DIAGNOSING NATIONS’ WEALTH CREATION POTENTIAL IN THE KNOWLEDGE ECONOMY CONTEXT. REFLECTIONS ON THE CASE OF SPAIN AND PORTUGAL.

José María Viedma Martí
Professor at the Polytechnic University of Catalonia
School of Professional & Executive Development

http://www.jmviedma.com
http://intellectualcapitalmanagementsystems.com
Index

1. Introduction to the approach and basic definitions.

2. Knowledge Economy. Definitions and characteristics

3. Principles and theories of wealth creation in the Knowledge Economy.
   2.1 Who creates wealth?
   2.2 How is wealth created?

4. Methodologies and frameworks for diagnosing wealth creation potential of nations in the knowledge economy.

5. Reflections on the case of Spain.

6. Conclusions.
1. Introduction to the approach and basic definitions.
The presentation tries to answer the following fundamental questions:

1) Who creates wealth in a specific country?

2) How is wealth created?

3) How to determine the wealth creation potential of a specific nation?

4) Does knowledge economy context fundamentally change rules of wealth creation?

5) Are intangible assets the main drivers of wealth creation?
Basic definitions

Wealth Definition

• A measure of the value of all of the assets of worth owned by a person, community, company or country.

• Wealth is the found by taking the total market value of all the physical and intangible assets of the entity and then subtracting all liabilities.

• For national wealth as measured in the national accounts the net liabilities are these owed to the rest of the world.

• Wealth is the present value of the expected stream of future utility that an entity could hope to extract from tangible and intangible resources available, assuming these resources are and will be managed in an effective and efficient way.

Source: Adapted from various sources
2. Knowledge Economy. Definitions and characteristics.
The Knowledge Content of Goods and Services

Samsung 6 Edge

Apple
IPAD 2 Air

YOGA
Lenovo Dual

NEW BMW
Series 7 2015
The Knowledge Content of Processes and Business Models
The advent of the Knowledge economy.

- Adam Smith
- Fritz Machlup
- T.W. Schultz
- Robert Lucas
- Carl Menger
- F. Hayek
- Ludwig von Mises
- Wilhelm Röpke
- Gary Becker
- Paul Romer
- Joseph Schumpeter

Source: Savage Ch. 1991.
Physical and Financial Capital

Process Capital

Human Capital

Renewal Capital

Market Capital

Intellectual Capital

Fuente: Kiernan Matthew, 1995
Entrepreneurial Excellence in the Knowledge Economy

Intellectual Capital Benchmarking Systems

By José Maria Viedma Martí and Maria do Rosário Cabrita

www.palgrave.com
Knowledge Economy Definitions

“... one in which the generation and exploitation of knowledge has come to play the predominant part in the creation of wealth. It is not simply about pushing back the frontiers of knowledge; it is also about the most effective use and exploitation of all types of knowledge in all manner of economic activity”


“economic success is increasingly based on upon the effective utilisation of intangible assets such as knowledge, skills and innovative potential as the key resource for competitive advantage. The term “knowledge economy” is used to describe this emerging economic structure”

Economic & Social Research Council 2005

Source:
Four pillars of the KE:

1. **An Economic incentive and institutional regime** that provides good economic policies and institutions, which promote efficient allocation of resources and stimulate creativity and incentives for the efficient creation, dissemination, and use of existing knowledge.

2. **An educated and skilled labor force** that continuously upgrades and adapts skills to efficiently create and use knowledge.

3. **An effective innovation system** of firms, research centers, universities, consultants, and other organizations that keeps up with the knowledge revolution, taps into the growing stock of global knowledge, and assimilates and adapts new knowledge to local needs.

4. **A modern and adequate information infrastructure** that facilitates the effective communication, dissemination, and processing of information and knowledge.

(World Bank Institute. Overview 2006)
Innovation System Information Infrastructure Economic Incentive and Institutional Regime Pillars of KBE

Educated and skilled labor force

Interconnected interdependent

Information Infrastructure Innovation System

(World Bank Institute. Overview 2006)
3. Principles and theories of wealth creation in the Knowledge Economy
The nature of human beings

**Human beings strive for knowledge and its value**

Curiosity and the desire for a better life are two of the most basic human instincts. Sociobiological studies of human behavior find clear and consistent evidence of spontaneous curiosity and hoarding. These are traits that arise from deep within the human genome.

The genius of a knowledge-based economy is that it lets us satisfy one of these primeval compulsions (wealth accumulation) by satisfying the other (curiosity).

Humans value ideas that improve their well-being, and that help them overcome environment constraints and other adversaries.

**Markets underlay the development and spread of all innovations.**

Source: Inspired by Randall Morck and Bernard Yeung
The knowledge problem: Political dimension

Three questions:

- **First**, how can a society optimize the use of knowledge?

- **Second**, how can we incentivize the creation and use of knowledge in such a way that people would be induced to create new knowledge and make their knowledge available to the others?

- **Third**, how can we produce the knowledge needed for people to coordinate their actions and produce economic and social progress?

Top-down and coercive systems of command-and-control don’t work out so well. No person and no committee can have the information necessary to coordinate millions (or billions) of people with disparate goals and fragmentary knowledge.

We find the solution of the problem in free market economy and political democratic institutions. (Liberty and the Rule of Law)

Source: Lode Cossaer and Maarten Wegge. Why Liberty, Jameson Books, Inc
Redefining Capitalism

Capitalism is under attack

The financial crisis of 2008, the stagnation of middle class in many developed countries, and rising income inequality are challenging some of our most deeply held beliefs about how a fair and well-functioning society should be organized.

Wealth or prosperity in a society is the accumulation of solutions to human problems.

Growth is an increase in the quality and availability of solutions to human problems.

Genius of capitalism: An unmatched evolutionary system for finding solutions to human problems.

Role of business: Solving problems through the process of converting great ideas into products and services that fulfill fast changing human needs.

Government role: Implement democracy as a political system. Creating laws and regulations (Rule of Law) to encourage economic activity that solves problems and discourages economic activity that creates them (A kind of Referee) thus fostering trust and cooperation in society.

Winston Churchill: “It has been said that democracy is the worst form of government except all the others that have been tried”. A same statement could be applied to capitalism.

Source: Erick Beinhocker and Nick Hanauer
Austrian School of Economics
Main economic factors in the Austrian School of Economics

**Individual choice**
Individuals and their choices active participants in the economic process. Markets and value of things are determined by these choices.

**Entrepreneurship**
Economic process too much uncertain and could not be predicted by one so “out of the loop”. Entrepreneur is the only one with the proper knowledge to predict outcomes and minimize risk. Entrepreneur, perhaps the most important role in any economy.

**Free and competitive markets**
Belief in a “free and competitive markets” approach to macroeconomics. Strong belief in a minimal role for government in our everyday lives.

**Private property**
Individual property ownership is the bedrock of a healthy economy, Without it, there is no basis for capital, for trade, for value... and free market.

**A price system**
A realistic price system emerges when free markets are allowed to do their work.
A Humane Economy: The Social Framework of the Free Market

Wilhelm Röpke

Introduction by Dermot Quinn

German Ordoliberalism

Summery of RÖPKE thoughts

“Conforming “ social economic and financial policy, the task of which is to protect the weak “ beyond the market” to equalize interest, set rules of the game and limit market power. Röpke strove for and economic order of “economic humanism” that he also referred to as the “Third Way “.
Why Nations Fail

Argues that the key differentiator between countries is “institutions”. Nations thrive when they develop “inclusive” political and economic institutions, and they fail when those institutions become “extractive” and concentrate power and opportunity in the hands of only a few.

“Growth without technological advance is not good; it represents short-run advantage that will be paid for in long-run retardation”.

David S. Landes

Wealth creation and Nations’ Competitiveness

“Nations themselves do not compete, rather, their enterprises do”

“The role of nations in shaping the environment in which enterprises operate influence their competitiveness”

“Competition among nations can be seen in the areas of education and know-how. In a modern economy, nations do not rely only on products and services, they also compete with brains”

(Stéphane Garelli-IMD 2002)
Wealth creation and Nations’ Competitiveness

“It is well understood that sound fiscal and monetary policies, a trusted and efficient legal system, a stable set of democratic institutions, and progress on social conditions contribute greatly to a healthy economy. These broader conditions provide the opportunity to create wealth but do not themselves create wealth. We must focus on the microeconomic level of the economy. Wealth is actually created in the microeconomic level of the economy. Wealth can only be created by firms. More than 80 percent of the variation of GDP per capita across countries is accounted for by microeconomic fundamentals. Unless microeconomic capabilities improve, macroeconomic, political, legal, and social reforms will not bear full fruit.”

(Michael Porter 2005)
Theoretical Foundations
Strategic Focus

Micro Level (Enterprises)

- Resource Based View
- Open Innovation
- Knowledge Based View
- Dynamic Capabilities Based View
- Customer-Centric View

Macro Level (Cities, Regions, Nations)

- Austrian School of Economics
- Institutional and Evolutionary Economics (I&E)
- Cultural and Social Economics (C&S)
- Knowledge Based Development (KBD)
- Triple Helix (TH)
- Regional Science (RS)
- Systems Theory (ST)
- Systems and Innovation (SI)

INCAS, ICBS (OICBS, IICBS), SCBS.
CADIC, CICBS, RICBS, NICBS
Wealth Creation in the Knowledge Economy

Macro dimension

- Free Market economy
- Knowledge based economy
- Liberal democratic political systems
- Inclusive political, economic and social institutions

Micro dimension

- Entrepreneurial excellence
- High quality people

Copyright José M. Viedma 2016 ©
Wealth Creation in the Knowledge Economy

Macro dimension

- Free Market economy
- Knowledge based economy
- Liberal democratic political systems
- Inclusive political, and economic institutions

Micro dimension

- Entrepreneurial excellence
- High quality people
- Global entrepreneurship and development index (GEINDEX)

Indexes:
- KEI
- K4D
- ISB
- Global Innovation index (GII)
- Freedom House Global democracy ranking
- Democracy index
- Global entrepreneurship and development index (GEINDEX)
- WEF Institutions The global competitiveness index
- WEF The human capital report
- Heritage Foundation Index of economic freedom

Copyright José M. Viedma 2016 ©
Theoretical principles

Who?

1. The main source of wealth of a nation is people. Knowledge and other types of intangibles are in the head of people. Without an educated, healthy and hardworking population there is no progress.

2. A free market economy with inclusive political and economic institutions is the sine qua non condition for sustainable economic and social development.

3. Wealth or poverty of a specific nation is strongly dependant on the number of competitive or excellent companies that the specific nation has.

4. Government does not create wealth directly but contributes to wealth creation when succeeds putting into practice a free market economy and inclusive democratic political, economical and social institutions (liberty, order and the rule of law).

5. An excellent or competitive company is the one that achieves long term extraordinary profits due to the fact that has a business model with sustainable competitive advantages.

6. In the knowledge economy sustainable competitive advantages are mainly based on intangibles. Consequently strategic management of intangibles or intellectual capital becomes a fundamental task.
Theoretical principles

How?

7. Business excellence is always due to good strategy formulation and superior strategy implementation.

8. Good strategy formulation and superior strategy implementation is always a human task and strongly depends on the quality of leaders, top management team, key professional people and knowledge workers.

9. In a continuous changing environment business models quickly get out-of-date and as a consequence of that, innovation in business models\(^1\) becomes an urgent need.

10. In any company the essential activity to perform is always innovation in the business model so it can be converted in an excellent or competitive business model.

11. Companies alone do not create wealth. They need the collaboration of other companies, universities and research institutes, financial institutions, government and other organisations and institutions and specially the existing ones in the cluster, region or nation where the company is located. In other words they need to be active part of a territorial open innovation system.

12. Strategic management of intangibles needs also to be applied to the government of clusters, regions in nations in order to build territorial open innovations systems.

\(^1\text{We consider, in this particular context, that innovation in business models, encompass all types of innovations, including products, services, processes, technical, management, etc.}\)
Wealth Creation in the KE

People

Knowledge

Intangibles

Competitive Enterprises

Innovative Enterprises

Suitable Environment
5. Methodologies and frameworks for diagnosing wealth creation potential of nations in the knowledge economy.
Two sets of frameworks

- **Competitiveness frameworks:**
  - W.E.F. Global Competitiveness Index
  - I.M.D. World Competitiveness Year Book

- **IC Community frameworks**
  - Mainly based on Skandia Navigator (Leif Edvinsson, Carol Yeh-Yun Lin)
  - Some concentrate on knowledge-creation and innovation. (Ahmed Bounfour, F.Javier Carrillo, Aino Kianto and Pirjo Stahle)
  - NICBS that tries to integrate the two sets of frameworks and considers the micro and macroeconomic dimension.
The 12 factors of competitiveness of W.E.F.

**Basic requirements**
- Institutions
- Infrastructure
- Macroeconomic environment
- Health and primary education

**Efficiency enhancers**
- Higher education and training
- Goods market efficiency
- Labor market efficiency
- Financial market development
- Technological readiness
- Market size

**Innovation and sophistication factors**
- Business sophistication
- Innovation

**Key for**
- factor-driven economies
- efficiency-driven economies
- innovation-driven economies
IC community frameworks.
IC community contributions.
Table 3.1 Variables in each type of capital proposed by this study

<table>
<thead>
<tr>
<th>Human capital index</th>
<th>Market capital index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skilled labor#</td>
<td>Corporate tax#</td>
</tr>
<tr>
<td>Employee training#</td>
<td>Cross-border venture#</td>
</tr>
<tr>
<td>Literacy rate</td>
<td>Openness of culture#</td>
</tr>
<tr>
<td>Higher education enrollment</td>
<td>Globalization#</td>
</tr>
<tr>
<td>Pupil–teacher ratio</td>
<td>Transparency#</td>
</tr>
<tr>
<td>Internet subscribers</td>
<td>Image of country#</td>
</tr>
<tr>
<td>Public expenditure on education</td>
<td>Exports of goods</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Process capital index</th>
<th>Renewal capital index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business competition environment#</td>
<td>Business R&amp;D spending</td>
</tr>
<tr>
<td>Government efficiency#</td>
<td>Basic research#</td>
</tr>
<tr>
<td>Intellectual property rights protection#</td>
<td>R&amp;D spending/GDP</td>
</tr>
<tr>
<td>Capital availability#</td>
<td>R&amp;D researchers</td>
</tr>
<tr>
<td>Computers in use per capita</td>
<td>Cooperation between universities and enterprises#</td>
</tr>
<tr>
<td>Convenience of establishing new firms#</td>
<td>Scientific articles</td>
</tr>
<tr>
<td>Mobile phone subscribers</td>
<td>Patents per capita (USPTO+EPO)</td>
</tr>
</tbody>
</table>

Remarks: (1) Financial capital is the logarithm of GDP per capita adjusted by purchasing power parity. (2) Variables marked with # are rated qualitatively using a scale of 1–10

Navigating Intellectual Capital After the Financial Crisis

Authors: Lin, C.Y.-Y., Edvinsson, L., Chen, J., Beding, T.
National Intellectual Capital and the Financial Crisis in Greece, Italy, Portugal, and Spain
Carol Yeh-Yun Lin, Leif Edvinsson, Jeffrey Chen, Tord Beding (häftad, 2012)
NICBS framework
NICBS: Main Structure & Key Elements

NATION'S LONG-TERM ECONOMIC GROWTH POTENTIAL

Wealth creation
80%

Sustainability
20%

MCICF

Construction 12%

Industry 17%

Services 68%

Primary sector 3%

NCICP

VISION

Cluster N's competitive environment

Dynamic & systemic assessment against first-class competitors

MACROECONOMIC STABILITY

Economic Institutions

Social Institutions

Political Institutions

NATION'S HUMAN CAPITAL BASE (Knowledge infrast.)

Living environment based resources

Copyright José M. Viedma 2016 ©
Wealth Creation in the Knowledge Economy

NATION’S ECONOMIC AND POLITICAL MODEL

- Entrepreneurial excellence
- Free Market economy
- Liberal democratic political systems
- Knowledge based economy
- Inclusive political, economic and social institutions
- High quality people

Copyright José M. Viedma 2016 ©
Wealth Creation in the Knowledge Economy

MAIN AGENTS

Entrepreneurial excellence
Entrepreneurial leaders. Top Management Team and Key Professional People. Knowledge and skilled workers.

Free Market economy

Liberal democratic political systems
Political Leaders and Leaders of Economic and Social Institutions Knowledge and skilled workers.

Knowledge based economy

Inclusive political, economic and social institutions

High quality people
Knowledge and skilled workers. Conscientious parents (specially mothers) Teachers in elementary and high school. Professors in University (Not its chief creators).
Wealth Creation in the Knowledge Economy

Intangible Capital

Entrepreneurial Capital

Economic Institutions Capital

Political Institutions Capital

ITT and Knowledge Capital

Social Institutions Capital

Human Capital

Copyright José M. Viedma 2016 ©
5. Reflections on the case of Spain.
Spain
Playa isla de la Toja, Galicia

Turismo rural

Turismo cultural
Corruption

• The urban corruption drags Spain to 40th place in the ranking of Transparency International.

• Global Index of Corruption Perception ranks Spain next to Poland in 40th place out of 177 countries, with a score of 59 points, according to the Global Corruption Report by Transparency International (TI).

http://www.transparency.org/whatwedo/pub/cpi_2013

Economic Freedom

• Index of Economic Freedom ranks Spain 49 out of 178 countries. Lose 21 posts in this index. Government spending, the labor market and the protection of property rights, main drags on growth.

http://www.heritage.org/index/
Spain’s corruption
### Global Competitiveness Index

<table>
<thead>
<tr>
<th>Category</th>
<th>Rank (out of 144)</th>
<th>Score (1–7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GCI 2014–2015</td>
<td>35</td>
<td>4.5</td>
</tr>
<tr>
<td>GCI 2013–2014 (out of 148)</td>
<td>35</td>
<td>4.6</td>
</tr>
<tr>
<td>GCI 2012–2013 (out of 144)</td>
<td>36</td>
<td>4.6</td>
</tr>
<tr>
<td>GCI 2011–2012 (out of 142)</td>
<td>36</td>
<td>4.5</td>
</tr>
<tr>
<td>Basic requirements (20.0%)</td>
<td>42</td>
<td>5.0</td>
</tr>
<tr>
<td>Institutions</td>
<td>73</td>
<td>3.8</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>9</td>
<td>6.0</td>
</tr>
<tr>
<td>Macroeconomic environment</td>
<td>121</td>
<td>3.8</td>
</tr>
<tr>
<td>Health and primary education</td>
<td>34</td>
<td>6.3</td>
</tr>
<tr>
<td>Efficiency enhancers (50.0%)</td>
<td>31</td>
<td>4.7</td>
</tr>
<tr>
<td>Higher education and training</td>
<td>29</td>
<td>5.2</td>
</tr>
<tr>
<td>Goods market efficiency</td>
<td>75</td>
<td>4.3</td>
</tr>
<tr>
<td>Labor market efficiency</td>
<td>100</td>
<td>3.9</td>
</tr>
<tr>
<td>Financial market development</td>
<td>91</td>
<td>3.8</td>
</tr>
<tr>
<td>Technological readiness</td>
<td>27</td>
<td>5.4</td>
</tr>
<tr>
<td>Market size</td>
<td>14</td>
<td>5.4</td>
</tr>
<tr>
<td>Innovation and sophistication factors (30.0%)</td>
<td>39</td>
<td>4.1</td>
</tr>
<tr>
<td>Business sophistication</td>
<td>38</td>
<td>4.4</td>
</tr>
<tr>
<td>Innovation</td>
<td>37</td>
<td>3.7</td>
</tr>
</tbody>
</table>

### Stage of development

- **1**: Factor driven
- **2**: Efficiency driven
- **3**: Innovation driven

World Economic Forum pp. 342
## The most problematic factors for doing business

<table>
<thead>
<tr>
<th>Factor</th>
<th>Percent of responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to financing</td>
<td>26.7</td>
</tr>
<tr>
<td>Restrictive labor regulations</td>
<td>14.4</td>
</tr>
<tr>
<td>Inefficient government bureaucracy</td>
<td>13.6</td>
</tr>
<tr>
<td>Tax rates</td>
<td>12.8</td>
</tr>
<tr>
<td>Corruption</td>
<td>9.0</td>
</tr>
<tr>
<td>Insufficient capacity to innovate</td>
<td>8.0</td>
</tr>
<tr>
<td>Tax regulations</td>
<td>6.7</td>
</tr>
<tr>
<td>Poor work ethic in national labor force</td>
<td>2.9</td>
</tr>
<tr>
<td>Inadequately educated workforce</td>
<td>2.5</td>
</tr>
<tr>
<td>Policy instability</td>
<td>1.5</td>
</tr>
<tr>
<td>Government instability/coups</td>
<td>0.7</td>
</tr>
<tr>
<td>Inadequate supply of infrastructure</td>
<td>0.4</td>
</tr>
<tr>
<td>Poor public health</td>
<td>0.4</td>
</tr>
<tr>
<td>Inflation</td>
<td>0.3</td>
</tr>
<tr>
<td>Foreign currency regulations</td>
<td>0.2</td>
</tr>
<tr>
<td>Crime and theft</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Note: From the list of factors above, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars in the figure show the responses weighted according to their rankings.

World Economic Forum pp.342
# Balance Sheet Spain

## Assets

<table>
<thead>
<tr>
<th>1st pillar: Institutions</th>
<th>Value</th>
<th>Rank/144</th>
</tr>
</thead>
<tbody>
<tr>
<td>Property rights</td>
<td>4.7</td>
<td>47</td>
</tr>
<tr>
<td>Intellectual property protection</td>
<td>4.0</td>
<td>50</td>
</tr>
<tr>
<td>Diversion of public funds</td>
<td>3.2</td>
<td>69</td>
</tr>
<tr>
<td>Irregular payments and bribes</td>
<td>4.7</td>
<td>43</td>
</tr>
<tr>
<td>Favoritism in decisions of government officials</td>
<td>3.1</td>
<td>64</td>
</tr>
<tr>
<td>Efficiency of legal framework in challenging regulatory issues</td>
<td>3.5</td>
<td>69</td>
</tr>
<tr>
<td>Business costs of crime and violence</td>
<td>5.5</td>
<td>30</td>
</tr>
<tr>
<td>Organized crime</td>
<td>5.7</td>
<td>46</td>
</tr>
<tr>
<td>Reliability of police services</td>
<td>5.9</td>
<td>18</td>
</tr>
<tr>
<td>Ethical behavior of firms</td>
<td>4.1</td>
<td>55</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2nd pillar: Infrastructure</th>
<th>Value</th>
<th>Rank/144</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of overall infrastructure</td>
<td>6.0</td>
<td>12</td>
</tr>
<tr>
<td>Quality of roads</td>
<td>6.0</td>
<td>13</td>
</tr>
<tr>
<td>Quality of railroad infrastructure</td>
<td>5.9</td>
<td>5</td>
</tr>
<tr>
<td>Quality of port infrastructure</td>
<td>5.8</td>
<td>12</td>
</tr>
<tr>
<td>Quality of air transport infrastructure</td>
<td>6.0</td>
<td>12</td>
</tr>
<tr>
<td>Available airline seat kms/week, millions*</td>
<td>3552.0</td>
<td>10</td>
</tr>
<tr>
<td>Quality of electricity supply</td>
<td>6.4</td>
<td>23</td>
</tr>
<tr>
<td>Fixed telephone lines/100pop</td>
<td>41.1</td>
<td>25</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3rd pillar: Macroeconomic environment</th>
<th>Value</th>
<th>Rank/144</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inflation, annual % change*</td>
<td>2.4</td>
<td>1</td>
</tr>
<tr>
<td>Country credit rating, 0-100 (best)*</td>
<td>57.8</td>
<td>50</td>
</tr>
</tbody>
</table>

## Liabilities

<table>
<thead>
<tr>
<th>1st pillar: Institutions</th>
<th>Value</th>
<th>Rank/144</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public trust in politicians</td>
<td>1.6</td>
<td>2.3</td>
</tr>
<tr>
<td>Judicial independence</td>
<td>2.2</td>
<td>3.7</td>
</tr>
<tr>
<td>Wastefulness of government spending</td>
<td>2.6</td>
<td>113</td>
</tr>
<tr>
<td>Burden of government regulation</td>
<td>2.9</td>
<td>125</td>
</tr>
<tr>
<td>Efficiency of legal framework in settling disputes</td>
<td>3.7</td>
<td>70</td>
</tr>
<tr>
<td>Transparency of government policymaking</td>
<td>3.9</td>
<td>87</td>
</tr>
<tr>
<td>Business costs of terrorism</td>
<td>5.7</td>
<td>52</td>
</tr>
<tr>
<td>Strength of auditing and reporting standards</td>
<td>4.4</td>
<td>85</td>
</tr>
<tr>
<td>Efficacy of corporate boards</td>
<td>4.3</td>
<td>93</td>
</tr>
<tr>
<td>Protection of minority shareholders' interests</td>
<td>4.0</td>
<td>79</td>
</tr>
<tr>
<td>Strength of investor protection, 0-10(best)*</td>
<td>5.0</td>
<td>84</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2nd pillar: Infrastructure</th>
<th>Value</th>
<th>Rank/144</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobile telephone subscriptions/100 pop.*</td>
<td>109.2</td>
<td>108.3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3rd pillar: Macroeconomic environment</th>
<th>Value</th>
<th>Rank/144</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government budget balance, % GDP*</td>
<td>-4.0</td>
<td>-10.3</td>
</tr>
<tr>
<td>Gross national savings, % GDP*</td>
<td>24.4</td>
<td>18.6</td>
</tr>
<tr>
<td>General government debt, % GDP*</td>
<td>84.1</td>
<td>132</td>
</tr>
</tbody>
</table>
### Assets

<table>
<thead>
<tr>
<th>4th pillar: Health and primary education</th>
<th>Value</th>
<th>Rank/144</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.01 Business impact of malaria</td>
<td>N/A</td>
<td>1</td>
</tr>
<tr>
<td>4.02 Malaria cases/100,000 pop.*</td>
<td>(NE)</td>
<td>1</td>
</tr>
<tr>
<td>4.03 Business impact of tuberculosis</td>
<td>6.7</td>
<td>10</td>
</tr>
<tr>
<td>4.04 Tuberculosis cases/100,000 pop.*</td>
<td>15.0</td>
<td>35</td>
</tr>
<tr>
<td>4.05 Business impact of HIV/AIDS</td>
<td>6.4</td>
<td>15</td>
</tr>
<tr>
<td>4.07 Infant mortality, deaths/1000 live births*</td>
<td>3.5</td>
<td>20</td>
</tr>
<tr>
<td>4.08 Life expectancy, years*</td>
<td>82.3</td>
<td>5</td>
</tr>
<tr>
<td>4.09 Quality of primary education</td>
<td>4.04</td>
<td>66</td>
</tr>
<tr>
<td>4.10 Primary education enrollment, net %*</td>
<td>99.7</td>
<td>8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5th pillar: Higher education and training</th>
<th>Value</th>
<th>Rank/144</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.01 Secondary education enrollment, gross %*</td>
<td>128.5</td>
<td>2</td>
</tr>
<tr>
<td>5.02 Tertiary education enrollment, gross %*</td>
<td>82.6</td>
<td>8</td>
</tr>
<tr>
<td>5.05 Quality of management schools</td>
<td>5.8</td>
<td>4</td>
</tr>
<tr>
<td>5.06 Internet access in schools</td>
<td>4.9</td>
<td>46</td>
</tr>
<tr>
<td>5.07 Availability of research and training service</td>
<td>4.8</td>
<td>30</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>6th pillar: Goods market efficiency</th>
<th>Value</th>
<th>Rank/144</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.01 Intensity of local competition</td>
<td>5.5</td>
<td>28</td>
</tr>
<tr>
<td>6.02 Extent of market dominance</td>
<td>4.4</td>
<td>27</td>
</tr>
<tr>
<td>6.03 Effectiveness of anti-monopoly policy</td>
<td>4.4</td>
<td>47</td>
</tr>
<tr>
<td>6.09 Prevalence of trade barriers</td>
<td>4.7</td>
<td>37</td>
</tr>
<tr>
<td>6.10 Trade tariffs, % duty*</td>
<td>0.8</td>
<td>4</td>
</tr>
<tr>
<td>6.11 Prevalence of foreign ownership</td>
<td>5.0</td>
<td>54</td>
</tr>
<tr>
<td>6.13 Burden of customs procedures</td>
<td>4.9</td>
<td>31</td>
</tr>
<tr>
<td>6.15 Degree of customer orientation</td>
<td>4.6</td>
<td>62</td>
</tr>
<tr>
<td>6.16 Buyer sophistication</td>
<td>3.5</td>
<td>63</td>
</tr>
</tbody>
</table>

### Liabilities

<table>
<thead>
<tr>
<th>4th pillar: Health and primary education</th>
<th>Value</th>
<th>Rank/144</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.06 HIV prevalence, % adult pop.*</td>
<td>0.40</td>
<td>78</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5th pillar: Higher education and training</th>
<th>Value</th>
<th>Rank/144</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.03 Quality of the educational system</td>
<td>3.6</td>
<td>77</td>
</tr>
<tr>
<td>5.04 Quality of math and science education</td>
<td>3.9</td>
<td>88</td>
</tr>
<tr>
<td>5.08 Extent of staff training</td>
<td>3.7</td>
<td>97</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>6th pillar: Goods market efficiency</th>
<th>Value</th>
<th>Rank/144</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.04 Effect of taxation on incentives to invest</td>
<td>3.1</td>
<td>118</td>
</tr>
<tr>
<td>6.05 Total tax rate, % profits*</td>
<td>38.7</td>
<td>74</td>
</tr>
<tr>
<td>6.06 No procedures to start a business*</td>
<td>10</td>
<td>116</td>
</tr>
<tr>
<td>6.07 No days to start a business*</td>
<td>28</td>
<td>105</td>
</tr>
<tr>
<td>6.08 Agricultural policy costs</td>
<td>3.6</td>
<td>101</td>
</tr>
<tr>
<td>6.12 Business impact of rules on FDI</td>
<td>4.3</td>
<td>93</td>
</tr>
<tr>
<td>6.14 Imports as a percentage of GDP*</td>
<td>31.2</td>
<td>121</td>
</tr>
</tbody>
</table>
### BALANCE SHEET SPAIN

#### Assets

<table>
<thead>
<tr>
<th>Pillar</th>
<th>Indicator</th>
<th>Value</th>
<th>Rank/144</th>
</tr>
</thead>
<tbody>
<tr>
<td>7th pillar: Labor market efficiency</td>
<td>7.04 Redundancy costs, weeks of salary</td>
<td>8</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>7.07 Reliance on professional management</td>
<td>4.5</td>
<td>51</td>
</tr>
<tr>
<td></td>
<td>7.10 Women in labor force, ratio to men</td>
<td>0.82</td>
<td>67</td>
</tr>
<tr>
<td>8th pillar: Financial market development</td>
<td>8.01 Availability of financial services</td>
<td>5.1</td>
<td>37</td>
</tr>
<tr>
<td></td>
<td>8.02 Affordability of financial services</td>
<td>4.4</td>
<td>53</td>
</tr>
<tr>
<td></td>
<td>8.08 Legal rights index, 0–10 (best)</td>
<td>6</td>
<td>65</td>
</tr>
<tr>
<td>9th pillar: Technological readiness</td>
<td>9.01 Availability of latest technologies</td>
<td>5.8</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td>9.02 Firm-level technology absorption</td>
<td>5.0</td>
<td>49</td>
</tr>
<tr>
<td></td>
<td>9.03 FDI and technology transfer</td>
<td>4.8</td>
<td>53</td>
</tr>
<tr>
<td></td>
<td>9.04 Individuals using Internet, %</td>
<td>72.0</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>9.05 Broadband Internet subscriptions/100 pop.*</td>
<td>24.0</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>9.06 Int’l Internet bandwidth, kbps per user</td>
<td>81.3</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>9.07 Mobile broadband subscriptions/100 pop.*</td>
<td>53.2</td>
<td>24</td>
</tr>
<tr>
<td>10th pillar: Market size</td>
<td>10.01 Domestic market size index, 1–7 (best)</td>
<td>5.3</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>10.02 Foreign market size index, 1–7 (best)</td>
<td>5.8</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>10.03 GDP (PPP billions)*</td>
<td>1410.6</td>
<td>14</td>
</tr>
</tbody>
</table>

#### Liabilities

<table>
<thead>
<tr>
<th>Pillar</th>
<th>Indicator</th>
<th>Value</th>
<th>Rank/144</th>
</tr>
</thead>
<tbody>
<tr>
<td>7th pillar: Labor market efficiency</td>
<td>7.01 Cooperation in labor-employer relations</td>
<td>4.0</td>
<td>107</td>
</tr>
<tr>
<td></td>
<td>7.02 Flexibility of wage determination</td>
<td>4.0</td>
<td>131</td>
</tr>
<tr>
<td></td>
<td>7.03 Hiring and firing practices</td>
<td>3.3</td>
<td>123</td>
</tr>
<tr>
<td></td>
<td>7.05 Effect of taxation on incentives to work</td>
<td>3.0</td>
<td>121</td>
</tr>
<tr>
<td></td>
<td>7.06 Pay and productivity</td>
<td>3.1</td>
<td>132</td>
</tr>
<tr>
<td></td>
<td>7.08 Country capacity to retain talent</td>
<td>2.9</td>
<td>108</td>
</tr>
<tr>
<td></td>
<td>7.09 Country capacity to attract talent</td>
<td>2.9</td>
<td>102</td>
</tr>
<tr>
<td>8th pillar: Financial market development</td>
<td>8.03 Financing through local equity market</td>
<td>2.9</td>
<td>101</td>
</tr>
<tr>
<td></td>
<td>8.04 Ease of access to loans</td>
<td>1.8</td>
<td>138</td>
</tr>
<tr>
<td></td>
<td>8.05 Venture capital availability</td>
<td>2.3</td>
<td>105</td>
</tr>
<tr>
<td></td>
<td>8.06 Soundness of banks</td>
<td>4.0</td>
<td>127</td>
</tr>
<tr>
<td></td>
<td>8.07 Regulation of securities exchanges</td>
<td>3.9</td>
<td>88</td>
</tr>
<tr>
<td>9th pillar: Technological readiness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10th pillar: Market size</td>
<td>10.04 Exports as a percentage of GDP</td>
<td>31.9</td>
<td>91</td>
</tr>
<tr>
<td>Assets</td>
<td>Value</td>
<td>Rank</td>
<td></td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>-------</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td>11th pillar: Business sophistication</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.01 Local supplier quantity</td>
<td>5.3</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>11.02 Local supplier quality</td>
<td>5.1</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>11.03 State of cluster development</td>
<td>4.2</td>
<td>42</td>
<td></td>
</tr>
<tr>
<td>11.04 Nature of competitive advantage</td>
<td>4.2</td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>11.05 Value chain breadth</td>
<td>4.7</td>
<td>23</td>
<td></td>
</tr>
<tr>
<td>11.06 Control of international distribution</td>
<td>4.3</td>
<td>45</td>
<td></td>
</tr>
<tr>
<td>11.07 Production process sophistication</td>
<td>4.5</td>
<td>36</td>
<td></td>
</tr>
<tr>
<td>11.08 Extent of marketing</td>
<td>4.7</td>
<td>36</td>
<td></td>
</tr>
<tr>
<td>12th pillar: Innovation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.01 Capacity for innovation</td>
<td>3.7</td>
<td>57</td>
<td></td>
</tr>
<tr>
<td>12.02 Quality of scientific research institutions</td>
<td>4.6</td>
<td>36</td>
<td></td>
</tr>
<tr>
<td>12.03 Company spending on R&amp;D</td>
<td>3.4</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>12.04 University-industry collaboration in R&amp;D</td>
<td>4.0</td>
<td>48</td>
<td></td>
</tr>
<tr>
<td>12.06 Availability of scientists and engineers</td>
<td>5.2</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>12.07 PCT patents, applications/million pop.</td>
<td>39.2</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liabilities</td>
<td>Value</td>
<td>Rank</td>
<td></td>
</tr>
<tr>
<td>11th pillar: Business sophistication</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.09 Willingness to delegate authority</td>
<td>3.8</td>
<td>70</td>
<td></td>
</tr>
<tr>
<td>12th pillar: Innovation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.05 Gov't procurement of advanced tech products</td>
<td>3.2</td>
<td>102</td>
<td></td>
</tr>
</tbody>
</table>
## Spain

<table>
<thead>
<tr>
<th>Human Capital Index 2013</th>
<th>Rank/122</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>31</td>
<td>0.590</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pillar 2: Health and wellness</th>
<th>12</th>
<th>0.778</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pillar 3: Workforce and employment</td>
<td>70</td>
<td>-0.185</td>
</tr>
<tr>
<td>Pillar 4: Enabling environment</td>
<td>28</td>
<td>0.679</td>
</tr>
</tbody>
</table>

### Key Indicators

- **Total population (1,000s):** 46,182.0
- **Median age of population:** 40
- **GDP per capita PPP (constant 2005, international $):** 26,545
- **GDP growth (annual %):** -1.4
IBEX 35

Telecomunications
- Telecinco
- Telefónica
- Amadeus

Construction infrastructure
- Abertis
- Acciona
- ACS
- Ferrovial
- Sacyr
- OHL

Financial services
- BBVA
- Banco de Sabadell
- Banco Popular
- Banco Santander
- Bankinter
- BME
- MAPFRE
- CaixaBank

Engineering
- Abengoa
- Acerinox
- Técnicas Reunidas
- Gamesa
- Indra
- Arcelor Mittal

Energy/renewal energy
- Gas Natural
- Iberdrola
- Red Eléctrica
- Repsol
- Enagás
- Endesa

Others
- Ebro Foods
- Grifols
- Inditex
- Día
Changing the economic model.

FROM A MODEL BASED ON THE CONSTRUCTION, TOURISM AND SERVICES TO A MORE KNOWLEDGE-INTENSIVE MODEL.

FEATURES OF THIS NEW MODEL: very selective agriculture, very important industry with low environmental costs focused on exports because their advanced technology, not too much construction, and especially many more services of high value added.

CURRENT MODEL FEATURES: weak primary production (3% of GDP), construction hypertrophy (12% of GDP), industry & energy production (17% of GDP) that basically focuses its exports on the car and its parts, but based on models of second technological level. Finally services concentrated around tourism and the public sector (68% of GDP).
Spain

M. Rajoy
S. Saez de Santamaria
De Guindos
Montoro
F. Baños

- Construction
- Primary Sector
- Services
- Industry

Population

40,000,000
5,500,000
1,500,000
47,000,000

© José María Viedma Martí 2016
Spain

C, A, S, I
Population: 47 millions

17 autonomous regions

© José María Viedma Martí 2016
Spain

Population: 47 millions
17 autonomous regions

Real state bubble

© José María Viedma Martí 2016
Spain

C A S I
Population: 47 millions
17 autonomous regions
Real State bubble

2008
1.667.865 ltd companies
2011
1.455.255 ltd companies
(-20%)

Underground Economy 20-25% GDP
23% Unemployment (49.6% youth unemployment)

Foreign debt = ± 1.670.000 millions €
Total debt = ± 3.300.000 Millions €
Net external debt = 970.000M € (90% GDP)

Innovative companies = 13.000 (should be 40.000)
R+D Investment = 7 billions (should be 14 billions)
Spain

Supervises

Current account balance
Public debt and deficit

M. Rajoy
S. Saez de Santamaría
De Guindos
Montoro
F. Baños

....

© José María Viedma Martí 2016

Spain

C A S I

Population: 47 millions
17 autonomous regions
Real State bubble
-20% limited companies

Innovative companies 13 mil (40mil)
R+D Investment 7 billions (14 billions)

Underground economy 20-25% GDP

26% Unemployment (55% Youth unemployment)

Foreign debt ± 1.670.000 millions €=
Total debt 4.000.000 Millions €
Spain

M. Rajoy
S. Saez de Santamaría
De Guindos
Montoro
F. Baños

Supervises

State Model
Public debt and deficit
Labor Reform
Current account balance deficit
Energy System
Educational System
Financial System
Justice
Retirement Pensions

C A S I
Population: 47 millions
17 autonomous regions
Real State bubble -20% limited companies
Innovative companies 13 mil (40 mil)
R+D Investment 7 billions (14 billions)
Underground economy 20-25% PIB
26% Unemployment (55% Youth unemployment)
Foreign debt ± 1.670.000 millions €=
Total debt 4.000.000 Millions €
### ASSETS
- First class infrastructure
- Health and primary education
- Tourism economic sector (1º pillar)
- Construction, real estate and infrastructure (2º pillar)
- Full member of the EU and Euro zone
- Some first class multinationals but not enough
- Higher education and scientific system
- Free market economy
- Democratic political system
- Financial sector reform

### LIABILITIES
- No economic model
- Not enough competitive companies
- Not enough knowledge intensive companies.
- High rate of unemployment
- The three bubbles (financial, real estate, and state)
- Growth without technological change
- Government budget deficit
- Government debt and private debt.
- Total debt and net debt.
- English as a second language
- Labor market reform
- State model (state bubble not yet burst)
- Innovation systems
- Public trust in politicians
- Judicial independence and efficiency.
- Wastefulness of government spending
- Corruption. (transparency international)
- Too small manufacturing sector
- Big underground economy

In summary: there is a need for transforming Spain into a more competitive, innovative and Knowledge intensive economy.
Portugal
Portugal
NICBS: Main Structure & Key Elements

NATION'S LONG-TERM ECONOMIC GROWTH POTENTIAL

Construction  Industry  Services  Tourism

MCICF

WEALTH CREATION

SUSTAINABILITY

Basic Requirements:
- Institutions
- Infrastructure
- Macroeconomic environment
Health and primary education

Efficiency enhancers:
- Higher education and training
- Goods market efficiency
- Labor market efficiency
- Financial market development
- Technological readiness
- Market size

Innovation and sophistication factors:
- Business sophistication
- Innovation

Dynamic & systemic assessment against first-class competitors

Cluster N's competitive environment

Living environment based resources

NATION'S HUMAN CAPITAL BASE (Knowledge infrast.)

MACROECONOMIC STABILITY

Wealth creation

MCICF

NCICP

VISION
WEF Global Competitiveness Index: Portugal

Global Competitiveness Index

<table>
<thead>
<tr>
<th>Rank (out of 144)</th>
<th>Score (1-7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GCI 2014–2015</td>
<td>36...4.5</td>
</tr>
<tr>
<td>GCI 2013–2014</td>
<td>51...4.4</td>
</tr>
<tr>
<td>GCI 2012–2013</td>
<td>49...4.4</td>
</tr>
<tr>
<td>GCI 2011–2012</td>
<td>45...4.4</td>
</tr>
</tbody>
</table>

Basic requirements (20.0%)
- Institutions: 41...4.4
- Infrastructure: 44...4.6
- Macroeconomic environment: 128...3.5
- Health and primary education: 24...6.4

Efficiency enhancers (50.0%)
- Higher education and training: 24...5.4
- Goods market efficiency: 44...4.6
- Labor market efficiency: 83...4.1
- Financial market development: 104...3.6
- Technological readiness: 26...5.4
- Market size: 51...4.3

Innovation and sophistication factors (30.0%)
- Business sophistication: 51...4.3
- Innovation: 28...4.1

Stage of development

1. Factor driven
2. Efficiency driven
3. Innovation driven

World Economic Forum
The most problematic factors for doing business

- Inefficient government bureaucracy: 19.2
- Tax rates: 16.3
- Access to financing: 16.2
- Policy Instability: 14.1
- Restrictive labor regulations: 11.5
- Tax regulations: 10.1
- Insufficient capacity to innovate: 4.7
- Inadequately educated workforce: 3.4
- Corruption: 2.0
- Poor work ethic in national labor force: 1.1
- Government Instability/coups: 0.6
- Inadequate supply of Infrastructure: 0.5
- Foreign currency regulations: 0.2
- Poor public health: 0.1
- Inflation: 0.0
- Crime and theft: 0.0

Note: From the list of factors above, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars in the figure show the responses weighted according to their rankings.

World Economic Forum
Portugal

Government

Population 10.4 millions

- Construction
- Tourism
- Services
- Industry
Portugal

Underground Economy 19.8% GDP
12.6% Unemployment (34.7% youth unemployment)

Total Debt GDP (Percent) = 500%

Public debt to GDP (Percent) = 128.2% (2015)

GDP growth 2015 (percent): 1.7%

© José María Viedma Marti 2016
Portugal

Government ?

Bailout Supervised

Population: 10.4 millions
Black economy 19.8% GDP
12.6% Unemployment (34.7% Youth unemployment)
Total Debt to GDP = 500%
Public debt to GDP = 128.2% (2015)
GDP growth 2015 = 1.7%
Portugal

Government

Supervised Bailout

State Model | Public debt and deficit | Labor Reform | Deficit Current account balance | Energy System | Education System | Financial System | Justice | Pensions

Deutschland | USA | Italy | Denmark | UK

Population: 10,4 millions
Black economy 19.8% GDP
12.6% Unemployment (34.7% Youth unemployment)
Total Debt to GDP = 500%
Public debt to GDP = 128.2% (2015)
GDP growth 2015 = 1.7%

© José María Viedma Marti 2016
6. Conclusions.
STRATEGY PERSPECTIVE

Present

Political Model
- Liberal democratic political systems
- Inclusive political, economic and social institutions

Economic Model
- Free Market economy
- Knowledge based economy

Future

Political Model
- Liberal democratic political systems
- Inclusive political, economic and social institutions

Economic Model
- Free Market economy
- Knowledge based economy

NICBS
Diagnosing and improving wealth creation potential of nations in the knowledge economy context
Copyright José M. Viedma 2016 ©
Strategic Management of intangibles at the macro level

Economic and Political Model

Good strategy formulation

Very good strategy implementation

Fundamentally Based on

Core Competencies
Core Capabilities
Intellectual Capital

Methodologies and frameworks more frequently used

Formulation

SWOT
NICBS

Implementation

Competitiveness frameworks IMD, WEF
IC Community frameworks

Copyright José M. Viedma 2016 ©
Conclusions

1. There is no established body of wealth creation theory in the Knowledge Economy context at the macro level.

2. The existing body of theory is mainly based on the Austrian School of Economics theory, and the contributions of other relevant theories such as endogenous growth, competitiveness, and KBD (I&E, C&S, ST, SI, TH, RS).

3. Based on these bodies of theories the paper tries to formulate principles of wealth creation in the KE context. Unfinished work.

4. There are two sets of practical methodologies or frameworks for diagnosing and improving wealth creation potential of nations in the KE context:
   a) Competitiveness frameworks
   b) IC community frameworks

5. NICBS methodology or framework is proposed as a more suitable alternative for diagnosing and improving wealth creation potential, because it is focused on strategy formulation and is mainly inspired by the principles of wealth creation that have been mentioned in point 3.

6. Finally, strategic management of intangibles or IC at the macro level is considered the best way to improve wealth creation potential of nations.
Música: V. M. Sequeira; Artur Fonseca
Letra: Reinaldo Ferreira

Numa casa portuguesa fica bem pão e vinho sobre a mesa. Quando à porta humildemente bate alguém, senta-se à mesa co'a gente. Fica bem essa fraqueza, fica bem, que o povo nunca a desmente. A alegria da pobreza está nesta grande riqueza de dar, e ficar contente.

Quatro paredes caiadas, um cheirinho a alecrim, um cacho de uvas doiradas, duas rosas num jardim, um São José de azulejo mais um sol de primavera, uma promessa de beijos dois braços à minha espera... É uma casa portuguesa, com certeza! É, com certeza, uma casa portuguesa!

https://www.youtube.com/watch?v=RU-Z0SiQKgU
Many thanks for your attention