '80s, but no longer in the '90s and onwards. Korea is viewed as a recent success. In contrast, the UK and US are currently considered a failure.

As you can see in the above, each welfare model contains success and failure mechanisms in relation to economy. Whether successful or unsuccessful will be determined by what criteria of success or failure are met by each individual country, and the enablers and their relationships put forth herein can be useful in this consideration.

Also considered significant is laying a foundation for and properly responding to whatever problems arise, and we believe this depends on how efficient and competent the government is. For instance, Japan is shifting from success to failure because it has failed to adjust to the changing environment, whereas Sweden was able to overcome crisis in the early '90s as the social democrats pushed forward restructuring measures that ran against the party's fundamental values.

Having said that, it is true that in terms of setting welfare policies, there are options available such as 'high-burden, High-benefit', and 'low-burden, Low benefit'. However, selecting an option doesn't prompt economic status or its relation to competitiveness to be automatically determined. Recognizing a potentially successful relationship and implementing adequate policies to actively push for it are required to move in a successful direction.

References

- Ko, Young-Seon (2005), 「Challenges for the Creation of a Virtuous Cycle of Distribution and Growth」, in 『The Priority of Mid-and Long-term Policies and the Direction of Fiscal Operation』, Korea Development Institute
- Ko, Young-Seon (2007), 「The Implications of Re-distribution Policies for Economic Growth」, in 『The Guidelines for In-depth Assessment of Fiscal Programs』, Korea Development Institute
- Lee, Myung-Jin, Yang, Jae-Jin (2011), 'A Study on the Relationship between Welfare State and National Competitiveness', published at the Spring Academic Seminar for Korean Association for Public Administration
- Yu, Geun-Chun (2008), 「List's Mental Capital Theory and Its Implications」, Journal of Commerce, Vol. 26. No. 1
- Choi, Jun-Wuk, and others (2005), 『A Study on the Allocation of Resources based on Expenditure Category』, Korea Institute of Public Finance (Appendix 4. An Empirical Study on the Relationship between Income Distribution & Welfare Spending and Economic Growth)
- Arjona, Roman, Maxime Ladaïque and Mark Pearson, (2001), Growth, Inequality and Social Protection. OECD Labor Market and Social Policy Occasional Papers 51, OECD.
- Aghion, Philippe and Patraick Bolton, (1997), “A Theory of Trickle-Down Growth and Development”, Review of Economic Studies 64(2), 151-172.

- Barro, Robert and Jong-Wha Lee, (1993), Losers and Winners in Economic Growth, National Bureau of Economic Research Working Papers 4341, National Bureau of Economic Research.
- Friedland, R. and J. Sanders, (1985), "The Public Economy and Economic Growth in Western Market Economies", *American Sociological Review* 50.
- IMD (2012), Over Ranking and Competitiveness Factors, IMD.
- Kenworthy, L. (1995), "Equality and Efficiency: The Illusory Trade-off", *European Journal of Political Research* 27.
- Landau, D. (1985), "Government Expenditure and Economic Growth in the Developed Countries: 1952-1976", *Public Choice* 47: 459-477.
- Lindert, Peter H., (2004), *Growing Public: Social Spending and Economic Growth Since the Eighteenth Century, Vol. 1.(The Story)*: Cambridge University Press.
- Lindert, Peter H., (2005), *Growing Public: Is the Welfare State Mortal or Exportable*, Paper presented at International Symposium on Social Spending and Economic Growth in OECD Countries, Korea Institute for Health and Social Affairs, November 22, Seoul, Korea.