Role of institutions in nations that have improved their competitiveness

Ji-Yeong Park

11385309

A research project submitted to the Gordon Institute of Business Science, University of Pretoria, in partial fulfillment of the requirement for the degree of
Masters of Business Administration

7 November 2012

© University of Pretoria
Abstract

This study explored the role of institutions in countries that have improved their competitiveness in a short time period, under the framework of institutional theory. This study investigated how informal and formal institutions have evolved and interacted.

The purpose of the study was to build on institutional theory by exploring the role and interaction of institutions in nations that have undergone institutional changes. A literature review was done to provide a foundation for the study. Case studies of Singapore and Finland – countries that have improved their competitiveness in a short time period – were done in this study. A number of documents in the public domain were observed: internet resources, reports, and studies on Singapore and Finland.

The study concluded that countries that have improved their competitiveness achieved their goals through their own institutional mix and through interactions among institutions. Active interactions among institutions were based on broad coalition among actors and the directions of interactions in each country differed.

Keywords: Institutional theory; Formal institutions; Informal institutions; National competitiveness
Declaration

I declare that this research project is my own work. It is submitted in partial fulfillment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University. I further declare that I have obtained the necessary authorization and consent to carry out this research.

7th November 7, 2012

Ji-Yeong Park

Date
Acknowledgements

I would like to express a special word of appreciation to the following people:

- I want to express my gratitude to the supervisor of the study, Dr. Raj Raina. Irrespective of my struggle in the initial stages, his patient, far-sighted and encouraging supervision was critical to the completion of the study.

- I also want to thank my family. My husband supported me and my baby had to deal with my absence at home during the MBA courses.
# Contents

**Chapter 1:** Introduction to the research problem .................................................. 1  
  1.1. Research title ............................................................................................................. 1  
  1.2. Research problem ....................................................................................................... 1  
  1.3. Research aim ............................................................................................................. 2  

**Chapter 2:** Literature review ..................................................................................... 3  
  2.1. National competitiveness .......................................................................................... 3  
    2.1.1. National competitiveness in the literatures ......................................................... 3  
    2.1.2. National competitiveness in the reports ............................................................. 6  
  2.2. Institutional theory ................................................................................................... 12  
    2.2.1. Institutions .......................................................................................................... 12  
    2.2.2. Regulative institutions ......................................................................................... 13  
    2.2.3. Normative institutions ......................................................................................... 14  
    2.2.4. Cultural-cognitive institutions ............................................................................. 15  
    2.2.5. Institutional change ............................................................................................. 16  
    2.2.6. Actors / agents .................................................................................................... 18  
  2.3. Role of institutions as a determinant of national competitiveness ..................... 19  
    2.3.1. In the context of national competitiveness ......................................................... 19  
    2.3.2. Institutions as shared belief systems ................................................................. 21  
    2.3.3. Institutions as governance systems ................................................................. 22  
    2.3.4. Institutions as guarding the property rights ...................................................... 23  
    2.3.5. In the context of institutional theory in sociology ............................................. 25  
  2.4. Role of formal institutions as a determinant of national competitiveness ... 26
2.5. Role of informal institutions as a determinant of national competitiveness ................................................................. 27

2.6. Interaction between formal and informal institutions .......................................................... 30

Chapter 3: Research questions ........................................................................................................ 33

Chapter 4: Research methodology .............................................................................................. 34

4.1. Research design .................................................................................................................... 34

4.2. Unit of analysis .................................................................................................................... 34

4.3. Universe / scope .................................................................................................................. 34

4.3.1 Institutions ...................................................................................................................... 35

4.3.2 Actors .............................................................................................................................. 36

4.3.3 Time frame ...................................................................................................................... 36

4.4. Population ............................................................................................................................ 36

4.5. Sampling ................................................................................................................................ 36

4.6. Data collection ..................................................................................................................... 37

4.7. Data analysis ........................................................................................................................ 38

4.8. Research limitations ............................................................................................................ 38

Chapter 5: Results ......................................................................................................................... 39

5.1. Introduction ........................................................................................................................ 39

5.2. Background of institutional change ..................................................................................... 39

5.2.1. Singapore ....................................................................................................................... 39

5.2.2. Finland ............................................................................................................................ 40

5.3. Institutions in Singapore ...................................................................................................... 40
5.3.1. Formal institutions ................................................................. 40
  5.3.1.1. Power systems (Political systems) ........................................... 40
  5.3.1.2. Judiciary systems ............................................................ 41
  5.3.1.3. Governance systems ....................................................... 42
  5.3.1.4. Economic policies .......................................................... 43
  5.3.1.5. Social policies ................................................................. 44
  5.3.1.6. Regulations on labour relations ....................................... 45
  5.3.1.7. Regulations on society .................................................... 46
5.3.2. Informal institutions ............................................................. 47
  5.3.2.1. Meritocracy ................................................................. 47
  5.3.2.2. Pragmatism ................................................................. 48
  5.3.2.3. Shared values ............................................................. 48
  5.3.2.4. Civil society’s informal institutions ................................... 49
5.4. Institutions in Finland ............................................................. 49
  5.4.1. Formal institutions ............................................................. 49
    5.4.1.1. Power systems ........................................................... 49
    5.4.1.2. Governance systems .................................................. 50
    5.4.1.3. Economic policies .................................................... 50
    5.4.1.4. Social policies .......................................................... 51
  5.4.2. Informal institutions .......................................................... 52
    5.4.2.1. Finnish sisu ............................................................ 52
    5.4.2.2. Openness / flexibility ............................................... 52
    5.4.2.3. Shared vision .......................................................... 53
    5.4.2.4. Practice of collective bargaining as a shared logic of action ... 53
    5.4.2.5. Rule-based decision-making as a shared logic of action ....... 54
5.4.2.6. Trust ............................................................................................................................... 55

5.5. Actors during institutional changes ................................................................................... 55

5.5.1. Singapore ........................................................................................................................ 55

5.5.1.1. Prime minister: Lee Kuan Yew ........................................................................ 55

5.5.1.2. Ruling class: PAP ................................................................................................. 56

5.5.1.3. People’s Association (PA) .................................................................................. 57

5.5.1.4. Civil Society ............................................................................................................. 57

5.5.2. Finland ................................................................................................................................ 58

5.5.2.1. Government / council ........................................................................................... 59

5.5.2.2. Financing / educational / research systems .......................................................... 59

5.5.2.3. Private enterprises ................................................................................................. 60

5.5.2.4. Cooperation / coordination .................................................................................. 60

Chapter 6: Discussion of results .......................................................................................... 62

6.1. Introduction ....................................................................................................................... 62

6.2. Characteristics of institutions .......................................................................................... 62

6.2.1. Framework for a discussion of institutions ............................................................... 62

6.2.2. Institutions in Singapore ........................................................................................... 62

6.2.3. Institutions in Finland ................................................................................................. 63

6.3. Role of institutions .......................................................................................................... 63

6.3.1. Framework for a discussion of role of institutions ..................................................... 63

6.3.2. Role of institutions in Singapore and Finland .......................................................... 64

6.3.3. Similarities and dissimilarities in the role of institutions ........................................... 65

6.4. Interactions among institutions ....................................................................................... 66

6.4.1. Singapore .................................................................................................................... 66
6.4.1.1. Building national identity ................................................................. 66
6.4.1.2. Meritocracy .................................................................................. 67
6.4.1.3. Pragmatism ................................................................................ 68
6.4.1.4. Overall interaction process .......................................................... 69
6.4.2. Finland ............................................................................................ 70
6.4.2.1. Trust ............................................................................................ 70
6.4.2.2. Informal institutions shaping formal institutions ..................... 70
6.4.2.3. Overall interaction process .......................................................... 70
6.4.3. Similarities and dissimilarities in the interactions among institutions. ......................................................................................... 71
6.4.4. Interactions among actors ............................................................... 71
6.4.4.1. Institutional entrepreneurs in Singapore and Finland ............... 71
6.4.4.2. Similarities in interactions among actors: Broad network .......... 72
6.5. Processes of forming institutions ...................................................... 73
6.5.1. Critical events ................................................................................ 73
6.5.2. Path dependence and adaptive institutions .................................... 73
6.5.3. Institutionalisation of informal institutions ..................................... 74
6.5.4. Isomorphism .................................................................................... 75
Chapter 7: Conclusion .............................................................................. 76
7.1. Main findings ..................................................................................... 76
7.2. Limitations ......................................................................................... 76
7.3. Recommendations to stakeholders .................................................... 77
7.4. Recommendations for future research .............................................. 77
References ............................................................................................... 79
Appendix 1. Boards, committees and council in Singapore .............................................83
Appendix 2. Financing, educational and research systems in Finland .....................85
Appendix 3. Surveys on trust (Cross-country analysis) .....................................................86
Appendix 4. Lists of secondary data .................................................................................90
List of figures

Figure 1. Economic performance and institutional mix.....................................................31
Figure 2. Economics of institutions .............................................................................35
Figure 3. Finnish innovation systems: organisations and cooperation .........................58
Figure 4. Interactions among institutions in national building in Singapore ...............69
Figure 5. Interactions among actors in building national identity in Singapore ..........74
List of tables

Table 1. Variables for business climate, socio-political climate and government policy . 5
Table 2. Structure of the global competitiveness index in GCR................................. 7
Table 3. Weights of the three main sub-indices at each stage of development .......... 8
Table 4. The breakdown of WCY competitiveness factors ........................................ 9
Table 5. Indexes/factors of institutions in GCR and WCY .....................................11
Table 6. Three pillars of institutions .........................................................................13
Table 7. Institutions suggested by Scott (2008) and other literatures ....................62
Table 8. The roles of institutions suggested by the literatures..................................64
Table 9. Comparison of the roles of institutions in Singapore and Finland .............66
Chapter 1: Introduction to the research problem

1.1. Research title

Role of institutions in nations that have improved their competitiveness

1.2. Research problem

Since economists in trade theory started to study the wealth of nations, scholars have studied the determinants of economic growth and competitiveness of nations. However, the concept and indicators of national competitiveness, such as macroeconomic performance (Cellini & Soci 2012; Cho & Moon 2005) and regional competitiveness (Bristow, 2005) were criticised. To make up for these incomplete concepts and indicators of competitiveness, institutions emerged as important determinants of economic growth (Helpman 2004; Kamath, Agrawal, & Chase 2012; Maksell 1995).

Role of institutions in economic performance was implicitly mentioned not only in the work by Porter (1990, 1998), who studied competitiveness of nations, but also in some works of institutional theory in sociology (Berger & Luckmann 1966; Meyer & Rowan 1977). Some scholars in each field explicitly considered the role of institutions for economic growth in the framework of political and economic institutions, or formal and informal institutions (Acemoglu, Johnson, & Robinson 2001; Acemoglu & Robinson 2010; Easterly & Levine 2003; North 1994, 2006). On one hand, the role of formal institutions was focused in explaining the cause of economic performance (Acemoglu et al. 2001; Acemoglu & Robinson 2010; Glaeser, La Porta, Lopez-de-Silanes, & Shleifer 2004); on the other hand, the role of informal institutions was emphasised (Chang & Evans 2005; Dasgupta & Serageldin 2001; Hill 1995; Huang 2007; Knack & Keefer 1997; Tabellini 2008).

However, some criticism has been raised by institutional economists on these streams of work. Firstly, most theorisations were based on the history of the West, especially previous colonised regions, which cannot be applied to developing countries or newly industrialised countries (Acemoglu et al. 2001; North 1994, 2006). Secondly, quantified measurements of institutions were used in the empirical studies that quantitatively analysed the theories (Glaeser et al. 2004; Kaufmann, Kraay & Mastruzzi 2004; Tabellini 2008; Williamson 2009). However, quantifying institutions was criticised (Dasgupta & Serageldin, 2001); there is doubt about whether institutions can be quantifiable like tangible capital. Thirdly, each side asserted the role of informal or
formal institutions, but there is a “missing link” in explaining each model, because the studies paid less attention to how individuals behave under the institutions that institutional theory in sociology focuses on and to the relationship between formal and informal institutions.

To explain the role of institutions in countries that have improved their competitiveness, an integrated model and different approach, which could overcome the problems suggested above, are needed. Firstly, nations that have improved their competitiveness under the process of institutional change in a short period should be investigated and compared with those studies based on the history of countries that have developed in their post-colonial era. Secondly, nations that have improved their competitiveness should be studied under the framework of institutional theory in sociology as well as institutional economics to make up for the missing link: how informal and formal institutions have evolved and interacted.

1.3. Research aim

The aim of the study is to build on the institutional theory by exploring the role and interaction of institutions in nations that have improved their national competitiveness.
Chapter 2: Literature review

2.1. National competitiveness

2.1.1. National competitiveness in the literatures

Michael Porter (1990) theorised the concept of national competitiveness in his work of *The Competitive Advantage of Nations*. He argued that “the only meaningful concept of competitiveness at the national level is national productivity” (p.6). Porter tried to explain the determinants of productivity in the cluster level, and suggested factor conditions, demand conditions, related and supporting industries, and firm strategy, structure, and rivalry as determinants of success of industry, adding two variables: change and government influencing all the elements in the framework. However, Bristow (2005) criticised that Porter “falls short of asserting that regional competitiveness and regional prosperity are equivalent notions” (p.288).

Cellini and Soci (2002) criticised the concepts of national competitiveness used in previous studies as “the missing fit between a unique clear concept of competitiveness and macro-performance” (p.75). They criticised some suggested indicators of national competitiveness, such as prices, profitability (labour-cost per unit) and trade performance, because “they perform as a partial and controversial indicator” (p.79). As for the indicator of trade performance in particular, “the main conceptual shortcoming of the export-share approach lies in it being exclusively supply-oriented …. On the contrary, export-growth can equally well [sic] be demand-determined” (Cellini and Soci, 2002, p.82). Cho and Moon (2005) also criticised other economists’ view of seeing “national competitiveness as a macroeconomic or financial phenomenon” (p.4).

Dimian and Danciu (2011) stated that “the perspective [sic] on the determinants of competitiveness has changed gradually, from the importance attributed to the classical production factors to so-called ‘soft’ factors” (p.73), such as expenditure on research and development, innovation, education level, expenditure on investment in human capital and, and effective dissemination of knowledge. Helpman (2004) found out that “investment in research explains the substantial part of different levels of variation [total factor productivity]” (p.111) and argued the importance of institutions in economic development because “without the protection of property rights, capital formation, land development, investment in R&D cannot take place” (p.112). Although Helpman’s view on the role of institutions was focused on the context of economic development, he raised the importance of institutions in explaining the performance of nations. Maskell (1995) studying regional competitiveness, introduced the concept of institutional
The institutional endowment of a region or a country should be defined broadly and include all institutions related to the factors of production: capital, labour, infrastructure, knowledge efficiency of the market for goods and services, quality of the demand and the bargaining power of customers, governmental forms, the public sector, the political decision-making and implementation process, entrepreneurship and the rules, practices, routines, conventions, culture, moral beliefs, religion and other basic values characterising the region or the country. (p.9)

Similarly, Kamath et al. (2012) suggested other key factors that determine cluster development and regional success based on Porter’s Diamond model and the researches on other determinants of national and regional competitiveness. By their empirical study, the authors stressed the critical influence of the business and socio-political climate, and favourable government policy for cluster formation. As for indicators for these three factors, they used various definitions based on literature review. Table 1 shows the used definitions for each variable.
Table 1.
Variables for business climate, socio-political climate and government policy

<table>
<thead>
<tr>
<th>Variables</th>
<th>Definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business climate</td>
<td>local support of entrepreneurship and enterprise; a historical record of being business-friendly; existence of a climate for risk taking; existence of a climate for business innovation; a local “results-oriented” business culture; business and government collaboration; enforcement of private property laws; and a low risk of nationalization</td>
</tr>
<tr>
<td>Socio-political climate</td>
<td>political stability; the use of a widely-used common language (English); low crime rates; low levels of corruption; low labour unrest; and the quality of life in the country</td>
</tr>
<tr>
<td>Government policy</td>
<td>presence of open trade and investment policies; the presence of favourable tax laws and tax incentives; the presence of financial incentives; the presence of facilitative incorporation and bankruptcy laws; the presence of R&amp;D policies and incentives; the absence of foreign exchange and capital restrictions; the existence of laws for the protection of private and intellectual property; the existence of fiscal, trade, and investment incentives; and the educational background of public policy makers</td>
</tr>
</tbody>
</table>


Although their finding was from the empirical study of the science and technology parks, his finding was supported by “institutional economics, economics of geography, and economic development in the larger economic growth context” (p.209).

In conclusion, the concept and definition of national competitiveness has varied and become more sophisticated as the subject has evolved. Soft factors which can be called “institutions” are gaining importance as significant determinants/indicators of national competitiveness other than quantitative factors.
2.1.2. National competitiveness in the reports

There are non-profit organisations that deal with national competitiveness and have published reports on each nation’s competitiveness. The World Economic Forum (WEF) has published reports on competitiveness, with the most recently (2011) released *Global Competitiveness Report* (GCR) defining competitiveness as:

the set of institutions, policies, and factors that determine the level of productivity of a country. The level of productivity, in turn, sets the sustainable level of prosperity that can be earned by an economy. In other words, more competitive economies tend to be able to produce higher levels of income for their citizens. The productivity level also determines the rates of return obtained by investments (physical, human, and technological) in an economy. Because the rates of return are the fundamental drivers of the growth rates of the economy, a more competitive economy is one that is likely to grow faster in the medium to long run. (p.4)

GCR suggested twelve pillars as an index of competitiveness and stressed the importance of interdependence among pillars. The suggested twelve pillars and their criteria are summarised in Table 2.
Table 2.
Structure of the global competitiveness index in GCR

| Basic Requirements          | 1st pillar: Institutions |
|                            | A. Public institutions   |
|                            | B. Private institutions  |
| 2nd pillar: Infrastructure  | A. Transportation infrastructure |
|                            | B. Energy and telephone infrastructure |
| 3rd pillar: Macroeconomic environment | |
| 4th pillar: Health and primary education | |

| Efficiency enhancers        | 5th pillar: Higher education and training |
|                            | A. Quantity of education |
|                            | B. Quality of education |
|                            | C. On-the-job training |
| 6th pillar: Goods market efficiency | A. Competition  |
|                            | B. Quality of demand conditions |
| 7th pillar: Labor market efficiency | A. Flexibility  |
|                            | B. Efficient use of talent |
| 8th pillar: Financial market development | A. Efficiency  |
|                            | B. Trustworthiness and confidence |
| 9th pillar: Technological readiness | A. Technological adoption |
|                            | B. ICT use |
| 10th pillar: Market size    | A. Domestic market size |
|                            | B. Foreign market size |

| Innovation and sophistication factors | 11th pillar: Business sophistication |
| 12th pillar: Innovation |


Based on the economic theory of stages of development, GCR assumed three stages of development: factor-driven, efficiency-driven and innovation-driven. According to the report, factor-driven countries “compete based on their factor endowments: primarily unskilled labour and natural resources” (p.9); efficiency-driven countries “begin to develop more efficient production processes and increase product quality” (p.9), and
finally; innovation-driven countries “compete by producing new and different goods” (p.9). GCR also assumed that the critical factors for competitiveness differ according to the particular stage: factor-driven stage - pillar 1~3, efficiency-driven stage - pillar 4~10, innovation-driven stage - pillar 11~12. These twelve set up the three sub-indexes: basic requirements (pillar 1~3), efficiency enhancers (pillars 4~10) and innovation factors (pillars 11~12). Based on this reasoning, the weights are distributed differently in calculating scores as shown in Table 3.

Table 3.
Weights of the three main sub-indices at each stage of development

<table>
<thead>
<tr>
<th>Sub-index</th>
<th>Factor-driven stage (%)</th>
<th>Efficiency-driven stage (%)</th>
<th>Innovation-driven stage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic requirements</td>
<td>60</td>
<td>40</td>
<td>20</td>
</tr>
<tr>
<td>Efficiency enhancers</td>
<td>35</td>
<td>55</td>
<td>50</td>
</tr>
<tr>
<td>Innovation and sophistication factors</td>
<td>5</td>
<td>10</td>
<td>30</td>
</tr>
</tbody>
</table>

Adapted from “Global competitiveness report 2010-2011,” By Klaus, S., and Xavier, S., 2011, World Economic Forum, p.49

“Two criteria were used to allocate countries into stages of development’’ (p.10): GDP per capita at market exchange rates and the share of exports of mineral goods in total exports.

Institute for Management Development (IMD), an independent non-profit institution, has developed an alternative approach to measuring competitiveness which is published under the name of The World Competitiveness Yearbook (WCY). The WCY presented four competitiveness factors: economic performance, government efficiency, business efficiency and infrastructure. Each of these four factors had five sub-factors, as shown in Table 4.
Table 4.
The breakdown of WCY competitiveness factors

<table>
<thead>
<tr>
<th>I. Economic Performance</th>
<th>II. Government Efficiency</th>
<th>III. Business Efficiency</th>
<th>IV. Infrastructure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic Economy</td>
<td></td>
<td>Public Finance</td>
<td>Productivity</td>
</tr>
<tr>
<td>(Size / Growth / Wealth</td>
<td></td>
<td></td>
<td>Basic Infrastructure</td>
</tr>
<tr>
<td>/ Forecasts)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>International Trade</td>
<td>Fiscal Policy</td>
<td>Labor Market</td>
<td>Technological</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Costs / Relations /</td>
<td>Infrastructure</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Availability of Skills)</td>
<td></td>
</tr>
<tr>
<td>International Investment</td>
<td>Institutional Framework</td>
<td>Finance</td>
<td>Scientific</td>
</tr>
<tr>
<td>(Investment, Finance)</td>
<td>(Central Bank / State</td>
<td>(Bank Efficiency /</td>
<td>Infrastructure</td>
</tr>
<tr>
<td></td>
<td>Efficiency)</td>
<td>Stock Market /</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Efficiency / Finance</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Management</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Practices</td>
<td></td>
</tr>
<tr>
<td>Employment</td>
<td>Business Legislation</td>
<td>Health and Environment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Openness / Competition</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>and Regulations / Labor</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Regulations)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prices</td>
<td>Societal Framework</td>
<td>Attitudes and Values</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Education</td>
<td></td>
</tr>
</tbody>
</table>

Adapted from “IMD world competitiveness yearbook 2012,” By Garelli, S., 2012, Lausanne: International Institute for Management Development., p.39

Each sub-factor has the same weight in calculating scores. Three-hundred and twenty-nine (329) competitiveness criteria were selected and WCY used quantifiable and qualitative data. As for statistical indicators, 214 criteria were acquired from international, national and regional organisations, private institutions and its network. An additional 115 criteria were drawn from Executive Opinion Survey. The number of respondents for WCY 2012 was 4 210.

In GCR, institutions are categorised as a first pillar, with the report arguing that “The quality of institutions has a strong bearing on competitiveness and growth” (p.4) based
on four studies on the relationship between economic growth and institutions (Acemoglu et al. 2001, 2002; Easterly & Levine 2003; Rodrik et al. 2002, and Sala-i-Martin & Subramanian 2003). The report stated legal, administrative, and the private environments as the determinants of institutions and listed criteria for institutions: property rights, ethics and corruption, undue influence, government inefficiency, security, core ethics, accountability. As for the role of sound institutions, the report stressed that “It [institution] influences investment decisions and the organization of production, and plays a key role in the ways in which societies distribute the benefits and bear the costs of development strategies and policies” (p.4). In WCY, there is a factor called institutional framework, however, other institutions are included under some factors as well. Based on the framework of GCR, institutional indices/factors in GCR and WCY are compared in Table 5.
Table 5.
Indexes/factors of institutions in GCR and WCY

<table>
<thead>
<tr>
<th>Public</th>
<th>Government</th>
<th>Legislation</th>
<th>Firm</th>
<th>Civil</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adaptability of government policy, Government decisions, Transparency, Bureaucracy, Bribing and corruption, Social cohesion</td>
<td>Legal and regulatory framework, Protectionism, Personal security and private property rights</td>
<td>Adaptability of companies, Ethical practices, Credibility of managers, Auditing and accounting practices, Customer satisfaction, Entrepreneurship, Social responsibility, Health, safety &amp; environmental concerns, Corporate values</td>
<td>Justice, Attitudes toward globalization, National culture, Flexibility and adaptability, Value system</td>
<td></td>
</tr>
</tbody>
</table>
2.2. Institutional theory

2.2.1. Institutions

According to Scott (1987), institutional environments are “characterized by the elaboration of rules and requirements to which individual organizations must conform if they are to receive support and legitimacy” (p.498). Recently, Scott (2008) discussed the role of institutions not only as “imposing restrictions by defining legal, moral, and cultural boundaries, setting off legitimate from illegitimate activities” but also as “supporting and empowering activities and actors” (p.50). His view on the role of institutions seems to have changed from restriction to enabling. Meyer and Rowan (1977) identified institutions as “formal structures … of modern organizations (that) are enforced [emphasis added] by powerful institutionalized rules such as public opinion, by the views of important constituents, by knowledge legitimated through the educational system, by social prestige, by the laws, and by the definitions of negligence and prudence used by the courts” (p.343). North (2006) defined the role of institutions as “reducing uncertainty,” “allowing us to get on with everyday business and solve problems effectively” and “incentive systems” (p.1).

As for another phrase, Scott and Meyer (1994) defined institutionalisation as “the process by which a given set of units and a pattern [emphasis added] of activities come to be normatively and cognitively held in place and practically taken for granted as lawful (whether as matter of formal law, custom, or knowledge)” (p.10). Berger and Luckmann (1966) stated that “Institutionalization occurs whenever there is a reciprocal typification [emphasis added] of habitualized actions by types of actors” (p. 72).

Concerning the consequence of institutionalisation, Selznick (1984) stated that “When value-infusion [institutionalisation] takes place, however, there is a resistance to change” (p. 18-19). DiMaggio and Powell (1983) identified the three mechanisms of institutionalisation: coercive, mimetic and normative. As sources of coercive institutionalisation, they listed “government mandate, common legal environment, legal and technical environment”; as for mimetic – “uncertainty” as a force encouraging imitation; and as for normative – “professionalization” (p.152). They stressed the major effects by state and the professions in the process of institutionalisation.

North (2006) classified the elements of institutions: “institutions are made up of formal rules, informal constraints and their enforcement characteristics” (p.2). With regards to formal rules, he suggested “laws, constitutions, regulations, whatever, that have the character of being specific and being defined precisely” (p.2). As for informal constraints, he stated that “cultural heritage and the belief systems produce results with
respect to the way in which problems are approached in the world” (p.4). Furthermore, he suggested that “Institutional framework consists of the political structure, the property rights structure, social structure – norm and conventions” (p.49). To put it another way, he tried to classify institutions into political, economic and social institutions.

Scott (2008) identified the elements of institutions in other ways: “institutions are comprised of regulative, normative and cultural-cognitive elements that, together with associated activities and resources, provide stability and meaning to social life” (p.48). The suggested three pillars are summarised in Table 6. More details will be discussed in the following sections.

**Table 6. Three pillars of institutions**

<table>
<thead>
<tr>
<th></th>
<th>Regulative</th>
<th>Normative</th>
<th>Cultural-cognitive</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Basis of compliance</strong></td>
<td>Expedience</td>
<td>Social obligation</td>
<td>Taken-for-grantedness</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Shared understanding</td>
</tr>
<tr>
<td><strong>Basis of order</strong></td>
<td>Regulative rules</td>
<td>Binding</td>
<td>Constitutive schema</td>
</tr>
<tr>
<td></td>
<td></td>
<td>expectations</td>
<td></td>
</tr>
<tr>
<td><strong>Mechanisms</strong></td>
<td>Coercive</td>
<td>Normative</td>
<td>Mimetic</td>
</tr>
<tr>
<td><strong>Logic</strong></td>
<td>Instrumentality</td>
<td>Appropriateness</td>
<td>Orthodoxy</td>
</tr>
<tr>
<td><strong>Indicators</strong></td>
<td>Rules</td>
<td>Certification</td>
<td>Common beliefs</td>
</tr>
<tr>
<td></td>
<td>Laws</td>
<td>Accreditation</td>
<td>Shared logics of action</td>
</tr>
<tr>
<td></td>
<td>Sanctions</td>
<td></td>
<td>Isomorphism</td>
</tr>
<tr>
<td><strong>Affect</strong></td>
<td>Fear</td>
<td>Shame/Honor</td>
<td>Certainty/Confusion</td>
</tr>
<tr>
<td></td>
<td>Guilt/Innocence</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Basis of legitimacy</strong></td>
<td>Legally sanctioned</td>
<td>Morally governed</td>
<td>Comprehensible</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Recognizable</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Culturally supported</td>
</tr>
</tbody>
</table>


**2.2.2. Regulative institutions**

“Regulatory processes involve the capacity to establish rules, inspect others’ conformity to them, and, as necessary, manipulate sanctions – rewards or punishments – in an
attempt to influence future behavior” (Scott, 2008, p.52). Regarding agency theory, Scott (2008) discussed that “It is necessary to vest the enforcement machinery in a ‘third party’ expected to behave in a neutral fashion. Economic historians view this as an important function of the state [emphasis added]” (p.52)

2.2.3. Normative institutions

“Normative systems include both values and norms. Values are conceptions of the preferred or the desirable …. Norms [emphasis added] specify how things should be done; they define legitimate means to pursue valued ends” (Scott, 2008, p.54). In the early work by Hughes (1936), he specified permanence as the feature of social institutions and argued that “persons do succeed one another in offices, and that other people continue to behave with reference to these succeeding persons in certain ways which are established as social expectations” (p. 181).

Selznick (1984), another sociologist who paid attention to value, explained the concept of institution in the relationship with organization. He assumed the characteristic of individuals in the organisations as searching for security and fulfillment, struggling for place and preferment, trying to use his position to satisfy his psychological needs, and assumed the characteristic of formal design of organisation as rational, expandable, machinery and technical. He discussed that “the prizing of social machinery beyond its technical role is largely a reflection of the unique way in which it fulfills personal or group needs” and concluded that “In what is perhaps its most significant meaning, ‘to institutionalize’ is to infuse with value [emphasis added] beyond the technical requirements of the task at hand” (p.17). According to his analysis, institutionalisation, i.e. infusing with value, performs as “symbolizing the community’s aspiration, its sense of identity”, “providing the individual with an ordered approach to his day-to-day problems”, and “integrity”.

Scott (2008) discussed that “Sociologists are more likely to examine those types of institutions, such as kinship groups, social classes, religious systems, and voluntary associations, where common beliefs and values are more likely to exist and constitute an important basis for order” (p.55). With regards to the major sources of normative institutionalisation, DiMaggio and Powell (1983) supposed that “One is the resting of formal education and of legitimation in a cognitive base produced by university specialists; the second is the growth and elaboration of a professional network” (p. 152).
2.2.4. Cultural-cognitive institutions

“Cultural-cognitive elements of institutions: shared conceptions that constitute the nature of social reality and the frames through which meaning is made …. Symbols – words, signs, and gestures – shape the meanings we attribute to objects and activities” (Scott, 2008, p.57). Regarding the examples of the symbols, he mentioned “flags, national anthems, and prevailing ideologies regarding preferred political or economic systems” (p.58).

Berger and Luckmann (1966) argued that “social structure is the sum total of the typifications and of the recurrent patterns of interaction established by means of them” (p. 48) and “Language … is the most important system of human society” (p. 51). They suggested that the institution “is taken for granted by myself and by others until further notice, that is, until a problem arises that cannot be solved in terms of it” (p.58). That is, he contended the “taken for granted” characteristic of institutions and notified the resistance to change and the possibility of change as well. He also elaborated cultural type of institutions that “It is the sum total of ‘what everybody knows’ about the social world, an assemblage of maxims, morals, proverbial nuggets of wisdom, values and beliefs, myths, and so forth” (p.83).

Zucker (1977) in her experiment about the consequences of institutionalisation concluded that “Transmission is defined as the process by which cultural understanding is communicated to a succession of actors …. Depending on the degree of institutionalization of acts, transmission of them will vary” (p.729) and “Cultural persistence which should vary with the degree of institutionalisation is resistance to change” (p.730). Scott and Meyer (1994) defined institutions as “cultural rules giving collective meaning and value to particular entities and activities, integrating then into the larger scheme” (p.10). So they suggested that “It is fruitful to see social structures … as ideological edifices of institutional elements that derive their authority from more universal rules and conceptions” (p.24). That is, for example, rationalisation and religion.

Based on connectionist models and selection model, North (2006) focused on shared belief, i.e. cultural heritage, in explaining how humans perceive the human landscape, how they learn, and what they learn. He stated that “The process of human learning can be described as a cognitive process” (p. 25) and that “The process of learning is unique to each individual but a common institutional/educational structure will result in
shared beliefs and perceptions” (p. 27). He elaborated on the notion of shared belief that “Culture consists of the intergenerational transfer of norms, values, and ideas. But the role of culture we are concerned with here is...as a process that permits the learning of prior generations to have more direct effect on the learning of subsequent generations” (p.49). Contrasting rational theory, he argued that “It is essential to remember that the constructs humans create are a blend of ‘rational’ beliefs and ‘non rational’ ones (superstitions, religions, myths, prejudices) that together shape the choices that are made” (p.79).

2.2.5. Institutional change

“Scholars increasingly attend not only to how institutions arise and are maintained, but how they undergo change” (Scott, 2008, p.50). North (2006) discussed economic change in the framework of institutional change. “Economic change is a result of changes (1) in the quantity and quality of human beings; (2) in the stock of human knowledge particularly as applied to the human command over nature; and (3) in the institutional framework that deliberate incentive structure of a society” (North, 2006, p.1). He elaborated that “Change was overwhelmingly an incremental process, building onto and modifying the pre-existing institutional framework and constrained by the structure that prevailed” (North, 2006, p. 139-140).

“Recently, several authors have attempted to resolve the theoretical paradox of embedded agency by integrating either political insight from the ‘old institutionalism’ or notions of structural dualism from structuration theory [emphasis added]” (Seo and Creed, 2002, p. 223). As for structuration theory, Barley and Tolbert (1997) defined the institutions that “represent constraints on the options that individuals and collectives are likely to exercise, albeit constraints that are open to modification [emphasis added] over time” (p.2). That is, they contended that “through choice and action, individuals and organisations can deliberately modify, and even eliminate, institutions” (p.2). They used the concept of scripts as a carrier of institutions, that is, “institutions as being enacted through ‘scripts’ ” (p.6). Criticising previous structuration theory, they argued that “the degree to which institutions vary in their normative power and their effect on behaviour was not emphasised” (p.4). Regarding the conditions for institutional change, they presented that “This [widespread change] is most likely to occur when common conditions affect many actors more or less simultaneously in much the same way (as occurs with a shift in an infrastructural technology) and when the social networks among actors are relatively dense” (p.19). Acemoglu and Robinson (2010) also stated
that “It [a critical juncture] can open the way for breaking the cycle of extractive institutions and enable more inclusive ones to emerge. Or it can intensify the emergence of extractive institutions” (p.101).

Explaining the structuration process, Scott (2008) summarised various top-down and bottom-up processes:

Various top-down processes - constitutive activities, diffusion, translation, socialization, imposition, authorization, inducement, and imprinting (see Scott 1987) - allow higher level (more encompassing) structures to shape, both constrain and empower, the structure and actors. Simultaneously, counter processes are at work by which lower level actors and structures shape, reproduce and change the contexts within which they operate. These bottom-up processes include, variously: selective attention, interpretation and sense-making, identity construction, error, invention, conformity and reproduction of patterns, compromise, avoidance, defiance, and manipulation (see Oliver 1991). (p.191)

Seo and Creed (2002) suggested a more sophisticated model for the institutional change. They argued that “institutional change is understood as an outcome of the dynamic interactions between institutional contradictions and human praxis” (p.222), that is, “institutional formation and change are the outcomes of political struggle among multiple social constituencies with unequal power” (p.223). He used Benson's (1977) model, four basic principles guiding dialectical analysis, to establish his model of institutional change. The definition of contradiction and praxis in the model is that “contradiction refers to these various ruptures and inconsistencies both among and within the established social arrangements [institutions] …. Praxis is the free and creative reconstruction of social patterns on the basis of a reasoned analysis of both the limits and the potentials of present social forms” (p.225). They proposed four sources of contradictions that can arise over the long term as by-products of the processes of institutionalisation: (1) legitimacy that undermines functional inefficiency, (2) adaptation that undermines adaptability, (3) intra-institutional conformity that creates interinstitutional incompatibilities, and (4) isomorphism that conflicts with divergent interests.

Concerning the concept of interinstitutional incompatibilities, Scott and Meyer (1994) introduced similar concept: the sources of the fragmented rationalized environment.

First, nation-state competition has generated some collective security structures (the League of Nations and later the United Nations) that provided an
organisational (and to some extent cultural) framework on which further rationalizing ventures could be promulgated by all sorts of interest. Second, with the expansion and intensification of the nation-state in world competition over recent centuries, states have increasingly built themselves as elaborate, rationalized actors. As the state has become more “real”, it has also become more of an elaborated and rationalized ideology. Third, denser systems of communication and interaction [emphasis added] in many domains (e.g. economic, scientific, and cultural) made it increasingly easy to organize on a world scale. Fourth, increasing codification of nations-states around general principles produced increasing competition around such principles. (p.50)

In the process of institutional changes, Seo and Creed (2002) specified that the role of the institutional entrepreneur is “to embed their change initiatives within frames or models available in the broader society” (p.236-237). This concept of institutional entrepreneurs also was presented in the work by Hughes (1936) that the “entrepreneur is one who undertakes to coordinate the activities of others; he makes decisions and meets contingencies” (p. 183). North (2006) also considered entrepreneurs as “those of political and economic entrepreneurs in a position to make policies” (p.2) and stated that “The overall direction of economic change will reflect the aggregate of choices made by political and economic entrepreneurs with widely diverse objectives” (p.79).

2.2.6. Actors / agents

“Organizations do often adapt to their institutional contexts, but they often play active roles in shaping those contexts” (Meyer and Rowan, 1977, p.348). Explaining the structuration theory, Scott (2008) stated “actors as creating and following rules and utilizing resources as they engage in the ongoing productions and reproduction of social structures” (p.77). He also explained that agents “participate in the construction of new institutional forms, but also exercise many kinds of influence on existing forms and processes” (p. 97). Regarding the types of the agents, he presented nation-state, professions, associations, INGO (international non-governmental organisations) and other elites such as corporate elites, social movements and rank-and-file participants, i.e., bottom-up participants. Especially, as for the types of professionals in regulatory frameworks, he listed “legal experts, military officers, and managers” (p.100).

With regards to the role of state as an actor, Scott and Meyer (1994) proposed that “The importance of the state … increased rapidly in recent decades with the expansion
of the state and its penetration of more and more aspects of social life” (p.39). In addition, as for professions, they stated that “The testimony of the sciences, represented by professional consultants of all stripes, is a powerful sort of rationalization and impulse to organizing” (p. 39).

2.3. Role of institutions as a determinant of national competitiveness

2.3.1. In the context of national competitiveness

As discussed above, in the work of The Competitive Advantage of Nations, Porter (1990) suggested the importance of proper “country circumstances” and “national attributes” for the success of nations.

Nations succeed where country circumstances support the pursuit of the proper strategy for a particular industry or segment …. Many national attributes affect the ease or difficulty of pursuing a particular strategy, form the norms of behaviour that shape the way firms are managed to the availability of certain types of skilled personnel, the nature of home demand, and the goals of local investors … Nations succeed where local circumstances provide an impetus for firms to pursue such strategies early and aggressively … Nations succeed in industries where pressures are created that overcome inertia and promote ongoing improvement and innovation instead of an easy life ... Nations succeed in industries where domestic firms are pushed (or encouraged) to compete globally. (Porter, 1990, p.68-69)

The suggested features of national circumstances, i.e. “supporting”, “affecting”, “providing”, and “encouraging”, seem to be related not only with direct strategies of corporations or policies but also with prevalent informal institutions which are prevalent among constituents of nations. Suggested “norms of behaviour” can be a clue for this reasoning.

He suggested a variable, the government, in explaining the determinants of productivity in the industry level. In discussing the role of government, he paid attention to government’s role of constructing the normative institutions to improve the competitiveness of nations.

At the broadest level, one of government’s most essential roles is signaling [emphasis added]. It can influence how firms compete by identifying and
highlighting the important priorities and challenges they face. Government leaders have a stage from which they can define issues of national importance and shape attitudes [emphasis added] toward particular problems in industry. A good example is the campaign of the Japanese government to elevate national attention to quality and overcome the stigma of ‘cheap’ Japanese goods. One of the most visible elements of the program was establishment of Deming Prize. This prize carries enormous prestige and sends a strong signal to all Japanese firms about the requirements for competitive success.

Some nations enjoy a built-in national consensus about the importance of economic success. This tends to occur in nations that have faced difficulties or feel vulnerable, such as Germany, Japan, and Korea. Government leaders have a role to play in creating or elevating the national priority placed on competition. (Porter, 1990, p.681)

He proposed that the government can change informal institutions, beliefs, among the constituents of nations as well as implement formal institutions. Government’s role is not only related with improving productivity in supply side, but also supporting the behaviour of demand side.

In Porter’s (1998) other work of The Adam Smith Address: Location, Clusters, and the “New” Microeconomics of Competition, he directly mentioned institutions in explaining the consequence of government’s policy that “These [social and economic policy] are positive and constructive roles for virtually all of a nation’s institutions in competitiveness, whether they are schools, consumer societies, or the judicial systems” (p.11). Under the framework of institutional theory, social and economic policies are formal institutions and schools and consumer societies are organisations. Policies, i.e. formal institutions, play important roles in supporting government’s setting behaviours and constructing the norms of organisations.

Lee (2010) pointed out that “the literature on the role of institutions in economic growth and development is well-established. In contrast, the relationship between institutional quality and competitiveness, while important, received much less attention until recently” (p. 671). However, there is worth looking at the works studying the role of institutions in the economic perspective, because they infer the role of institutions in national competitiveness.
2.3.2. Institutions as shared belief systems

In institutional economics, North (2006), as discussed above, believed that institutions symbolise shared belief, i.e. cultural heritage. He contended that “Dominant belief - those of political and economic entrepreneurs in a position to make policies - over time result in the accretion of an elaborate structure of institutions and determine economic and political performance” (p.2). He introduced the concept of path dependence for discussing the history of economic performance. “Path dependence is not ‘inertia’, rather it is the constraints on the choice set in the present that are derived from historical experiences of the past” (p. 52). In line with the concept of path dependence, another notion, adaptive efficiency, was introduced. “Cultural heritage provides the artifactual structure - beliefs, institutions, tools, instruments, technology …. The richer the artifactual structure, the wider the range of routine decisions that can be made (p.36), therefore, “creating the necessary artifactual structure is an essential goal of economic policy” (p. 70). “[Adaptive efficiency of] institutional structure will play a critical role in the degree to which diverse knowledge will be integrated and available to solve problems as economics become more complex” (p. 73).

He suggested the history of western world as an example to explain the role of shared belief and path dependence in economic growth:

The adaptive efficient institutional structure that has characterized the American economy is a consequence of path dependence (political and economic institutions inherited form British rule), favourable factor endowments, endless favorable events throughout the nineteenth century that reinforced the belief system that supported the formal political institutions, and good luck … The Latin American story starts with Spanish (and Portuguese) colonization of the new world. Without the heritage of colonial self-governed and well-specified property rights, independence disintegrated into a violent struggle among competing groups for control of the polity and economy. There was no shared belief system about the role of government, the state, corporate privileges, and citizenship. The absence of agreement about basic political structure combined with an absence of shared belief systems resulted in an absence of a shared belief systems, resulted in an absence of credible commitment by the new states and in inherent political instability. (North, 2006, p.111-113)

However, his statement could not explain the origin of difference in a shared belief system in North America and Latin America. Furthermore, his assertion could not explain the emergence of competitive nations in short periods, which may not be able
to be understood together with the concept of path dependence.

He also used the concept of transaction cost in explaining the needs of institutions for economic performance and stated the importance of “developing a variety of organizations and institutions that will bridge at low cost, and integrate at low cost the knowledge [sic]” (p.7). He added that the knowledge should be combined with “flexible institutions that provide a maximum of choices at a given moment of time” (p.9). That is, he paid attention to the role of cooperative and flexible institutional framework to achieve economic development.

2.3.3. Institutions as governance systems

Easterly and Levine (2003) studied how geography, institutions, and policy influence economic development. He proposed three hypotheses:

- **Geography/endowment hypothesis**: holds that the environment directly influences the quality of land, and production technologies .... The **Institution view** holds that the environment’s main impact on economic development runs through long-lasting institutions .... This view [Policy view] holds that economic policies and institutions reflect current knowledge and political forces. Thus changes in either knowledge about which policies and institutions are best for development or changes in political incentives will produce rapid change in institutions and economic policies. (Easterly and Levine, 2003, p.5-6)

Concerning the measurements for endowments, he used settler mortality, latitude, crops/minerals, landlocked; for the institutions index - voice and accountability, political stability and absence of violence, government effectiveness, light regulatory burden, rule of law, and freedom from graft; and as for macroeconomic policies - openness to trade, real exchange rate, and inflation. Institutions index was quantifiable and the mixture of formal and informal institutions. As for the explanatory variables, ethnolinguistic diversity, religion, and French legal origin were used. In particular, he stated that “religion shapes national view regarding property rights, competition, and the role of the state” (p.21). The explanatory variables can be categorised as cultural-cognitive institutions. In other words, they tried to include all possible variables for the institutions index. They concluded that “Tropics, germs, and crops [endowments] do not explain economic development beyond their impact on institutions .... Policies [Macroeconomic policies] do not explain cross-country differences in GDP per capita
once controls for the impact of endowments on institutions and on to economic development" (p.35). This finding is consisted with Porter’s (1998) argument: “government role in some areas (e.g. trade barriers, pricing) and an activist role in others (e.g. ensuring vigorous competitions, providing high quality education and training)” (p.11). This study also verified that institutions matter in discussion for an economic development.

However, the suggested institutions index was derived from Kaufmann et al (1999)’s indicators which measured the governance. Kaufmann et al.’s (2004) indicators “constructed six aggregate governance indicators, motivated by a broad definition of governance as the traditions and institutions by which authority in a country is exercised” (p.2). There is a criticism on quantifying informal institutions for the study of relationship between institution and economic performance. “There is certainly more inference, and riskier inference, involved in measuring these quantities than in the parallel case of tangible capital” (Dasgupta and Serageldin, 2001, p.7).

2.3.4. Institutions as guarding the property rights

North (1994) stressed that “an essential part of development policy is the creation of policies [sic] that will create and enforce efficient property rights” (p.366). Acemoglu et al. (2001) studied why among the areas colonized by European powers during the past 500 years, those that were relatively rich in 1500 are now relatively poor: institutional reversal. They hypothesised that “a cluster of institutions ensuring secure [sic] property rights for a broad cross section of society, which we refer to as institutions of private property, are essential for investment incentives and successful economic performance” (p.1235) and concluded that “European colonialism led to an institutional reversal” (p.1262). That is,

In prosperous and densely settled areas, Europeans introduced or maintained already-existing extractive institutions to force the local population to work in mines and plantations, and took over existing tax and tribute systems. In contrast, in previously sparsely settled areas, Europeans settled in large numbers and created institutions of private property, providing secure property rights to a broad cross section of the society and encouraging commerce and industry. (p.1279)

In recent work by Acemoglu and Robinson (2010), political and economic institutions were concentrated as the determinants of economic performance. They denied the
culture hypotheses in explaining economic performance:

Those aspects of culture often emphasized - religion, national ethics, African or Latin values - are just not important for understanding how we got here and why the inequalities in the world persist. Other aspects, such as the extent to which people trust each other or are able to cooperate, are important but they are mostly an outcome of institutions, not an independent cause. (Acemoglu and Robinson, 2010, p. 57)

That is, they disagreed with the major role of normative and cultural-cognitive institutions as determinants in explaining economic growth. The reasoning was as follows: comparing the different conditions of North and South Korea, they argued that “It had an unprecedented homogeneity in terms of language, ethnicity, and culture. To the north is a different regime, imposing different institutions, creating different incentives” (p.58). As for Weber’s Protestant ethic, they contended that “None of the economic success of East Asia has anything to do with any form of Christian religion, so there is not much support for a special relationship between Protestantism and economic success there, either” (p. 60). In addition, “Current Chinese growth has nothing to do with Chinese values or changes in Chinese culture; it results from a process of economic transformation” (p.63). Their assertion is contradictory with the argument by Dasgupta and Serageldin (2001) that “It is often opined that the rapidly growing East Asian economies … exemplify the value of some specifically Asian virtues of character and social organization: diligence, teamwork, compromise, and so on” (p.9). Acemoglu and Robinson (2010) also denied the ignorance hypothesis by introducing the example of Ghana’s prime minister, Kofi Busia, that “main obstacles to the adoption of policies that would reduce market failure and encourage economic growth is not the ignorance of politics but the incentives and constraints they face from the political and economic institutions in their societies” (p.67).

They introduced the concept of inclusive institutions that “foster economic activity, productivity growth, and economic prosperity” (p.75) and explained that “To be inclusive, economic institutions must feature secure private property, an unbiased system of law, and a provision of public services that provide a level playing field in which people can exchange and contract” (p.74-75). On the contrary, they proposed exclusive institutions that “have opposite properties to those they [sic] call inclusive …. are designed to extract incomes and wealth from on subset of society to benefit a different subset” (p.76). They suggested two conditions for inclusive political institutions: pluralistic society and centralised state. In discussing the conditions for institutions, they argued
that “Political institutions that distribute power broadly in society and subject it to constraints are pluralistic” (p.80) and “When either of these conditions fails, we will refer to the institutions as extractive political institutions” (p.81). They proposed a broad coalition as “deciding factors underpinning the emergence of pluralism and inclusive [political] institutions” (p.212).

In explaining the economic success of England, they maintained that inclusive political institutions lead to inclusive institutions, that is, “The Industrial Revolution started and made its biggest strides in England because of her uniquely inclusive economic institutions. These in turn were built on foundations laid by the inclusive political institutions brought about by the Glorious Revolution” (p.208).

By introducing many historic examples, authors well summarised the source of economic success, i.e. inclusive political and economic institutions. According to their theory, broad coalition seems to be most important factors for economic prosperity because it enables inclusive political institutions and inclusive economic institutions. However, they failed to find the source of emergence of broad coalition. It seems that they considered the emergence of broad coalition as random phenomenon.

2.3.5. In the context of institutional theory in sociology

In sociology, some scholars suggested the role of institutions in relation to the competitiveness. DiMaggio and Powell (1983) argued that “Organizations are still becoming more homogeneous, and bureaucracy remains the common organizational form” (p.147) and “The concept that best captures the process of homogenization is isomorphism” (p.149). DiMaggio and Powell’s suggested concept of isomorphism of organisation can be applied to the homogenisation of structure of nations such as leading toward to democracy and bureaucracy, however, their argument didn’t explain which factors determine the competitiveness of nations which are mimetised each other.

Meyer and Rowan (1977) argued the role of institutions for the competitiveness of organisations that “institutional isomorphism promotes the success and survival of organizations increases the commitment [emphasis added] of internal participants and external constituents” (p.349). They also suggested that “internal participants and external constituents alike call for institutionalized rules that promote trust and confidence [emphasis added] in outputs and buffer organizations from failure” (p.354). They understood that “conformity to institutionalized rules often conflicts sharply with
efficiency criteria” (p.340) and, interestingly, suggested that “by binding participants to act in good faith, and to adhere to the larger rationalities of the wider structure, they may maximize long-run effectiveness” (p.360). Berger and Luckmann (1966) maintained that “The backgrounds of habitualized activity opens up a foreground for deliberation and innovation [emphasis added]” (p.71) and, in detail, “The construction of this background of routine in turn makes possible a division of labour between, opening the way for innovations, which demand higher level of attention” (p. 75).

2.4. Role of formal institutions as a determinant of national competitiveness

North (2006) suggested that “It is the polity that defines and enforces the formal economic rules of the game and therefore is the primary source of economic performance” (p.57).

Glaeser et al. (2004) presented two assumptions about relationship between institutions and economic growth: first approach is constraining government to secure rights and a second approach - the need for human and physical capital accumulation to cause institutional improvement, i.e. “it [second approach] holds that even pro-market dictators can secure property rights as a matter of policy choice, not of political constraints” (p. 251-252). He supported the latter assertions. They revisited “three measures of institutions used in the current economic growth literature: risk of expropriation by the government, government effectiveness, and constraints on the executive” and argued that these measures are not proper for institutions index:

They are outcome measures that reflect the government's past restraint from expropriation in the first case, and its quality in the second … Moreover, these are both subjective measures which rise sharply with the level of economic development, raising severe doubts that the causality runs from them to growth rather than the other way around.

The third measure we consider, constraints on the executive, is in principle linked to constraints on government, but in reality is constructed to reflect the outcomes of most recent elections. In developing countries, even this measure is extremely volatile, and cannot be plausibly interpreted as reflecting durable rules, procedures or norms that the term “institution” refers to. (Glaeser et al., 2004, p. 273-274)

Doubting of these measures, they introduced four constitutional rules as measures:
plurality, proportional representation, judicial independence and constitutional review. They concluded that “countries that emerge from poverty accumulate human and physical capital under dictatorships, and then, once they become richer, are increasingly likely to improve their institution” (p.297). Their assertion is meaningful to developing economies and worth reviewing because they pointed out the defects of measures of political institutions used by other scholars. However, it could not explain under what circumstances certain nations, i.e. dictators, implement policy of accumulating human and physical capital. Moreover, their suggested constitutional rules for institutions did not include all measures such as normative and cultural-cognitive institutions.

2.5. Role of informal institutions as a determinant of national competitiveness

In sociology, Selznick (1984) emphasised integrity as the consequence of institutions and related it with competitiveness that “Defence of integrity is also defence of the organization’s distinctive competence” (p.139). Concerning the role of institutions in the economy, North (2006) stated that “Economies that adopt the formal rules of another economy will have very different performance characteristics than the first economy because of different informal norms and enforcement” (p.366). In his recent work, he presented that “There is an immense literature on this project; there is less on the way informal constraints influence economic performance” (p.57) and “Norms of honesty, integrity, reliability influence transaction costs” (p.74).

Tabellini (2008) presented the role of norms as a major determinant for economic performance. Background for the reasoning is that “Within many countries we observe large differences in the functioning of the bureaucracy, despite identical legislation and incentives, and similar resource” (p.256). Regarding the factor motivating individuals, he introduced morality as “Conceptions of what is right or wrong, and of how one ought to behave in specific circumstances” (p.257). He elaborated further about this normative institution:

These normative values evolve slowly over time, as they are largely shaped by values and beliefs inherited from previous generations …. Slow-moving values can explain the puzzling persistence of institutional outcomes, and provide the "missing link" between distant political history and current functioning of government institutions. (Tabellini, 2008, p.257)
As for role of normative institution, he stated that:

Altogether, norms of generalized morality induce well-functioning institutions through at least three channels: law enforcement is easier because citizens are more likely to be law-abiding; bureaucrats are more likely to refrain from corruption; and voters expect and demand higher standards of behaviour from political representatives and are more inclined to vote based on general social welfare rather than personal benefit criteria. (Tabellini, 2008, p.260-261)

This view is different from that of Acemoglu and Robinson (2010) and North (2006) because they regarded citizens as contestable to rulers or governors. He implemented quantitative research by introducing two variables: trust and respect. From the analysis of country data, he concluded that “there remains a strong positive and statistically significant correlation between trust and respect and the level of output per capita” (p.285). His findings showed influence of normative values on formal institutions, but how this process is performed was not elaborated on.

There are case studies focusing on the role of informal institutions in economic growth. Maskell (1996) studied how informal institutions has characterised the political and economic development in a small economy that is Denmark. He argued that “informal institutions might often be fundamental for the long term competitiveness of firms” (p. 3), because “while designed institutions or specific policies can more or less easily be imitated, this is in no way the case with national or regional culture” (p.3). He presented the “egalitarian tradition, consensus-seeking behaviours, and penalising [as] informal institutions, which lower the barriers for interaction, cooperation or exchange and creation of knowledge, increase rapidly in economic importance as we turn towards the knowledge-based economy” (p.12). There are some limitations in the study. Maskell’s unit of analysis mixed ranging from firm and regions to countries and assumed that competitiveness of Denmark was recognised by GDP, employment, and technological innovations, which was not well structured.

Huang (2007) stated that the economic growth in East Asian countries can be characterised by the “growth-at-any-cost mentality”, “decision structure led by some form of economic planning board”, and “command structure.” He argued that these informal institutions were related with “control and reduction of transaction costs” (p.14). Suggested role is related with “enabling” role of institutions. However, informal institutions in East Asian countries were quite different under similar conditions Maskell (1994) assumed as a background for informal institutions. Hill (1995), who studied the role of institution for Japan’s economic success, also presented that “informal
institutions may constitute a more effective and less costly mechanism for governing exchange and facilitating cooperation” (p.121).

Chang and Evans (2005), who studied institutions in economic change of South Korea, presented that “we operate with a mental model of the world (or value system, ideology, worldview)” (p.7) and stressed that “ideology” such as developmentalism, neoliberalism, and elite ideology played important role in economic change together with interests of economic actors. If world view and ideology affect the actors’ preferences and interests in economic change, there is a question why other countries facing with same ideologies or world views reacted differently and achieved differently. Therefore, the concept of “constitutive” role of institutions needs to be investigated further in relation with other institutions, i.e. regulative and normative institutions.

The role of Social capital which is a similar concept with informal institutions was broadly discussed as well. Coleman (1988) defined that “It [social capital] is not a single entity but a variety of different entities, with two elements in common: they all consist of some aspect of social structures, and they facilitate certain actions of actors whether persons or corporate actors within the structure” (p.98) and distinguished between human capital and social capital that “Human capital is created by changes in persons that bring about skills and capabilities that make them able to act in new ways. Social capital, however, comes about through changes in the relations among persons that facilitate actions” (p.100). Therefore, it can be argued that the concept of social capital is in line with informal institutions.

“Such things as trust, the willingness and capacity to cooperate and coordinate, the habit of contributing to a common effort even if no one is watching – all these patterns of behaviour, and others, have payoff in terms of aggregate productivity” (Dasgupta and Serageldin, 2001, p.7). “[Horizontal] associations [informal institutions] and institutions [formal institutions] provide and informal framework for sharing information, coordinating activities and making collective decisions (Dasgupta and Serageldin, 2001, p.47). These explanations about the function of social capital can be clues for explaining the missing link, i.e. the emergence of broad collation which was asserted as determining factors for inclusive political institutions in the work of Acemoglu and Robinson (2010). Knack and Keefer (1997) who also studied whether social capital have an economic pay-off concluded that “trust and civic cooperation have significant impacts on aggregate economic activity” (p.1283) and “Low social polarization, and formal institutional rules that constrain the government from acting arbitrarily, are associated with the development of cooperative norms and trust” (p.1289).
2.6. Interaction between formal and informal institutions

In sociology, Scott (2008) suggested that “The regulative and normative pillars can be mutually reinforcing” (p.53) and “Institutions supported by one pillar may, as time passes and circumstances change, be sustained by different pillars” (p.54). “We also must learn how they [informal institutions] interact with formal rules and influence economic performance” (North, 1994, p.8). Especially, in relation to economic performance, North (2006) stated that “The key to improved performance is some combination of formal rules and informal constraints and the task” (p. 79) and emphasized “institutional matrix [emphasis added] that ... is undergirded by strongly held social norms that imbed these values into the culture of the society” (p. 108).

Dasgupta and Serageldin (2001)’s statement about the interaction between formal and informal institutions elaborated this process:

Complementarity between micro- [informal] and macro [formal] social capital not only influences economic outcomes but has a mutually strengthening [emphasis added] effect ... Macro [formal] institutions can provide and enabling environment for micro institution to develop and flourish. In turn, local association [informal institution] helps sustain regional and national institutions and give them a measure of stability. The key measures of successful interaction between the two levels of institutions are share values and norms and mutual trust. These can be expressed in the recognition and acceptance, at both levels, of a common entity (which could be the state itself) or [sic] a common objective (such as peace or economic progress).

Among the factors that determine whether a positive or negative scenario prevails is the macro scale framework institution to be legitimate, representative, and fair. Formal government and other institutions interact with a dense set of informal networks, associative frameworks, and voluntary associations. (p.50 - 51)

In addition, they emphasized the quality of interaction that “Support for capacity-building and training can improve institutions and promote social capital to make the positive interaction more efficient” (p.51). This support can be provided by actors such as state, professions, elites and etc.

Knack and Keefer (1997), studying the influence of trust and cooperation on formal institutions also suggested that “These results on formal institutions, although perhaps
fraught with multiple directions of causation, constitute important evidence for the interaction of formal and informal institutions" (p.1282). Tabellini (2008) discussing the role of norms presented the example of interaction that “First, current values reflect the quality of distant political institutions …. Conversely, a republican regime reinforces positive values” (p.285).

Williamson (2009) studied the interaction with formal and informal institutions and its influence on economic development. First, he simplified “the combinations of formal and informal institutional arrangements into four distinct categories” (p.372). To measure formal institutions, they used plurality, proportional representation, judicial independence, and constitutional review and for informal institutions - trust, respect, individual self-determination, and obedience. By observation of 45 countries, he concluded as shown in Figure 1.

**Figure 1.**
**Economic performance and institutional mix**

<table>
<thead>
<tr>
<th>Formal</th>
<th>Weak</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strong</td>
<td>(1)</td>
</tr>
<tr>
<td></td>
<td>23,452</td>
</tr>
<tr>
<td></td>
<td>(Canada, New Zealand)</td>
</tr>
<tr>
<td>(2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>28,659</td>
</tr>
<tr>
<td>(Denmark, Finland, Iceland, Netherland, Norway, Sweden)</td>
<td></td>
</tr>
<tr>
<td>Informal</td>
<td></td>
</tr>
<tr>
<td>Strong</td>
<td>(3)</td>
</tr>
<tr>
<td></td>
<td>6,662</td>
</tr>
<tr>
<td>(Pakistan, Phillipines, Uganda, Zimbabwe, Singapore)</td>
<td></td>
</tr>
<tr>
<td>(Without Singapore)</td>
<td></td>
</tr>
<tr>
<td>Weak</td>
<td>(4)</td>
</tr>
<tr>
<td></td>
<td>7,672</td>
</tr>
<tr>
<td>(Columbia, Nigeria, Peru, Portugal, South Africa, Turkey)</td>
<td></td>
</tr>
<tr>
<td>(Without Portugal)</td>
<td></td>
</tr>
</tbody>
</table>

Note: Singapore and Portugal can be considered outliers and, therefore, the averages are calculated with and without them. Adapted from “Informal institutions rule: Institutional arrangements and economic performance,” By Williamson, C. R., 2009, *Public Choice, 139*(3), p.377.

He explained the result that:

Countries that have weak formal institutions and strong informal institutions have the highest GDP per capita … while countries with strong formal and strong
informal rank second ... those countries that score high on the formal index and low on ... are among the poorest ... those countries with both low formal and informal scores ... are mainly middle income countries. (Williamson, 2009, p.375-377)

He concluded that:

The countries that built their formal institutions off of their informal rules are achieving a much higher level of economic development. The countries in which governments have imposed formal institutions without consideration for informal institutions are the poorest.

Another interesting implication from these results is that formal and informal institutions do not necessarily interact in the same way. Specifically, they are not always acting as substitutes or complements to one another. In some instances, they are complementary and at other times they are substitutes. (Williamson, 2009, p.378)

At the end of the work, he claimed the further studies to “develop a more elaborate empirical model that determines causal mechanisms, and study the feedback mechanisms and evolution between these two types of institutions” (p. 284). These themes can be studied in the framework of institutional change. For example, concerning authoritarian, North (2006) stated that “Because this cultural conditioning of a society usually takes place over generations, it is fundamentally difficult to establish stable consensual order in societies that have experienced persistent disorder” (p.108). In such case authoritarian order may well be preferred by members of that society. This explanation can be applied to Quadrant (3). On the contrary, he suggested that “Common belief systems which embodies social norms consistent with the policies of the ruler will reduce the use of coercion” (p.104) and Quadrant (2) can be explained with this case.
Chapter 3: Research questions

The open ended questions that are answered in this research are:

▪ Research question 1

  : What are the characteristics/role of the institutions in nations that have improved their competitiveness?

▪ Research question 2

  : What are the interactions between institutions and other elements of nations that have improved their competitiveness?

▪ Research question 3

  : What are the processes by which institutions are formed?

▪ Research question 4

  : What are the similarities and dissimilarities in the characteristics/roles/interactions of institutions in nations that have improved their competitiveness?
Chapter 4: Research methodology

4.1. Research design

This study aimed at exploring the role of institutions in nations that have improved their competitiveness.

“Qualitative approach can be conceptualised as a focus on words and feelings – the quality of an event or experience” (Meyer, 1999, p.18). In the process of investigating, I focused on all elements of institutions, actors’ behaviour, and the any events and phenomenon occurred in nations. Therefore, the research design was qualitative in nature.

“Exploratory research is about discovering general information about a topic” (Saunders and Lewis, 2012, p.110) and “looks for ideas, patterns, or themes – it is an exploration of phenomenon/event/issue/problem” (Meyer, 1999, p.18, p.22), in this case - exploring the role of institutions in nations that have improved their competitiveness. Some literature suggested how formal and informal institutions play a role in nations, however, interaction between formal and informal institution during institutional change was not studied extensively. Therefore, the study was exploratory. “As well as literature searching, exploratory studies are well suited to qualitative of methods” (Saunders and Lewis, 2012, p.110).

The case study method was used for the research. “Case studies are particularly good at enabling the researcher to get detailed understanding of the content of the research and the activity taking place within that context” (Saunders and Lewis, 2012, p.117). Dasgupta and Serageldin (2001) also suggested the case study method for the analysis of institutions that “The key to determining what constitutes appropriate social capital is data …. We think that the most useful way to advance this notion is to undertake case studies in selected countries where a good bit of information on micro institutions [informal institutions] is already available” (p.54).

4.2. Unit of analysis

Unit of analysis was a nation.

4.3. Universe / scope
4.3.1 Institutions

As shown in Figure 2, Williamson (2000) introduced four levels of analysis regarding institutions. Scope of the analysis for the research comprises of Level 1 and Level 2, that is, informal and formal institutions.

Figure 2.
Economics of institutions

<table>
<thead>
<tr>
<th>Level</th>
<th>Frequency (years)</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>L1</td>
<td>$10^2$ to $10^3$</td>
<td>Often noncalculative; spontaneous (caveat: see discussion in text)</td>
</tr>
<tr>
<td>L2</td>
<td>$10$ to $10^2$</td>
<td>Get the institutional environment right. 1st order economizing</td>
</tr>
<tr>
<td>L3</td>
<td>1 to 10</td>
<td>Get the governance structures right. 2nd order economizing</td>
</tr>
<tr>
<td>L4</td>
<td>continuous</td>
<td>Get the marginal conditions right. 3rd order economizing</td>
</tr>
</tbody>
</table>


He explained each level of institution:

The top level is the social embeddedness level. This is where norms, customs,
mores, traditions, etc. are located. Religion plays a role at this level. Institutions at this level change very slowly - on the order of centuries or millennia .... The second level is referred to as the institutional environment .... we now introduce "formal rules (constitutions, laws, property rights)" (North 1991, p. 97) .... the design instruments at Level 2 include the executive, legislative, judicial, and bureaucratic functions of government as well as the distribution of powers across different levels of government (federalism). The definition and enforcement of property rights and of contract laws are important features .... The third level, which is where the institutions of governance are located ... The governance of contractual relations becomes the focus of analysis.... The fourth level, which is the level at which neoclassical analysis works. (Williamson, 2000, p.596-600)

4.3.2 Actors
Scope of the analysis was all actors suggested by Scott (2008): nation-state, professions, associations, and other elites such as corporate elites, social movements and rank-and-file participants, i.e. bottom-up participants.

4.3.3 Time frame
Scope of the analysis was the period during institutional change after the critical juncture or events in nations.

4.4. Population
The population consisted of all nations that have improved their competitiveness over the last 50 years. National competitiveness ranking was inferred from the Global Competitiveness Report published by the World Economic Forum.

4.5. Sampling
“The best sample design ensures that the sampled data represent the research population efficiently and reliably” (Meyer, 1999, p.18, p.43).

Singapore and Finland were the samples for the study. According to Huang’s (2007)
work, the Republic of Singapore came into existence in 1965 and had maintained a rapid 30-year development at an average GDP growth rate of 8.88%. Singapore ranked second out of 142 countries according to the Global Competitiveness Report (World Economic Forum, 2012). According to Jäntti, Saari, and Vartiainen (2006), “Finland was a late industrialiser. In the 1930s, the economy was predominantly agrarian, and, as late as in the 1950s, more than half the population and 40 per cent of output were still in the primary sector. Per capita gross domestic product was only half of Sweden’s. Yet by the late 1970s, Finland had become a mature industrial economy” (p.12). Finland ranked 7th out of 142 countries according to the Global Competitiveness Report (World Economic Forum, 2012). Two countries met the standards of improvement in competitiveness during a short period.

According to Williamson (2009), Singapore was characterised by a high degree of formal rules and a low degree of informal rules and Finland was categorised by a low degree of formal rules and a high degree of informal rules. Comparison among the nations of different institutional mix ensured fruitful results of analysis for institutional interaction.

4.6. Data collection

“The best data-collection method ensures that the data actually collected are capable of answering the research questions efficiently” (Meyer, 2000, p.43).

Collected data was secondary data. Slanders and Lewis (2012) stated that “the benefit data from a range of sources can be combined to create one new data set” (p.92). The research collected reports, studies, newspaper and internet resources related to Singapore and Finland. Related literatures were reviewed as well. “The published research literature is also a source of secondary data. In a broad sense, the data and ideas presented in the research literature are used to develop a theoretical framework for new research” (Meyer, 2000, p.96).

The research investigated how informal and formal institutions interact in the process of institutional change. Barley and Tolbert (1997) studying the institutional change suggested that “researchers who wish to study changes in institutions that govern the actions of collectives may therefore need to resort to historical and archival data” (p.13).
4.7. Data analysis

According to the suggestions by Slanders and Lewis (2012) on how to build or test the theory, I took the following steps:

- Developed meaningful categories or codes to describe data
- Decided on the unit of data that were appropriate for my analysis and to which the study attached relevant categories
- Attached relevant categories to units of data

Considering that the study used a deductive approach, categories were based on terms used in the literature or secondary data.

Payne, Payne, and Credo Reference (2004) said that content analysis “seeks to demonstrate the meaning of written or visual sources by systematically allocating their content to pre-determined, detailed categories, and then both quantifying and interpreting the outcomes” (p.51). “Formal content analysis is creating initial conceptual categories and then refining those categories” (Meyer, 1999, p.131). Method of data analysis of this study was content analysis.

Barley and Tolbert (1997) who studied the institutional change suggested four processes for identifying and analysing scripts, (1) grouping the data by category or unit of observation, (2) identifying behavioural patterns (scripts) within categories, (3) identifying commonalities across scripts, and (4) comparing scripts over time. This suggested processes carried out for the data collection:

4.8. Research limitations

The following aspects are the limitations to this study:

- As a result of using non-probability sampling, the results of this inquiry don’t allow for generalisation.
- By focusing on a range of reports and indicators, this study used a relatively heterogeneous sample which might involve the noise of significant external factors that might impact the relationships being investigated.
Chapter 5: Results

5.1. Introduction

Both Singapore and Finland underwent institutional changes while confronting hardships in nations. Even though some institutions were persistent during the period, institutions in Singapore and Finland have been changed by various actors.

5.2. Background of institutional change

5.2.1. Singapore

After independence from Britain in 1958, Singapore struggled to find ways to survive without any good fundamentals such as natural resources, infrastructure, and a viable labour force. In 1963, Singapore, Malaysia, and Indonesia formed the new nation, Federation of Malaysia, however. However, in 1965, Singapore was ejected from a new nation which had been a “a condition that Lee [Lee Kuan Yew, first Prime Minister of Singapore since the independence] believed was necessary for Singapore’s Survival” (Porter, Neo and Ketels, 2012, p.3). Instabilities were prevalent domestically. “He [Lee Kuan Yew] needed to confront the dangers that deterioration in living standards would trigger riots similar to those that had broken out in Singapore during the 1950s” (Root, 2012, p.7). What was worse, “Britain's announcement in 1968 of its intention to withdraw military forces from Singapore by the early 1970s marked the beginning of a greatly expanded, more intrusive role for the government in the economy” (Library of congress, 1989).

“Singapore’s real GDP growth accelerated to 12.9% from 1966 to 1973, which was probably the highest rate in the world” (Porter et al., 2012, p.6). Hill (2000) said of the social building during that period that “By the late 1970s, when most of the basic needs of the population had been fulfilled, and there emerged a new and increased concern over the non-material (social and cultural) dimensions of nation-building” (p.184). Wilkinson (1988) said about the concerns about ethical diversity and lack of national identity at that time that “With just over two decades of independence as a rapidly industrialising city-state, and being populated by immigrants from different regions of China, from the Indian sub-continent and from Malaysia … the government is concerned with a lack of national identity, attempting to engage the population in a ‘nation building’ programme ” (p.174-175).
In the 1990s, Singapore's economic crisis was another factor contributing to the reforms in Singapore. “The deep economic crisis at the beginning of the 1990s also accelerated the already on going transformation process” (Porter et al., 2012, p.104). “Given Singapore's dependence on foreign capital, the reduction of Western investment in Southeast Asia because of recurrent economic crises was a source of deep concern” (Hill, 2000, p.184).

5.2.2. Finland

“The Finnish economy was dominated by manufacturing industries and had a service sector smaller than in many comparable European countries” (Solvoll and Porter, 2002, p.2). Throughout the 1980s and 1990s, industrial changes were made focusing on science and technology. Oinas (2005) stated about the movement during the period:

The traditional industrial core was challenged in the 1980s, when discussions were launched concerning the need for Finland to modernise and transform into an “information society” …. Finland was especially hard hit by what has been called the Great Depression at the turn of the 1990s …. Even if some change processes in the political and business systems had already been initiated earlier, the recession and its aftermath were decisive in bringing about a major restructuring of the economy and the configuration of its largely centrally controlled politico-economic institutions. (p.1231)

Lemola (2002) specified that the problem was related to unemployment and this was the trigger for change. “The main thrust of Finnish science and technology policy in the early 1990s came from a strong need to secure the further development of science and technology under the circumstances of economic recession associated with high unemployment” (Lemola, 2002, p.1485).

5.3. Institutions in Singapore

5.3.1. Formal institutions

5.3.1.1. Power systems (Political systems)

“The constitutional framework of Singapore's government, with its Parliament, cabinet, courts, and functional ministries, resembled that of its British model and its peers in
other countries of the British Commonwealth of Nations” (Library of congress, 1989). Even though its constitutional framework was modelled from colonial times, the legal framework in Singapore has been consistently characterised the power it gives government. “Dominance of the executive branch over the legislative and judicial branches, and the predominant authority of the prime minister within the executive, have a consistent history from the colonial period in the 1950s to the present in Singapore” (Leong, 2000b, p.91).

Singapore’s government has been controlled by the People’s Actions Party (PAP) since its independence. “Economic growth and political stability would be maintained instead by the paternal guidance of the PAP. Politics, as a result, was only exercised within very narrow limits determined by the PAP. Singapore was thus administered by bureaucrats, not politicians” (Library of congress, 1989).

Leong (2000b) explained the decision-making process in the power system:

The cabinet works essentially as a committee, and is a forum for discussion and a mechanism for making decisions. The various ministries work closely to formulate and coordinate major policy initiatives … The prime minister in such a cabinet system has very great power … Cabinet ministers are designated by the prime minister, appointed by the elected president. … Policy making passed a few levels of hierarchy and was a top-down process where the agenda-setters and policy initiators were mainly the governing elite, with only peripheral participation from some non-governmental groups. (p.96, 104)

5.3.1.2. Judiciary systems

“The legal system is a common law system in the English tradition” (Blochlingert, 2000, p.594). Based on well instituted judiciary systems, the Singapore government has respected the role of judiciary:

Singapore’s judges and superior courts repeatedly demonstrated their independence from the government …. The government response in such cases was to amend the law or to pass new laws, but it did not attempt to remove or to intimidate judges. Although internal political struggle in Singapore from the 1950s through the 1980s was often intense, and the ruling government was quite willing to intimidate and imprison its political opponents, it always followed legal forms and procedures. (Library of congress, 1989)
5.3.1.3. Governance systems

The government established the boards, committees and councils to achieve economic social goals. These are the Economic Development Board [EDB], Housing and Development Board [HDB], National Productivity Board [NPB], Trade development Board [TDB], Public Utilities Board [PUB], National Wages Council, and All-Party Committee and National Police Cadet Corps (NPCC). Details of these organisations are shown in Appendix 1. Other than these organisations, government formed state-owned companies. “The statutory boards not only became major actors in the economy but also formed subsidiary companies to add flexibility to their own operations .... Numerous state and quasi-state companies were created either directly by ministries .... which provided a wide range of goods and services” (Library of congress, 1989).

Singapore faced a recession in 1980s and “a number of changes introduced in 1986 has the effect of relaxing the role of statutory boards, public corporations and government companies in economic development” (Lam, 2001, p.404). Haque (2004) explained the changes after a recession that “The leading role of the public sector became less pronounced as the government began to allow local and foreign private firms to compete in sectors that had been traditionally reserved for state monopolies. For instance, more open competition with the private sector has been allowed” (p.230).

Low (2001) noticed that “the government may be honest, accountable and efficient, but transparency was not its strong suit” (p.420). The government’s transparency in controlling financial resources was criticised by Chee (2001):

The Singaporean government runs a fund management firm, unpretentiously named the Government of Singapore Investment Corporation (GIC). The company invests the country's foreign reserves of US$80 billion all over the world .... The public, however, knows little about the performance record of these reserves, which are derived mainly from accumulated budget surpluses and workers' contributions to the Central Provident Fund (CPF), a pension savings scheme into which every Singaporean employee must pay. The GIC does not even account to parliament. The corporation is controlled by a board of directors whose chairman is Lee Kuan Yew, a post that he has held since he was prime minister. The public receives no information about how these directors are appointed or what the criteria for their selection are. (p.158)
As for state bureaucracy, its non-corruption practice is well known:

The Singapore public service was regarded as almost entirely free from corruption, a fact that in large part reflected the strong emphasis the national leadership placed on probity and dedication to national values. The Corrupt Practices Investigation Bureau enjoyed sweeping powers of investigation and the unreserved support of the prime minister. (Library of congress, 1989)

With regards to characteristic of bureaucracy in Singapore, Haque (2004) stated that “Administrative system was largely based on the assumptions of the bureaucratic model, promoting meritocracy, impersonality, hierarchy, structural rigidity” (p.232).

### 5.3.1.4. Economic policies

Singapore’s governmental intervention was extensive:

Under Goh Keng Swee and other able finance ministers, the government worked hard to woo local and foreign capital … The decision to encourage the latter [attracting foreign direct investment] resulted both in a large share of Singaporean manufacturing being foreign owned and a high degree of export-led growth … The government provided subsidized housing, education, and health and recreational services, as well as public transportation. The government also managed the bulk of savings for retirement through the Central Provident Fund and Post Office Savings Bank. It also decided annual wage increments and set minimum fringe benefits in the public and private sectors. (Library of congress, 1989)

“Singapore continued to invest heavily in physical infrastructure and skills” (Porter et al., 2012, p.14)

The government changed its attitudes toward economic policies:

The government responded to the economic downturn by recognising certain adverse effects of excessive intervention and by introducing a number of corrective measures in 1986. The measures included: tax concessions; tax incentives and grants for research and development; a reduction of the CPF contribution rate; freezing overall wages; minimising trade restrictions; introducing incentives to encourage the fund management industry; and education improvement. (Lam, 2001, p.404)
5.3.1.5. Social policies

“Politicians repeatedly stressed the need for social cohesion [emphasis added]” (Porter et al., 2012, p.13). “The government sought to build a multiracial and multilingual society that would be unified by a sense of a unique ‘Singaporean identity’ .... Integrated schools and public housing were the principle means used by the government to ensure a mixing of the various ethnic groups” (Library of congress, 1989).

After providing economic stability to people, the government tried to influence attitudes and behaviours leading to social cohesion. “In paternalistic fashion, a combination of punishments, rewards, praise and moral lessons is used in an attempt to inculcate particular values and patterns of behaviour [emphasis added]” (Wilkinson, 1988, p.166).

There has been an emphasis on courtesy in Singapore to promote a civil society: changes were encouraged in their behaviour. “The National Courtesy Campaign was launched on 1 June 1979 by Lee, Kuan Yew ... Commonly used methods of promotion were through distribution of souvenirs ... and through the use of catchy slogans. The Singapore Courtesy Council was also set up in 1993” (Lim, 2004). Lee Kwan Yew initiated the campaign “To create a pleasant social environment, with Singaporeans considerate to each other and thoughtful of each other's need ... courtesy is a part of all cultivated societies” (The Strait times, 1979). Lee (2002) analysed this campaign as a mean to develop national identity:

The Singaporean campaign for courtesy, while apparently socially and culturally focused in its attempt to inculcate civility in thought and behaviour, also serves a political purpose in helping Singaporean citizens to “imagine” Singapore as their beloved nation (a la Benedict Anderson’s well-known 1983 thesis).

Minister George Yeo reveals most succinctly: We inherited from the British a Singapore that prospered as a trading post but had no sense of nationhood. With independence, our goal must be to create a sense of oneness among the diverse groups that live here (Yeo, cited in Singapore Courtesy Council 1999, p.113). With its emphasis on “proper behaviour” to achieve “a sense of oneness”, the discourse of courtesy is arguably one of many tools created to define the scope of citizenship, identity and nationhood in Singapore. (p. 100-101)

Wilkinson (1988) described the other means implemented by the government to create a sense of national loyalty:
The other two major tools centrally concerned with creating a national loyalty are language policies and the Total Defence Campaign. With regard to language policy, there are four official languages --English, Mandarin, Malay and Tami ... a policy of bilingual has been practices, such that each ethnic group is educated in English plus their “mother tongue.” ... The Total Defence message has been pressed on the public in the mid-1990s through a variety of media ... The message is that Singapore is a small, vulnerable city-state which is worth defending against potential (but unnamed) enemies from without or within, and that the whole population has a role to play. (p.176)

Hill (2000) studied about the emergence of emphasis on Asian values in Singapore:

From the late 1970s the desired cultural values were increasingly labelled “Asian values" ... a matter of sceptical comment even among senior government Ministers .... An early statement of the issue, using a distinctly medical metaphor, was made by Lee Kuan Yew in his National Day Speech in 1978 .... The project to establish a set of core values in the process of nation-building attained great prominence in that year, mainly as a result of the two government reports, the first, which was chaired by Goh Keng Swee (the Goh Report) addressed the role of bilingualism and multiculturalism in schools, and the second (the Ong Report) explored the need for moral education .... The Confucian project was enhanced by the now well established perception that other economically successful Asian countries – Hong Kong, South Korea, and Taiwan – had a Confucian tradition of ethics. (p.183-186)

Kuah (1990) discussed how government began to use Confucianism to promote its social engineering process:

The ruling elites feared that “the next generation is not growing up with the same values which their parents’ generation have” .... There is therefore a need for the government to inculcate “a clear set of values, strongly held and shared by Singaporeans can help us to develop an identity, bound ourselves together, and determine our own future .... The Minister for Trade and Industry, Lee Hsein Loon, outlined the promotion of an identity in three ways .... He saw the positive role played by Confucianism. (p.378)

5.3.1.6. Regulations on labour relations

As for the labour relations, the processes of institutional change were as follow:
- Labourers in Singapore had a tradition of strikes. They were relatively well-organised and unrest was always a possibility (Root, 2012, p.7).

- In 1968, two pieces of legislation - the Industrial Relations (Amendment) Act and the Employment Act - were passed in parliament and they became the landmarks for industrial relations in Singapore (Leong, 2000b, p.103).

- The new legislation permitted longer working hours, reduced holidays, and gave employers more power over hiring, firing, and promoting workers …. As a result of the new legislation, productivity increased, and there were no strikes in 1969 (Library of congress, 1989).

- Their successor, the National Trades Union Congress (NUTC), was cooperative with government officials sharing the doctrines and policies of the PAP (Porter et al., 2012, p.5).

- Privileges gained by the unions and their members during the period of the anti-colonial political struggle were withdrawn. The emphasis shifted from worker's rights to productivity and efficiency (Leong, 2000b, p.103).

5.3.1.7. Regulations on society

Wilkinson (1988) mentioned that an “Important socializing agency is of course the legal system, which gives extensive powers to the police and judiciary, for instance with regard to the detention of suspects” (p.169). Constraints on human rights have been imposed by regulations, fines, taxes and sanctions:

- The Internal Security Act (ISA), an outgrowth of the Emergency Regulation that dates to the British colonial era, allows for detention without charges or trial for an indefinite period (Leong, 2000b, p.439-440).

- Private ownership of cars was limited through high taxes to avert traffic congestion and air pollution …. Fines for littering, smoking in public places ... were stiff and exercised with alacrity (Porter et al., 2012, p.4).

- Singapore still has limits on the freedom of media, the cultural sphere, civil society, trade unions and political activities (Blomström, Kokko, and Sjöholm, 2002, p.5).

- Drunk-traffickers, fire arms offenders and murders are frequently hung, and those guilty of violent crimes often subject to the rotan (a sort of crane) a detailed and
frank description of the administration of which provided by Josey (Wilkinson, 1988, p.169)

- The Singapore political system establishes specific parameters that some say impose practical constraints on citizen involvement in policymaking. These constraints include a prohibition of discussion of sensitive issues-parameters often described by policy makers as ‘OB markers’ (out of- bound markers) (Leong, 2000a, p.440).

- Lee allegedly deluged rivals with lawsuits before and after elections, pursuing opposition politicians through the courts for expressing viewpoints that are considered part of healthy democracies. His opponents paid the price for their convictions through personal bankruptcy (Root, 2012, p.4).

5.3.2. Informal institutions

5.3.2.1. Meritocracy

According to Ng (2007), “Meritocracy [emphasis added] is one of the foundations of Singapore’s mode of governance” (p.357). Bellows (2009) argued that “Singapore’s success today is principally a result of optimal policy decisions, by a political elite” (p.27). He elaborated how the concept of meritocracy has established in Singapore:

> From a young age, Lee Kuan Yew developed a belief in elitism based on intellectual merit (Barr, 2000). Years later, when he became prime minister, he began the process of integrating the merit concept into the operational mechanism of the political system .... The PAP government has instilled awareness in most Singaporeans that competition and staying ahead are the only way Singapore can survive and prosper. The drive to achieve excellence is spread throughout most layers of society .... The cabinet, with some external input, forged policy, and the civil service implemented it ..... Testing and evaluation, particularly in the upper political echelons, are a constant process. (p.31-32)

Porter et al. (2012) explained their attitudes toward the civil society that “the governing style was not totalitarianism, but rather ... a paternalistic, ordered, and planned approach to society, based on the government’s belief [emphasis added] that it knows best ” (p.4). Leong (2000b) also emphasised politicians’ strong confidence in their performance that “To the People’s Action Party (PAP) politicians, the drive for power is not only a rational
self-seeking process, but is also based on the belief [emphasis added] that their continuance in power would most benefit the nation because of the PAP's organisational superiority, its indispensability and personal sacrifice for the general good" (p.91-92).

5.3.2.2. Pragmatism

Ng (2007) said that “the ruling PAP has repeatedly claimed that its legitimacy is rooted in performance” (p.357). Hamilton-Hart (2000) also stated that “Performance-based measures of success are the norm in the public sector and efficiency and effectiveness serve as legitimating mechanisms for the government” (p.205). According to Bellows (2009), pragmatism is shown in government compensation scheme:

The Singapore government put in place substantial salary increases for high flyers beginning in 1972. The intention is to pay competitive market rates for senior civil servants, government ministers and elected representatives, and civil servants .... Top salaries, though, are adjusted according to performance, in this instance, Singapore's economic performance as measured by decline in the GDP. (p.36)

In the selection process, “Individuals from the civil service, business or the parliamentary PAP are incorporated on the basis of success. This may be success in external examinations, outstanding university performance or prior success in business” (Hamilton-Hart, 2000, p.207). Another example showing pragmatism is that “Government-linked firms were managed differently that in most other countries, with professional boards of directors and expectations that they make profits” (Porter et al., 2012, p.8).

5.3.2.3. Shared values

Leong (2000b) suggested shared values among ruling party that “There is little change in the Singapore polity in terms of its corporatist ideology of emphasising social unity, political order and success, and placing community interest above the individual's - the government-endorsed Shared Values” (p.117). Porter et al. (2012) also mentioned about a shared vision among ministers that " 'Because of the small size [of the society], each official wears many hats,' a senior official said. 'This eases informal communication and makes it easier to have a shared vision' [emphasis added]" (p.4).
One of the factors that determine the corruption-free in Singapore bureaucracy is its shared value. “The Singapore public service was regarded as almost entirely free from corruption, a fact that in large part reflected the strong emphasis the national leadership placed on probity and dedication to national values” (Library of congress, 1989)

5.3.2.4. Civil society’s informal institutions

Civil society's informal institutions can be characterised as follows:

- Citizens’ expectations that politicians will do a good job have therefore increased correspondingly (Leong, 2000a, p.448).

- Singaporeans generally believe that their power to initiate or prevent the appearance of a policy item on the national agenda is minimal (Leong, 2000a, p.452).

- It is considered a privilege to be recruited into the party .... The presupposition (that the best and brightest should be in politics and are in politics) has managed to penetrate into the hearts and minds of the citizenry with the help of media resources (Leong, 2000b, p.95-96)

- Civic responsibility, honesty, a spirit of voluntarism, and respect for racial and religious diversity and harmony (Root, 2012, p.3).

5.4. Institutions in Finland

5.4.1. Formal institutions

5.4.1.1. Power systems

Finland is characterised by democracy that “The four acts that make up the Finnish Constitution provide for a central government divided into three overlapping branches - legislative, executive, and judicial. Their mutual control by an elaborate system of checks and balances has permitted Finnish democracy to flourish” (Library of congress, 1988).
5.4.1.2. Governance systems

Dahlman, Routti and Ylä-Anttila (2005) stated about governance in Finland that “For almost two decades, good governance and a low level of corruption have been strongly connected to the notion of the knowledge economy. Good governance and political transparency play an invaluable role in the Finnish society, particularly in its knowledge economy” (p.11).

5.4.1.3. Economic policies

Blomström, Kokko, and Sjöholm (2002) argued the role of policy during the period of 1980s and 1990s:

The Finnish ICT cluster owes much to a comprehensive systems approach in public policy [emphasis added] .... One of the first areas where these ideas [cluster policy and national innovation systems] were implemented was science and technology policy. The emphasis on upgrading and higher value added in production suggested a stronger role for investments in technology creation, and several institutional changes were made during the 1980s to promote R&D, both in industry and the public sector. (p.16-18)

Lemola (2002) explained the origin of the Finnish policy as an imitation process that “Catching up with industrially and technologically more advanced countries, like Finland’s neighbour Sweden, became the factor which significantly shaped Finnish activities and structures in science and technology for decades” (p.1483). Examples for imitation process suggested by him were as follows.

- The model of the Science Policy Council (later the Science and Technology Policy Council) was imitated mainly from Sweden which had earlier imitated it from the United States.
- The new system after reform in 1969 - 1971 was very much built on the basis of the Swedish model.
- TEKES was designed after the Swedish Board for Technical Development.
- Most of the influences came from the OECD’s Technology and Economy Programme which had been launched in 1988.
- In the mid-1990s, the Science and Technology Policy Council launched the
concept of a knowledge-based society as the key concept of the Finnish science and technology policy strategy of the late 1990s. This concept and thinking behind it came from the OECD Jobs Study.

He noticed unique characteristics in implementing science and technology policies in Finland such as regionalisation of innovation policy and convergence among people. However, he also argued that the trend came from political pressures from the EU and OECD.

Oinas (2005) explained about institutionalisation process of the policy in 1990s:

> Key science and technology policy reforms in the 1990s included regional innovation policies .... The most important qualitative changes in the functioning of the innovation system in recent years relate to the internationalisation of R&D through networking, the strengthened regional innovation policy, more efficient commercialisation of research output and intensified national network formation. (p.1235)

Direction toward economic policies has changed since 1980s from intervention. “Although the state continued to control certain key sectors, such as agriculture, forestry, minerals, and energy, overall economic policy had shifted from sectoral intervention toward efforts to improve productivity and market efficiency” (Library of congress, 1988).

### 5.4.1.4. Social policies

Finland has a well-established social welfare programme:

> For instance Finland, among many other countries, during its history has implemented universal and comprehensive social security and social services systems as instruments for social integration and cohesion .... Such comprehensive social policies have strengthened productive capacities and gender equality. In times of crisis the state has taken the role of a “social broker”, packaging social policies and economic policies into a consensus deal: social protection to workers in exchange for flexibility, mobility and peace on the labour market and access to social security funds to employers to facilitate investment and smooth capitalistic development. (Wiman, 2009, p.34)
5.4.2. Informal institutions

5.4.2.1. Finnish sisu

Oinas (2005) defined the concept of “Finnish sisu” as “the guts or stamina, a strong component of the self-image of the Finns with which the resolute, small nation fought to maintain its independence in World War II and worked hard to pay war debts without external support” (p.232). As a reason for this informal institution in Finland, he argued that “due to having been ruled by others in the not very distant past, there is still a shared legacy that requires the creation of a strong nation against external threats, in whatever guise” (p.1237). Dahlman et al. (2005) stated self-reliance and a can-do mind set as two specific characteristics of Finland and argued weather, geography and occupation as reasons for these two characteristics:

Finland has 60 percent of the world's population who live as far north as the Finns do, partly above the Artic Circle. Over time, the very cold climate has created a very hardy population who must plan ahead to survive. For example, in the 1860s, when two summers were too short for a growing season, 5 percent of the population starved to death. (p.16)

They also mentioned about the role of informal institutions in Finland that “what made this restructuring possible included the special characteristics already noted of a strong ‘can-do’ attitude and strong social cohesiveness [emphasis added]” (p.18).

5.4.2.2. Openness / flexibility

Dahlman et al. (2005) described two Finnish characteristics, openness and flexibility:

Characteristic is a willingness to interact with the outside world in an open but strongly nationalistic way .... In the 1800s, Finns relied heavily on timber and sawmill technologies from their Nordic neighbours and the Germans. Finns also were among the first to introduce electricity and to use the telephone. Similarly, they were very open to experimenting with different telephone technologies almost as soon as they were invented and to develop their own versions.

Lesson is the importance of flexibility or elasticity of the economy to react of changing opportunities. Finland’s case aptly demonstrates the importance of this flexibility in the way that it was able to significantly restructure its economic structure as a result of the crisis of the early 1990s. Two critical aspects of that
process of creative destruction were the very strong social cohesion and strong safety nets. (p.16-20)

5.4.2.3. Shared vision

Schienstock and Hämäläinen (2001) stressed the role of a systematic vision, which was a “knowledge society”:

A systematic vision can be characterised as a set of general ideas of how to create economic growth, develop economic structures efficiently, and to restructure production processes. It also has a normative [emphasis added] dimension, as it becomes the basis of practical restructuring processes. A major advantage of a systemic vision is that it makes communication [emphasis added] among social actors possible, even if they have different interests and preferences. During the 1990s, the “knowledge society” became the new systemic vision in Finland which guided the various actors in the restructuring process. (p.44)

Dahlman et al. (2005) stated the existence of national strategies as a shared vision:

Increasing R&D was helped partially by national industrial and innovation strategies communicated by the government. These national strategies were important for consensus building, for example, by organizing economic policy programs attended by practically all members of the Finnish Parliament and other decision makers from the public and private sectors, media, and labour market organisations. (p.5)

5.4.2.4. Practice of collective bargaining as a shared logic of action

According to Oinas (2005),

The Finnish political elite had traditionally been closely connected to the powerful forestry industry and tended to its needs …. The post-war societal system was coordinated by government planning but the system involved a corporatist [emphasis added] element, with a strong role of employers’ and employees’ interest organisations in negotiating industrial relations and collective bargaining agreements [emphasis added]. (p.1230)

Ornston and Rehn (2006) elaborated on the process of how collective bargaining has
Finnish firms also developed a dense network of employer associations, closely tied to the state and trade unions through their counselling, lobbying and collective bargaining activities. These associations originated from interwar export cartels, but merged into a unified Confederation of Finnish Industries after 1976 in tandem with the Finnish trade union movement. Labour played a marginal role in early industrialisation, partly as a legacy of the civil war of 1918 and partly because of the resultant division of the trade union movement into social democratic and communist camps. Growing trade union clout as well as the desire to create a (social) democratic bulwark against the communists inspired periodic but opportunistic recourse to national collective bargaining and incomes policies following strategic devaluations during the 1950s and 1960s.

Centralised collective bargaining became a permanent feature of Finland's institutional landscape in 1967 following the election of a social democratic coalition government and the creation of a more encompassing Confederation of Finnish Trade Unions (SAK) .... Collective bargaining increased in prominence in subsequent decades and was closely linked to rapidly expanding social protection and labour market regulation. Finland could be said to possess all of the dense organizational and institutional structures of a neo-corporatist economy by the end of the 1980s. Centralized employer associations and trade unions played a key role in paying determination and policy formulation, while universal banks linked firms together within dense, long-term financial networks. (p. 6-7)

5.4.2.5. Rule-based decision-making as a shared logic of action

According to Lemola (2002),

A rule-based action has been an important form of convergence in Finland .... Much decision-making behaviour reflects the routine way of following rules in both defined and ill-defined situations .... Throughout nearly four decades, rules made on the basis of R&D statistics have been a central element of the Finnish decision-making logic ... From the late 1960s until quite recently, the most significant single aim of Finnish science and technology policy has been the growth of R&D expenditure in relation to GDP. (p.1488)
5.4.2.6. Trust

Newton (2001) analysed the status of social trust and trust toward public sectors in 1980s and 1990s:

In the 1990s social trust in Finland was at the same very high level as in Sweden, Norway, and the Netherlands …. ; by 1990 it was even higher: in the same period, confidence in parliament fell heavily from 65 percent in 1981 (second only to Norway) to 34 percent in 1991. Confidence in the police and civil service also declined steeply in this period …. Social trust [emphasis added] was high and the country maintained its unusually vibrant associational life, as measured by the rate of formation of new associations, and by organizational membership …. The causes of Finland’s decline of political confidence lie in the severe political problems caused by the collapse of its neighbour and crucial trading partner, the Soviet Union. (p.209-210)

5.5. Actors during institutional changes

5.5.1. Singapore

5.5.1.1. Prime minister: Lee Kuan Yew

“He not only exercises authority [sic] leadership, but also inspirational [emphasis added] leadership” (Leong, 2000b, p.96). Goh Chok Tong, the successor of Lee Kuan Yew, emphasised Lee’s paternalistic style:

Goh commented in an interview with the BBC on 23 November 1990 that Lee was like a “critical parent - very disciplined, very demanding, very impatient of faults, and wanting to improve these faults very quickly”. In an interview in 1994, he used the same metaphor, depicting himself as “an elder brother” and Lee as a “stern father”, with responsibility for setting the house rules for their “family”. This attitudes of being a "critical parent", of regarding himself more as the head of a household than the head of a state, has interesting implication for legitimacy - for there can be no question of the right of a father to be the ultimate authority for his people. (Leong, 2000b, p.101-102)

According Root (2012), Lee affected not only civil society but also public servants. “He [Lee Kuan Yew] created a full supportive sequence of strong accountability within his civil service” (p.17).
He deeply believed in the culture in building society and criticised the World Bank’s study on East Asian economic success:

I think the World Bank had a very difficult job. It had to write up these very, very complex series of situations. But there are cultural factors [emphasis added] which have been lightly touched over, which deserved more weightage. This would have made it a more complex study and of less universal application, but it would have been more accurate, explaining the differences …. Getting the fundamentals right would help, but these societies will not succeed in the same way as East Asia did because certain driving forces will be absent. If you have a culture that doesn't place much value in learning and scholarship and hard work and thrift and deferment of present enjoyment for future gain, the going will be much slower ….

World Bank report's conclusions are part of the culture of America and, by extension, of international institutions. It had to present its findings in a bland and universalisable way, which I find unsatisfying because it doesn't grapple with the real problems. It makes the hopeful assumption that all men are equal, that people all over the world are the same. They are not. Groups of people develop different characteristics when they have evolved for thousands of years separately. Genetics and history interact. (Zakaria and Yew, 1994, p.116-117).

Lee did make decisions supported by his own network including ministers:

Lee formed the "hub" with the first ring comprising the inner group …. The second and third orbits consisted of allies he respected and trusted and those who have proven themselves competent. These were the intimates Lee discussed his ideas and intentions with. He steered colleagues towards consensus decisions, winning debates within the team, and persuading them to be on his side. In the cabinet, he valued quality of opinions more than the quantity of votes … Outside the inner orbit, Lee had personal contact with the ministers’ concerned. (Leong, 2000b, p.101)

5.5.1.2. Ruling class: PAP

Leong (2000b) succinctly described the background of the ruling class in Singapore:

Singapore’s ruling class in somewhat homogenous in their social and educational background. School ties and organisational networking, in addition to class identification and ideological inclination, in essence foster this cohesion. The top 100 or so most influential and powerful office-holders in Singapore are mainly
English-educated and maintain a close network. Although not all of them are in the PAP, the cohesiveness [emphasis added] and interconnections of these elite are strengthened and reinforced by their common allegiance to the patronising state. Since each of these elements in dependent on, and connected to, the others, and forms an unbreakable network and circuitry, the deliberation and centralisation of political power is almost unchallengeable. (p.101)

Leong (2000b) discussed the role of government’s supporters in implementing the policies:

The extent to which political leadership of the prime minister is accepted, the expectation of strong government on the part of the parliament and citizen alike, the high degree of political discipline and cohesion among the government's political supporters, make it possible for major or controversial policy changes to be implemented [emphasis added]. (p.96)

5.5.1.3. People's Association (PA)

As for social cohesion, The People’s Association (PA) played an important role:

The People’s Association (PA) was established as a statutory board on 1 July 1960 to promote racial harmony and social cohesion in Singapore ..... The People’s Association (PA) has a network of more than 1,800 grassroots organisations (GROs). They are managed by volunteers appointed by the PA ... They bring people of different backgrounds together by organising a wide range of programmes for residents to meet and interact, encouraging community involvement, raising awareness about community issues, explaining government policies and gathering feedback .... The Residents’ Committees (RCs) were introduced in 1978 to promote neighbourliness, racial harmony and community cohesiveness amongst residents within their respective RC zones. (People’s Association, 2012)

5.5.1.4. Civil Society

“From a ‘civic’ perspective, citizens tend to exhibit a general unwillingness to become members of civil society interest groups or to volunteer in social work as ‘the final word always rests with the authorities’” (Ng, 2007, p.357).
However, there are some evidences that show a civil society force for collective action:

- It [The Graduate Mothers Scheme (GMS)] was introduced in 1984, whereby benefits and incentives were given to graduate mothers, with the objective of increasing their productive rates …. Given the widespread negative public response … the scheme finally revoked (Leong, 2000b, p.105, 107).

- However, the Singaporean has not been apathetic when policies ‘hurt their pocket’-they will ‘jump up and down.’ ("Hng Kiang Says Singaporeans Are Not Apathetic," Sunday Times, June 8, 1997.) (Leong, 2000a, p.453).

5.5.2. Finland

Actors related with Finland’s national innovation systems are shown in Figure 3.

Figure 3.
Finnish innovation systems: organisations and cooperation

5.5.2.1. Government / council

Blomström et al. (2002) emphasised the coordination among ministers in Finland:

One of the most important elements of this coordination concerns inter-ministerial collaboration. It has been recognized in Finnish innovation and cluster policy that it is not enough to coordinate the decisions of private actors, but it is also necessary to establish a strong foundation for joint policy reform within the public sector. To create a favourable business climate, it may be necessary to combine several policy areas, including industrial, financial, education and science, employment, regional, environmental, social, and perhaps even cultural policies. Consequently, in the late 1990s, the STPC [Science and Technology Policy Council] initiated a process where more than half a dozen inter-ministerial cluster-based programs have been established to identify reform areas that require substantial policy coordination and fall outside the responsibility of any individual ministry. (p.22)

STPC has played a role in coordination between private and public sectors as well as among ministers:

It [STPC] is chaired by the Prime Minister, and has a membership consisting of several ministers, S&T [Science and Technology] policy representatives, business people, representatives of major research centres, and the employers and employees organisations. The main guidelines of the Finnish S&T policy are developed in this body. The composition of this high-level coordination structure guarantees that scientific progress and technological development are viewed from the perspectives of different economic actors. The long-standing existence of this institution can also be seen as crucial in integrating and overcoming fruitless struggling and “territorial thinking” among ministries. (Schienstock and Hämäläinen, 2001, p.44-45)

5.5.2.2. Financing / educational / research systems

Details on organisations related with financing, educational and research systems are shown in Appendix 2.
5.5.2.3. Private enterprises

Schienstock (2007) pointed out how Nokia’s CEO, Kari Kairamo, affected the formation of an information society that “Nokia’s CEO Kari Kairamo challenged the forest cluster by launching a campaign advocating a vision that Finland should become an ‘information society’ instead of depending on an old-fashioned ‘smokestack industry’ " (p.100). Roos, Fernström, and Gupta (2005) also pointed out Nokia as playing a major role in the formation of the ICT cluster that “The information and communications technology cluster is a case in point, where Nokia has acted as a catalyst in creating vertical relationships with suppliers and subcontractors, covering not only production but also research and product development” (p.11).

Blomström et al. (2002) emphasised the competition between public and private actors:

A national public telecommunications operator was established and managed eventually to set up a monopoly in long-distance and international calls, but Finland remained one of the few European countries where private operators competed with the state in local operations. Already in 1921, the private operators joined in an Association of Telephone Companies that has been able to resist several attempts by the authorities to nationalize the industry. (p.11)

The competition between the private operators and the state-owned company created a dynamic market, attracted foreign investors, and contributed to the development of essential skills and knowledge. (p.15-16)

5.5.2.4. Cooperation / coordination

Schienstock and Hämäläinen (2001) argued that Finland has consistently developed a “network-facilitating innovation policy.” Oinas (2005) also presented the interaction among the stakeholders of the Finnish innovation system as a success factors that “The Finnish innovation system has evolved as a result of the interaction [emphasis added] of government actors committed to a consistent policy line supporting the interactions between private firms and universities and research institutes in R&D activities” (p.1236). Ornston and Rehn (2006) said that this trend was “A new discursive and institutional framework was thus already in place by the time of the 1991 recession, leading to an innovation-driven policy response to economic crisis rather than an emphasis on active macroeconomic management or increased investment” (p.20). Hall and Gingerich (2004) categorised coordinated market economies “where firms typically
engage in more strategic interaction with trade unions, suppliers of finance, and other actors” (p.8).

During the process of interaction, Dahlman et al. (2005) pointed out the government’s coordinating function in implementing the policy:

However, it is important to stress that a systems view of industrial policy does imply that Finland has followed a “master plan” in which the government played a strong leading role. Rather, the systems view was concretised through an emphasis on responsive longer-term policies to improve the general framework conditions for firms and industries, especially in knowledge development and diffusion, innovation, and clustering of industrial activities. (p.8)

The role of government was that of a facilitator [emphasis added] rather than a driver: it was decided that policy should not favour any cluster over other, but provide a good environment for any cluster that might emerge (p.21).

“The state sharply increased expenditures for research and development, and it helped coordinate efforts among universities, private industry, and government research centres” (Library of congress, 1988).

As a consequence of networking, Roos et al. (2005) explained that “Networking between industry and science is so well developed in Finland that in the mid-1990s, 40 per cent of all innovative firms reported that they cooperated with universities or public research institutions, which is among the highest in OECD” (p.10). “As a result, information regarding investment plans and policy reforms is diffused rapidly to all the major actors” (Blomström et al., 2002, p.22).
Chapter 6: Discussion of results

6.1. Introduction

Characteristics and roles of institutions in Singapore and Finland are discussed first. Based on the discussions, the way in which institutions interacted and evolved in each country are explored in detail. Similarities and dissimilarities between Singapore and Finland are analysed according to each topic.

6.2. Characteristics of institutions

6.2.1. Framework for a discussion of institutions

Institutions suggested by Scott (2008) and other literatures studying the institutions can be summarised as shown in Table 7.

Table 7.
Institutions suggested by Scott (2008) and other literatures

<table>
<thead>
<tr>
<th></th>
<th>Scott (2008)</th>
<th>GCR, WCY and other literatures</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Formal institutions</strong></td>
<td>Coercive: Rules and Laws, Governance systems, Power systems, Operating procedures</td>
<td>Transparency of government policy-making, Property rights, Judicial Independence, Legal framework</td>
</tr>
<tr>
<td><strong>Informal institutions</strong></td>
<td>Normative: Values, Expectations, Regimes, Authority systems, Roles, Obedience to duty Cultural-Cognitive: Common belief, Identities, Shared logics of actions</td>
<td>Public trust of politicians, Adaptability/Flexibility, Ethical behaviour, Openness, Trust, Honesty, Reliability, Respect, Integrity, Morality</td>
</tr>
</tbody>
</table>

6.2.2. Institutions in Singapore

Singapore has strong formal institutions. The reason is that governance systems and power systems in Singapore are characterised by granting power to the government and PAP’s control. Operating procedures in both economic and social perspectives are mainly enforced by regulations and policies, in other words, mechanism was overall coercive. Informal institutions such as meritocracy, pragmatism, belief in leadership
were newly formed based on various government's initiatives, programmes and good performance in national building. According to the Global Competitiveness Report (GCR) (2012), Singapore ranked 3rd overall and 1st as an institutions pillar. This strong and positive appearance in institutions is based on strong formal institutions in Singapore’s case. North’s (2006) argument that “It is the polity that defines and enforces the formal economic rules of the game and therefore is the primary source of economic performance” (p.57) can be applied to the case of Singapore. The case also supports Glaeser et al. (2004)'s presentation that dictators can implement policies of accumulating human and physical capital as a matter of policy choice, not of political institutions such as plurality, proportional representation and judicial independence.

6.2.3. Institutions in Finland

During the period of industrial change, the national direction toward ICT cluster and national innovative systems was pursued by government’s coordination and stakeholders' cooperation, that is, the mechanism was not coercive. Informal institutions are strong in Finland based on expectations and shared understandings among the constituents of society. Informal institutions such as Finnish sisu, openness, and collective bargaining practices and trust were embedded based on its history and legacy. According to GCR (2012), Finland ranked 7th overall and 4th in an institutions pillar. This relatively strong appearance of institutions in Finland can be characterised by strong informal institutions. Even though Lemola (2002) explained the origin of the Finnish policy as an imitation from EU and OECD, Finland outperformed other European countries that might be also affected by guidelines or pressures from the EU and OECD. Therefore, the case of Finland can be explained by literatures which concentrated the role of informal institutions in economic development: Selznick (1984) - integrity, North (2006) - informal norms, Tabellini (2008) – morality, Coleman (1988) social capital, and Dasgupta and Serageldin (2001) and Knack and Keefer (1997) - trust and civic cooperation.

6.3. Role of institutions

6.3.1. Framework for a discussion of role of institutions

The role of institutions suggested by literatures can be summarised as shown in Table 8.
### Table 8.
The roles of institutions suggested by the literatures

<table>
<thead>
<tr>
<th>The role of institutions</th>
<th>Literatures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influence firm’s strategy</td>
<td>Porter (1990)</td>
</tr>
<tr>
<td>Promote innovations</td>
<td>Porter (1990), Berger and Luckmann (1966)</td>
</tr>
<tr>
<td>Integrate, exchange and creation of knowledge</td>
<td>North (2006), Maskell (1996)</td>
</tr>
<tr>
<td>Foster economic activity, productivity growth and economic prosperity</td>
<td>Acemoglu and Robinson (2010), Knack and Keefer (1997)</td>
</tr>
<tr>
<td>Build in national consensus</td>
<td>Porter (1990)</td>
</tr>
<tr>
<td>Shape attitudes</td>
<td>Porter (1990)</td>
</tr>
<tr>
<td>Commitment and political instability</td>
<td>North (2006),</td>
</tr>
<tr>
<td>Promote trust and confidence</td>
<td>Meyer and Rowan (1977)</td>
</tr>
<tr>
<td>Bind participants to act in good faith</td>
<td>Meyer and Rowan (1977)</td>
</tr>
<tr>
<td>Bureaucrats’ refrain from corruption</td>
<td>Tabellini (2008)</td>
</tr>
</tbody>
</table>

### 6.3.2. Role of institutions in Singapore and Finland

In Singapore’s case, most of the formal institutions such as PAP’s guidance, government’s economic policies have explicitly contributed to foster economic activity and productivity growth (Porter et al., 2012). Regulations on society and social policies made participants to act in a good faith (Hill 2000; Kuah 1990; Lee 2002; Lim 2004; Porter et al. 2012; Strait times 1979; and Wilkinson 1988). Social policies together with some informal institutions such as belief in leadership, pragmatism and meritocracy achieved building national consensus and shaped attitudes of society and ruling class (Bellows 2009; Hamilton-Hart 2000; Leong 2000b; Leong 2000b; and Porter et al. 2012). Most of the informal institutions cultivated a sense of commitment from the ruling class, political stability and citizen’s law-abiding (Leong 2000b; Library of congress, 1989; Ng 2007; and Porter et al. 2012). Pragmatism played a role in influencing government-linked companies’ strategy (Porter et al., 2012). Governance systems and share values contributed to Bureaucrats’ refrain from corruption (Haque 2004; and Library of congress 1989). Both formal and informal institutions together
played many roles in the country.

In Finland’s case, governance systems, i.e. good governance and political transparency, played a role in formation of Finnish knowledge economy by promoting exchange and creation of knowledge (Dahlman et al., 2005). Economic polices contributed to economic productivity and efficiency (Blomström et al., 2002). Strong welfare policies together with Finnish sisu, one of informal institutions in Finland, helped promoting trust and confidence and binding participants to act in a good faith (Dahlman et al. 2005; and Wiman 2009). Economic policies and informal institutions such as openness, shared vision and collective bargaining practices played various roles such as promoting innovations, influencing firm's strategy, facilitating interaction and cooperation, integrating exchange and create knowledge, building in national consensus, and shaping attitudes (Dahlman et al. 2005; Library of congress 1988; Oinas 2005; and Schienstock & Hämäläinen 2001). Rule-based decision making practices ensured commitment and political stability (Lemola, 2002).

Therefore, North (2006)'s statement that “The key to improved performance is some combination of formal rules and informal constraints and the task” (p. 79) can be applied to both Singapore and Finland cases.

6.3.3. Similarities and dissimilarities in the role of institutions

The roles that institutions in Singapore and Finland have been achieved are as shown in Table 9.
Table 9.
Comparison of the roles of institutions in Singapore and Finland

<table>
<thead>
<tr>
<th>Role</th>
<th>Singapore</th>
<th>Finland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influence firm’s strategy (competition)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Promote innovations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facilitate interaction and cooperation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Integrate, exchange and create knowledge</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foster economic activity and economic prosperity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Build in national consensus</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shape attitudes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commitment and political stability</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Promote trust and confidence</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bind participants to act in good faith</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Citizens’ law-abiding</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bureaucrats’ refrain from corruption</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Formal institutions such as policies and regulations in Singapore and Finland explicitly fostered economic activity and economic prosperity. Both Singapore and Finland achieved building national consensus, shaping attitudes, commitment, political stability, binding participants to act in a good faith, and influencing firms’ strategies. However, the institutional mix that enabled the achievement or the roles is different between Singapore and Finland. Williamson (2009)'s argument that “the ‘right’ institutional mix may not be identifiable and transportable from country to country” (p.372) makes sense.

6.4. Interactions among institutions

6.4.1. Singapore

6.4.1.1. Building national identity

Singapore implemented policies and campaigns such as the National Courtesy Campaign, Total Defence Campaign, Language Policy and Moral Education by means of punishment and rewards so as to build social life. Lee Kuan Yew believed in the power of culture (Zakaria & Lee, 1994) and he initiated campaigns and programmes on
social building (Hill 2000; Lim 2004; and Strait times 1979).

Based on the belief in culture, he instilled the values called “Asian values” into Singaporean citizens (Hill, 2000) and this action was related with Selznick’s (1984) definition that “to institutionalize’ is to infuse with value” (p.17). Selznick (1984) identified the role of leader in the organization that “His [interpersonal leader’s] contribution is to the efficiency of the enterprise. The institutional leader, on the other hand, is primarily an expert in the promotion and protection of values” (p.28). According to his definition, Lee can be identified as both an interpersonal leader and an institutional leader. Selznick (1984) also said that building integrity is a leader’s major function:

Integrity combines organization and policy. It is the unity that emerges when a particular orientation becomes so firmly at a part of group life that it colors and directs a wide variety of attitudes, decisions, and forms or organization, and does so at many levels of experience. The building of integrity is part of what we called the “institutional embodiment of purpose” and its protection is a major function of leadership. (p.128-129)

Lee’s focus was also building national identity, i.e. building integrity, in Singapore because of ethnic diversity and lack of national identity. Therefore, Lee believed to do a major function as a leader.

In the process of social building, formal institutions, i.e. policies, formed normative institutions, i.e. Asian values, and cultural-cognitive institutions. i.e. national identity. Of course, normative institutions, i.e. Asian values, supported cultural cognitive institutions. i.e. national identity, as well.

6.4.1.2. Meritocracy

In the process of forming a meritocracy, the starting point was Lee’s early belief in elitism based on intellectual merit (Bellows, 2009). He dispersed the belief among ministers and other civil servants. This shared belief in meritocracy among the government’s constituents (Leong, 2000b) applied to the selection process in PAP that was one of the governance systems (Hamilton-Hart, 2000). Singaporean also felt honoured by being selected and working as bureaucrats (Leong, 2000b) and this normative institution strengthened the formation of meritocracy. In addition, citizen’s expectation towards governments and belief in government’s performance (Leong,
2000b) also reinforced the meritocracy as well (Haque, 2004).

This case demonstrated Scott (2008)'s statement about reinforcing mechanism that “The regulative and normative pillars can be mutually reinforcing …. Institutions supported by one pillar may, as time passes and circumstances change, be sustained by different pillars” (p.53-54), and also demonstrated North (1994) emphasis on stable polities as reinforcing mechanisms in developing countries that “Both institutions and belief systems must change for successful reform …. Developing norms of behaviour that will support and legitimize new rules is a lengthy process” (p.366).

6.4.1.3. Pragmatism

In the face of instability of an unstable labour market, labour regulations such as the Industrial Relations Act and Employment Act were put into place. The enforcement of the regulations resulted in an increase in productivity and efficiency and also shaped labours’ attitude and behaviours in the work place (Leong 2000b; and Library of congress 1989). Tan (2012) elaborated on the interactions between pragmatism and formal institutions after the execution of the regulations:

Singapore’s one-party dominant state is the result of continuous ideological work that deploys the rhetoric of pragmatism to link the notion of Singapore’s impressive success and future prospects to its ability to attract global capital. In turn, this relies on maintaining a stable political system dominated by an experienced, meritocratic and technocratic PAP government. While this Singaporean conventional wisdom has supported the political and economic interests of the state and global capital in a period of neo-liberal globalisation. (p.67)

That is, the outcome of the regulations, i.e. well-performed tasks by government, justified and sustained the regulations. In addition, a one-party power system was supported by pragmatism among civil society because citizen elected PAP based on the taken-for-granted belief in PAP’s performance thanks to the creation of cultural cognitive institutions. Dasgupta and Serageldin (2001) argued mutually strengthening effect of informal and formal institutions and this effect was observed in the case for pragmatism in Singapore.
6.4.1.4. Overall interaction process

Formal and informal institutions interacted with each other in a nation building process as shown in Figure 4. This process fits for Tabellini’s (2008) argument that “These results on formal institutions, although perhaps fraught with multiple directions of causation, constitute important evidence for the interaction of formal and informal institutions” (p.1282).

Figure 4.
Interactions among institutions in national building in Singapore

According to Williamson (2009)’s study, the countries of strong formal institutions and weak informal institutions are the poorest compared to the three other types of countries. However, Singapore was an outlier. Even though Singapore was in the category of strong formal institutions and weak informal institutions, Singapore’s GDP was similar with two rich categories: category of strong informal and formal institutions and category of strong informal institutions and weak formal institutions. This phenomenon can be interpreted as Singapore’s formal institutions wanting to build informal institutions into strong position: this meant by building strong national identity, social cohesion and trust.

According to Dasgupta and Serageldin (2001), “the key measures of successful interaction between the two levels of institutions are share values and norms and mutual trust” (p.50). Evidence of shared values, norms and visions in the society of
Singapore were detected (Leong 2000b; Library of congress 1989; and Porter et al. 2012;), however the score of trust in Singapore was positioned at medium level according to the surveys done by JDS Survey (2012) and Danish Social Capital Project (2002). Details on the results of the surveys are shown in Appendix 3. Quality of interactions in Singapore was not optimum according to Dasgupta and Serageldin (2001)’s measurement.

6.4.2. Finland

6.4.2.1. Trust

Finland has implemented social welfare programmes and Wiman (2009) argued that this social system contributed a social cohesion in Finland. Bjørnskov (2007) stressed the income equality as one of the most important determinant of generalized trust. Social welfare programmes increased social cohesion and income equality, which lead to widespread trust in Finland (Newton, 2001). This case showed how formal institutions could affect informal institutions.

6.4.2.2. Informal institutions shaping formal institutions

Government's economic policies have changed since 1980s from intervention to coordination (Library of congress, 1988). Dahlman et al. (2005) mentioned the role of Finnish sisu, i.e. can-do mind-set, in the restructuring process that took place during the 1980s and 1990s and Oinas (2005) noticed the increased collective bargaining in the process of government planning. Thus informal institutions such as Finnish sisu and collective bargaining contributed to the changes in government’s policies. As Williamson (2009) suggestion that “formal and informal institutions may act as substitutes” (p.378) in countries with strong informal institutions and weak formal institutions, government’s role in enforcing formal institutions in Finland has been substituted by informal institutions.

6.4.2.3. Overall interaction process

According to Dasgupta and Serageldin (2001)’s measure for quality of interactions: trust and shared values and norms, quality of interactions among institutions in Finland
was ideal because national vision and strategies were shared (Dahlman et al. 2005; and Schienstock & Hämäläinen 2001) and level of trust was high (Newton 2001, JDS Survey 2012, and Danish Social Capital Project 2002).

6.4.3. Similarities and dissimilarities in the interactions among institutions

Active interactions among institutions were identified in both Finland and Singapore. However, direction and intensity of interactions differed. In Finland, informal institutions changed formal institutions into weak position while informal institutions were sustained or reinforced. On the contrary, in Singapore, formal institutions changed informal institutions drastically while characteristic of strong formal institutions was sustained. North (2006) compared the society of strong formal institutions to that of strong informal institutions that “Common belief systems which embodies social norms consistent with the policies of the ruler will reduce the use of coercion” (p.104) and “In such cases [of disorder] authoritarian order may well be preferred by members of that society” (p.108). Former case would be in line with Finland’s and latter case would be – Singapore’s. Other difference between Finland and Singapore is the quality of interactions. Finland’s quality of interaction was higher than Singapore’s because the level of trust after the interaction process was higher in Finland.

6.4.4. Interactions among actors

6.4.4.1. Institutional entrepreneurs in Singapore and Finland

The literatures suggested the role of the institutional entrepreneur: “to embed their change initiatives within frames or models available in the broader society” (Seo and Creed, 2002, p.237), to "undertakes to coordinate the activities of others; he makes decisions and meets contingencies” (Hughes, 1936, p. 183), and North (2006) defined entrepreneurs as “those of political and economic entrepreneurs in a position to make policies” (p.2). Lee initiated regulations and policies on both economic and social issues and tried to embed the vales such as meritocracy, Asian values and pragmatism into a broader society of Singapore. He also managed minister’s thoughts and activities to lead to the changes. Therefore, he can be categorised as an institutional entrepreneur in Singapore. North (2006) presented corporate elites as a kind of institutional entrepreneurs. Nokia’s CEO, Kari Kairamo, launched a campaign on advocating a vision of information society and played a critical role in the formation of
ICT cluster (Schienstock, 2007), therefore, he can be categorised as an institutional entrepreneur in Finland.

6.4.4.2. Similarities in interactions among actors: Broad network

Broad coalition among actors is a similar phenomenon in Singapore and Finland. In case of Singapore, even though Lee’s authoritarian and inspirational leadership played a major role in institutional change, broad coalition among ruling party was found (Leong, 2000b). Leong (2000b)’s statement specified cohesion among major actors.

The various ministries work closely to formulate and coordinate major policy initiatives …. the high degree of … cohesion among the government's political supporters, make it possible for major or controversial policy changes to be implemented …. The top 100 or so most influential and powerful office-holders in Singapore are mainly English-educated and maintain a close network. (p.96, 101)

In cased of Finland, broad networks and cooperation among stakeholders during the formation of national innovative system (Blomström et al. 2002; Oinas 2005; Peter & Daniel 2004; Schienstock & Hämäläinen 2001; and Roos et al. 2005) were in line with North (2006)'s statement that “The overall direction of economic change will reflect the aggregate of choices made by political and economic entrepreneurs with widely diverse objectives” (p.79). And the competition between private operators and the state-owned company created competitive market and the broad coalition among private operators was a unique characteristic compared to other countries (Blomström et al., 2002). Finland’s collective bargaining practices showed the clue of the broad coalition (Oinas 2005, and Ornston & Rehn 2006).

The existence of broad coalitions in Finland and Singapore is related with Seo and Creed (2002)’s statement that “This [Widespread change] is most likely to occur … when the social networks among actors are relatively dense” (p.19). Acemoglu and Robinson (2010) also argued about a broad coalition as “deciding factors underpinning the emergence of inclusive [political] institutions” (p.57), which lead to better economic performance. Even though Acemoglu and Robinson (2010) didn't present the sources of broad coalition, shared vision and values can be one of the sources of broad coalition because the broad coalition was shaped with shared vision and values among bureaucrats in Singapore and stakeholders in Finland.
6.5. Processes of forming institutions

6.5.1. Critical events

As a condition for institutions change, critical events were suggested that “cognitive blockades that hinder companies or countries from adapting to the new paradigms can only be overcome when major change events occur” (Schienstock, 2007, p.95). “This [Widespread change] is most likely to occur when common conditions affect many actors more or less simultaneously in much the same way (Seo and Creed, 2002, p.19), “It [A critical juncture] can open the way for breaking the cycle of extractive institutions and enable more inclusive ones to emerge” (Acemoglu and Robinson, 2010, p.101). As for Singapore, there were events such as independence, ejection from new nation, riots, crime, social separation due to ethnic diversity, and deep economic crisis occurred. In Finland, economic recession and high unemployment were conditions that made Finland promote adapting to new paradigm.

6.5.2. Path dependence and adaptive institutions

In Finland, the formation of informal institutions stemmed from its legacies and histories. Finnish sisu came from endowment factors such as weather and geography (Dahlman et al., 2005), openness – from history of dependence on technology abroad (Dahlman et al., 2005), collective bargaining – from tradition of connection between political elites and powerful forestry and industry (Oinas, 2005). This process can be explained by path dependence. North (2006) explained that “path dependence is not ‘inertia,’ rather it is the constraints on the choice set in the present that are derived from historical experiences of the past” (p. 52). North (2006) also mentioned that “The adaptive efficient institutional structure that has characterized the American economy is a consequence of path dependence (political and economic institutions inherited form British rule) … throughout the nineteenth century that reinforced the belief system that supported the formal political institutions” (p.111). Even though, period of improving competitiveness in Finland was short, the power that drove the competitiveness came from rich informal institutions that have been reinforced through history. This process is in line with adaptive institutions suggested by North (2006). The Schienstock (2007)’s elaboration of Finnish industry transformation was “From path dependence to path creation”, but it can be said as “Path creation through path dependence”.

In Singapore, the concept of path dependence and adaptive institutions (North, 2006)
can’t be applied directly. Even though, Singapore had formal institutions which are from the legacy of British colony such as statutory board and constitutional law, Singapore made its new destiny out of path dependence.

6.5.3. Institutionalisation of informal institutions

Rigidity and resistance to change of informal institutions are stronger than those of formal institutions: “Because this cultural conditioning of a society usually takes place over generations it is fundamentally difficult to establish stable consensual order in societies that have experienced persistent disorder” (North, 2006 p.108) and “The top level [informal institution] is the social embeddedness level. This is where norms, customs, mores, traditions, etc. are located …. Institutions at this level change very slowly-on the order of centuries or millennia” (Williamson, 2000, p.596). However, Singapore tried to change citizen’s attitudes, behaviours, values, and norms by implementing formal institutions for last 30 years and this process deserves to look at how informal institutions are institutionalised. Scott and Meyer (1994) defined the concept of institutionalisation as “the process by which a given set of units and a pattern of activities come to be normatively and cognitively held in place and practically taken for granted as lawful (whether as matter of formal law, custom, or knowledge)” (p.10). With regards to institutional change, i.e. formation of new informal institutions, Singaporean identity has been in the way of institutionalisation by constant interactions among actors. Related actors are shown in Figure 5.

**Figure 5.**

**Interactions among actors in building national identity in Singapore**

![Diagram of interactions among actors in building national identity in Singapore](image-url)
Scott (2008) categorised the kinds of institutionalisation: based on increasing return, based on increasing commitment, and as increasing objectification of shared belief. The institutionalisation process of building nationality in Singapore was based on increasing commitment which highlighted the role of norms, value, structures and procedures. That is, it’s a normative process across the actors. This process demonstrates Scott’s (2008) argument that “Regulatory activities thought to embody coercive pressures often depend more on normative and cognitive elements” (p.136).

6.5.4. Isomorphism

As a force of institutionalisation, isomorphism was suggested (DiMaggio & Powell 1983; Meyer & Rowan 1977; Seo & Creed 2002). Finland’s policies were somewhat originated from EU and OECD (Lemola, 2002), however, the adaptation in Finland showed different outcome compared to other EU countries. This difference in outcome came from strong informal institutions which lead to cooperation and from formal institutions which changed its role from intervention to coordination. As for Singapore, they brought in western ideology, i.e. pragmatism, elitism (Bellows 2009; Hamilton-Hart 2000; and Ng 2007), and eastern ideology, i.e. Confucianism (Hill, 2000), and it blended them in forming informal institutions. Both countries went through isomorphism during the period, but developed it uniquely with its own institutional mix.
Chapter 7: Conclusion

7.1. Main findings

Singapore and Finland have improved their competitiveness while undergoing institutional changes after critical events. During the period, institutions in Singapore were characterised by strong formal institutions such as regulations and policies. Institutions in Finland were characterised by strong informal institutions such as Finnish-sisu, openness, collective bargaining practice, shared understanding, and trust. Their own institutional mix of both Singapore and Finland fostered economic activity, prosperity and achieved building national consensus, shaping attitudes, commitment, political stability, and influencing firms’ strategies. During the institutional change, there were interactions among institutions in both Singapore and Finland. But the directions of interactions differed. In Finland, formal institutions have been substituted by strong informal institutions. These strong informal institutions in Finland can be understood as path dependence and adaptive institutions because they had been embedded and reinforced throughout history. On the other hand, in Singapore, formal institutions changed informal institutions by building strong national identity, meritocracy and pragmatism in the society, which aimed at establishing social cohesion and trust.

Institutionalisation process of informal institutions in Singapore has been implemented by interactions among actors. Singapore’s improved competitiveness cannot be understood by the scheme of path dependence, rather by the interactions among institutions. With regards to interactions among actors, broad coalitions were shown in both Singapore and Finland. In the case of Singapore, broad coalition among the ruling party was detected and in the case of Finland – broad coalition among stakeholders was revealed. These case studies of Finland and Singapore added the examples to the institutional theory regarding the role of institutions, institutional change and interactions among institutions.

7.2. Limitations

Delgado, Ketels, Porter and Stern (2012) developed a framework for measuring national competitiveness by synthesising various studies. They suggested that “It [A framework] captures macroeconomic and microeconomic underpinnings of competitiveness in three areas: social infrastructure and political institutions, monetary and fiscal policy, and microeconomic conditions” (p.29-30). According to their findings,
their research explained about institutions, not about monetary and fiscal policy and microeconomic conditions such as state of cluster development and sophistication of company operations and strategy.

7.3. Recommendations to stakeholders

“Policy makers around the world have been increasingly concerned about their country’s level of competitiveness vis-à-vis other countries” (Lee, 2010, p.671). As a result, there have been reports on national competitiveness such as GCR and WCY which show indicators and rankings across nations. “Public authorities and international institutions increasingly tend to follow the ‘evidence-based policy’, where policies are guided by indicators and benchmarks, typically in the form of hard statistical data. (Sabadie & Johansen, 2010, p.236). Based on these data, each country tries to benchmark other countries success stories or policies to improve its competitiveness. There are some recommendations for such efforts to be successful. Policy makers should

▪ study on their own institutional matrix before benchmarking other countries' policies. Strengths and weaknesses of institutions should be investigated first.

▪ focus on informal institutions such as norm, value, attitude and behaviour in society. Countries of weak informal institutions can pay attention to strengthening weak informal institutions through formal institutions.

▪ concentrate on establishing broad coalition in interactions among actors because broad coalition is essential for strong one person politician, one party, and stakeholders to lead to desirable results.

▪ constantly check the quality of interactions among institutions such as trust, shared norms and values.

7.4. Recommendations for future research

Finland’s case explains the path dependence and adaptive institutions of informal institutions. On the contrary, Singapore’s case explains the institutionalisation process of informal institutions based on the framework of interactions among institutions and actors. To enrich the context of the interactions, interactions among institutions and
actors in transitional countries that have undergone institutional changes can be investigated further.

The case of Finland and Singapore represents examples of countries where each has the opposite institutional framework makeup: Finland – weak formal institutions and strong informal institutions, and Singapore – strong formal institutions and weak informal institutions. As for countries of strong formal and informal institutions, the way in which formal and informal institutions evolved and how they reinforced each other can be investigated further in relation to the future direction of Singapore, which is leaning towards strong formal and informal institutions.
References


Chang, H. J., & Evans, P. (2005). The role of institutions in economic change. Trabalho Apresentado Na Conferência “The Other Canon and Economic Development”, Oslo, Norway, August,


Appendix 1. Boards, committees and council in Singapore

▪ Under the appropriate government ministries, statutory boards -- a concept carried over from colonial days--were established to manage specific parts of the economy and foster overall and sectoral development. .... The statutory boards played the major role in the government's post-independence development strategy, and their activities usually served multiple economic and political goals .... The Economic Development Board was established in 1961 .... In the first two decades following independence, the board evolved industrial strategies in response to changes in the international and domestic business environments, as well as negotiating the public-private consensus necessary for implementing them. (Library of congress, 1989)

▪ The Housing and Development Board, established in 1960. Between 1960 and 1985, the government-owned board completed more than 500,000 high-rise, high-density public housing apartments-- known as housing estates--along with their related facilities were completed (Library of congress, 1989)

▪ The NPB [National Productivity Board] ... exists to inculcate 'better work attitudes' and create 'good labour-management relations' .... 'Teamy' the anthropomorphic bee, the mascot of the productivity movement, in the meantime continues to lead the campaign, which reaches its height each November which has been designated 'productivity month' (Wilkinson, 1988, p.170)

▪ The governmental National Wages Council set economic-wide guidelines for wages, wage increases, and fringe benefits, which rose steadily over time (Porter et al., 2012, p.5)

▪ The All-Party Committee was formed in 1954. It was appointed by the Legislative Assembly to look into the future of Chinese education in the country (Leong, 2000b, p.104)

▪ Despite a heavy handed approach towards criminals --serious and petty--the police are expected to have ‘cooperative relations’[emphasis added] with the community [emphasis added]. Most important in this regard is the National Polce Cadet Corps (NPCC) with over 20,000 cadets in 120 secondary schools. The NPCC educates students on the role of the police, subjecting them to crime prevention exhibitions, road safety games, etc. The early 1980s has seen the intensification of efforts to improve police-community relations, with the establishment of a Neighbourhood Police Post system, a Neighbourhood Watch scheme, Crime Preceentio
Committees, and police-run Boy'S Clubs (Ministry of Culture, 1985) (Wilkinson, 1988, p.169)

- The Public Utilities Board, established in May 1963, was responsible for providing the country's utility services (Library of congress, 1989)
Appendix 2. Financing, educational and research systems in Finland

- The Academy of Finland focuses on financing basic research. .... The Academy's operations cover all scientific disciplines. It operates within the administrative sector of the Ministry of Education and is funded through the state budget (Dahlman et al., 2005, p.10).

- TEKES is the principal organization for implementing technology policy and is part of the Ministry of Trade and Industry in Finland. It supports companies engaged in risk-bearing product development projects with grants and loans, and finances the projects of research institutes and universities in applied technical research. TEKES launches, co-ordinates and funds technology programs to be implemented together with companies, research institutes, and universities. Also, TEKES has expertise abroad including coordinating international cooperation in research and technology (Roos et al., 2005, p.6). Its programs require cooperation and networking between business enterprises and research institutes and promote technology transfer [emphasis added] and internationalization [emphasis added]. (Blomström et al., 2002, p21)

- The Finnish National Fund for Research and Development, or Sitra, to fill the need on the public side to have an instrument by which to experiment and start new activities without the budgetary delays and political commitments of government to carry them out immediately on a broad front. .... Initially, it was subordinated under the Central Bank of Finland, but since 1991, it has operated as a public foundation under the Parliament (Dahlman et al., 2005, 11).

- The Finnish education system, which is very technology oriented, has supported the knowledge-based high road approach by increasingly focusing on higher education. Not only did the extension of universities' education capacity in ICT, but particularly the establishment of the polytechnic system boost tertiary education" (Schienstock, 2007, p.102).

- There is the Technical Research Centre of Finland, or VTT. “By developing new technological solutions and applied technologies, VTT helps its clients to improve their competitiveness. VTT also promotes technology transfer by participating in national and international research programs and collaborative networks” (Dahlman et al., 2005, p.11).
Appendix 3. Surveys on trust (Cross-country analysis)

- JDS Survey (2012)

<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>Source</th>
<th>Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algeria</td>
<td>2005</td>
<td>Globalbarometer - Round 1</td>
<td>45,3</td>
</tr>
<tr>
<td>Argentina</td>
<td>2008</td>
<td>Latinobarómetro 1995-2008</td>
<td>40,6</td>
</tr>
<tr>
<td>Australia</td>
<td>2005</td>
<td>World Values Survey Wave 5 (2005-2008)</td>
<td>92,4</td>
</tr>
<tr>
<td>Austria</td>
<td>1999</td>
<td>Values Surveys EVS/WVS Waves 1-4 (1981-2004)</td>
<td>70,2</td>
</tr>
<tr>
<td>Belgium</td>
<td>1999</td>
<td>Values Surveys EVS/WVS Waves 1-4 (1981-2004)</td>
<td>63,0</td>
</tr>
<tr>
<td>Benin</td>
<td>2005</td>
<td>Globalbarometer - Round 1</td>
<td>56,2</td>
</tr>
<tr>
<td>Bolivia</td>
<td>2008</td>
<td>Latinobarómetro 1995-2008</td>
<td>48,8</td>
</tr>
<tr>
<td>Botswana</td>
<td>2005</td>
<td>Globalbarometer - Round 1</td>
<td>12,3</td>
</tr>
<tr>
<td>Brazil</td>
<td>2006</td>
<td>Latinobarómetro 1995-2008</td>
<td>17,5</td>
</tr>
<tr>
<td>Cambodia</td>
<td>2008</td>
<td>East-Asian barometer 2005-2008</td>
<td>15,6</td>
</tr>
<tr>
<td>Cape Verde</td>
<td>2005</td>
<td>Globalbarometer - Round 1</td>
<td>9,0</td>
</tr>
<tr>
<td>Colombia</td>
<td>2008</td>
<td>Latinobarómetro 1995-2008</td>
<td>30,9</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>2008</td>
<td>Latinobarómetro 1995-2008</td>
<td>48,9</td>
</tr>
<tr>
<td>Chile</td>
<td>2008</td>
<td>Latinobarómetro 1995-2008</td>
<td>34,4</td>
</tr>
<tr>
<td>China</td>
<td>2008</td>
<td>East-Asian barometer 2005-2008</td>
<td>120,9</td>
</tr>
<tr>
<td>Dominican Republic</td>
<td>2008</td>
<td>Latinobarómetro 1995-2008</td>
<td>74,7</td>
</tr>
<tr>
<td>Ecuador</td>
<td>2008</td>
<td>Latinobarómetro 1995-2008</td>
<td>72,7</td>
</tr>
<tr>
<td>Country</td>
<td>Year</td>
<td>Survey/Source</td>
<td></td>
</tr>
<tr>
<td>--------------</td>
<td>--------</td>
<td>-----------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Guatemala</td>
<td>2008</td>
<td>Latinobarómetro 1995-2008</td>
<td></td>
</tr>
<tr>
<td>Honduras</td>
<td>2008</td>
<td>Latinobarómetro 1995-2008</td>
<td></td>
</tr>
<tr>
<td>Hong Kong</td>
<td>2005</td>
<td>World Values Survey Wave 5 (2005-2008)</td>
<td></td>
</tr>
<tr>
<td>Indonesia</td>
<td>2006</td>
<td>East-Asian barometer 2005-2008</td>
<td></td>
</tr>
<tr>
<td>Kenya</td>
<td>2005</td>
<td>Globalbarometer - Round 1</td>
<td></td>
</tr>
<tr>
<td>Korea (South)</td>
<td>2005</td>
<td>World Values Survey Wave 5 (2005-2008)</td>
<td></td>
</tr>
<tr>
<td>Kuwait</td>
<td>2005</td>
<td>Globalbarometer - Round 1</td>
<td></td>
</tr>
<tr>
<td>Lebanon</td>
<td>2005</td>
<td>Globalbarometer - Round 1</td>
<td></td>
</tr>
<tr>
<td>Lesotho</td>
<td>2005</td>
<td>Globalbarometer - Round 1</td>
<td></td>
</tr>
<tr>
<td>Madagascar</td>
<td>2005</td>
<td>Globalbarometer - Round 1</td>
<td></td>
</tr>
<tr>
<td>Malawi</td>
<td>2005</td>
<td>Globalbarometer - Round 1</td>
<td></td>
</tr>
<tr>
<td>Country</td>
<td>Year</td>
<td>Survey Details</td>
<td>Value</td>
</tr>
<tr>
<td>--------------</td>
<td>---------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>Mexico</td>
<td>2008</td>
<td>Latinobarómetro 1995-2008</td>
<td>41,7</td>
</tr>
<tr>
<td>Mongolia</td>
<td>2006</td>
<td>East-Asian barometer 2005-2008</td>
<td>21,4</td>
</tr>
<tr>
<td>Mozambique</td>
<td>2005</td>
<td>Globalbarometer - Round 1</td>
<td>56,0</td>
</tr>
<tr>
<td>Namibia</td>
<td>2006</td>
<td>Globalbarometer - Round 1</td>
<td>57,8</td>
</tr>
<tr>
<td>Netherlands</td>
<td>2006</td>
<td>World Values Survey Wave 5 (2005-2008)</td>
<td>90,6</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>2008</td>
<td>Latinobarómetro 1995-2008</td>
<td>46,1</td>
</tr>
<tr>
<td>Nigeria</td>
<td>2005</td>
<td>Globalbarometer - Round 1</td>
<td>29,8</td>
</tr>
<tr>
<td>Panama</td>
<td>2008</td>
<td>Latinobarómetro 1995-2008</td>
<td>45,9</td>
</tr>
<tr>
<td>Paraguay</td>
<td>2008</td>
<td>Latinobarómetro 1995-2008</td>
<td>22,7</td>
</tr>
<tr>
<td>Peru</td>
<td>2008</td>
<td>Latinobarómetro 1995-2008</td>
<td>30,5</td>
</tr>
<tr>
<td>Philippines</td>
<td>2005</td>
<td>East-Asian barometer 2005-2008</td>
<td>20,1</td>
</tr>
<tr>
<td>Russia</td>
<td>2006</td>
<td>World Values Survey Wave 5 (2005-2008)</td>
<td>55,4</td>
</tr>
<tr>
<td>Senegal</td>
<td>2005</td>
<td>Globalbarometer - Round 1</td>
<td>54,2</td>
</tr>
<tr>
<td>Singapore</td>
<td>2006</td>
<td>East-Asian barometer 2005-2008</td>
<td>59,8</td>
</tr>
<tr>
<td>South Africa</td>
<td>2007</td>
<td>World Values Survey Wave 5 (2005-2008)</td>
<td>38,0</td>
</tr>
<tr>
<td>Switzerland</td>
<td>2007</td>
<td>World Values Survey Wave 5 (2005-2008)</td>
<td>107,4</td>
</tr>
<tr>
<td>Taiwan</td>
<td>2006</td>
<td>East-Asian barometer 2005-2008</td>
<td>70,0</td>
</tr>
<tr>
<td>Tanzania</td>
<td>2005</td>
<td>Globalbarometer - Round 1</td>
<td>27,6</td>
</tr>
</tbody>
</table>
Appendix 4. Lists of secondary data


